Academy of Sciences of the USSR

Institute of Philosophy

On Dialectical Materialism

Collection of Articles

Second Edition

Party Cabinet

UVRE

No. 802

State Publishing House of Political Literature

1953

This is a publication of STC — SPC — DD(CP).
November 2026.

Source: АКАДЕМИЯ НАУК СССР ИНСТИТУТ ФИЛОСОФИИ, О ДИАЛЕКТИЧЕСКОМ МАТЕРИАЛИЗМЕ, СБОРНИК СТАТЕЙ, Издание второе, 1953
Language: Russian

Produced by transcription, manually edited and prepared as an e-book. Translated into English using Gemini, Google Translate and Yandex Translate.

This is a publication of STC — SPC — DD(CP).

November 2026.

Direct Democracy (Communist Party)
Doğrudan Demokrasi (Komünist Parti)
Άμεση Δημοκρατία (Κομμουνιστικό Κόμμα)
Прямая демократия (Коммунистическая партия)
www.directdemocracy4u.uk

Kıbrıs'ta Sosyalist Gerçek
Σοσιαλιστική Πραγματικότητα στην Κύπρο
The Socialist Truth in Cyprus
Социалистическая правда на Кипре
http://www.st-cyprus.co.uk

Kıbrıs Sosyalist Partisi
The Socialist Party of Cyprus
Το Σοσιαλιστικό Κόμμα Κύπρου
Социалистическая партия Кипра
https://st-cyprus.co.uk/kibris-sosyalist-partisi

АКАДЕМИЯ НАУК СССР
ИНСТИТУТ ФИЛОСОФИИ

О ДИАЛЕКТИЧЕСКОМ МАТЕРИАЛИЗМЕ

*

СБОРНИК
СТАТЕЙ

Издание второе

ПАРТКАБИНЕТ
УВРЗ
№ 802

ГОСУДАРСТВЕННОЕ ИЗДАТЕЛЬСТВО
ПОЛИТИЧЕСКОЙ ЛИТЕРАТУРЫ
1953

Table of Contents

DIALECTICAL MATERIALISM — THE WORLDVIEW OF THE MARXIST-LENINIST PARTY.....10
V. P. CHERTKOV.....10
MARXIST DIALECTICS ON THE INTERCONNECTION AND INTERDEPENDENCE OF PHENOMENA IN NATURE AND SOCIETY.....67
V. S. MOLODTSOV.....67
Critique by Marxist Philosophy of the Metaphysical Denial of the Interconnection of Phenomena in Nature and Society.....68
Marxist Dialectics on the Connection and Interdependence of Phenomena.....76
Marxist Dialectics on the Law-Governed Development of Nature and Society.....88
Marxist Dialectics on Causal Conditioning of Phenomena.....96
Marxist Dialectics on the Diversity of Types of Connection in Nature and Society.....103
The Practical Significance of the Proposition....117
on the Interconnection and Interdependence of Phenomena.....117
of Nature and Society.....117
MOVEMENT AND DEVELOPMENT IN NATURE AND SOCIETY 129
D. M. TROSHIN.....129
The Reactionary Nature of Metaphysics, Which Denies the Development of Nature and Society. 130
Movement and Development— The Form of Existence of Matter.....146
Movement and Rest.....150
Basic Forms of Movement of Matter.....154

Development as the Emergence of the New and the Dying Away of the Old.....160
Irresistibility of the New, Progressive.....164
Practical Significance of the Propositions on Universal Motion, Change, and Development in Nature and Society.....182
DEVELOPMENT AS A TRANSITION OF QUANTITATIVE CHANGES INTO RADICAL, QUALITATIVE CHANGES.....194
K. V. MOROZ.....194
Metaphysical and Dialectical Understanding of Development.....194
Quality and Quantity.....201
Measure.....201
What is included in the concept of quality?.....201
What, then, is quantity?.....205
The Transition of Quantitative Changes into Qualitative — The Law of Development of Nature and Society.....209
Evolution and Revolution. The Leap.....216
Development as Movement Along an Ascending Line 228
Significance of the Proposition on the Transition of Quantitative Changes into Radical, Qualitative Ones for the Practical Activity of the Party of the Proletariat.....237
DEVELOPMENT.....249
AS THE STRUGGLE OF OPPOSITES.....249
F. I. KALOSHIN.....249
Two Conceptions of Development.....249
The Struggle of Opposites.....263
as a Law of Development of Nature, Society, and Thought.....263
Internal and External Contradictions.....270

Antagonistic and Non-Antagonistic Contradictions 274
THE MATERIALITY OF THE WORLD AND THE LAWS OF ITS DEVELOPMENT.....294
N. F. OVCHINNIKOV.....294
Unity of the world—in its materiality.....295
The Marxist-Leninist Concept of Matter.....305
Modern Concepts of the Structure of Matter.....313
Motion—the Mode of Existence of Matter.....323
Space and Time—Objective Forms of Existence of Matter.....330
Laws of Development of Moving Matter.....341
The Significance of the Propositions of Marxist Philosophical Materialism on the Materiality of the World and the Laws of Its Development for the Practical Activity of Communist Parties.....350
ON THE PRIMACY OF MATTER AND THE SECONDARY NATURE OF CONSCIOUSNESS.....363
P. T. BELOV.....363
The Basic Question of Philosophy.....363
Scientific Data on the Emergence of Consciousness as a Property of Matter.....386
Social Being and Social Consciousness.....428
KNOWABILITY OF THE WORLD AND ITS LAWS.....449
YU. G. GAYDUKOV.....449
Marxist Philosophical Materialism on the Knowability of the World.....449
Sensory Cognition.....457
(sensation, perception, representation).....457
Abstract Thinking.....472
Dialectical Materialism on Objective, Absolute, and Relative Truth.....500
Marxism-Leninism on the Significance of Scientific Cognition for the Practical Activity of People...515

DIALECTICAL AND HISTORICAL MATERIALISM — THE THEORETICAL FOUNDATION OF COMMUNISM.....526
M. A. LEONOV.....526
Dialectical materialism — a philosophical system, from which scientific socialism stems.....526
Dialectical Materialism — The Scientific Basis of the Practical Activity of the Marxist-Leninist Party 546
Dialectical Materialism — An Ideological Weapon in the Struggle for the Building of Communism.....568
The Creative Character of Marxist-Leninist Philosophy.....583

Academy of Sciences of the USSR

Institute of Philosophy

On Dialectical Materialism

Collection of Articles

Second Edition

Party Cabinet

UVRE

No. 802

State Publishing House of Political Literature

1953

DIALECTICAL MATERIALISM — THE WORLDVIEW OF THE MARXIST-LENINIST PARTY

★

V. P. CHERTKOV

Marxism, according to Comrade Stalin's definition, is "the science of the laws governing the development of nature and society, the science of the revolution of the oppressed and exploited masses, the science of the victory of socialism in all countries, the science of building a communist society"[1]. Guided by this great revolutionary science, the Communist Party has clearly defined the paths of the working people's struggle for liberation from the power of landlords and capitalists, led the workers and peasants to victory over the exploiters, guided the Soviet people onto the broad and bright path of communism, made the Soviet country powerful and invincible, and transformed it into a stronghold of world peace, a stronghold of democracy and socialism.

Dialectical materialism is the only scientific worldview; it constitutes the theoretical foundation of communism.

In the work "*Dialectical and Historical Materialism"*, J. V. Stalin gave the following definition of dialectical materialism:

"Dialectical materialism is the worldview of the Marxist-Leninist party. It is called dialectical materialism because its approach to the phenomena of nature, its method of studying

[1] *J. V. Stalin*, Marxism and Problems of Linguistics, Gospolitizdat, 1952, pp. 54–55.

nature phenomena, its method of apprehending these phenomena is *dialectical*, while its interpretation of nature's phenomena, its comprehension of nature's phenomena, its theory is *materialistic*"[2].

The creation of dialectical materialism by Marx and Engels was their great scientific achievement. Marx and Engels summarized and critically reworked the achievements of philosophical thought, summarized and creatively rethought the achievements of the natural and social sciences, as well as the entire experience of the working masses' struggle against exploitation and oppression.

Utilizing all the best that had been accumulated by humanity over preceding millennia, Marx and Engels accomplished a revolutionary upheaval in philosophy and created a qualitatively new philosophy.

The essence of the revolutionary upheaval accomplished in philosophy by the founders of Marxism consists in the fact that philosophy, for the first time in human history, became a science arming people with the knowledge of the laws of nature and society's development, serving as an instrument of struggle for the victory of communism. Philosophical systems of the past were distinguished by the fact that their creators, unable to provide a single coherent picture of the world, piled into one heap the most diverse facts, conclusions, hypotheses, and mere fantasies, claiming knowledge of absolute truth in the final instance, and thereby essentially limited the living process of human cognition regarding the laws of nature and society.

[2] *J. V. Stalin*, Problems of Leninism, 1952, p. 574.

The discovery by Marx and Engels marked the end of the old philosophy, which could not yet be called scientific, and the beginning of a new, scientific period in the history of philosophy. Marxist philosophy is not a science above other sciences. Dialectical materialism is an instrument of scientific research. It permeates all sciences of nature and society, continually enriching itself with new achievements of science and the practice of building socialism and communism.

Marxism marked a qualitatively new stage in the development of philosophical thought, including in the sense that only in the form of Marxism did philosophy become the banner of the masses.

J. V. Stalin points out that Marxism "represents not merely a philosophical doctrine. It is the doctrine of the proletarian masses, their banner; it is revered and 'bowed down to' by the proletarians of the world. Consequently, Marx and Engels are not simply the founders of some philosophical 'school' — they are the living leaders of a living proletarian movement, which grows and gains strength with every passing day"[3].

Therefore, A. A. Zhdanov, criticizing during the philosophical discussion the incorrect understanding of the history of philosophy as a mere succession of one philosophical school by another, noted that "with the appearance of Marxism as the scientific worldview of the proletariat, the old period in the history of philosophy ends, when philosophy was the occupation of isolated individuals, the property of philosophical schools consisting of a small number of

[3] *J. V. Stalin*, Works, Vol. 1, p. 350.

philosophers and their disciples, detached from life, from the people, alien to the people."

Marxism is not such a philosophical school. On the contrary, it is the overcoming of the old philosophy—when philosophy was the possession of a chosen few, an aristocracy of the spirit—and the beginning of an entirely new period in the history of philosophy, when it became a scientific weapon in the hands of the proletarian masses fighting for their liberation from capitalism[4].

The ideas of Marxist philosophy, taking hold of the masses, themselves become a material force. Pre-Marxist philosophical doctrines did not have, and could not have, such force.

The deeply fundamental distinction of dialectical materialism from preceding philosophical systems lies in the fact that it serves as a powerful instrument for practical impact on the world, an instrument for knowing and changing the world.

Marx, at the very beginning of his revolutionary activity, stated that whereas in older times philosophers saw their task merely in explaining the world one way or another, the new, revolutionary philosophy must teach how to change it. Dialectical materialism, created by Marx and Engels and further developed by Lenin and Stalin, is a formidable theoretical weapon in the hands of the working class fighting against capitalism, for socialism and communism.

[4] *A. A. Zhdanov*, Speech at the discussion on G. F. Aleksandrov's book "History of Western European Philosophy", Gospolitizdat, 1952, p. 12.

Under the banner of Marxism-Leninism, the Communist Party of the Soviet Union and the Soviet people radically transformed the face of old Russia.

Reflecting the magnificent results of the path traveled by the party, the Rules adopted at the XIXth Party Congress state: "The Communist Party of the Soviet Union, having organized the alliance of the working class and the laboring peasantry, achieved as a result of the Great October Socialist Revolution of 1917 the overthrow of the rule of capitalists and landlords, the establishment of the dictatorship of the proletariat, the elimination of capitalism, the abolition of the exploitation of man by man, and ensured the construction of a socialist society."

"Now," the Rules further state, "the main tasks of the Communist Party of the Soviet Union are to build a communist society through a gradual transition from socialism to communism, to continuously raise the material and cultural level of society, to educate members of society in the spirit of internationalism, to establish fraternal ties with the working people of all countries, and to strengthen in every way the active defense of the Soviet Motherland against the aggressive actions of its enemies"[5].

In the face of new tasks, the party raises the role and significance of Soviet socialist ideology even higher, setting as its goal the full utilization of the mobilizing, organizing, and transforming power of the great ideas of Marxism-Leninism in

[5] *Rules of the Communist Party of the Soviet Union*, Gospolitizdat, 1952, pp. 3–4.

the interests of building communism, in the interests of strengthening peace throughout the world.

The XIXth Party Congress set the task to step up ideological work, systematically raise and improve the scientific-political training of cadres, and direct all means of ideological influence toward the cause of the communist education of the Soviet people.

The ideas of Marxism-Leninism, the ideas of J. V. Stalin's brilliant work "*Economic Problems of Socialism in the USSR"*, J. V. Stalin's speech at the closing session of the XIXth Party Congress, and the decisions of the XIXth Party Congress serve as an inspiring guide for all progressive humanity.

Mastering this vast theoretical wealth is the duty of every conscious builder of a communist society, every participant in the world communist movement.

In the report at the XIXth Party Congress, Comrade Malenkov stated: "The teaching of Marx—Engels—Lenin—Stalin gives our party invincible strength, the ability to blaze new paths in history, to see clearly the goal of our forward movement, and to achieve and consolidate victories faster and more firmly."

Leninist-Stalinist ideas illuminate with the bright light of revolutionary theory the tasks and prospects of the struggle of the masses of all countries against imperialism, for peace, democracy, and socialism[6].

* *

[6] *G. Malenkov*, Report on the Work of the Central Committee of the CPSU(B) to the XIXth Party Congress, Gospolitizdat, 1952, pp. 107–108.

*

A worldview represents a system of views on the world as a whole, the basic principles with which people approach surrounding reality, explain it, and by which they are guided in their practical activity.

Whatever great discoveries may have taken place in individual branches of nature, they did not yet give—and could not give—a unified understanding of nature, an understanding of it as a whole. Can, for example, certain discoveries in the field of chemical phenomena or chemical laws form a worldview and provide an understanding of nature as a whole? Of course not, because no matter how important they might be, they hold force only for narrowly limited boundaries—for the field of chemical phenomena—and do not reveal the essence of a multitude of other phenomena.

The same must be said about all other sciences. None of the so-called concrete sciences can yield a complete picture of the world or eliminate the necessity of working out an integrated worldview.

In history, there were many attempts to create a picture of the world as a whole by extending the laws of one concrete science to all phenomena of nature and society. Thus, in the XVIIIth century, philosophers extended the laws of mechanics not only to all natural phenomena, but also tried to interpret social phenomena with their help. The widespread transfer of Darwinian laws onto society in bourgeois philosophy and sociology during the second half of the XIXth century served

as the theoretical basis for the emergence of such a reactionary trend in sociology as Social Darwinism.

Not infrequently, the opposite took place: attempts were made to extend social laws to natural phenomena; for instance, the life of insects was likened to state activity, claiming that "animals work," and so forth.

Attempts to transfer laws peculiar to one set of phenomena onto others are unscientific and reactionary. Such thoroughly reactionary theories especially flourish in the era of imperialism, when defenders of decaying capitalism deliberately pervert science, striving at all costs to justify capitalism and excuse aggressive predatory wars.

To forge a comprehensive and integral worldview, it is necessary to synthesize the regularities of nature and society, discovering general laws inherent in all phenomena, objects, and processes of reality—laws that can serve as guiding, initial principles when approaching the most diverse phenomena of reality. The discovery of such laws and the elaboration of a method for approaching reality and interpreting it is the task of a special science: philosophy.

Speaking at the philosophical discussion in 1947, A. A. Zhdanov stated: "The scientific history of philosophy, consequently, is the history of the birth, emergence and development of the scientific materialist worldview and its laws"[7].

[7] *A. A. Zhdanov*, Speech at the discussion on G. F. Aleksandrov's book "History of Western European Philosophy", 1952, p. 7.

This history of the birth and development of a scientific worldview does not represent some autonomous process of pure ideas generating one another. In reality, particular discoveries in philosophy always represent a conscious or unconscious generalization of factual knowledge about nature, a conscious or unconscious reflection of specific needs in the further development of social life.

Engels points out that "what pushed philosophers forward was by no means the mere force of pure thought, as they imagined. On the contrary. In reality, they were pushed forward mainly by the powerful, increasingly rapid, and turbulent development of natural science and industry"[8].

The process of the development of philosophical thought was influenced not only by production and the development of productive forces, but also by the production and social relations of people. Philosophical ideas, being a superstructure over the real basis of a given society, time and again reflected the changes taking place in the sphere of production and the achievements of natural sciences in a distorted, upside-down manner.

This distortion was conditioned by the character of social relations in class, antagonistic social formations, and by the class position of the authors of philosophical systems and doctrines. The class struggle—the struggle of progressive and reactionary social forces—found its reflection in philosophy in the form of a struggle between opposing ideological trends.

---

[8] *F. Engels*, Ludwig Feuerbach and the End of Classical German Philosophy, Gospolitizdat, 1952, p. 18.

Thus, because society was split into hostile classes and moved forward through their mutual struggle, the history of philosophical thought appeared as a history of the struggle of ideas, reflecting the history of class struggle.

Materialism arose and developed in a fierce struggle against idealism, with various idealistic trends. The entire history of philosophy is a history of struggle between the main camps and parties in philosophy, reflecting the struggle of social classes and representing their party interests.

"Recent philosophy," Lenin said, "is just as partisan as two thousand years ago"[9].

Thus, the history of philosophy is the history of the struggle between two opposing camps: materialism and idealism. Materialists strove for a correct explanation of reality, proceeding from the objective laws of reality and nature. On the contrary, idealists attempted to explain the world and nature not from nature itself, but using invented, ideal, and ultimately divine forces.

The idealistic worldview is just as unscientific and reactionary as religion, with which idealism shares common roots. Idealism views the world as the embodiment of an "absolute idea," a "world reason," or "consciousness." From the perspective of idealism, the natural phenomena and objects surrounding us—the entire world as a whole—do not exist by themselves, but are allegedly the product of otherworldly forces standing above nature.

[9] *V. I. Lenin*, Works, Vol. 14, 4th ed., p. 343.

Idealists, especially those of the type of the German philosopher Hegel, talk much about the unity of the world, asserting that they have supposedly managed to work out a single, complete understanding of reality. But these are only words. In fact, idealists are unable to find the real unity of all world phenomena and speak instead of an invented, completely fantastical unity.

Every form of idealism, whether it depicts the world as created by otherworldly, supernatural forces, or takes human consciousness as the primary given, inevitably leads to religion and clerical obscurantism. It is no accident, therefore, that the idealist Hegel spoke of the "world reason" as the idea of a "world ruler"—that is, God—and that the Machists played the role of flunkeys to clericalism. All idealists one way or another appeal to religion. Idealism directly merges with religion. In this lies the hostile-to-science, reactionary essence of the idealistic worldview.

Religious views themselves are, of course, also idealistic, likewise claiming the role of a worldview. The religious worldview, distorting the real picture of the world, is reactionary to the core. Both religion and idealism serve the bourgeoisie as a weapon for the spiritual enslavement of the working people.

Religion asserts that all diverse phenomena of nature and society are unified because they are allegedly "created by God" and owe their entire continued existence to God. But this "unity" is not real, but invented, theological, and fantastical. As science and the daily practical activity of human beings show, the objects and phenomena of reality arise and exist by virtue

of natural, material causes. By asserting that the world was created by a supreme power, the religious worldview fails to see the actually existing connection between various natural phenomena that condition one another and give rise to each other.

A unified view of nature must be sought not in the artificial imposition of laws inherent in one set of phenomena onto completely different phenomena, nor in an invented, fantastical, divine, or supernatural "unity," but in the real unity of things, phenomena, and living and non-living nature itself. The unity of the world consists in its materiality. Therefore, the only scientific worldview is the materialist worldview in its modern, highest form—dialectical materialism. The teaching of Marx, Lenin wrote, is "complete and harmonious, providing people with an integral world-conception that is irreconcilable with any superstition, any reaction, or any defense of bourgeois oppression"[10].

However, before the creation of the dialectical-materialist worldview became possible, science had to traverse a long and winding path of development, creating the necessary prerequisites for such a great discovery.

Comrade Stalin points out that "dialectical materialism is the product of the development of sciences, including philosophy, over the preceding period"[11].

On the basis of the development of social life and, above all, the successes in the process of producing material goods,

[10] *V. I. Lenin*, Works, Vol. 19, 4th ed., p. 3.
[11] *J. V. Stalin*, Marxism and Problems of Linguistics, p. 34.

newer and newer acquisitions of the natural sciences took place, along with achievements in dialectical and materialist understandings of nature and attempts at their philosophical generalization.

All the successes of natural sciences and philosophy were ultimately driven by the needs of production and social practice. It was the development of social production in the period of slave-owning society that initially brought to life a still undeveloped and undifferentiated science, which included philosophical concepts within its scope.

The first attempts to work out a scientific worldview occurred in deep antiquity—in ancient China, India, and later in ancient Greece. Ancient Greek philosophers, both materialists and dialecticians, viewed the world as something not created by any god, existing independently of human consciousness. The most outstanding among them—Heraclitus—taught that the world is one, and that everything in nature is in a state of change and development.

Ancient thinkers viewed nature so broadly that they did not see the deep differences existing between its individual phenomena. Their understanding of nature was still naive. Yet the idea that nature exists by itself and eternally changes was extraordinarily fruitful and progressive; it was not lost in vain and left a deep imprint on the history of science.

A bold attempt to paint a unified picture of the world was made by XVIIIth-century French materialist philosophers—Diderot, Helvétius, Holbach, and others.

Being ideologists of the bourgeoisie during its period of development, when it was a progressive class moving forward the development of society's productive forces, the French materialists defended advanced philosophical ideas: they decisively opposed the religious understanding of nature and attempted to explain all natural phenomena on a scientific basis. However, the level of scientific development at that time did not yet allow for the discovery of the true interdependence of natural phenomena, nor did it allow for tracing the complex dialectical transitions from one set of phenomena to another or the transformation process of one set of phenomena into another. Therefore, the XVIIIth-century French materialist philosophers, remaining on the whole metaphysicians, expressed only isolated guesses regarding development. Furthermore, the French thinkers, contrary to their own intentions to show the world as a unified whole, shifted to idealistic positions when considering social phenomena, since they were unable to uncover the material bases of social life. Clearly, the worldview offered by French materialism was not, and could not be, consistent, strictly scientific, or comprehensive.

The further development of natural sciences and social practice gave a new impetus to the development of philosophical thought.

At the end of the XVIIIth and beginning of the XIXth century, as Engels points out, "geology, embryology, plant and animal physiology, and organic chemistry were already sufficiently developed, and... on the basis of these new sciences, brilliant

guesses were emerging everywhere, anticipating the later theory of development..."[12]

Thus, the development of natural science, reflecting successes in the development of production, steadily and with ever greater persistence brought forward the question of a dialectical understanding of nature.

In the first third of the XIXth century, Hegel attempted to connect all world phenomena through the idea of the commonality of their development. But his attempt was not crowned with success. Hegel's idealistic philosophy was a reaction against French materialism. As an ideologist of the German bourgeoisie, which was frightened by the movement of the lower classes, Hegel was a conservative thinker.

And although Hegel was familiar with the most important scientific achievements of his time and drew the very idea of universal development from objective reality, he presented all of this in a distorted manner due to the reactionary nature of his political views.

Hegel declared that the unity of the world consists not in its materiality, but in the fact that everything represents the product of the spirit. He declared all phenomena of nature to be stages in the development of his invented "absolute idea." Thus, according to his system, the world has a beginning and an end: its development "begins" from the moment the "world spirit" allegedly starts its process of "self-knowledge," and

[12] *F. Engels*, Ludwig Feuerbach and the End of Classical German Philosophy, 1952, p. 21.

“ends” when that same “world spirit,” in the person of Hegel's own philosophy, completes its “self-knowledge.”

Virtue of this, Hegel's idealistic dialectic was not, nor could it be, a scientific method of cognition. Hegel's dialectic was directed toward the past, not the future. Hegel denied the development of nature, and sought to put an end to the development of society, desiring to perpetuate the Prussian-Junker class-monarchical state in Germany.

However, the idea of development, although limited by a metaphysical system and understood by Hegel in a distorted, idealistic way, was the “rational kernel” of his philosophy, which was utilized by philosophy in its further movement forward.

Another German philosopher, Feuerbach, who played a prominent role in the history of philosophical thought as the man who restored materialism to its rights, rejected the dialectical view of the world along with Hegelian idealism. Furthermore, while explaining natural phenomena materialistically, Feuerbach, like all pre-Marxist materialists, continued to treat social phenomena and regularities idealistically.

Closest of all past thinkers to a scientific, dialectical-materialist worldview came the Russian philosophers—Herzen, Belinsky, Chernyshevsky, and Dobrolyubov. These thinkers were revolutionary democrats who called the working masses to fight against serfdom. At the same time, they subjected capitalism, with its false democracy and equality, to sharp

critique. All of them viewed philosophy as an instrument of struggle against social and national inequality.

It is precisely by their revolutionary democratism that one explains the fact that they subjected Hegelian idealism and its fear of everything advanced and revolutionary to fierce criticism. As materialists and dialecticians, they gained a fuller understanding of the movement of nature itself "from stone to man," emphasized the decisive role of the masses in social progress, and expressed a number of brilliant ideas about the internal causes of society's development.

Though coming closer than others to a scientific worldview, the Russian philosophers nevertheless, like all other materialists prior to Marx, were unable to interpret social phenomena materialistically, and thus could not work out a complete and integral scientific worldview.

A truly scientific worldview encompassing all phenomena of nature and society was created only by the founders of communism—Marx and Engels. This worldview is dialectical materialism, which could only be created at a specific level of development in natural science and social sciences, and above all at a specific stage of maturity in the class struggle of the proletariat against the bourgeoisie.

The successes of the natural sciences were one of the most important prerequisites for the creation of dialectical materialism.

The first half of the XIXth century was marked by major discoveries in natural science. Among these discoveries, first

and foremost, the discovery of the law of conservation and transformation of energy must be noted.

The proposition regarding the unity of nature and the indestructibility of matter and motion was substantiated as early as the XVIIIth century by the founder of Russian science, M. V. Lomonosov, who formulated the law of conservation of matter and motion. In a 1748 letter to Euler, Lomonosov wrote that "all changes taking place in nature occur in such a way that as much as is added to anything, just as much is taken away from something else. Thus, as much matter as is added to one body, as much is taken away from another as many hours as I spend sleeping, just as many I deduct from waking, and so forth. This law of nature is so universal that it extends even to the rules of motion: a body that impels another to motion loses as much of its own motion as it imparts to the other body"[13].

Deepening Lomonosov's propositions on the conservation of matter and motion, the Russian scientist G. H. Hess established in 1840 the basic law linking thermal phenomena with chemical ones, which served as the first formulation of the law of conservation and transformation of energy regarding these specific processes. In the early 1840s, R. Mayer, Joule, the Russian scientist E. Lenz, and others formulated the general law of conservation and transformation of energy, affirming the natural-scientific understanding of the unity of various forms of motion of matter.

The Russian scientist P. F. Goryaninov in 1827–1834, and later the Czech scientist Purkyně in 1837, laid the foundations of

[13] *M. V. Lomonosov*, Selected Philosophical Works, Gospolitizdat, 1950, p. 160.

cell theory regarding the structure of living organisms. In 1838 –1839, the German scientists Schleiden and Schwann developed cell theory further, thereby substantiating the unity of all phenomena in organic nature.

In 1859, Darwin introduced the theory of the development of the organic world, and in 1869 the great Russian scientist D. I. Mendeleev created the periodic system of chemical elements.

Engels considered the middle of the XIXth century to be a period in the development of natural science "when the dialectical character of natural processes irresistibly forced itself upon the mind, and when, consequently, only dialectics could help natural science escape from theoretical difficulties"[14].

Engels also wrote: "Dialectics, stripped of mysticism, becomes an absolute necessity for natural science, which has left behind the field where rigid categories were sufficient..."[15] In a word, natural science imperatively demanded a transition from metaphysics to dialectics—from idealism to materialism, taking nature in its dialectical development.

However, the discoveries of natural science alone were insufficient to create an integral scientific worldview. This required a certain maturity of social relations necessary for people to see and understand the internal driving springs of society's development.

[14] *F. Engels*, Dialectics of Nature, 1952, p. 23.
[15] *Ibid.*, p. 160.

In contrast to all preceding pre-capitalist social formations, productive forces under capitalism develop extraordinarily rapidly, making it possible for the first time to notice the fact that production constitutes the basis of social development, and that changes occurring in production entail changes in all other spheres of social life. At the same time, capitalism simplifies and exposes class contradictions. The bourgeois era, as Marx and Engels point out in the "*Manifesto of the Communist Party"*, replaced exploitation veiled by religious and political illusions with "exploitation that is open, shameless, direct, and brutal." This circumstance allowed for the theoretical establishment of the fact that "the competing social classes are at every given moment the product of relations of production and exchange, in a word—the *economic* relations of their era..."[16]

The decisive condition for the creation of dialectical materialism was the emergence of a new class—the proletariat —and its entry onto the arena of history as an independent political force.

The largest revolutionary actions of the proletariat during this period were the Lyon uprisings of 1831 and 1834 in France, the mass workers' movement in England known as the Chartist movement (which reached its peak in 1838–1842), and the Silesian weavers' uprising of 1844 in Germany.

These historical events, as Engels points out, "brought about a decisive turn in the understanding of history." Thus without the appearance of the revolutionary working class on the historical

[16] *F. Engels*, Anti-Dühring, 1952, p. 26.

arena, it was impossible to scientifically understand the history of society, and without this understanding, it was impossible to work out a scientific worldview.

The working class is the only class in capitalist society which, by virtue of its social position, is interested in creating a scientific worldview, a scientific philosophy. The working class is called upon by history to overthrow capitalism, forever end all forms of economic, political, and spiritual slavery, establish its dictatorship, and use it as a lever for building a classless, communist society. The working class, therefore, is fundamentally interested in creating a philosophy that provides a correct picture of the world and the ability not only to know the history of nature and society and their current laws of development, but also to foresee the course of events in the future, master the laws of nature and society, and make them serve the interests of all humanity. This explains why the immense achievements of science in the first half of the XIXth century served specifically as material for the ideologists of the proletariat to elaborate a scientific worldview. Ideologists of the bourgeoisie, owing to their social position, did not and could not draw the appropriate conclusions from the scientific discoveries of that period.

The proletariat sees and finds the only path to its deliverance from capitalist slavery through a complete, radical change in the foundations of the capitalist system, moving society forward toward a new, higher social order. This is why the doctrine of dialectics regarding development and change, and the victory of the new over the old, is organically received by the proletariat as confirmation and illumination of its class

aspirations. The revolutionary proletariat and its vanguard—the communist parties—do not and cannot see any other means of fighting for their goals except the class struggle against reactionary forces and exploiters. Materialist dialectics serves the working class as a science illuminating the revolutionary struggle of the masses: in the dialectical teaching that development is the result of contradictions and the struggle of opposites, the proletariat finds its natural theoretical weapon in the struggle against capitalism and for socialism.

"Just as philosophy finds its *material* weapon in the proletariat," wrote Marx, "so the proletariat finds its *spiritual* weapon in philosophy..."[17]

Thus, by critically reworking all the advanced and progressive ideas previously achieved in the history of human thought, Marx and Engels created an integral scientific worldview, putting it at the service of the interests of the proletariat.

Dialectical materialism, being the only scientific worldview, serves and can only serve the advanced, consistently revolutionary class of modern society—the proletariat and its Marxist party.

In this lies the essence of the class character and partisanship of dialectical materialism. The class character and partisanship of dialectical materialism consist precisely in the fact that the bearer of this science in our time is the working class and its Marxist party.

[17] *K. Marx and F. Engels*, Works, Vol. I, 1938, p. 398.

The laws of dialectics are just as objective and precise as the laws of chemistry, physics, and other sciences. However, while the laws of chemistry, physics, and other sciences can be equally utilized by all classes, the laws of dialectics cannot be used by all classes, but only by the revolutionary class—the proletariat and its party. Dialectical materialism is, by its very nature, the worldview of the proletariat as the only consistently revolutionary class.

In the work "*Economic Problems of Socialism in the USSR"*, Comrade Stalin points out that, unlike the laws of natural science, the utilization of economic laws in a class society has a class background.

This applies entirely to the laws of Marxism as a science and to the laws of the scientific worldview.

The partisanship of dialectical materialism consists in the fact that it is a method of cognition and revolutionary transformation of society on the foundations of socialism and communism. By virtue of the objective laws of social development, above all by virtue of the law of the obligatory correspondence of relations of production to the character of productive forces, socialism replaces capitalism. However, at the present time, of all the classes of modern society, only the working class consciously utilizes these laws, restructuring society on the foundations of socialism and communism.

This happens because the working class is vitally interested in utilizing these laws. The bourgeoisie, on the contrary, is vitally interested in preventing the utilization and cognition of the laws of social development, in preventing the dissemination of

a scientific worldview. Hence, the essence of the principle of Marxist partisanship consists in the fact that in modern society one cannot have a truly scientific worldview without sharing the worldview of the proletariat, its Marxist party.

V. I. Lenin teaches that "materialism includes within itself, so to speak, partisanship, obliging one in any assessment of an event to directly and openly stand on the point of view of a specific social group"[18], on the point of view of the working class.

In philosophy, partisanship consists in not dangling between the trends of idealism and materialism, metaphysics and dialectics, but directly and openly taking the point of view of a specific trend. The revolutionary proletariat, the Marxist party directly and openly stand on the positions of dialectical materialism and resolutely defend and develop it.

"The genius of Marx and Engels," wrote Lenin, "consists precisely in the fact that over a very long period, *nearly half a century*, they developed materialism, moved forward one main direction in philosophy, did not mark time repeating already solved epistemological issues, but consistently applied—showed how to apply that same materialism in the field of social sciences, mercilessly sweeping away as trash, nonsense, bombastic pretentious double-talk, countless attempts to 'discover' a 'new' line in philosophy, to invent a 'new' trend, and so forth"[19].

---

[18] *V. I. Lenin*, Works, Vol. 1, 4th ed., pp. 380–381.

[19] *V. I. Lenin*, Works, Vol. 14, 4th ed., p. 321.

Marxist philosophy is irreconcilably hostile to contemplation, bourgeois objectivism, and apoliticism. The partisanship of Marxist philosophy demands a decisive, passionate struggle against all enemies of materialism, under whatever flag they may hide.

In our time, the partisanship of Marxist philosophy obliges us to conduct a daily struggle against all kinds of new fashionable trends and sub-trends, especially widespread in the USA and England and sowing extreme idealism, metaphysics, and obscurantism, to expose the servile character of the activity of bourgeois philosophers who pervert science to please the imperialists, justifying social and national oppression and predatory wars.

A distinctive feature of the partisanship of dialectical materialism also consists in the fact that it coincides with scientific objectivity, for the class interests of the proletariat do not diverge from the general line of history's development, but, on the contrary, organically accord with it.

If all the development of capitalist society, contrary to the interests and will of its ruling classes, prepares the conditions for socialism, makes the victory of socialism inevitable, then it is precisely with this objective process of society's development that the activity of the proletariat—its struggle for socialism—accords. The socialist revolution, the realization of which is the historical mission of the proletariat, forever eliminates exploitation, opens a broad path to communism, and thereby meets the vital interests of all working humanity.

"...Class interests of the proletariat," points out Comrade Stalin in the work *"Economic Problems of Socialism in the USSR"*, "merge with the interests of the overwhelming majority of society, for the revolution of the proletariat signifies not the destruction of one form or another of exploitation, but the destruction of all exploitation, whereas revolutions of other classes, destroying only one form or another of exploitation, were limited within the framework of their narrow class interests, which were in conflict with the interests of the majority of society"[20].

That is why the class point of view of the proletariat, its partisanship, correctly expressing not only the interests of the proletariat, but also the needs of the development of all human society, fully accords with objective truth. The principle of Marxist partisanship demands a decisive struggle for objective truth in science, which not only does not contradict the interests of the proletariat, the Marxist party, but is also a condition for successful struggle against that which has outlived itself in science and social life.

In short, the partisanship of Marxist philosophy is foreign to class narrowness and subjectivism, which are organically inherent in the partisanship of the bourgeoisie. And this is understandable. Even at the time when the bourgeoisie was a progressive class, its interests as an exploiting class limited the horizon of its ideologists, bringing them into contradiction with reality and to subjectivism. In the era of imperialism, which is the last epoch in the life of capitalism, the epoch of its

[20] *J. V. Stalin*, Economic Problems of Socialism in the USSR, Gospolitizdat, 1952, p. 50.

historical doom, the class interests of the bourgeoisie contradict the further forward movement of humanity, being irreconcilably hostile to everything advanced and progressive in the life of peoples. That is why the class point of view of the bourgeoisie in philosophy and science is hostile to objective truth, perverts and denies it. Precisely in the interests of bourgeois partisanship, all kinds of flunkeys of imperialism—bourgeois scientists, philosophers, journalists—pervert the truth and lie, proving the eternity of capitalism. In this hostility of bourgeois ideologists to objective, scientific truth is manifested the doomed nature of capitalism, its inevitable demise.

★ ★

★

Dialectical materialism, as an integral and scientific worldview, is characterized by the unity of the dialectical method and materialist theory. Created by Marx and Engels and enriched and developed further by Lenin and Stalin, the dialectical method is one of the greatest achievements of science. V. I. Lenin and J. V. Stalin teach that dialectics is the soul of Marxism. The working class, its vanguard—the Marxist party—consciously utilize the laws of dialectics, seeing in them a weapon in the struggle for further social progress.

The method of cognition is not an aid, artificially created and external with respect to objective reality; it represents certain objective laws of reality, discovered by humans in things and phenomena themselves, and serving as a means of their cognition.

On the opposite position stand the idealists. For example, representatives of one of the schools of modern bourgeois philosophy in the USA, calling themselves instrumentalists, like many other idealists and reactionaries, interpret the method and theory of cognition subjectivistically. From the point of view of these enemies of science, objective laws of nature and society do not exist. The method of cognition, according to their assertion, is artificially constructed by people and represents a "convenient" tool with which a person allegedly forms phenomena and creates their own order in nature.

In reality, the method of cognition cannot be artificially created. The method, as has been said, consists of the very laws of nature's development, discovered, correctly understood, and consciously applied by people in the process of cognition.

A dialectical-materialist examination of natural and social phenomena means examining them as they are in themselves, objectively.

Marx wrote that the "dialectical method" created by him is not only fundamentally different from Hegel's, but represents its direct opposite. For Hegel, the process of thinking, which he turns even under the name of the idea into an independent subject, is the demiurge [creator, fashioner] of the real, which represents only its external manifestation. For me, on the contrary, the ideal is nothing other than the material, transposed into the human head and transformed within it[21].

[21] *K. Marx*, Capital, Vol. 1, 1951, p. 19.

To Hegel, dialectics seemed to be a science of the laws of the absolute spirit, of idealistically understood laws of consciousness. For Marx, it is above all the science of the objective laws of nature and society.

The history of philosophy and sciences in general knows many unsuccessful attempts to create a universal method of cognition. Some bourgeois philosophers attempted to declare the laws of mathematics as the method for researching all natural phenomena. And even now, many bourgeois scientists adhere to this point of view. However, the untenable nature of such attempts is obvious: not a single special field of knowledge, no matter how important and thoroughly developed it may be, can fundamentally claim the role of a universal method. All the more untenable and reactionary are all kinds of subjectivist research methods: the "subjective method in sociology," subjectivism in psychology and physiology, in chemistry, physics, and so forth—methods that are especially fashionable among modern representatives of reactionary bourgeois science.

Only Marxism-Leninism discovered the only scientific, universal method of cognizing nature and society. This method consists of the universal laws operating in all, without exception, objects and phenomena. It is precisely these laws that Marxism-Leninism considers as a universal method of cognition.

In *"Dialectics of Nature"*, Engels points out that "dialectics is considered as the science of the most general laws of all motion. This means that its laws must hold force both for

motion in nature and human history, as well as for the motion of thinking"[22]. In another place, Engels writes:

"Thus, the history of nature and human society—that is where the laws of dialectics are abstracted from. They are nothing other than the most general laws of both of these phases of historical development, as well as of thinking itself"[23].

Science asserts that all phenomena of living and non-living nature exist in a certain interdependence, and not in isolation from one another. But from this it follows that one must study the phenomena of living and non-living nature not in isolation from one another, but in their real interconnection.

Science asserts that in all phenomena of living and non-living nature, processes of change, renewal, and development take place. Development is the law of all objects and phenomena of living and non-living nature. Hence, this law is universal, all-embracing, met everywhere and anywhere. It only takes discovering this universal law in things and phenomena themselves and correctly understanding it, which Marx and Engels were the first in science to do, for it to become possible to utilize this objective law of nature as a method and to consciously be guided by it in researching all phenomena of nature, society, and thinking.

The same must be said about such a law of dialectics as the law of the struggle of opposites. Marxism comprehensively proved that the internal source of the development of all phenomena of living and non-living nature is the struggle of opposites. This

[22] *F. Engels*, Dialectics of Nature, 1952, p. 214.
[23] *F. Engels*, Dialectics of Nature, 1952, p. 38.

law of dialectics is also universal and all-embracing. That is why knowledge of this law makes it possible in the research of new, as yet unknown phenomena to follow the right path: to seek the source of their development not in otherworldly external forces, but in the internal contradictoriness of the phenomena themselves.

It turns out, therefore, that thanks to knowing once discovered and correctly understood general laws—the laws of dialectics —the research of concrete laws is significantly facilitated; people confidently seek and find them. In this consists the guiding, methodological significance of the dialectical method, its role as a powerful and correct instrument of cognition.

In materialist dialectics, the Marxist party finds not only a method for explaining the phenomena of social life, but also guiding principles for finding the paths and means to change it.

The dialectical method is a method of revolutionary action. Guided by the Marxist dialectical method, the party of the proletariat bases its policy, its strategy, and tactics on a sober scientific analysis of society's economic development, accounting for concrete historical conditions, proceeding from the correlation of class forces and the real tasks facing the working class in a given situation.

The propositions of materialist dialectics give a scientific understanding of the regularities of nature and society's development, arming the working class and all working people with a correct method of cognition and revolutionary transformation of the world.

Materialist dialectics theoretically substantiates the necessity of fighting for the revolutionary transformation of an exploiting society.

If the transition from gradual, slow quantitative changes to rapid qualitative changes constitutes the law of development, says Comrade Stalin, then it is clear that revolutionary upheavals accomplished by oppressed classes represent a completely natural and inevitable phenomenon. Not a gradual, slow change in the living conditions of capitalist society through reforms, but a qualitative change in the capitalist system through revolution and the creation of new foundations of social life—that is what practical conclusion flows from the principles of materialist dialectics.

This conclusion exposes the right-wing social democrats preaching reactionary views, according to which capitalism supposedly peacefully, without leaps and upheavals, grows into socialism. The sworn enemies of the working people—the right-wing socialists, groveling before American imperialism, go out of their way to prove the "untenability" of Marxist dialectics.

However, life takes its toll. Economic crises periodically experienced by capitalist states, wars, and revolutions, which are ripening ever more fully in various countries and have already blown up capitalism in a number of countries in Europe and Asia, speak of the inescapable truth of Marxist dialectics and the inevitable, total defeat of its enemies.

Marxist dialectics deeply substantiates the historical inevitability of the explosion of the old social order in a society

divided into hostile classes. Revealing the general laws of development of all natural and social phenomena, Marxist dialectics shows the regularity of social revolutions accomplished by oppressed classes and, thus, deals a serious blow to all kinds of perverters of science who defend the obsolete capitalist order.

Marxism views the development of nature and society as a process of their self-development, for nature and society change according to their internally inherent laws. The fundamental causes of all development lie in the contradictoriness of all phenomena of nature and society: all of them are characterized by the struggle of the new with the old, the emerging with the dying.

From the point of view of Marxist dialectics, the contradictions existing in the material world are infinitely diverse. This extraordinarily important proposition was emphasized by V. I. Lenin. In his letter to Maxim Gorky, he wrote: "...life moves forward through contradictions, and living contradictions are many times richer, more multifaceted, and more content-rich than it initially seems to the human mind"[24].

In a society divided into antagonistic classes, the contradictoriness of development is expressed in the struggle of classes. The history of an exploiting society is, therefore, the history of class struggle.

If the struggle of opposing forces, the struggle of antagonistic classes drives forward the development of an exploiting

[24] *V. I. Lenin*, Works, Vol. 34, 4th ed., p. 353.

society, then from this follows the conclusion: one must not slur over the contradictions of capitalist society, but expose them, not extinguish the class struggle, but carry it through to the end.

The Bolshevik Party always built its tactics, sought paths and methods of struggle for a new social system in full accord with this law of materialist dialectics. The party mobilized the working people of Russia for a decisive struggle against capitalists and landlords, for the victorious implementation of the Great October Socialist Revolution, for the elimination of capitalist elements in town and country, and for the construction of a socialist society, and now confidently leads our people forward to communism. These historical victories won under the banner of Lenin–Stalin speak of the great organizing, mobilizing, and transforming power of Marxist-Leninist science.

In our days, millions of working people in the countries of people's democracy, led by communist and workers' parties, are successfully creating the foundations of socialism. Dialectical and historical materialism, Marxist-Leninist theory, like a powerful searchlight, illuminates their path forward.

Contradictions are the source of all development. They take place under socialism as well. Clarifying their characteristics under the conditions of socialism acquires exceptionally great significance for the practical activity of the Communist Party and the Soviet people.

In a socialist society, where there are no hostile classes, contradictions do not assume the character of a struggle

between opposing classes. But here, too, the new and the old, contradictions, and the struggle between them take place. However, contradictions and the struggle between the new and the old exist in new conditions. "...In our socialist conditions," teaches J. V. Stalin, "economic development occurs not by way of upheavals, but by way of gradual changes..."[25]

The transition from an old quality to a new one is accomplished in a socialist society without explosions, for in this society there are no antagonistic classes. The development of society under socialism is realized on the basis of new driving forces: the moral-political unity of Soviet society, the friendship of peoples, and Soviet patriotism.

The struggle of the new with the old in the economic, political, and spiritual life of Soviet society does not require breaking the foundations of society, but is accomplished on the basis of further strengthening the principles of socialism, on the basis of further rallying workers, peasants, and the Soviet intelligentsia around the tasks of building communism, around the Communist Party. The feature of the struggle of the new with the old, of conflicts between them, consists in the fact that on the side of the new in a socialist society stands the absolute majority of the people headed by the Communist Party. By virtue of this, Soviet society has the opportunity to overcome lagging inert forces without bringing the matter to a conflict between the productive forces of society and production relations. The decisive role in overcoming such inert forces that defend the old is played by criticism and self-criticism.

---

[25] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 53.

Contradictions between the new and the old in the development of socialism are exposed and resolved through the deployment of criticism and self-criticism. Criticism and self-criticism are an indispensable and constantly operating weapon of the Communist Party. Criticism and self-criticism are the key with which Soviet people expose and eliminate shortcomings and move society forward.

In the report at the XIXth Party Congress, Comrade Malenkov indicated that in order to successfully move forward the cause of building communism, it is necessary to conduct a decisive struggle against shortcomings and negative phenomena, and for this it is necessary to broadly deploy self-criticism and especially criticism from below.

"Active participation of the broad masses of working people in the struggle against shortcomings in work and negative phenomena in the life of our society," says G. M. Malenkov, "is vivid evidence of the genuine democratism of the Soviet system and the high political consciousness of Soviet people. In criticism from below, the creative initiative and self-activity of millions of working people find their expression, as well as their care for strengthening the Soviet State. The more broadly self-criticism and criticism from below are deployed, the more fully will the creative forces and energy of our people be revealed, and the stronger will grow and consolidate in the masses the sense of being the master of the country"[26].

[26] *G. Malenkov*, Report on the Work of the Central Committee of the CPSU(B) to the XIXth Party Congress, p. 87.

The XIXth Party Congress paid immense attention to the task of all-out deployment of criticism and self-criticism and the removal of obstacles hindering the operation of this important dialectical regularity of Soviet society's development. The new Party Rules adopted at the XIXth Congress oblige every party member to develop self-criticism and criticism from below, expose and eliminate shortcomings in work, and fight against ostentatious well-being and intoxication with successes. The Rules declare as incompatible with membership in the party the suppression of criticism or replacing it with ostentatiousness and praise.

Such are the practical conclusions from the laws of materialist dialectics.

All this speaks to the fact that Marxist dialectics represents not only the only scientific method of cognition, but also a method of revolutionary action.

The great transforming power of the dialectical-materialist worldview lies precisely in the fact that, being the only scientific one, it gives principles for understanding the world as a whole and at the same time points out the paths and means of changing this world. Thus, Marxism-Leninism represents an integral, harmonious, and practically effective worldview.

★ ★

★

Dialectical materialism is the only scientific interpretation of the phenomena of nature and society, an instrument of cognition and changing the world.

Materialist theory, like the dialectical method, is also not artificially created or invented. The materialist understanding of the phenomena of living and non-living nature is the understanding of them as they are in themselves, without any extraneous additions.

Materialist theory not only makes it possible to scientifically interpret all phenomena of nature and society, but also serves as a powerful means of transforming reality.

Marxist materialist theory, or Marxist philosophical materialism, proceeds from the fact that the world is material, that the diverse phenomena in the world represent various forms of moving matter, that the world develops according to the laws of matter and needs neither god, nor spirit, nor other idealistic inventions.

Materialist theory further proceeds from the fact that natural phenomena and conditions of the material life of society represent the primary element, while human consciousness, the entire sphere of society's spiritual life, is secondary, derivative.

Considering consciousness as a reflection of the laws of nature and society, materialist theory correctly interprets the origin of ideas, views, and social institutions. Thereby, materialist theory correctly points out the actual role of people's ideas and views in social life.

Interpreting people's ideas and views as a reflection of objectively existing laws of nature and society, Marxist theory asserts the knowability of the world and its regularities.

These propositions of materialist theory are the most important principles of a worldview. They are of immense importance for the scientific understanding of all phenomena of living and non-living nature.

Extending the propositions of dialectical materialism to society, Marxism for the first time saw in society not an accumulation of accidents, but the realization of specific laws inherent in society's development. This allowed advanced social forces, the Communist Party, to base their activity not on the demands of "reason," "universal morality," and other principles put forward by all kinds of idealists, but, as J. V. Stalin says, "...on the regularities of society's development, on the study of these regularities"[27].

Marxism-Leninism teaches that not only natural phenomena occur according to objective laws independent of human will. Processes occurring in social life are also subject to objective regularity. History, political economy, and other social sciences study the objective regularities of society's development, arming people with knowledge of these regularities and the ability to use them in the interests of society. "Marxism," points out J. V. Stalin in the work *"Economic Problems of Socialism in the USSR"*, "understands the laws of science—whether it is a question of the laws of natural science or the laws of political economy—as a reflection of objective processes taking place independently of human will. People may discover these laws, cognize them, study them, account for them in their actions, and use them in the interests of

[27] *J. V. Stalin*, Problems of Leninism, 1952, p. 583.

society, but they cannot change or abolish them. Still less can they form or create new laws of science"[28].

Asserting and creatively developing the fundamental propositions of dialectical materialism regarding the objective character of the laws of science, J. V. Stalin subjected subjectivist, voluntarist views to a crushing defeat. Prior to the appearance of J. V. Stalin's work *"Economic Problems of Socialism in the USSR"*, these subjectivist views on the economic laws of socialism were quite widespread among Soviet economists, philosophers, historians, and legal scholars, causing great harm to ideological work. Exposing subjectivism, J. V. Stalin points out that "the laws of political economy under socialism are objective laws reflecting the regularity of economic life processes taking place independently of our will.

People who deny this proposition are essentially denying science, and by denying science, they deny the very possibility of any foresight—and consequently, denying the possibility of directing economic life"[29].

The recognition of the objectivity of the laws of economic development should by no means lead to their fetishization. Society is not helpless before objective economic laws. By cognizing them, people can master objective laws and "harness" them.

Obliging the careful study of the objective laws of social development, Marxism-Leninism at the same time assigns a huge role to the revolutionary transforming activity of people,

---

[28] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 4.

[29] *J. V. Stalin*, Economic Problems of Socialism in the USSR, pp. 9–10.

the activity of advanced classes and parties. Marxism-Leninism teaches that history is always made by people, that in the history of society development is realized not by itself, not automatically, but only as a result of the activity of people, through the struggle and labor of millions. Lenin and Stalin teach that the demise of capitalism does not occur automatically, but as a result of a stubborn struggle against it by all working people under the leadership of the working class and its revolutionary party.

Noting the decisive role of material production in the development of society, historical materialism in no way denies the significance of ideas. On the contrary, dialectical materialism, as opposed to vulgar materialism, emphasizes the active role of ideas in the life of society. In his brilliant work *"On Dialectical and Historical Materialism"*, Comrade Stalin indicated the immense role of progressive ideas, their mobilizing, organizing, and transforming significance. In the work *"Marxism and Problems of Linguistics"*, Comrade Stalin shows what a immense active force in the development of society is the social superstructure over the economic basis, i.e., social ideas and institutions.

In the work *"Economic Problems of Socialism in the USSR"*, J. V. Stalin again emphasizes the significance of the activity of advanced social classes using objective laws of social development.

Especially great is the role of the active endeavor of people, the role of advanced ideas and social institutions under socialism.

The great importance of advanced ideas and institutions in the conditions of Soviet reality is evidenced by the ever-increasing activity of Soviet people, the organizing activity of the Communist Party and the Soviet State. Of immense importance for accelerating the movement of Soviet society toward communism is the economic-organizational and cultural-educational function of the Soviet State, which is completely unknown to a bourgeois state. Relying on the basic economic law of socialism and the law of planned, proportional development of the national economy, the Soviet State plans the development of all branches of the economy and culture, mobilizing Soviet people to fight for new successes in the relentless movement toward communism.

The proposition of historical materialism that under socialism the role of conscious human activity grows immeasurably is most fully confirmed by the leading and guiding activity of the Communist Party. The Communist Party of the Soviet Union, armed with the most advanced theory—Marxism-Leninism—determines, on the basis of knowledge of the objective laws of historical development, the paths of Soviet society's forward movement. Studying the laws of society's development and generalizing the experience of labor and struggle of the masses, the party sets concrete tasks before the Soviet people at every individual stage of building communism. To the Communist Party belongs the decisive role in organizing and mobilizing the working people of our Motherland for further successes in communist construction.

★ ★

★

The great, all-conquering power of the dialectical-materialist worldview lies in the fact that it gives the only correct picture of the development of nature and society.

One of the most important, decisive conditions for the correctness of the conclusions and propositions of dialectical materialism is the fact that it itself is always being perfected, absorbing new achievements of the natural and social sciences and generalizing the achievements of the practice of the working people's struggle against capitalism, for socialism, for communism.

Dialectical materialism is not a collection of forever immutable rules and propositions. Dialectical materialism is constantly developing and enriching itself. It is an enemy of all bookishness, dogmatism, and Talmudism.

The very nature of dialectical materialism demands this creative attitude toward Marxist science.

If dialectics consists of the most general laws of nature and society's development, then it follows that the laws of dialectics are nowhere and never manifested in identical ways. Being the most general and eternal, the laws of dialectics are manifested each time in a particular concrete field and are realized always only in a concrete-historical form.

Thus, the proposition of dialectics that everything in nature is in a state of change and development is universal and eternal, for the change and development of nature, of matter, are eternal. However, it was always different in its content: in the distant past on our planet, certain changes and certain development processes took place; the appearance of the first

living organisms marked the appearance of new processes of change and development; the appearance of human society meant the appearance of new, hitherto unseen processes of change and development. And at every given moment in the life of nature, the eternal laws of dialectics are realized differently: at one and the same time, the process of motion and change is manifested both as the movement of planets around the Sun, as the oxidation of metal, as the process of formation of a new biological species, as the creation by people of a new social order, and so forth and so on.

This speaks to the fact that one cannot metaphysically understand the universality and eternity of the laws of dialectics: the laws of dialectics, while being universal, are manifested always in a new way. The laws of dialectics are eternal in their universality and historical in their concrete manifestation.

Marxism-Leninism not only found general laws in things themselves, not only managed to single them out from concrete and particular laws, but also showed how these general laws are manifested in nature.

The laws of dialectics, as universal ones, Marxism asserts, are manifested in things not alongside concrete laws, not apart from them, but within them—in concrete laws. "The general," says V. I. Lenin, "exists only in the individual, through the individual"[30].

[30] *V. I. Lenin*, Philosophical Notebooks, 1947, p. 329.

In that field of nature studied, for example, by physics, the laws of dialectics are manifested not apart from and not alongside physical laws, but within them—in physical laws. The same takes place in all other phenomena of nature and society, where general laws—the laws of dialectics—are manifested only in concrete laws inherent in given phenomena. That is why it is absurd to seek change and development as such apart from concrete processes of change and development.

In short, dialectics by its very nature demands a creative attitude toward itself: not "adjusting" facts to one or another proposition of dialectics, but, on the contrary, finding dialectics in the facts themselves, in which it is always manifested distinctively.

K. Marx in his famous work *"Capital"* showed how the laws of materialist dialectics are manifested in an historically concrete period of social development—in the conditions of capitalist society. While bourgeois sociologists-metaphysicians sought eternal principles of morality, law, and eternal laws of social development, Marx dialectically and concretely studied a specific society—capitalist society—and thereby for the first time and uniquely correctly pointed out the real laws of social development.

Engels in his work *"Dialectics of Nature"* showed how distinctively the laws of dialectics are manifested in the phenomena of organic and inorganic nature.

It is precisely this feature of dialectics, which is always manifested only in a concrete historical manner, that conditions the fact that the principles of Marxism can also never and

nowhere be put into practice according to a rigid pattern, but, on the contrary, are applied and can be applied in life only with due regard to the specific economic, political, and cultural development of a given country, and with due regard to the features of the current moment in domestic and international life.

Lenin says that Marx's theory "...gives only general *guiding* propositions, which are applied in particular to England differently than to France, to France differently than to Germany, to Germany differently than to Russia"[31].

Reality, especially social life, changes and develops unceasingly. Precisely because of this constant emergence of the new in material reality itself, the conclusions and propositions of science cannot be immutable; on the contrary, they are always being perfected and changed.

J. V. Stalin says: "Bookworms and Talmudists view Marxism and individual conclusions and formulas of Marxism as a collection of dogmas that 'never' change, despite the change in the conditions of society's development. They think that if they learn these conclusions and formulas by heart and start quoting them left and right, they will be able to solve any questions, counting on the learned conclusions and formulas serving them for all times and countries, for all cases in life. But only such people can think like this who see the letter of Marxism, but do not see its essence, who memorize the texts of conclusions and formulas of Marxism, but do not understand their content... Marxism, as a science," J. V. Stalin continues, "cannot stand in

[31] *V. I. Lenin*, Works, Vol. 4, 4th ed., p. 192.

one place—it develops and perfects itself. In its development, Marxism cannot fail to enrich itself with new experience, new knowledge—consequently, its individual formulas and conclusions cannot fail to change over time, cannot fail to be replaced by new formulas and conclusions corresponding to new historical tasks.

Marxism does not recognize immutable conclusions and formulas obligatory for all epochs and periods. Marxism is an enemy of all dogmatism"[32].

In that period of society's development when the exploitation of man by man took place everywhere, science knew the struggle of the new with the old only in the form of class struggle; but when a socialist society was born that knows no antagonistic classes, then the teaching of dialectics on the struggle of opposites was enriched: science now knows that besides class clashes, the struggle of the new with the old can also be expressed in the form of criticism and self-criticism.

J. V. Stalin, generalizing the life experience of Soviet society, revealed the immense significance of criticism and self-criticism as a new dialectical regularity, as a special form of struggle between the new and the old under the conditions of the socialist system. Thereby, dialectical materialism was enriched and developed further as applied to new phenomena of social life.

Not only this example, but all the most important phenomena of the era of imperialism and proletarian revolutions, the era of

[32] *J. V. Stalin*, Marxism and Problems of Linguistics, pp. 54–55.

building socialism and communism in the USSR, testify to how life itself demands constant enrichment of the propositions of dialectical materialism.

The continuers of the teaching and overall cause of Marx and Engels—Lenin and Stalin—developed dialectical materialism further as applied to new historical conditions: to the conditions of the era of imperialism and proletarian revolution, the era of building socialism in the USSR. The founders and leaders of the Bolshevik Party and creators of the world's first Soviet State enriched dialectical materialism with new experience of the revolutionary struggle of the proletariat, new theoretical propositions and conclusions, raising Marxist philosophy to a new, higher level.

Lenin and Stalin raised dialectical materialism to a higher level by generalizing not only the experience of social life, but also the achievements of the natural sciences.

In his remarkable work Materialism and Empirio-criticism, V. I. Lenin analyzed the most important discoveries of natural science during the period following the death of Engels.

Lenin's book, writes J. V. Stalin, is "...a materialistic generalization of everything important and essential gained by science, and first of all, by natural science, over a whole historical period, from the death of Engels to the publication of Lenin's book Materialism and Empirio-criticism"[33].

Works such as Anarchism or Socialism?, On Dialectical and Historical Materialism, Marxism and Problems of Linguistics,

[33] History of the C.P.S.U.(B.). Short Course, p. 98.

Economic Problems of Socialism in the USSR, and all other works by J. V. Stalin are remarkable examples of creative Marxism.

Such laws and categories of materialist dialectics as the interdependence of objects and phenomena, the invincibility of the new, possibility and reality, forms of transition from one qualitative state to another, the law of the struggle of opposites, etc., have been enriched and developed by J. V. Stalin in application to the latest achievements of all branches of knowledge.

In his work On Dialectical and Historical Materialism, J. V. Stalin provided for the first time in Marxist literature a systematic, integral presentation of the basic features of the Marxist dialectical method and Marxist philosophical materialism. J. V. Stalin outlines four main features of the dialectical method: 1) the universal connection and interdependence of phenomena; 2) movement, change, and development; 3) the transition from one qualitative state to another; 4) the struggle of opposites as the internal source of development.

J. V. Stalin demonstrated the organic interdependence of all features of the Marxist dialectical method. The law of the struggle of opposites, which constitutes the essence of the fourth feature of the dialectical method, J. V. Stalin views as the internal content of the process of development, the internal content of the transition from quantitative changes into qualitative ones, i.e., he inextricably links the fourth feature of the Marxist dialectical method with the preceding third feature.

As for the law of the "negation of the negation," formulated by Hegel and materialistically interpreted by Marx and Engels, J. V. Stalin discarded this terminology and expressed the essence of dialectics on this issue more fully and correctly by putting forward the proposition of development "from simple to complex, from lower to higher".

In Stalin's work On Dialectical and Historical Materialism, Marxist philosophical materialism is presented with equal system and completeness.

J. V. Stalin formulates the main features of Marxist materialist theory: 1) the materiality of the world and the conformity to law of its development, 2) the primacy of matter and the secondary nature of consciousness, 3) the knowability of the world and its laws.

J. V. Stalin emphasizes the organic connection between the dialectical method and materialist theory, demonstrating the immense significance that the application of the propositions of philosophical materialism has for the study of social life, the application of these propositions to the history of society, and the practical activity of the party of the proletariat.

In his work On Dialectical and Historical Materialism, J. V. Stalin further developed historical materialism, formulating fundamental propositions that demonstrate the concrete application of dialectical materialism to understanding the laws of social development.

The works of J. V. Stalin, Marxism and Problems of Linguistics and Economic Problems of Socialism in the USSR, open a new stage in the development of Marxist theory.

In the classic work Marxism and Problems of Linguistics, J. V. Stalin enriches and further develops Marxist dialectics, philosophical, and historical materialism.

In this work, questions regarding the law-governed nature of social development, productive forces and relations of production, and the base and superstructure are elaborated. Comrade Stalin revealed the characteristic features and role of language in social life, indicating the prospects for the further development of national cultures and languages.

A major contribution to the treasury of Marxism-Leninism is J. V. Stalin's brilliant work Economic Problems of Socialism in the USSR.

The theoretical and practical significance of this work by Comrade Stalin is truly immense. In it, based on a deep scientific analysis of the objective processes of development of Soviet society, Comrade Stalin demonstrated the paths of gradual transition from socialism to communism.

The 19th Party Congress instructed the commission on revising the party program to be guided by the main propositions of Comrade Stalin's work Economic Problems of Socialism in the USSR.

In the work Economic Problems of Socialism in the USSR, J. V. Stalin subjected anti-Marxist "viewpoints" and erroneous views on economic issues of socialist society to devastating criticism. Comrade Stalin deeply and comprehensively elaborated on the economic laws of socialism, the prospects for the development of the socialist economy, and the paths of gradual transition from socialism to communism.

A major contribution to Marxist theory is J. V. Stalin's discovery of the basic economic law of modern capitalism and the basic economic law of socialism. Comrade Stalin formulates the main features and requirements of the basic economic law of modern capitalism as follows: "...the securing of the maximum capitalist profit through the exploitation, ruin and impoverishment of the majority of the population of a given country, through the enslavement and systematic robbery of the peoples of other countries, especially backward countries, and, finally, through wars and militarization of the national economy, utilized to secure the highest profits"[34].

The basic economic law of modern capitalism shows that under the capitalist economic system, the interests of millions of ordinary people are sacrificed to a small clique of capital magnates. This law exposes the parasitic nature of modern capitalism, which is in a stage of decay, and lays bare the roots of the aggressive policy of capitalist states.

Conversely, the basic economic law of socialism shows that under the socialist economic system, production develops in the interests of all society, in the interests of the working people liberated from the exploiting classes. J. V. Stalin formulates the main features of the basic economic law of socialism as follows: "...the securing of the maximum satisfaction of the constantly growing material and cultural requirements of the whole of society through the continuous growth and perfection of socialist production on the basis of higher technique"[35].

---

[34] J. V. Stalin, Economic Problems of Socialism in the USSR, p. 38.

[35] J. V. Stalin, Economic Problems of Socialism in the USSR, p. 40.

Thus, while under capitalism man is subjected to the merciless law of extracting maximum profit, under socialism, on the contrary, production is subjected to man, to the satisfaction of his needs. This noble goal has a beneficial effect on production and its rate of development. The operation of the basic economic law of socialism leads to a rise in society's productive forces, to rapid growth in production, and to a steady rise in the material well-being and cultural level of all members of society. It leads to the strengthening of the socialist system, whereas the operation of the basic economic law of modern capitalism leads to the deepening of the general crisis of capitalism, to the accumulation and aggravation of all capitalist contradictions, and to an inevitable explosion. A comparison of the basic economic law of socialism and the basic economic law of modern capitalism reveals the decisive advantages of the socialist system over the capitalist system as a incomparably higher order.

Comrade Stalin's propositions on the paths of transition from socialism to communism are of program-defining importance.

J. V. Stalin teaches that in order to prepare the transition to communism, it is necessary to fulfill at least three main preliminary conditions:

"1. It is necessary, first, to firmly ensure, not a mythical 'rational organization' of the productive forces, but a continuous growth of all social production, with a priority growth of the production of means of production"[36].

[36] J. V. Stalin, Economic Problems of Socialism in the USSR, pp. 66–67.

"2. It is necessary, secondly, by means of gradual transitions carried out with advantage to the collective farms and, consequently, to all society, to raise collective farm property to the level of public property, and to replace commodity circulation, also by gradual transitions, with a system of product exchange, so that the central authority or some other social-economic center can cover all output of social production in the interests of society"[37].

"3. It is necessary, thirdly, to achieve such a cultural growth of society as would secure for all members of society the comprehensive development of their physical and mental capacities, so that members of society have the opportunity to receive an education sufficient to become active figures in social development, and to have the opportunity freely to choose their occupation, rather than being tied for life, owing to the existing division of labor, to some single occupation"[38].

For this purpose, Comrade Stalin points out, it is necessary to reduce the working day at least to 5–6 hours, to introduce compulsory polytechnic education, to radically improve housing conditions, and to raise the real wages of workers and employees at least twofold.

Comrade Stalin teaches that "only after the fulfillment of all these preliminary conditions, taken together, will it be possible to transition from the socialist formula — 'from each according to his ability, to each according to his work' to the communist

---

[37] Ibid., p. 67.
[38] Ibid., pp. 68–69.

formula — 'from each according to his ability, to each according to his needs'"[39].

J. V. Stalin elaborated such new problems as the question of measures to raise collective-farm property to the level of public property, the gradual transition from commodity circulation to a system of direct product exchange between state industry and collective farms through the "commodity-outflow" system (otovarivanie), as well as the question of eliminating the essential distinctions still remaining in socialist society between town and country, and between mental and physical labor.

J. V. Stalin drew a clear distinction between the question of eliminating the opposite between town and country, between mental and physical labor, and the question of eliminating essential differences between them. Comrade Stalin showed that the opposition between town and country, between mental and physical labor, disappeared along with the destruction of capitalism and the consolidation of the socialist system. However, under a socialist system, essential differences between town and country, between mental and physical labor, still exist, and the problem of eliminating these differences is a highly serious one.

Along with elaborating economic problems and problems of scientific communism, J. V. Stalin, in his work Economic Problems of Socialism in the USSR, develops and concretizes dialectical and historical materialism, deepening the understanding of such issues as objective laws of social

[39] J. V. Stalin, Economic Problems of Socialism in the USSR, p. 69.

development and their utilization, the dialectics of productive forces and production relations, possibility and reality, the relationship between old forms and new content, and many others.

The works of J. V. Stalin, Economic Problems of Socialism in the USSR and Marxism and Problems of Linguistics, deal a crushing blow to vulgarizers of Marxism-Leninism, enriching and further developing Marxist political economy, dialectical and historical materialism, and serve as a guide in practical activity for building communism.

"The theoretical discoveries of Comrade Stalin have world-historical significance, arming all peoples with the knowledge of paths for the revolutionary transformation of society and the richest experience of our party's struggle for communism"[40].

Of immense importance is Comrade Stalin's struggle against a dogmatic approach to theory.

J. V. Stalin, developing and advancing Marxist theory, enriched it with new propositions and conclusions, clarified and concretized certain general propositions of Marxism based on historical experience, and pointed out that individual theses of the classics of Marxism had lost their validity due to new historical conditions.

Comrade Stalin sharply criticized those who understand Marxism dogmatically and scholar-like, and who establish an Arakcheyev-like regime in science. The struggle of opinions

[40] G. Malenkov, Report to the XIX Party Congress on the Work of the Central Committee of the C.P.S.U.(B.), p. 107.

and freedom of criticism, Comrade Stalin teaches, is a decisive condition for the development of science.

Through his creative development of key principles of Marxism and his struggle against dogmatism and Talmudism, Comrade Stalin made an invaluable contribution to the treasure house of Marxist-Leninist science.

The teachings of Marx — Engels — Lenin — Stalin brightly illuminate the path of the victorious movement of peoples toward communism far into the future.

The teachings of Marx — Engels — Lenin — Stalin are all-powerful and invincible because they are true. Over more than a century of the Marxist worldview's existence, bourgeois ideologists have repeatedly attempted to "overthrow" it, and each time they smashed their heads in struggle against the indestructible, scientifically grounded, and historically proven propositions and conclusions of Marxism-Leninism.

In our days, a similar crusade against Marxism-Leninism is being undertaken by the despicable lackeys of American-British imperialism, the malicious instigators of a new world war.

However, an equally inglorious fate awaits them. The worldview of the Marxist-Leninist party — dialectical materialism — illuminates brighter each day the path to communism for communist and workers' parties, as well as for all working people.

MARXIST DIALECTICS ON THE INTERCONNECTION AND INTERDEPENDENCE OF PHENOMENA IN NATURE AND SOCIETY

★

V. S. MOLODTSOV

In his work *On Dialectical and Historical Materialism*, Comrade Stalin provided a formulation of the four main features of the Marxist dialectical method that is unsurpassed in clarity and depth.

Comrade Stalin begins his presentation of the features of the Marxist dialectical method with the doctrine of the connection and interdependence of phenomena in nature and society, pointing out that the Marxist dialectical method requires considering every phenomenon in nature and society in connection with other phenomena. This requirement of the Marxist dialectical method reflects the essential relations of objects and phenomena of the objective material world. In the world, there is nothing that exists in isolation; everything exists in relation to something else, in connection with others. "Millennia have passed since the idea of the 'connection of all things' and the 'chain of causes' arose," Lenin pointed out.—"A comparison of how these causes were understood in the history of human thought would provide a theory of knowledge that is indisputably conclusive"[41].

[41] *V. I. Lenin, Philosophical Notebooks, 1947, p. 294.*

The Marxist doctrine of the interconnection of phenomena in nature and society is fundamentally opposed to metaphysics, which considers all objects of nature as existing in isolation.

In formulating the features of the Marxist dialectical method, Comrade Stalin counterposes the dialectical method to metaphysics, exposing its anti-scientific and reactionary essence.

Critique by Marxist Philosophy of the Metaphysical Denial of the Interconnection of Phenomena in Nature and Society

The Marxist dialectical method was forged in the struggle against idealism and metaphysics. "Dialectics matured in the struggle against metaphysics, and in this struggle it gained fame..."[42]—writes Comrade Stalin. The founders of materialist dialectics, Marx and Engels, decisively exposed all kinds of theories hostile to proletarian socialism. They subjected various bourgeois and petty-bourgeois metaphysical concepts (economic, political, philosophical) to criticism, and in this struggle perfected and developed the method of materialist dialectics.

The struggle against metaphysics acquires particular sharpness in the era of imperialism, when agents of the bourgeoisie penetrating the labor movement substitute metaphysics for Marxist dialectics in order to impose bourgeois views on the working class and limit the scope of its revolutionary struggle. Exposing theories and political currents hostile to Marxism, Lenin and Stalin always revealed the methodological basis of these theories and currents—their metaphysics.

---

[42] *J. V. Stalin, Works, vol. 1, p. 303.*

The metaphysical denial of the interdependence of phenomena is a characteristic feature of modern idealist systems. In these systems, metaphysics is inextricably linked with idealism. In order to undermine scientific concepts of reality, the ideologists of imperialism, relying on the metaphysical method, "invent" an endless number of "concepts" and "worldviews" that reduce to a denial of the existence of the world independent of consciousness. One such concept is Machist philosophy, which to this day has currency in capitalist countries.

In his work *Materialism and Empirio-criticism*, which marked an epoch in the development of Marxist philosophy, Lenin, while exposing the idealism of Machist philosophy, simultaneously subjected its metaphysical method to decisive criticism. The Machists attempted to prove that only sensations really exist; they considered sensations in themselves, detached from reality, outside connection with surrounding objects and phenomena. The external material world was thus declared by the Machists to be an illusion. On this basis grew the monstrous "brainless" philosophy of the Machists, as Lenin called it.

"The sophism of idealist philosophy consists in the fact," wrote Lenin, "that sensation is accepted not as a connection of consciousness with the external world, but as a partition, a wall separating consciousness from the external world…"[43]

From Lenin's critique of Machism, it is clearly visible that the Machists, in substantiating their idealist theories and in their

[43] *V. I. Lenin, Works, vol. 14, 4th ed., p. 40.*

struggle against materialist natural science and materialist philosophy, relied on metaphysics as a method that makes it possible to distort reality.

Lenin and Stalin, conducting an unceasing struggle against theories hostile to Marxism, show how tearing phenomena out of their mutual connection inevitably leads to an idealist and metaphysical distortion of reality, and in the sphere of politics —to opportunism.

The history of the Communist Party's struggle against various falsifiers of Marxism provides many examples showing how an abstract, non-dialectical approach to reality invariably served the vile ends of the enemies of the party.

Exposing the Trotskyites and Bukharinites—the worst enemies of the proletarian revolution and socialism—Comrade Stalin repeatedly pointed out that this gang of spies and murderers, for their own vile purposes, misinterpreting reality, substituted metaphysics and scholasticism for Marxist dialectics.

In 1925, when under the leadership of the Communist Party the restorative period was coming to an end in the country and socialist industry became the predominant force, the Trotskyites came forward denying the socialist character of our industry, attempting to represent socialist industry as state-capitalist.

Speaking in 1925 at the 14th Party Congress, Comrade Stalin exposed the Trotskyites' identification of socialist industry with state capitalism. Comrade Stalin showed that the Trotskyites

considered the question of state capitalism "scholastically, not dialectically, outside connection with the historical situation"[44].

Comrade Stalin showed that two different periods in the development of Soviet industry must not be confused: "...to speak now, in 1925, of state capitalism as the predominant form of our economy means distorting the socialist nature of our state industry, means not understanding the whole difference between the past and present situation, means approaching the question of state capitalism not dialectically, but scholastically, metaphysically"[45].

This example from the history of our party's struggle against the enemies of Marxism-Leninism vividly demonstrates how metaphysics was used by the enemies of the proletarian revolutionary movement to distort reality.

Under modern conditions, the peddlers of anti-popular, reactionary theories are the ideologists of American-British imperialism; they also act as propagandists of idealism and metaphysics.

A vivid illustration of the metaphysical distortion of reality is the so-called semantic philosophy of modern American imperialism. The semanticists wage a fierce struggle against materialism in general, and against dialectical materialism in particular. Representatives of this subjectivist-idealistic philosophy (Carnap, Wittgenstein, Ayer, Chase, and others) lecture that all contradictions in life arise from the arbitrary interpretation of words and concepts.

---

[44] *J. V. Stalin, Works, vol. 7, p. 366.*
[45] *Ibid., p. 367.*

Ayer asserts that "there is no philosophical question about the relationship of mind and matter; there are only linguistic questions about defining certain symbols..." Semanticists attempt to convince people that concepts like "capitalism" and "fascism" are allegedly invented words that reflect nothing real.

Semanticists metaphysically tear concepts away from objects, considering concepts as unrelated to objects and not reflecting phenomena of the material world.

Although this philosophy is extremely primitive, it is nevertheless quite widely used by seasoned political hucksters to dull the consciousness of the working masses. Ideologists of imperialism try to instill in the masses that if the word "capitalism" is eliminated, this will save the capitalist system from hardships and upheavals. They cherish the illusion that with the help of this sophistry they will manage to deceive the working people. But no matter how hard the semanticists try to fool the masses of the people, the capitalist system will inevitably collapse, and only together with it will such a concept hated by the masses as capitalism pass into history.

Bourgeois metaphysical and idealist theories also penetrate the environment of those Soviet people who have not yet freed themselves from the vestiges of capitalism.

Noting that in Soviet society there is no class basis for the dominance of bourgeois ideology and that socialist ideology dominates among us, Comrade Malenkov reminds us of the presence among us of remnants of bourgeois ideology, against which a decisive struggle is necessary. "We are not insured," says Comrade Malenkov, "also against the penetration into our

midst of alien views, ideas, and moods from the outside, from capitalist states, and from within, from the remnants of groups hostile to Soviet power not fully destroyed by the party. It must not be forgotten that the enemies of the Soviet state try to spread, foster, and inflate all kinds of unhealthy moods, to ideologically corrupt the unstable elements of our society"[46].

In recent years, metaphysical and idealist theories alien to Marxism have penetrated a number of fields of knowledge, delaying the development of Soviet science. An illustration of this can serve as the penetration into certain circles of Soviet biologists of the metaphysical and idealist concept of Weismannism-Morganism. Considering a living organism in isolation from its environment, Weismannist-Morganists attempted to prove the unchangeability of heredity under the influence of the organism's living conditions and the impossibility of targeted alteration of plant and animal forms.

The great Russian transformer of nature I. V. Michurin and his followers comprehensively demonstrated that organisms must be considered only in their inseparable connection with the surrounding environment that conditions their development, and substantiated the possibility of targeted alteration of the heredity of plants and animals. Having routed the Weismannist-Morganists, Michurinists opened up broad scope for the development of Soviet science, for understanding new laws governing the development of the organic world and utilizing the forces of nature in the interests of building communism in our country.

---

[46] *G. Malenkov, Report to the 19th Party Congress on the Work of the Central Committee of the C.P.S.U.(B.), p. 94.*

Weismannism-Morganism in biology demonstrates the reactionary essence of metaphysics, which hinders the discovery of laws governing the development of nature.

Metaphysics and idealism also penetrated Soviet linguistics. Exposing Marr's idealist concept of linguistics, J. V. Stalin uncovered its metaphysical nature. Marr and his followers failed to apply dialectics to the interpretation of such a social phenomenon as language. They, in particular, ignored the dialectical interconnection of language with the history of the people, the interconnection of language and thought. Marr asserted that thinking could occur without language.

Criticizing this metaphysical theory, Comrade Stalin showed that Marrists tear thought away from language, considering it possible for people to communicate without the aid of language. The metaphysical separation of language from thought and the ignoring of the dialectical interconnection between them ultimately led the Marrists to an idealist interpretation of thought, to an attempt to substantiate the existence of thought outside connection with its material, linguistic shell.

A serious danger to the development of Soviet science is represented by the attempt of certain economists to smuggle metaphysics and idealism into political economy. During the discussion on economic issues that took place in November 1951, it became clear that certain economists took an idealist position on fundamental issues of economic science. In doing so, of course, they completely retreated from Marxist dialectics, taking up the positions of the metaphysical method.

Retreating from dialectics as a whole, these economists ignored the dialectical interconnection of phenomena in economic life.

Thus, for example, the dialectical law of the connection of phenomena was ignored by certain economists and philosophers when considering the problem of the relationship between productive forces and relations of production. Productive forces were considered in isolation from relations of production, while the latter were simply dissolved into productive forces. This separation of productive forces from relations of production was a restoration of the idealist and metaphysical Bogdanov-Bukharin concept.

The departure of certain economists from dialectics and their sliding into positions of metaphysics was also revealed in their approach to many other problems. These economists, for example, viewed production as an end in itself, not in connection with human needs, but in isolation from them. They viewed socio-economic formations in isolation, severed from one another, as a result of which the role of economic laws common to all formations was underestimated.

Comrade Stalin exposed the metaphysical and idealist treatment of questions by certain economists and gave a solution to economic problems based on uncovering the dialectic of social life. At the same time Comrade Stalin showed that metaphysics and idealism in economic science lead to adventurism in economic policy.

By denying the interdependence of phenomena in nature, metaphysics undermines the possibility of knowing nature as a unified whole. The metaphysical denial of the interconnection

of phenomena in nature and society inevitably gives rise to a false view of nature and social life as a casual accumulation of objects and phenomena isolated from one another.

Marxist Dialectics on the Connection and Interdependence of Phenomena

In contrast to metaphysics, Marxism-Leninism developed a truly scientific method for knowing and changing reality. This method primarily contains the requirement to consider all phenomena of nature and society in their connection and interdependence.

Dialectics, wrote Engels, "takes things and their perceptual images mainly in their interconnection, in their concatenation, in their movement, in their origin and disappearance..."[47] In an unfinished article on dialectics, Engels set the task to "develop the general character of dialectics as a science of interconnections in contrast to metaphysics"[48].

Lenin attached paramount importance to the dialectical doctrine of the connection between objects and phenomena of the material world. Comprehensively elaborating Marxist dialectics, Lenin pointed out the necessity of considering, when analyzing a thing, the entire "sum of the multifaceted relations of this thing to others". In the dialectical analysis of reality, Lenin included the requirement to reveal the multifaceted, universal connection and interdependence of all phenomena in the world.

---

[47] *F. Engels, Anti-Dühring, 1952, p. 22.*
[48] *F. Engels, Dialectics of Nature, 1952, p. 38.*

Lenin pointed out that in the cognition of phenomena of the material objective world science proceeds "from coexistence to causality and from one form of connection and interdependence to another, deeper, more general"[49].

Comrade Stalin exhaustively revealed the essence of the Marxist proposition on the connection and interdependence of phenomena in nature and society, treating the doctrine of connection as the first main feature of the Marxist dialectical method. "In contrast to metaphysics," Comrade Stalin points out, "dialectics does not view nature as a casual accumulation of objects, phenomena, severed from one another, isolated from one another and independent of one another,—but as a connected, unified whole, where objects, phenomena are organically connected with one another, depend on one another, and condition one another.

Therefore, the dialectical method holds that no phenomenon in nature can be understood if taken in an isolated form, outside connection with surrounding phenomena, for any phenomenon in any field of nature can be turned into nonsense if considered outside connection with surrounding conditions, in isolation from them; and, conversely, any phenomenon can be understood and substantiated if considered in its inseparable connection with surrounding phenomena, in its conditioning by surrounding phenomena"[50].

Characterizing the doctrine of the connection and interdependence of phenomena in nature and society as the

---

[49] *V. I. Lenin, Philosophical Notebooks, 1947, p. 193.*

[50] *J. V. Stalin, Problems of Leninism, 1952, p. 575.*

main feature of the Marxist dialectical method and as a most important requirement for the scientific analysis of reality, Comrade Stalin further developed Marxist dialectics, enriching it with new conclusions and propositions.

Marxist dialectics is the only scientific method for knowing reality; the laws and propositions of dialectics are not brought into nature and social life from the outside, but represent a reflection of the objective material world.

The task both in understanding nature and in understanding the history of society "consists not in inventing connections out of one's head, but in discovering them in the facts themselves"[51], wrote Engels.

The requirement of the Marxist dialectical method to consider phenomena in their interdependence is determined, therefore, by the circumstance that in nature itself and in social life, objects and phenomena do not exist in isolation. In the world, all objects and events are conditioned by one another, interact with one another, and thanks to this, as Engels wrote, "all of nature accessible to us forms a system, an aggregate connection of bodies, and by body we understand here all material realities, starting from a star and ending with an atom..."[52]

Only the consideration of phenomena in their interdependence enables us to understand nature as a unified whole.

The doctrine of Marxist dialectics on the unity of nature, on the connection and interdependence of natural phenomena, finds

---

[51] *F. Engels, Ludwig Feuerbach and the End of Classical German Philosophy, Gospolitizdat, 1952, p. 52.*

[52] *F. Engels, Dialectics of Nature, 1952, p. 45.*

vivid confirmation in all fields of science, and particularly in natural science. As early as the 19th century, natural science developed in the direction of understanding the interconnection of nature's processes.

Engels wrote that natural science, having been until the end of the 18th century a collecting science, a science of finished things, in the 19th century became a science of processes, of the origin and development of these things, and of the connection uniting these processes of nature into one great whole[53].

Of immense significance for proving the mutual connection of nature's processes is the law of the conservation and transformation of energy. "The unity of all movement in nature is now no longer merely a philosophical assertion, but a natural-scientific fact"[54], wrote Engels regarding this law.

The unity of organic nature was vividly demonstrated by the discovery of the cellular structure of organic matter, which established the unity of the plant and animal worlds and the mutual connection between them, as well as Darwin's theory, which proved that all organisms arose as a result of a long evolution from the simplest living forms, which in turn (as was proven later) were formed in the process of a long history of natural development of matter.

In his book *Ludwig Feuerbach*, Engels, pointing to these three great discoveries—the discovery of the cell, the law of the

---

[53] *F. Engels, Ludwig Feuerbach and the End of Classical German Philosophy, 1952, p. 38.*
[54] *F. Engels, Dialectics of Nature, 1952, p. 155.*

transformation of energy, and Darwin's evolutionary theory—emphasizes their great influence on the development of a dialectical understanding of nature. Engels also showed great interest in the discovery of D. I. Mendeleev. In *Dialectics of Nature*, Engels notes that by creating the periodic system of elements, Mendeleev "accomplished a scientific feat".

D. I. Mendeleev's periodic system of chemical elements is a most important natural-scientific discovery, proving that nature is a single, connected whole.

Mendeleev discovered the connection between elements and the law-governed nature of their interaction. He put an end to the metaphysical concept prevailing in science regarding the existence of isolated elements unrelated to one another.

Noting the special significance of natural science discoveries for dialectical-materialist generalizations, Engels points out that data obtained by empirical natural science make it possible "in a fairly systematic form to give a general picture of nature as a connected whole"[55].

Twentieth-century natural science has provided in various fields of science many new facts vividly confirming the propositions of dialectical materialism regarding the unity of nature, the interdependence of natural phenomena and objects.

The development of sciences in Soviet socialist society serves as confirmation of the vitality and scientific significance of the principles of dialectical materialism.

---

[55] *F. Engels, Ludwig Feuerbach and the End of Classical German Philosophy, 1952, p. 39.*

Soviet scientists Pavlov, Timiryazev, Michurin, Lepeshinskaya, Lysenko, and many others, through their scientific research, have significantly enriched our knowledge of the unity of nature and its infinite interconnections.

Modern science convincingly demonstrates how every new discovery confirms the Marxist doctrine of the interconnections of nature's processes. Among such discoveries is the doctrine of the great Russian physiologist I. P. Pavlov.

Of immense philosophical importance is I. P. Pavlov's resolution of the problem of the connection between mental phenomena and the external environment. Idealist psychology attempted to "comprehend" mental phenomena without going beyond the limits of the internal world of animals and humans. Such an approach to the study of mental activity does not allow for working out any objective criterion for evaluating mental phenomena and leads to the interpretation of the "soul" as an incomprehensible entity.

In contrast to idealist psychologists, I. P. Pavlov considered his main task to be revealing "the infinitely complex relationship of the organism with the surrounding world in the form of an exact scientific formula"[56].

Studying the higher nervous activity of animals and humans, I. P. Pavlov created the doctrine of conditioned reflexes, which convincingly proved that the mental world of animals and humans takes shape under the influence of the external environment and that overall the vital activity of an organism

[56] *I. P. Pavlov, Lectures on Physiology. 1912–1913, ed. Academy of Medical Sciences USSR, M. 1949, p. 55.*

represents a unity of the external and internal. By reflexes, I. P. Pavlov understands law-governed reactions of the organism to external stimuli. From a physiological point of view, the aggregate of reflexes constitutes the main fund of human and animal nervous activity. Thus, the materialist foundation for researching mental phenomena was established by I. P. Pavlov through uncovering the mechanism of interconnection between mental phenomena and the external world.

One of the newest discoveries confirming dialectical interconnection in nature is O. B. Lepeshinskaya's theory on non-cellular forms of existence of living matter, on the origin of the cell from non-cellular living substance, and the role of pre-cellular living substance in the organism.

O. B. Lepeshinskaya dealt a decisive blow to Virchow's metaphysical theory, which dominated biology for a long time and maintained that all living things arise only from a cell, that outside the cell there is allegedly no life, and that a living organism represents a mechanical sum of cells, a "federation" of cells.

Engels himself, in refuting such metaphysical theories, pointed out the existence of structureless moners, pre-cellular formations.

Guided by the principles of Marxist-Leninist philosophy, O. B. Lepeshinskaya overcame Virchow's metaphysical concept and experimentally proved the existence of non-cellular forms of living matter. As a result of many years of research into the yolk spheres of a chicken egg, she achieved scientific results that convincingly demonstrate that the formation of new cells

occurs not only through the division of an old cell, but also from living non-cellular matter. Without denying the emergence of new cells from old cells in the process of their division, O. B. Lepeshinskaya asserts that new cells can arise not only from cells, but also from protoplasm. Characterizing protoplasm as active and capable of metabolism, O. B. Lepeshinskaya proves that "various forms of organized matter —at least primary ones—arise from it"[57]. Data on the structure of organic matter obtained through the outstanding research of O. B. Lepeshinskaya serve as new confirmation of the proposition of Marxist dialectics regarding the unity of nature, a further step forward on the path of experimental disclosure of the connection between living and non-living matter, the transformation of inorganic matter into organic.

A vivid confirmation of the Marxist dialectical doctrine of the interconnection and interdependence of objects of the material world is the history of society.

In contrast to idealist theories of social development, which reduced social life to a chaos of accidents, Marxism-Leninism created a genuine science of society, viewing the development of society as a natural-historical process.

"Just as Darwin," writes Lenin, "put an end to the view that plant and animal species were completely unconnected, accidental, 'god-created,' and unchangeable, and for the first time put biology on a completely scientific footing by establishing the variability of species and succession between

---

[57] *O. B. Lepeshinskaya, The Origin of Cells from Living Substance and the Role of Living Substance in the Organism, ed. Academy of Medical Sciences USSR, M. 1950, p. 13.*

them,—so Marx put an end to the view of society as a mechanical aggregate of individuals, permitting any kind of changes at the will of authorities (or, what is the same thing, at the will of society and government), arising and changing accidentally, and for the first time put sociology on a scientific footing by establishing the concept of socio-economic formation as an aggregate of given relations of production, and establishing that the development of such formations is a natural-historical process"[58].

Historical materialism, being an extension of dialectical materialism to the cognition of social relations, reveals the objectively existing interconnection between social being and social consciousness.

In his work *On Dialectical and Historical Materialism*, Comrade Stalin reveals the interconnection between the conditions of the material life of society and social consciousness. Comrade Stalin shows that the source of the origin of ideas is the material relations of people, and that differences in ideas and political institutions at different times are explained by different conditions of the material life of society.

On the other hand, the interconnection of social consciousness and the material conditions of society's life also lies in the reverse influence of ideas on the material life of society.

The disclosure by Marxism of the interconnection between the material conditions of society's life and social ideas, the proof

[58] *V. I. Lenin, Works, vol. 1, 4th ed., pp. 124–125.*

of the primacy of social being and the secondary, derivative nature of social consciousness, and the clarification of the role of ideas in social development have immense importance for the practical activity of the Marxist-Leninist party. "...The party of the proletariat," writes Comrade Stalin, "must rely on such a social theory, on such a social idea as correctly reflects the needs of development of the material life of society and is capable, by virtue of this, of setting in motion broad masses of the people, capable of mobilizing them and organizing from them a great army of the proletarian party, ready to crush reactionary forces and clear the road for the progressive forces of society"[59].

In his work *Marxism and Problems of Linguistics*, Comrade Stalin subjected the primitive-anarchic view of society as a sum of phenomena unconnected with one another to severe criticism.

Representatives of the primitive-anarchic view considered class struggle to be an indicator of society's breakdown, a rupture of connections between hostile classes. Comrade Stalin exposed the groundlessness of such a view. "As long as capitalism exists," Comrade Stalin points out, "bourgeoisie and proletarians will be bound to one another by all economic threads as parts of a single capitalist society"[60]. The class struggle of the proletariat against the bourgeoisie not only does not lead society to breakdown, but on the contrary, leads to the overthrow of capitalism and the establishment of a higher socio-economic formation—communism.

---

[59] *J. V. Stalin, Problems of Leninism, 1952, pp. 586–587.*

[60] *J. V. Stalin, Marxism and Problems of Linguistics, p. 19.*

In this work, elaborating Marxist theory of language, Comrade Stalin also showed the connection of language with the history of the people. Comrade Stalin showed that language is a means of human communication, that language and the laws of its development can be understood only in connection with the history of society, with the history of the people. Vulgarizers of Marxism in linguistics, considering language to be class-based and identifying it with the superstructure, created a theory of language explosions in the process of its development. Criticizing this vulgarizing theory, Comrade Stalin showed that such a sudden liquidation of a language would inevitably lead to a rupture of connections between people, "to the complete disruption of human intercourse with one another."

Having shown the groundlessness of the Marrist theory of language, Comrade Stalin in the most profound manner revealed the dialectic of language and thought, pointing out that language and thought exist only in their interconnection. Thought is necessarily carried out on the basis of linguistic material. "Naked thoughts," writes Comrade Stalin, "free from linguistic material, free from linguistic 'natural matter'—do not exist. 'Language is the immediate reality of thought' (Marx). The reality of thought manifests itself in language. Only idealists can speak of thought unconnected with the 'natural matter' of language, of thought without language."[61]

In the work *Economic Problems of Socialism in the USSR*, Comrade Stalin, solving the most complex problems of political economy, gives classic examples of the dialectical

[61] *J. V. Stalin, Marxism and Problems of Linguistics, p. 39.*

analysis of reality. Considering social life in a state of continuous development, J. V. Stalin reveals the interdependence and mutual conditioning of social phenomena. Exposing the Bogdanov-Bukharin concept, which dissolves relations of production into productive forces, Comrade Stalin demonstrates its idealist essence.

At the same time, J. V. Stalin reveals the dialectical interconnection between productive forces and relations of production, as two inextricably linked sides of social production. Although they are distinct, they are nevertheless interconnected with each other as content and form, and do not exist without one another. The interaction between them manifests itself in the fact that new relations of production, being determined by the level of development of productive forces, act in the role of the main engine of development of the latter, while the old act in the role of a brake on the development of productive forces.

"This peculiarity of the development of relations of production from the role of a brake on the productive forces to the role of their main engine forward, and from the role of the main engine to the role of a brake on the productive forces,— constitutes one of the main elements of Marxist materialist dialectics."[62]

The manifestation of the dialectical law of interconnection Comrade Stalin reveals in the analysis of other economic factors. For example, pointing out that the law of value is not under socialism the regulator of production, J. V. Stalin

[62] *J. V. Stalin, Economic Problems of Socialism in the USSR, p. 62.*

emphasizes that continuous growth of socialist production is impossible without the primacy of the production of means of production. Thus is revealed the organic connection between the continuous growth of the national economy and the primacy of the production of means of production. The dialectic of connection and mutual conditioning of phenomena is uncovered by J. V. Stalin when considering the problem of economic laws and conditions of their action, the connection between production and consumption, and when considering other economic phenomena.

The doctrine of the interconnection of phenomena in nature and society is of fundamental importance for understanding the process of cognition. In contrast to metaphysics, which concentrates attention only on individual objects, on details, Marxist dialectics points to the fact that in nature and society all phenomena are interconnected, and therefore gives us the opportunity to comprehend nature and society as a single whole.

Marxist Dialectics on the Law-Governed Development of Nature and Society

Considering the objects of nature and social phenomena in their multifaceted connections, we thereby uncover the chain of interactions of things and historical events, the sequence of their arising, and the conditioning of their existence. This state of universal connection of phenomena in nature and society is characterized by the Marxist dialectical method as the law-governed development of nature and social life. Comrade Stalin points out that "diverse phenomena in the world represent different forms of moving matter, that the mutual

connection and mutual conditioning of phenomena, established by the dialectical method, represent the law-governed development of moving matter..."[63] Marxist philosophy, therefore, recognizes objective law-governed regularity, necessity in nature and society.

The Marxist doctrine of the law-governed development of nature and society is the basis for the development of knowledge. V. I. Lenin and J. V. Stalin comprehensively elaborated the problem of the objectivity of scientific laws and their utilization in human practical activity. Laws of science express the objective logic of the development of nature and society, reflecting the connection, mutual conditioning of phenomena, objects, and historical events, their sequential and successive development. V. I. Lenin notes that *"every individual thing is bound by thousands of transitions with other kinds of individual things (things, phenomena, processes)"*[64]. Lenin points out that *"natural connection, the connection of natural phenomena exists objectively..."*[65] Defining the concept of law, Lenin writes: *"...the concept of law is one of the stages of human cognition of the unity and connection, interdependence and integrity of the world process."*[66] Lenin characterizes law as the essential, identical, durable (remaining) in a phenomenon.

Lenin points out that laws formulated by science are a reflection of the essence of diverse phenomena of the objective

---

63 *J. V. Stalin, Problems of Leninism, 1952, pp. 580–581.*
64 *V. I. Lenin, Philosophical Notebooks, 1947, p. 329.*
65 *V. I. Lenin, Works, vol. 14, 4th ed., p. 143.*
66 *V. I. Lenin, Philosophical Notebooks, 1947, p. 126.*

material world. *"Law is a reflection of the essential in the movement of the universe,"*[67]—notes Lenin.

Fully and comprehensively, the problem of law is investigated in J. V. Stalin's work *Economic Problems of Socialism in the USSR*. First of all, J. V. Stalin details the Marxist doctrine on the objectivity of scientific laws. Nature and society develop in a law-governed manner. Laws of science reflect objective processes occurring in nature and society. "Marxism understands the laws of science,—whether we are speaking of the laws of natural science or the laws of political economy,—as a reflection of objective processes occurring independently of the will of people,"[68]—teaches J. V. Stalin.

Comrade Stalin emphasizes that not only natural laws have an objective character, but society also develops according to objective laws; in particular, an objective character is inherent in the laws of economic development of society. Socialist society and the socialist economy also develop according to objective laws.

Marxist dialectics proceeds from the materiality of the world and the law-governed patterns of its development.

The Marxist understanding of law-governed development fundamentally differs from its idealist interpretation. Idealism denies the objective character of law-governed development. In the most sharply expressed form, objective law-governed pattern and necessity are denied by representatives of subjective-idealist, in particular Machist philosophy. The

---

[67] *V. I. Lenin, Philosophical Notebooks, 1947, p. 127.*

[68] *J. V. Stalin, Economic Problems of Socialism in the USSR, 1952, p. 4.*

Machists came forward as propagators of the Neo-Kantian idealist point of view on necessity. In his time Kant proved that in the objective world there is no necessity, no law-governed regularity, and that necessity is a category inherent only to the intellect. This line of idealist interpretation of law-governed pattern was adopted by the Machists.

"Except logical,"—wrote Mach,—*"any other necessity, for example physical, does not* exist." Another Machist, Pearson, asserted that "laws of science are much more products of the human mind than facts of the external world."

To this same group of Machists belonged the notorious Bogdanov, who also idealistically interpreted the laws of science. He wrote that "laws by no means belong to the sphere of experience... they are not given in it, but are created by thought as a means to organize experience, to harmoniously reconcile it into a coherent unity." Exposing the idealism of Bogdanov and others in understanding the laws of science, V. I. Lenin showed that the Machists had completely broken with science and embarked on the path of propagating mysticism and fideism.

Particular zeal in replacing objective law-governed regularity with mysticism and symbolism is displayed by modern philosophizing obscurantists. The leitmotif of imperialist philosophy is the mysterious, mystical, otherworldly, incomprehensible, unknowable. For example, the head of the American philosophical school of personalists, Flewelling, declares that nature exists by the will of a divine person, a supreme and omnipotent person. There is no objective law-governed regularity, he declares, everything is directed by a

divine person. Regarding Flewelling, one can with full right repeat what Lenin said about a similar philosophizing obscurantist—the American philosopher Carus: "It is completely obvious that before us is a leader of a company of American literary rogues who engage in intoxicating the people with religious opium."[69]

Modern right-wing socialists are also adherents and propagators of an anti-scientific, subjective-idealist philosophy. Preachers of agnosticism, they prove the impossibility of knowing the laws of nature, and even more so of society. One of the "theoreticians" of the British Labour Party, Gordon-Walker, proves that reason allegedly deals only with symbols of reality and "it would be a delusion to assume that these symbols are identical with reality." The social meaning of this theory is completely clear: its adherents try to prove that the laws of social life cannot be known, and that such laws simply do not exist.

An idealist interpretation of laws also penetrates into the sphere of Soviet science. Under the conditions of socialism, there are people ideologically untempered, unstable, and susceptible to bourgeois theories who become conductors of subjective-idealist views. Some economists began, for example, to assert that under socialism there are supposedly no objective laws of development, that economic laws arise by the will of people, and therefore people can at their own discretion abolish some laws, create others, or transform laws.

---

[69] *V. I. Lenin, Works, vol. 14, 4th ed., p. 213.*

A similar error was committed by certain philosophers. Among economists and philosophers, an idealist point of view on planning was prevalent. It was argued as if planning were an economic law of Soviet society. Since planning was identified by these people with objective law, and plans, as is known, are created by the state, it turned out that the state could supposedly abolish, transform, and create objective laws. This is an explicitly idealist, voluntaristic interpretation of objective laws. Acting as propagators of these propositions were both economists and philosophers.

Criticizing the denial by certain economists of the objective character of the laws of social development, J. V. Stalin showed that these people "break with Marxism and embark on the path of subjective idealism." Revealing the dialectical character of the development of reality, J. V. Stalin substantiated the Marxist proposition that both the laws of nature and the laws of society exist objectively, independently of the will and consciousness of people, and that people in their activity must reckon with these laws.

Marxism teaches that the task of people consists in knowing the objective laws of development of nature and society, mastering them, and using them for their own purposes. The task of the builders of communism consists in knowing the objective laws of development of socialist society and relying on these laws in their activity.

Marxist dialectics is a scientific method for knowing and reflecting the laws of nature and society. Guided by Marxist dialectics, J. V. Stalin discovered new laws of social development. To Comrade Stalin belongs the discovery of the

basic economic law of modern capitalism and the basic economic law of socialism.

Relying on the economic laws of socialism, mastering them and using them, the Communist Party and the Soviet state outline plans for the economic development of socialist society —plans that reflect the requirements of objective economic laws of the development of socialism: the basic economic law of socialism and the law of planned, proportional development of the national economy.

A vivid document of the era of socialism is the "Directives of the 19th Party Congress on the Fifth Five-Year Plan for the Development of the USSR for 1951–1955." In these directives of the Communist Party, the action in our society of the basic economic law of socialism and the law of planned, proportional development of the national economy finds comprehensive reflection. A new, powerful surge in all branches of the national economy is outlined, alongside a further rise in the material welfare and cultural level of the Soviet people. These directives reveal the reality of our plans; they are drawn up by the Communist Party on the basis of knowledge of the laws of economic development.

Marxist dialectics rejects both voluntaristic interpretations of laws and fetishistic attitudes toward them. Voluntarists do not reckon with objective laws, interpreting them idealistically. According to the understanding of voluntarists, laws have no objective basis and allegedly depend entirely on people. This is an anti-Marxist, idealist interpretation of law. Classics of Marxism decisively exposed the idealist interpretation of law by various philosophical "schools."

Asserting that nature and social life develop according to laws inherent to them, independent of the will of people, Marxism-Leninism at the same time rejects a fetishistic interpretation of law-governed patterns and emphasizes the role of the popular masses, classes, parties, and individuals in the development of society.

Marxism rejects fatalism. The Marxist understanding of law-governed development contains the obligatory recognition that people are capable of influencing the course of social development. People make history, the people are the creator of history. In the process of historical creation, people discover objectively existing laws, comprehend them, and in their practical activity rely on these laws and use them. Giving a dialectical solution to the problem of freedom and necessity, Engels pointed out that "freedom, therefore, consists in a command over ourselves and over external nature, a command founded on knowledge of natural necessities (*Naturnotwendigkeiten*)..."[70]

Comrade Stalin teaches that people cannot arbitrarily bypass the stages of the law-governed development of society, but they can influence the course of events and use the laws of their development in their own interests. "It is proven," writes J. V. Stalin, "that society is not powerless in the face of laws, that society can, having comprehended economic laws and relying on them, restrict the sphere of their action, utilize them in the interests of society, and 'harness' them..."[71]

---

[70] *F. Engels, Anti-Dühring, 1952, p. 107.*

[71] *J. V. Stalin, Economic Problems of Socialism in the USSR, p. 6.*

A vivid example of the conscious utilization of the laws of social development is the building of communism in the USSR. The Communist Party confidently leads the Soviet people to communism along a path based on precise knowledge of the laws of historical development.

Marxist Dialectics on Causal Conditioning of Phenomena

The interconnection of objects and phenomena of nature and society exists in diverse forms and is reflected in cognition in the form of various concepts and categories. The connection of phenomena of nature and society is expressed in relations between quality and quantity, between form and content, the new and the old, positive and negative, necessity and chance. Causal relations of phenomena of nature and society also exist. Causal relations differ from all other relations expressing the connection of objects in that they reveal the origin of phenomena and objects. Through relations of cause and effect, a continuous and infinite chain of events in nature and society is revealed. Causality expresses a moment of universal connection of phenomena of the material world. In the history of philosophy, the interpretation of causality has always constituted an arena of fierce struggle between materialism and idealism. Lenin pointed out: *"The question of causality has an especially important significance for determining the philosophical line of this or that newest 'ism'..."*[72] In *Materialism and Empirio-criticism*, Lenin subjected the Machist idealist interpretation of causality to a decisive exposure. The Machists denied the objective significance of

[72] *V. I. Lenin, Works, vol. 14, 4th ed., p. 140.*

cause-and-effect relations and revived the Humean concept of causality. They imposed the idea that there is no causal dependence in the phenomena themselves, and that sensation and experience allegedly tell us nothing about causal relations. The Machist subjective-idealist viewpoint on causality is predominant in modern bourgeois philosophy and natural science.

Bourgeois idealist physicists deny objective causal relations in the world of microparticles, attempting to refute the presence of objective law-governed patterns in intra-atomic phenomena.

Idealist physicists in a Machist manner assert that we are dealing only with sensory experience and mathematical calculations that say nothing about the existence of a material, objective world independent of consciousness. Such statements on the part of bourgeois physicists are nothing other than a betrayal of science, an expression of the dead-end crisis of bourgeois natural science.

Refuting the fabrications of idealist physicists of the USA and England, Soviet physicists reject the idealist theory of indeterminism (the denial of law-governed patterns and causality of phenomena). They proceed from the fact that the principle of causality, which dominates in classical mechanics, must be refined as applied to particles of the microworld and is by no means refuted by new discoveries in physics.

Marxist dialectics recognizes the objective character of causality. The application of the materialist solution of the fundamental question of philosophy to the understanding of causality means that this philosophical category is a reflection

of causal relations inherent in phenomena of the objective world. Causal relations are universal; they are inherent in all phenomena of the world; in nature and society there are no causally unconditioned phenomena.

The universal character of causality is evidenced by the entire multifaceted practical activity of man. Engels points out that man not only finds that a certain movement is followed by another movement, but also creates new forms of movement, such as industry. Knowing the causes that condition the appearance of a phenomenon, we prove able to evoke it ourselves. *"Thanks to this, thanks to human activity, the idea of causality is substantiated, the idea that one movement is the cause of another."*[73]

Lenin pointed out that revealing the causal relations of things and objects is an important condition for comprehending their essence. Lenin wrote that "real cognition of cause is the deepening of cognition from the externality of phenomena to substance."[74]

In analyzing phenomena, Lenin demanded that their causal connections be revealed, and did not consider analysis complete if causal relations were not disclosed.

Marxist dialectics also teaches that causality expresses the law-governed development of phenomena of nature and society. Causality expresses the most characteristic side of the connection and interdependence of phenomena of nature and

---

[73] *F. Engels, Dialectics of Nature, 1952, p. 182.*

[74] *V. I. Lenin, Philosophical Notebooks, 1947, p. 134.*

society; through cause, the conditions for the emergence of the new are revealed.

A vivid example of revealing the law-governed development of social events is the analysis of the causes of the Stakhanovite movement given by Comrade Stalin in his speech at the First All-Union Conference of Stakhanovites. In his speech, Comrade Stalin shows that in socialist society the Stakhanovite movement is a law-governed phenomenon; it is the most vital and irresistible movement of modern times. Comrade Stalin points to four causes that resulted in the Stakhanovite movement. To these causes Comrade Stalin attributes the radical improvement in the material position of workers, the absence of exploitation in our country, the presence of new technology, and finally, the presence of people, cadres of working men and women who have mastered technology and are capable of driving it forward.

Characterizing the causal relation as an expression of law-governed development of phenomena of the objective material world, Marxist dialectics views causality as a part, one of the sides of the universal connection existing in reality. *"Cause and effect,"*—wrote Lenin,—*"ergo, are only moments of universal interdependence, connection (universal), reciprocal concatenation of events, merely links in the chain of the development of matter."*[75]

Lenin pointed out that "causality, as usually understood by us, is only a small particle of universal connection, but (a

[75] *Ibid.*

materialist addition) a particle of not a subjective, but of an objectively real connection."[76]

Marxist dialectics recognizes a diversity of forms of causality. Lenin and Stalin, when analyzing various social phenomena, point to the presence of external and internal causes, long-term and conjunctural, subjective and objective. Investigating the question of the maturation of the revolution in 1917, Lenin said that *"revolutions are not made to order, are not timed to this or that moment, but mature in the process of historical development and break out at a moment conditioned by a whole complex of a number of internal and external causes."*[77]

When considering social phenomena, it is necessary to investigate their subjective and objective causes. Thus, for example, in the report to the 15th Congress of the C.P.S.U.(B.), Comrade Stalin, analyzing the development processes of agriculture, pointed out that at that time many measures had been implemented by the party to transfer agriculture to the rails of collectivization, but far from everything that conditions allowed had yet been done. Pointing out that collective and state farms then yielded a little over two percent of total agricultural output, Comrade Stalin revealed both the objective causes of this lagging and the subjective ones, and outlined a concrete program for drawing peasant holdings into the channel of socialist construction.

Causal relations are also characterized by the duration of their action. In the concrete study of social phenomena, it is often

---

[76] *V. I. Lenin, Philosophical Notebooks, 1947, p. 136.*

[77] *V. I. Lenin, Works, vol. 27, 4th ed., p. 506.*

important to distinguish basic causes from temporary and conjunctural ones. For example, analyzing the causes of grain difficulties that arose in 1928, Comrade Stalin separated temporary and conjunctural causes from the main causes that called forth grain procurement difficulties, and indicated a real path to overcoming these difficulties[78].

Investigating social phenomena, the classics of Marxism-Leninism always identified their basic, fundamental causes. Lenin, revealing the causes of the collapse of the Second International, asserted that "the main cause of this collapse is the actual predominance in it of petty-bourgeois opportunism, the bourgeois character and danger of which had long been pointed out by the best representatives of the revolutionary proletariat of all countries."[79]

One can cite many other works of Lenin and Stalin, from which it is clear that in analyzing social events, Lenin and Stalin identify basic, fundamental, deep-seated causes. This allows for precisely determining the concrete tasks of the party's practical activity.

In contrast to the metaphysical counterposition of cause and effect, when they were viewed as unchangeable and not transforming into each other, Marxist dialectics establishes the mutual transformability of cause and effect. Expounding the doctrine of Marxist dialectics on cause and effect, Engels writes: *"...cause and effect are representations that have significance, as such, only in application to a given individual*

---

[78] *See J. V. Stalin, Works, vol. 11, pp. 179 et seq.*

[79] *V. I. Lenin, Works, vol. 21, 4th ed., p. 2.*

case; but as soon as we consider this individual case in its general connection with the whole world-system, these representations converge and intertwine in the representation of universal interaction, in which causes and effects constantly change places, so that what here or now is a cause becomes there or then an effect, and vice versa."[80]

This proposition is easy to illustrate with the development of the Stakhanovite movement. One of the causes of the emergence of the Stakhanovite movement, as Comrade Stalin points out, was a radical improvement in the material position of the working class. However, having arisen, the Stakhanovite movement significantly raised labor productivity in the national economy and turned into a cause of further growth in the material welfare of working people.

Marxist dialectics also teaches that phenomena of nature or social life can be caused not by one, but by several causes. Thus, for example, noting the exceptionally militant and revolutionary character of Leninism, Comrade Stalin points to two causes for this. "But this feature of Leninism," writes Comrade Stalin, "is explained by two causes: first, by the fact that Leninism emerged from the depths of the proletarian revolution, the imprint of which it cannot fail to bear; second, by the fact that it grew up and gained strength in battles against the opportunism of the Second International, the struggle against which was and remains a necessary preliminary condition for a successful struggle against capitalism."[81]

---

[80] *F. Engels, Anti-Dühring, 1952, p. 22.*

[81] *J. V. Stalin, Works, vol. 6, p. 71.*

In the work *Economic Problems of Socialism in the USSR*, Comrade Stalin showed that under socialism, means of production are not commodities. However, they speak of the value of means of production, of their cost price, price, etc. How is this explained? Comrade Stalin here also points to two causes that condition the importance and vital significance of the category of value: "First, this is necessary for calculation, for settlement, for determining the profitability and unprofitability of enterprises, for checking and controlling enterprises. But this is only the formal side of the matter.

Second, this is necessary in order to carry out the sale of means of production to foreign states in the interests of foreign trade."[82]

From all that has been said about causality follows the conclusion that Marxist dialectics obliges one to study concretely the various forms of causal dependence in nature and society.

Marxist Dialectics on the Diversity of Types of Connection in Nature and Society

The types and forms of interconnection between objects and phenomena of reality are extremely diverse.

In his work *Marxism and Problems of Linguistics*, Comrade Stalin points out the existence of indirect and direct connections of phenomena.

Clarifying the difference between the superstructure and language, Comrade Stalin shows that language is directly

[82] *J. V. Stalin, Economic Problems of Socialism in the USSR, p. 52.*

connected with the productive activity of man. Language directly reflects changes occurring both in production and in the base and superstructure. The superstructure, on the other hand, is connected with production indirectly; it reflects changes in production only through the medium of the base. Pointing out the presence and role of direct and indirect connections in social phenomena, Comrade Stalin enriched Marxist dialectics with a new proposition, deepening and concretizing the doctrine of connection and interdependence of phenomena of reality.

A most important proposition of Marxist dialectics is also the doctrine of essential and non-essential connections in nature and society. Every phenomenon of nature and social life is always connected in diverse ways with other phenomena. But only essential connections reveal the nature of phenomena. Therefore, the Marxist dialectical method obliges one to find essential connections in phenomena and distinguish them from non-essential connections. Lenin pointed out more than once that attempts to characterize an object through its non-essential connections and the chase after details inevitably lead to a distortion of reality. Exposing the Socialist-Revolutionary Chernov and other "critics" of Marx's economic doctrine who ignored essential features of capitalism and focused attention on details, Lenin wrote: *"...how characteristic is this so trendy at present, quasi-realistic, but in fact eclectic chase after a complete listing of all individual features and individual 'factors.' As a result, of course, this senseless attempt to bring into a general concept all particular features of individual phenomena, or, conversely, 'to avoid collisions with the*

extreme diversity of phenomena,'—an attempt testifying simply to an elementary misunderstanding of what science is,—leads the 'theoretician' to the point where he cannot see the wood for the trees."[83]

The disclosure of essential connections of objects presupposes a comprehensive consideration of them, clarification of their relations to other objects, a dialectical approach to reality. On the contrary, ignoring essential connections is always accompanied by an eclectic combination of various sides of phenomena and inevitably leads to a distortion of reality and the substitution of eclecticism for dialectics. Lenin and Stalin waged a persistent struggle against those who replaced dialectics with eclecticism. In a number of his works, Lenin exposes the eclectic approach of Kautskyites to questions of the state. In the pre-revolutionary years, especially on the eve of the Great October Socialist Revolution, renegades of the Second International Kautsky and Vandervelde "labored" much over the distortion of the Marxist doctrine on the state. They tried to slur over the main thing in this doctrine—the question of the violent destruction of the bourgeois state machine and the proletarian revolution. For these purposes, Vandervelde bypassed in every way the Marxist definition of the state as an instrument of violence of one class over another and replaced it with an abstract eclectic definition borrowed from bourgeois sources. *"On the one hand, by state one can understand 'the totality of the nation'... on the other hand, by state one can understand 'the government'..."*[84]—wrote Lenin on

---

[83] *V. I. Lenin, Works, vol. 5, 4th ed., p. 130.*

[84] *V. I. Lenin, Works, vol. 28, 4th ed., p. 299.*

Vandervelde's views regarding the state, characterizing them as "learned platitudes."

Lenin pointed out that eclectics, distorting reality, constantly "combine" uncombinable phenomena in life.

Quoting Engels left and right out of context, opportunists "united" Engels's arguments on violent revolution with his words on the "withering away" of the state, remaining silent about the fact that the latter refers to the proletarian state.

This was indeed a combination of uncombinable sides in life. "They usually combine both the one and the other by means of eclecticism,—wrote Lenin,—unprincipled or sophistical grabbing arbitrarily (or to please the powers that be) now one, now another argument, and in ninety-nine cases out of a hundred, if not more, 'withering away' is brought to the fore.

Dialectics is replaced by eclecticism..."[85] As a result of these sophistical tricks, it turned out that the bourgeois state, without violent revolution and without the destruction of the state machine, would wither away on its own, and capitalism would peacefully grow into socialism.

Restoring Marxist propositions on the state, Lenin shows that Marx and Engels pointed to the necessity of a violent revolution with respect to the bourgeois state and that their proposition on the withering away of the state applies only to the proletarian state, which will begin to wither away when necessary historical conditions are created for it.

---

[85] *V. I. Lenin, Works, vol. 25, 4th ed., p. 372.*

Lenin subjected the Trotskyite-Bukharinite foray on the question of trade unions to a decisive exposure. The Trotskyite-Bukharinite degenerates counterposed an economic approach to a political approach, attempting to prove their equal value and equal significance. Lenin, they shouted, approaches trade unions politically, whereas one should, so to speak, approach them from the economic side. Lenin vividly demonstrated that these enemies of communism solved the question of the relationship between politics and economics eclectically. "'Both the one and the other', 'on the one hand, on the other hand'—such is Bukharin's theoretical position. This is eclecticism,"[86] —wrote Lenin. The dialectical solution of the question required finding essential sides of relations between politics and economics. This essential relationship between politics and economics lies in the fact that politics, as Lenin pointed out, is a concentrated expression of economics and therefore "cannot but have primacy over economics."[87]

The enemy of the people Bukharin eclectically solved the question of the role and tasks of trade unions. He defined trade unions, on the one hand, as a school, and on the other hand, as an apparatus.

Lenin called such a definition an eclectic emptiness, showing that in Bukharin’s eclectic definition there is not a grain of Marxism.

Using the example of a glass, Lenin showed the difference between dialectics and eclecticism. The eclectic does not

---

[86] *V. I. Lenin, Works, vol. 32, 4th ed., p. 69.*

[87] Ibid., p. 62.

discern the essential aspects of the relation between objects, but arbitrarily snatches individual features of phenomena and mechanically combines them—for instance, saying that a glass is both a glass cylinder and an instrument for drinking. The eclectic considers the glass without regard to its use. The dialectician, on the other hand, considers that a glass has an infinite number of properties, aspects, and interrelations with all the rest of the world, and determines their attitude toward the glass based on concrete practical needs.

A glass can be a vessel for drinking, it can have value as an object of art, it can serve as an object to throw, etc. The dialectician determines the attitude toward the glass depending on needs. If we need a glass as a vessel for drinking, then the circumstance that this glass has a bottom and cannot cut one’s lips becomes of primary importance. If the glass is important as an artwork, then it can fulfill this function while being unsuitable for drinking. Dialectics demands that an object be considered in connection with concrete historical conditions. The eclectic arbitrarily and without regard to practical goals combines individual aspects of an object and therefore cannot find the main thing in the phenomena under investigation.

Exposing the eclectics, Lenin formulated four rules of dialectical logic, namely: "In order genuinely to know an object, it is necessary to embrace and study all its aspects, all its connections and 'mediations.' We shall never achieve this completely, but the requirement of comprehensiveness will safeguard us against mistakes and rigidity." First. Second, dialectical logic requires that an object be taken in its development, its "self-movement"... change. In relation to a

glass this is not immediately clear, but a glass does not remain unchanged either, and in particular the purpose of the glass, its use, and its connection with the surrounding world change. Third, all human practice must enter into the full "definition" of an object both as a criterion of truth and as a practical determinant of the object's connection with what a person needs. Fourth, dialectical logic teaches that "there is no abstract truth, truth is always concrete..."[88]

Having shown the essential aspects of the relations between trade unions, the state, and the party, Lenin gave a dialectical definition of trade unions and pointed out that in the system of the proletarian state, trade unions are in every respect a school of communism, a school of unity, a school of solidarity, a school for defending the interests of the working class, a school of management, a school of administration.

Consequently, non-essential connections between objects do not reveal to us the essence of phenomena and do not provide a basis for formulating the laws of development of nature and society. "...The non-essential, the seeming, the superficial most often disappears, does not hold as 'tightly,' does not sit as 'firmly' as the 'essence'"[89]. And conversely, the discovery of essential, organic connections between the phenomena of nature and society allows us to uncover regularities and formulate the laws of development of the material world.

The law-governed development of phenomena in nature and society is comprehended by us through revealing essential

---

[88] *V. I. Lenin*, Works, vol. 32, 4th ed., p. 72.

[89] *V. I. Lenin*, Philosophical Notebooks, 1947, p. 104.

interconnections, the most important relationships of the studied phenomena with the world surrounding them. However, while recognizing the law-governed nature of the development of the objective world, Marxist dialectics does not deny the existence of accidental phenomena and recognizes the influence of chance on the course of events.

Such a dialectical understanding of the interaction of necessity and chance was inaccessible to metaphysical, mechanistic materialism.

For example, 18th-century French materialists completely denied chance and considered all natural phenomena solely as necessary.

"...Everything we observe is necessary or cannot be otherwise than it is..."[90], wrote Holbach. Thus, Holbach effectively preached a fatalistic view of nature and social life. "...Necessity," wrote Holbach, "which governs the movements of the physical world, also governs the movements of the spiritual world, in which, consequently, everything is subject to fatalism"[91]. But if everything is only necessary, then necessity itself is reduced to the level of chance, and "with necessity of this kind we still do not go beyond the bounds of a theological view of nature"[92]. The denial of the objective existence of chance and the assertion of the fatal necessity of all processes of nature and social life leads to the recognition of some

[90] *P. Holbach*, System of Nature, 1940, p. 35.
[91] Ibid., p. 131.
[92] *F. Engels*, Dialectics of Nature, 1952, p. 173.

otherworldly force relative to nature and society, imposing its will on nature and man, predetermining the fates of humanity.

Marxist dialectics does not confuse chance with necessity, nor does it absolutely oppose them. K. Marx wrote that "history would be of a very mystical nature if 'chances' played no role. These chances naturally form part of the general course of development themselves, being balanced by other chances"[93]. Friedrich Engels emphasized the same thing when he wrote that necessity "carves a path for itself through an endless multitude of contingencies..."[94]

Necessity and chance, although not in an absolute rupture, differ from each other in their role in the processes of the objective material world. Marxist dialectics requires distinguishing necessity and regular pattern from chance.

The classics of Marxism-Leninism, analyzing the facts of nature and social life, always consider chance in relation to necessity, regular pattern.

Characterizing the alignment of class forces in Russia at the beginning of 1907, Lenin wrote: "It was not chance, but economic necessity that caused the proletariat, the peasantry, and the urban petty-bourgeois poor to lean sharply to the left and become revolutionized after the dissolution of the Duma, while the Cadets leaned sharply to the right"[95]. Characterizing the revolutionary surge of 1911–1912, Lenin emphasized that "there is nothing accidental in this surge, that its onset is

---

[93] *K. Marx and F. Engels*, Selected Letters, 1948, p. 264.
[94] Ibid., p. 422.
[95] *V. I. Lenin*, Works, vol. 12, 4th ed., p. 153.

completely law-governed and with absolute necessity conditioned by all previous development of Russia"[96].

In the work *Economic Problems of Socialism in the USSR*, Comrade Stalin emphasizes that if we were to adopt the standpoint of denying the existence of objective regularities, it would lead to us "falling into the realm of chaos and chance, finding ourselves in a slavish dependence on these chances, and depriving ourselves of the ability not only to understand, but simply to make sense of this chaos of chances"[97].

Marxist dialectics recognizes the objective nature of chance, but requires distinguishing the accidental from the necessary.

What, then, is chance? How to characterize accidental phenomena in contrast to necessary phenomena? We will receive an exhaustive answer to this question if we carefully trace in what sense the concept of chance is used by the classics of Marxism-Leninism in their analysis of socio-historical phenomena.

Revealing the features of capitalism, Lenin pointed out that "the product takes the form of a commodity in a wide variety of social production organisms, but only in capitalist production is such a form of the product of labor general, and not exceptional, not single, not accidental"[98]. Thus, chance is characterized by the fact that it is, first, opposed to the general, and second, identified with the single, exceptional.

---

[96] *V. I. Lenin*, Works, vol. 18, 4th ed., p. 86.

[97] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 85.

[98] *V. I. Lenin*, Works, vol. 1, 4th ed., p. 417.

Lenin gives the same characterization of chance when he criticizes the attack of the Struvists against Marx's theory of value. Lenin writes: "If price is an exchange relation, then it is inevitable to understand the difference between a single exchange relation and a permanent one, between an accidental and a mass one, between a momentary one and one encompassing long periods of time. Since this is so—and this is undoubtedly so—we just as inevitably rise from the accidental and single to the stable and mass, from price to value"[99]. We see that Lenin here too characterizes chance as an expression of singularity and opposes chance to general and mass phenomena operating over time.

In the article "A Caricature of Marxism and Imperialist Economism", Lenin shows that the imperialist war of 1914–1918 was not an accidental phenomenon, not an exception, not a deviation from the general and typical, but a law-governed product of the imperialist era. In this case, Lenin characterizes chance as a deviation from the general and typical[100]. Consequently, by the accidental one should understand a deviation from the general, the atypical, the individual, having no organic connection with the whole.

Acting as atypical, external in relation to regularity, the accidental does not reveal the essence of objects and phenomena. Investigating the question of the dialectics of the general and the particular, chance and necessity, essence and phenomenon, Lenin pointed out that in defining concepts "we discard a number of features as accidental, we separate the

[99] *V. I. Lenin*, Works, vol. 20, 4th ed., p. 182.
[100] See *V. I. Lenin*, Works, vol. 23, 4th ed., p. 19.

essential from the apparent and oppose the one to the other"[101]. Accidental features are discarded because they do not reveal the essence of objects.

Lenin and Stalin, in characterizing accidental phenomena, also point out that the accidental has no firm roots in phenomena. Comrade Stalin opposes the accidental as transient and temporary to the lasting. In the work "Lenin and the Question of the Alliance with the Middle Peasant", Comrade Stalin wrote: "...Lenin and the party consider the policy of agreement with the middle peasant not accidental and transient, but a long-term policy..."[102] Thus, we can conclude that the accidental has no deep roots in objects and events, being an expression of temporary connections of phenomena.

Comrade Stalin noted that, for example, the states of Cyrus or Alexander cannot be considered nations, as these were "accidental and loosely connected conglomerates of groups that disintegrated and united depending on the successes or defeats of one conqueror or another"[103].

At the same time, chance also acts as a form of manifestation of necessity and a supplement to necessity. Necessity does not always manifest itself in the form of chance, but there are such relationships between events where chance acts as a form of manifestation of necessity. F. Engels points out that in capitalist society people make history without being guided by a single will, without having a single plan, which is why

---

[101] *V. I. Lenin*, Philosophical Notebooks, 1947, p. 329.
[102] *J. V. Stalin*, Works, vol. 11, p. 110.
[103] *J. V. Stalin*, Works, vol. 2, p. 293.

economic necessity carves a path through a multitude of contingencies, appearing in the form of chance[104].

By accidental things and events Engels also understands those whose internal connection is very distant[105].

Thus, the accidental acts in diverse forms; under the accidental, Marxist dialectics understands that which has no deep roots in phenomena, does not express the essence of objects, is a deviation from the general and typical, has no organic connection with phenomena, and in some phenomena acts as a form of manifestation of necessity and its supplement.

It should also be noted that an accidental phenomenon is not uncaused; every chance has a cause.

Marxist dialectics rejects any uncaused phenomena; everything in the world has its causes, and in this respect, chances are also causally conditioned. The line between chance and necessity is not absolute. Chance under certain conditions can become necessary, and under other conditions, chance can turn into necessity. For example, Marx in the first chapter of *Capital* shows how the exchange of products of labor transformed from an accidental economic phenomenon into a historical necessity under conditions of commodity production, without which modern society cannot exist.

A correct understanding of the role of chance in objective reality is of vast importance in cognition, in revealing the laws of nature and society. Exposing the Weismannists-Morganists,

---

[104] See *K. Marx and F. Engels*, Selected Letters, pp. 422, 470.
[105] See ibid., pp. 422–423.

T. D. Lysenko showed that all "laws" of Mendelism-Morganism are built exclusively on the idea of chance. "...Living nature," says Lysenko, "appears to Morganists as a chaos of accidental, disconnected phenomena, outside of necessary connections and laws. Everywhere chance reigns"[106].

Soviet biology, in contrast to Weismannism-Morganism, develops on the basis of mastering the laws of nature; it is guided by the rule stating that science is the enemy of chance.

Since chances represent phenomena inherent in objective material reality and stand in a definite relationship with necessity and regularity, the primary task consists in distinguishing the accidental from the necessary.

In the work "On the Right Deviation in the VKP(b)", Comrade Stalin showed how enemies of the people, Bukharin and his accomplices, tried to interpret the sharpening of class struggle during the transition period from capitalism to socialism as an accidental phenomenon. They substituted necessity with chance. Comrade Stalin showed that the sharpening of the class struggle in the country was not an accident.

The sharpening of class struggle during the transition period is a historical law reflecting the resistance of class enemies to the construction of socialism.

Considering the sharpening of class struggle as a law-governed phenomenon, Comrade Stalin drew important practical conclusions from this:

---

[106] *T. D. Lysenko*, Agrobiology, 4th ed., Selkhozgiz, 1948, p. 652.

"What should the party's policy be in view of such a state of affairs?

It should consist in awakening the working class and the exploited masses of the countryside, raising their combat readiness, and developing their mobilization readiness for the struggle against the capitalist elements of the city and countryside, for the struggle against the resisting class enemies.

Marxist-Leninist theory of class struggle is good, among other things, because it facilitates the mobilization of the working class against the enemies of the dictatorship of the proletariat"[107].

The Practical Significance of the Proposition on the Interconnection and Interdependence of Phenomena of Nature and Society

A fundamental feature of Marxist-Leninist philosophy is its inseverable link with practice, with the struggle for communism. Theoretical propositions of Marxism-Leninism arise on the basis of generalizing the experience of practical activity and, having arisen, become an instrument for comprehending reality and changing it. In the work *On Dialectical and Historical Materialism*, Comrade Stalin clearly shows what important conclusions follow from each feature of the Marxist dialectical method and philosophical materialism for the activity of the Marxist-Leninist party.

[107] *J. V. Stalin*, Works, vol. 12, p. 38.

From the first feature of the Marxist dialectical method flows the necessity of a concrete-historical approach to the phenomena of reality. "If there are no isolated phenomena in the world, if all phenomena are interconnected and condition one another," writes Comrade Stalin, "then it is clear that every social system and every social movement in history must be evaluated not from the point of view of 'eternal justice' or any other preconceived idea, as historians often do, but from the point of view of the conditions that gave rise to this system and this social movement and with which they are connected"[108]. Comrade Stalin points out the special importance of the historical approach to social phenomena, for everything depends on conditions, place, and time.

Metaphysics, denying the interconnection of phenomena, inevitably generates an abstract approach to reality, in fact leading to a distorted interpretation of natural phenomena and historical events.

Sworn enemies of the people—Trotskyites and Bukharinites—perverting historical events for their vile ends, used metaphysics for a distorted interpretation of phenomena of social life. Scholastically, dogmatically using the propositions of Marxism, Trotskyites arbitrarily transferred evaluations of historical events made by Marx from one set of conditions to another.

Comrade Stalin pointed out that the enemies of Marxism substitute Marx's point of view with "quotes from individual

[108] *J. V. Stalin*, Questions of Leninism, 1952, p. 578.

propositions of Marx, taken out of connection with the concrete conditions of a specific era"[109].

Marxist dialectics requires a historical approach to events and a concrete analysis of them. When considering any issue or historical event, it is necessary to proceed from concrete historical conditions, and only such an analysis of reality is a genuinely scientific analysis, enabling us to correctly reflect events and determine our attitude toward them.

Lenin pointed out that a concrete analysis of a concrete situation is the very living soul of Marxism[110].

"It is necessary for the party to formulate slogans and directives not on the basis of rote-learned formulas and historical parallels," said Comrade Stalin, "but as a result of a careful analysis of the concrete conditions of the revolutionary movement, internal and international, with mandatory consideration of the experience of revolutions in all countries"[111].

Since all phenomena in nature and society are interconnected and interdependent, it follows that understanding these phenomena is possible only when considering the concrete conditions of their existence and development.

In the work *Marxism and Problems of Linguistics*, criticizing rote-learners and Talmudists, Comrade Stalin once again draws our attention to the importance of a concrete-historical approach to social phenomena.

---

[109] *J. V. Stalin*, Works, vol. 9, p. 89.
[110] See *V. I. Lenin*, Works, vol. 31, 4th ed., p. 143.
[111] *J. V. Stalin*, Works, vol. 7, p. 38.

The proposition of Marx and Engels on the impossibility of the victory of the socialist revolution in one country and Lenin's proposition on the possibility of such a victory, although mutually exclusive, Comrade Stalin points out, are both correct —each for specific historical conditions.

"Some rote-learners and Talmudists, who without delving into the essence of the matter quote formally, detached from historical conditions, might say that one of these conclusions, as absolutely incorrect, must be discarded, and the other conclusion, as absolutely correct, must be extended to all periods of development. But Marxists cannot fail to know that the rote-learners and Talmudists are mistaken, they cannot fail to know that both of these conclusions are correct, but not unconditionally, each for its own time: the conclusion of Marx and Engels—for the period of pre-monopoly capitalism, and the conclusion of Lenin—for the period of monopoly capitalism"[112].

In the same work, Comrade Stalin subjects to criticism those who in a Talmudic manner perverted Engels's proposition on the dying away of the state.

Engels asserted that after the victory of the socialist revolution the state must die away. Proceeding from this, rote-learners and Talmudists demanded the adoption of measures toward the dying away of the Soviet state.

Our party and Comrade Stalin exposed the Talmudists and rote-learners and proved that Engels's proposition on the dying

[112] *J. V. Stalin*, Marxism and Problems of Linguistics, pp. 49–50.

away of the state after the victory of the socialist revolution cannot be applied in conditions where this victory occurred in only one country. Comrade Stalin shows that Soviet Marxists, proceeding from the fact that the socialist revolution was victorious in one country, concluded that it was necessary to strengthen the Soviet state, intelligence organs, and army, so that our country would not be crushed by the capitalist encirclement. "Russian Marxists came to the conclusion," writes Comrade Stalin, "that Engels's formula has in mind the victory of socialism in all countries or in the majority of countries, that it is inapplicable to the case when socialism triumphs in one, individually taken country, while capitalism reigns in all other countries."

From two different formulas about the fates of the socialist state, Talmudists could not draw the correct conclusion; they demanded discarding one of these formulas and extending the other to all times and periods of history. Comrade Stalin further points out that "rote-learners and Talmudists are mistaken, for both of these formulas are correct, but not absolutely, each for its own time: the formula of Soviet Marxists—for the period of the victory of socialism in one or several countries, and Engels's formula—for that period when the successive victory of socialism in individual countries will lead to the victory of socialism in the majority of countries and when, thus, the necessary conditions for applying Engels's formula are created"[113].

[113] *J. V. Stalin*, Marxism and Problems of Linguistics, pp. 50, 51.

Replying to A. Kholopov, J. V. Stalin criticizes the Talmudic approach to the question of crossing languages. In his work *Concerning Marxism in Linguistics*, Comrade Stalin, analyzing the past history of language, pointed out that as a result of crossing languages, one of them usually emerges victorious, as a consequence of which, when crossing two languages, a third language does not arise, but one of the existing languages is preserved.

A. Kholopov contrasted this proposition of Comrade Stalin with the proposition put forward by Comrade Stalin in his report at the 16th Party Congress, which indicated that under communism languages will merge into one common language. Being a rote-learner, Kholopov decided that one of these propositions had to be discarded and the other recognized as absolutely correct, regardless of concrete conditions, and thus fell into a hopeless situation. "So it always happens with rote-learners and Talmudists," writes Comrade Stalin, "who, without delving into the essence of the matter and quoting formally, irrespective of those historical conditions treated by the quotes, inevitably fall into a hopeless situation"[114].

Comrade Stalin explains that both formulas are correct provided they are considered in a concrete-historical manner. The formula on the impossibility of a new language arising when crossing two or more languages refers to the period prior to the victory of socialism on a world scale, "when there is as yet no national equality, when the crossing of languages occurs in the course of a struggle for the dominance of one of the

[114] *J. V. Stalin*, Marxism and Problems of Linguistics, p. 52.

languages, when conditions for peaceful and friendly cooperation of nations and languages do not yet exist, when the agenda is not cooperation and mutual enrichment of languages, but the assimilation of some and the victory of other languages. It is clear that under such conditions there can only be victorious and defeated languages"[115].

To completely different historical conditions belongs the proposition of Comrade Stalin stated by him at the 16th Party Congress that the merging of languages will lead to one common language. This proposition of Comrade Stalin refers to the period after the victory of socialism on a world scale, when there will be no imperialism, when exploiters will be overthrown, national and colonial oppression eliminated, and mutual trust established among nations. This will be a period when "national equality will be brought to life, the policy of suppression and assimilation of languages liquidated, cooperation among nations established, and national languages will have the opportunity to freely enrich one another through cooperation.

It is clear that under these conditions there can be no question of the suppression and defeat of some and the victory of other languages. Here we will be dealing not with two languages, one of which suffers defeat while the other emerges victorious from the struggle, but with hundreds of national languages, from which, as a result of prolonged economic, political, and cultural cooperation among nations, first the most enriched single zonal languages will be singled out, and then zonal

[115] Ibid., p. 53.

languages will merge into one common international language, which, of course, will be neither German, nor Russian, nor English, but a new language that has absorbed the best elements of national and zonal languages"[116].

Analyzing social life phenomena and characterizing the laws of social development, J. V. Stalin always points to the necessity of proceeding from the concrete-historical conditions of social development. In the work *Economic Problems of Socialism in the USSR*, summarizing the processes of development of socialist society, J. V. Stalin shows the historical specificity of the manifestation of the laws of social development under conditions of socialist society.

For example, the law of value operates in socio-economic formations where commodity production exists. However, concrete historical conditions modify the operations of this law. Thus, under socialism, the action of the law of value is limited by new economic conditions. The presence of public ownership of the means of production and the action of the law of planned, proportional development of the national economy limit the sphere of action of the law of value. Comrade Stalin points out that "the absence of private ownership of the means of production and the socialization of the means of production both in the city and in the countryside cannot fail to limit the sphere of action of the law of value and the degree of its influence on production"[117].

---

[116] *J. V. Stalin*, Marxism and Problems of Linguistics, pp. 53–54.

[117] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 22.

The law of value is an objective economic law; it cannot be abolished or transformed. The task of the researcher is to study the concrete conditions under which this law operates. Some economists, ignoring the concrete-historical analysis of the economic phenomena of socialist society, tried to identify the operation of the law of value under capitalism with its operation under socialism. They claimed that even under socialism, the law of value operates just as it does under capitalism, i.e., acts as a regulator of production, a regulator of proportions in allocating labor and means of production among different branches of production. Such a metaphysical approach led to the rejection of the primacy of the production of the means of production, to a misunderstanding of the law of planned development of the national economy, and to an underestimation of the role of annual and five-year plans for national economic development.

Thus, only a concrete-historical approach to the analysis of commodity production under socialism makes it possible to correctly understand the essence of the law of value, to study the actions of this law under socialism, and, armed with this knowledge, to use this law for the further development of the country's national economy.

Another proposition of Marxist dialectics, stemming from the first feature of the Marxist method and extremely important for the practical activity of the Marxist-Leninist party, is the doctrine of the main link in the chain of historical development. Since historical events represent a chain of interconnected social phenomena, in practical activity it is very important to be able to find special, decisive links in this chain.

Revealing the essence of tactical leadership, Comrade Stalin teaches that it is necessary at any given moment to find that specific link "in the chain of processes, by grasping which it will be possible to hold the whole chain and prepare the conditions for achieving strategic success"[118].

Analyzing the history of the Bolshevik Party, Comrade Stalin pointed out that during the period of the formation of the Marxist workers' party, the main link in the chain of tasks of Russian Marxists was the creation of an all-Russian illegal newspaper, *Iskra*.

In the post-October period, during the transition from the Civil War to economic construction, the main link turned out to be the development of trade, since only through trade was it possible to establish a connection between industry and the peasant economy.

Special links in the chain of historical development that allowed our country to be raised to a higher level were the industrialization of the country and the collectivization of agriculture. By consistently putting forward these special links in the chain of development of Soviet society as leading and decisive, the Communist Party raised the Soviet people to heroic feats of labor, which culminated in the landmark victory of socialism.

The historic decisions of the XIXth Party Congress determined the prospects for the further movement of Soviet society, movement toward communism; they express the concrete tasks

[118] *J. V. Stalin*, Works, vol. 6, p. 163.

of the Soviet people's struggle for communism. Under the unflagging leadership of the Communist Party, armed with a deep knowledge of Marxist-Leninist science, the decisions of the congress, and the new works of J. V. Stalin, Soviet people will successfully achieve the great goal of humanity—the construction of the highest form of social organization—communism.

The requirement of Marxist dialectics to approach reality in a concrete-historical manner, to find and put forward special, leading links in the chain of historical development, helps to properly orient oneself in events, to successfully solve concrete tasks of communist construction, and to carry on the struggle against the imperialist camp.

At present, the main link in the activity of the progressive people of the world is the struggle for peace, the expansion of the movement of peoples in defense of peace, and the increase in the number of participants in the struggle for peace and the national independence of their states.

In his historic speech at the XIXth Party Congress, J. V. Stalin emphasized that the modern bourgeoisie sells the rights and independence of its nations for dollars and that it has thrown overboard the banner of national independence, just as it has thrown overboard the banner of bourgeois-democratic freedoms. Communist and democratic parties are called upon to raise this banner and carry it forward, expressing the patriotic feelings of their people, fighting against warmongers, for peace among the peoples of all countries of the world. "*As for the Soviet Union, its interests are generally inseparable from the cause of peace throughout the world" (J. V. Stalin).*

The doctrine of materialist dialectics on the interconnection and interdependence of phenomena in nature and society serves as a powerful means of knowing reality and its revolutionary transformation.

MOVEMENT AND DEVELOPMENT IN NATURE AND SOCIETY

★

D. M. TROSHIN

From the fact that everything in the material world is in a state of universal interconnection and interdependence, there follows the dialectical view of the surrounding world as being in movement and development.

Engels wrote: "When we submit to process of thought nature or history of mankind or our own intellectual activity, at first we see the picture of an endless entanglement of relations and reactions, in which nothing remains what, where and as it was, but everything moves, changes, comes into being and passes away"[119].

The disclosure of the connection and interdependence of phenomena gives a picture of the development and change of nature and society.

J. V. Stalin points out:

"In opposition to metaphysics, dialectics does not regard nature as a state of rest and immobility, stagnation and immutability, but as a state of continuous movement and change, continuous renewal and development, where something is always arising and developing, and something is disintegrating and dying away."

[119] *F. Engels, Anti-Dühring, 1952, p. 20.*

Therefore, the dialectical method requires that phenomena be considered not only from the standpoint of their mutual connection and interdependence, but also from the standpoint of their movement, their change, their development, from the standpoint of their origin and passing away[120].

Materialist dialectics is the science of the most general laws of the development of nature, society, and thought. "...Dialectics," said V. I. Lenin, "...is the doctrine of development in its fullest, deepest, and most comprehensive form..."[121].

Dialectics as a science became possible only after it was proven that movement and development are a form of being, a mode of existence of matter. Engels says: "...dialectics is comprehended as the science of the most general laws of all movement". With all the endless variety of the material world at all stages of its existence, from the smallest elementary particles to colossal accumulations of matter in galactic systems, from the atom to the complex organism—everywhere, despite the variety of states of matter, movement and development are common.

The Reactionary Nature of Metaphysics, Which Denies the Development of Nature and Society

The dialectical understanding of development is confirmed and substantiated by the data of science regarding nature and society. The very idea of dialectical development took shape in the process of generalizing data from individual sciences about nature and society. Universal movement is so obvious that even

---

[120] *J. V. Stalin, Problems of Leninism, 1952, p. 576.*

[121] *V. I. Lenin, Col. Works, vol. 19, 4th ed., p. 4.*

ancient Greek philosophers Heraclitus, Democritus, Aristotle, and others recognized movement and development in nature. For example, Heraclitus taught that there is nothing immutable: “Everything flows, everything changes,” and Aristotle believed that ignorance of movement entails ignorance of nature.

However, the views of ancient Greek philosophers were not comprehensively substantiated by natural science, as science at that time was only beginning to develop. Considering nature as a single whole, ancient Greek scholars had not yet reached the stage of dismemberment, the analysis of nature. Therefore, interconnection and universal movement in nature were for them an unproven scientific proposition, the result of deep analysis, and a outcome of reflection on movement accessible to direct contemplation. “In this,” points out Engels, “lies the inadequacy of Greek philosophy, because of which it had later to yield its place to other outlooks”, metaphysics. The metaphysical method took shape in the XVII–XVIII centuries on the basis of the rapid development of natural sciences, wherein the natural science of that time, having accumulated factual knowledge about nature, did not yet have the opportunity to transition from the accumulation of facts to their generalization.

The period of collection and classification was a necessary stage in the development of human knowledge, since it is impossible to reveal the connections of phenomena and their movement without knowing the details.

“It was necessary,” wrote Engels, “to study things before it was possible to proceed to the study of processes. One must first

know what a given thing is before one can deal with the changes taking place in it"[122].

Speaking of this period in the development of natural science, Engels wrote that this "method of study has left us the habit of observing natural objects and processes in isolation, detached from the whole vast interconnection of things; and therefore not in their motion, but in their repose; not as essentially changing, but as fixed constants; not as living, but as dead. And when this way of looking at things was transferred by Bacon and Locke from natural science to philosophy, it created the specific narrow-mindedness of the last centuries—the metaphysical mode of thought".

Thus, the Marxist dialectical method was preceded by the metaphysical method as an inevitable stage in the history of the development of thought and cognition, associated with the necessity of gathering facts about individual objects and phenomena of nature.

Revealing the causes that gave birth to metaphysics, V. I. Lenin wrote that while people did not know how to undertake the study of processes, they always composed *a priori* general, fruitless theories, and the result of reflection on movement accessible to direct contemplation.

"In this," points out Engels, "lies the inadequacy of Greek philosophy, because of which it had later to yield its place to other outlooks"[123], metaphysical outlooks. The metaphysical method took shape in the XVII–XVIII centuries on the basis of

[122] *F. Engels, Anti-Dühring, 1952, p. 350.*
[123] *F. Engels, Anti-Dühring, 1952, p. 314.*

the rapid development of natural sciences, wherein the natural science of that time, having accumulated factual knowledge about nature, did not yet have the opportunity to transition from the accumulation of facts to their generalization.

The period of collection and classification was a necessary stage in the development of human knowledge, since it is impossible to reveal the connections of phenomena and their movement without knowing the details.

"It was necessary," wrote Engels, "to study things before it was possible to proceed to the study of processes. One must first know what a given thing is before one can deal with the changes taking place in it"[124].

Speaking of this period in the development of natural science, Engels wrote that this "method of study has left us the habit of observing natural objects and processes in isolation, detached from their great general connection, and because of this—not in movement, but in a state of rest, not as essentially changing, but as eternally immutable, not as living, but as dead. Transferred by Bacon and Locke from natural science into philosophy, this way of understanding created the specific limitation of the past centuries—the metaphysical method of thought"[125].

Thus, the Marxist dialectical method was preceded by the metaphysical method as an inevitable stage in the history of the development of thought and knowledge, associated with the

---

[124] *F. Engels, Ludwig Feuerbach and the End of Classical German Philosophy, 1952, p. 37.*
[125] *F. Engels, Anti-Dühring, 1952, p. 21.*

necessity of gathering facts about individual objects and phenomena of nature.

Revealing the causes that gave birth to metaphysics, V. I. Lenin wrote that as long as people did not know how to undertake the study of processes, they always composed *a priori* general, fruitless theories. "The metaphysician-chemist, unable yet to investigate empirically chemical processes, invented a theory about what kind of force chemical affinity was. The metaphysician-biologist talked about what life and vital force were. The metaphysician-psychologist reasoned about what the soul was. The technique here was already absurd. One cannot reason about the soul without explaining in detail psychological processes: progress here must consist precisely in abandoning general theories and philosophical constructions about what the soul is, and being able to put the study of facts characterizing particular psychological processes on a scientific footing"[126].

The limited metaphysical methodology time and again led naturalists of the XVII–XVIII centuries to idealist conclusions.

Thus, Newton, having discovered the law of universal gravitation, believed that the combination of the Sun and planets could not have occurred otherwise than by the design and power of a mighty and wise Being.

Linnaeus, having classified animals and plants, asserted that there are as many species as were created by God.

[126] *V. I. Lenin, Col. Works, vol. 1, 4th ed., pp. 126–127.*

Analyzing the metaphysical period in the development of natural science and philosophy and showing the unscientific nature and limitations of metaphysics, Engels wrote:

"According to this view, nature, in whatever way it may have come into existence, once it was there, remained always the same as long as it existed. The planets and their satellites, once set in motion by the mysterious 'first impulse', went on spinning in their prescribed ellipses for all eternity, or at any rate until the end of all things. The stars rested forever motionless in their places, holding one another there by 'universal gravitation'. The Earth remained from eternity or from the day of its creation (depending on the point of view) unchanged the same.

The present 'five parts of the world' had always existed, always had the same mountains, valleys, and rivers, the same climate, the same flora and fauna, unless modified or displaced by the hand of man. The species of plants and animals were established once and for all when they came into existence, like always produced like... All change, all development in nature was denied"[127].

This view of natural phenomena as eternal and immutable was already being disproved by accumulated factual data at the end of the XVIII century.

At this time, individual sciences were transitioning from collecting facts to generalizing them and theoretical reflection. Major discoveries were made in natural science and theories

[127] *F. Engels, Dialectics of Nature, 1952, p. 6.*

were created asserting that the world is in a state of development and change. Among such discoveries is the Kant–Laplace hypothesis on the origin and development of the solar system. Engels called it the first hypothesis to breach the wall of metaphysics.

Simultaneously, Lomonosov put forward the idea of an historical approach to the study of the Earth's crust, showing that mountain ranges, minerals, coal deposits, and oil were formed as a result of the historical development of the Earth. Later, the science of geology was created. Along with geology, the science of fossil animals—paleontology—was established, showing that present-day animals and plants differ significantly from those that inhabited our planet in earlier epochs.

However, scientists attempted to cram these new facts into the Procrustean bed of metaphysical theory. Changes were still understood superficially, and the emergence of the new was denied within these changes. Thus, in biology, the unscientific theory of preformation was preached for a long time, according to which an organism possesses all features and organs of an adult animal or human while still an embryo. The process of development was understood as a process of growth, an increase of already pre-existing organs. It is clear that such an understanding of development ultimately led to the denial of development.

How strongly metaphysics dominated views on nature even at the beginning of the XIXth century can be judged by the following case: the French zoologist Cuvier, studying fossil remains of animals and discovering that previously living animals differed from modern ones, instead of concluding that

the organic world had developed, tried to explain these facts by asserting that the Earth had supposedly experienced several catastrophes. As a result of these catastrophes, animals and plants allegedly perished each time, and the Earth remained uninhabited for a long time until a divine force created them anew.

Subsequently, the metaphysical method of thought increasingly came into conflict with scientific data about nature and turned into fetters for science. The development of natural sciences urgently demanded a new, dialectical method to generalize the factual data they had obtained.

Of enormous significance for substantiating the theory of development, as Engels pointed out, were three great scientific discoveries of the XIXth century:

“Knowledge of the interconnection of processes taking place in nature moved forward in giant strides, especially thanks to three great discoveries:

First, through the discovery of the cell as the unit from whose multiplication and differentiation the whole body of the plant and animal develops. This discovery not only convinced us that the development and growth of all higher organisms proceed according to one common law, but also showed the capacity of cells to change, indicating the path leading to species-level changes in organisms, changes as a result of which organisms can undergo a process of development that represents something more than mere individual development.

Secondly, through the discovery of the transformation of energy, which showed that... all movement in nature reduces to

a continuous process of transformation from one form into another.

Finally, thirdly, through the cohesive proof first presented by Darwin that all the organisms surrounding us today, not excluding human beings, arose as a result of a long process of development from a few original single-celled germs and these germs, in turn, were formed from protoplasm or protein that arose via a chemical path"[128].

The discoveries of natural science exposed the connections and interdependencies between natural phenomena and demonstrated that nature is in motion, in a process of development and change.

An enormous contribution to the natural-scientific foundation of materialist dialectics was made by Russian naturalists Lomonosov, Mendeleev, Lebedev, Mechnikov, Sechenov, Timiryazev, Pavlov, the Kovalevsky brothers (A. and V.), Michurin, Williams, Dokuchaev, Gamaleya, and others.

Russian materialist philosophers and progressive naturalists advanced the view of nature as being in development and change.

M. V. Lomonosov was the first to put forward the idea of the origin of rock formations as a result of a long process of development of the Earth's surface. Long before Lamarck and Darwin, Lomonosov expressed a whole series of brilliant propositions regarding the historical process of the

[128] *F. Engels, Ludwig Feuerbach and the End of Classical German Philosophy, 1952, pp. 38–39.*

development of animals and plants on Earth. Being a consistent materialist, he directed his investigative genius toward uncovering the laws of nature's development.

Russian scientist Vladimir Kovalevsky, summarizing the data of paleontological findings, created a new evolutionary paleontological science serving as proof of the development and change of animals and plants as a result of the historical development of the Earth. I. I. Mechnikov was a consistent defender of the theory of the development of life on Earth and did much to substantiate and prove it. The great Russian biologist K. A. Timiryazev made an enormous contribution to the theory of the development of organic forms of matter, comprehensively substantiating the theory of the origin and development of plants.

I. M. Sechenov convincingly proved that human sense organs and the brain are the result of a long development of organic matter, its complication and refinement, laying the foundations of materialist psychology.

Academician I. P. Pavlov, developing and deepening Sechenov's doctrine, revealed the essence of the higher nervous activity of animals and humans. Pavlov's doctrine of conditioned and unconditioned reflexes, and of the role of the cerebral cortex, is the greatest achievement of modern physiological science and serves as the natural-scientific foundation of the Marxist-Leninist theory of knowledge.

The outstanding Russian scientist I. V. Michurin raised Darwinism and biological science to the highest level. Michurinist biology represents a new, higher stage in the

development of biological science because it proved the development of living nature more convincingly and consistently, exposing its genuinely dialectical character; only Michurinist biology makes it possible to pass from explaining the process of development to actively influencing it—that is, consciously guiding this process, directing it, and creating the kind of organisms that humanity needs.

Dokuchaev, Kostychev, and Williams created a new science regarding the origin and development of soil. They convincingly proved that soil is a special historical body of nature that is in continuous change and development. The main soil-forming factors are organisms, which determine the direction of the soil-forming process. Thus, depending on plant communities, podzolic soil is formed under forest, marsh soil under grassy vegetation, and so on. The zonation of soil is an historical process; it is constantly changing.

The doctrine of Dokuchaev–Kostychev–Williams on the process of soil development not only explains it, but also provides the opportunity to consciously direct the soil-forming process, which on the one hand confirms the correctness of the theory, and on the other makes this theory effective and revolutionary.

The new theory of the soil-forming process is an integral part of Michurinist agrobiological science, which not only explains the development of living nature, but also serves as the theoretical basis for its transformation.

Modern geological science is unthinkable without the outstanding discoveries of Russian naturalists. Soviet

geologists Karpinsky, Gubkin, Obruchev, Fersman, and others made a particularly large contribution to geological science.

Soviet scientists, guided solely by the scientific method of research—materialist dialectics—penetrate deeper into the essence of the phenomena of the material world, revealing its laws, substantiating the dialectical view of nature, and enriching science with new outstanding discoveries. Among such outstanding discoveries in the history of science's development are the studies of Doctor of Biological Sciences O. B. Lepeshinskaya, who disproved the view that had prevailed since the time of Virchow and Pasteur regarding the boundary between the living and non-living, as well as the role of the cell in the organism.

Soviet scientists have made an enormous contribution to cosmogony—the science of the origin and development of the universe, the solar system, and our planet (the discoveries of Ambartsumian, the theories of Schmidt, Fesenkov, etc.).

Thus, the metaphysical view of nature has been completely and irrevocably disproved by the development of science, every outstanding discovery of which confirms the truth of the dialectical view.

However, it would be a mistake to consider metaphysics an historical past that has no place in the present. Metaphysics is alive even today. But while in the era of Marx and Engels metaphysics openly opposed development, now it most often disguises itself under a supposed “recognition” of development. This happens because in the XXth century it is no longer possible to simply deny the idea of development, as

it is “hammered” into people's heads by the entire course of the growth of scientific knowledge about nature and society. Therefore, metaphysicians in word do not deny development, but in deed distort the true understanding of the objective laws of nature's and society's development in every way, creating various metaphysical “theories of development” which, in the words of V. I. Lenin, “choke and vulgarize the truth.”

A striking example of such a “theory of development” that “chokes and vulgarizes the truth” is Weismannism--Morganism. Weismannists verbally do not deny development; they operate under the sign of “neo-Darwinism.” But according to the concept of Weismannists, in the life process of organisms nothing new is allegedly created, but only previously inherent traits manifest themselves. Weismannism, like preformationism, denies development as the emergence of the new and understands “development” as the growth of what is already pre-formed.

Weismannist-Morganists believe that the emergence of new species is possible only as a result of recombination through mutation of ready-made, already existing species. Over 10–15 thousand years, a species allegedly remains completely unchanged, but suddenly a moment comes when, for unknown reasons, the species “explodes” and buds off new species. Denying the possibility of the emergence of new species and new properties in the process of evolution, Weismannists invent false theories about how, in the process of evolution, the “reserve of mutations” is gradually “expended,” and therefore the “hereditary substance” becomes less capable of diversification, by virtue of which a period must allegedly

arrive when evolution will cease. Thus, Schmalhausen, who created the pseudoscientific theory of "stabilizing selection" and the decaying evolution of organic nature, wrote that organisms, having expended their "reserve of mutations," will stop evolving.

Such is the metaphysical essence of this theory of "development," according to which all the diversity of living organisms is, as the Weismannist Bateson wrote, the "result of the disintegration of the amoeba—the progenitor of life."

Similar metaphysical theories, which distort the laws of natural development, are widespread in modern bourgeois science. They are a tool in the struggle of reactionary forces against progressive trends in natural science, against advanced scientists striving to study nature and spontaneously drawn toward dialectics and materialism. These theories shackle the development of science and ultimately serve as a means of imposing and propagating a bourgeois worldview among naturalists and the general public.

In philosophy and sociology, reactionary metaphysical theories distorting the laws of social development and the laws of history directly serve the interests of the ruling classes.

In an era when the ruin of capitalist society becomes inevitable, all kinds of metaphysical theories are called upon to "substantiate" the eternity of capitalism. Metaphysics in our time is used by the ideologists of imperialism to fight against peace, democracy, and socialism.

Under conditions where the course of historical events objectively leads to the inevitable ruin of capitalism and the

triumph of socialism, reaction tries to direct all its efforts toward delaying the progressive course of history on the path to a bright future—to communism.

All sorts of attempts are made to discredit the very concept of progress and the development of civilization. The means for these ends is the dilapidated weapon of reaction—the metaphysical denial of development, the denial of progress.

Reactionary bourgeois sociologists—servants of Wall Street—try in every way to "prove" that there is no development in society, no forward movement. Reactionary sociologists try to portray social phenomena as eternal, immutable categories. They preach the eternity of private ownership of the means of production, the eternity of society's division into rich and poor, slaves and masters. They assert that classes will exist forever, one of which—the bourgeoisie—is allegedly called upon to rule and own all wealth, while the other—the proletariat—is allegedly doomed to labor and poverty.

Metaphysics is used by American-British racists and Malthusians in their misanthropic raving about the overpopulation of the globe. Striving to enslave and subjugate the peoples of other countries, American Malthusians frantically scream about an alleged discrepancy between population growth and the increase in the quantity of material goods, about a disproportion between them. In doing so, they distort the actual state of affairs, metaphysically viewing the production of the means of production and consumption outside of development, outside of progress. The practice of constructing socialism in the Soviet Union and in the countries of people's democracy has shattered to pieces the metaphysical

reactionary ravings of racists and Malthusians, proving the unlimited possibilities for the development of productive forces and the growth of means of production and consumption.

Metaphysics today has been enlisted by American reactionaries into the service of the ideology of war and the destruction of people. The life of society is viewed as a state of rest and immutability. War is declared to be the sole means of setting society in motion. Hence, even if some forward movement of society is recognized, it is only as a result of war. With the help of these shallow, metaphysical reasonings, war is declared a social good, the basis of progress. The English reactionary sociologist Arthur Keith writes precisely that: "War ensures civilization," "war is a powerful factor in the evolution of humanity."

Metaphysics penetrates us as well; it is propagated by a backward section of scientists in natural science. This is evidenced, for example, by articles by T. Ivanov in the *Botanical Journal* (1952, XXXVII, No. 6) and in the *Bulletin of the Moscow Society of Naturalists* (1952, vol. LVII, issue 6), in which he defends Malthusianism. Metaphysical views also take place in other fields of science, including philosophy.

From all that has been said, it is clear that metaphysics in our time serves the goals of reaction and represents a real danger. Exposing metaphysics constitutes one of the most important tasks of Marxist philosophy and Soviet science.

Movement and Development— The Form of Existence of Matter

"Movement," says Engels, "considered in the most general sense of the word, i. e. understood as a form of being of matter, as an inherent attribute of matter, encompasses all changes and processes occurring in the universe, from simple displacement to thought"[129]. Engels emphasizes that "nowhere and never has there been or could there be matter without movement"[130].

The fact that movement and development are a universal form of the existence of matter is proven by everyday human experience and by all the data of modern science and technology. Science repeatedly confirms that all matter, from elementary particles—the electron, proton, neutron, photon, etc.—to huge celestial bodies, is in a state of change and development. Elementary particles undergo ceaseless changes and transformations, while celestial bodies, in turn, arise, develop, and change.

Among the infinite number of celestial bodies and systems, the solar system is only a small part that arose in the process of the development of matter. There was a time when there was no Sun, no planets of the solar system, including Earth. In the process of the development of matter, the Sun was formed, and at certain distances around it—planets and their satellites.

The surface of the terrestrial globe was different than it is now, and its modern appearance is the result of a long history of development, including both slow evolutionary changes and

---

[129] *F. Engels, Dialectics of Nature, 1952, p. 44.*
[130] *F. Engels, Anti-Dühring, 1952, p. 57.*

grandiose upheavals that shifted continents, changed river courses, and formed seas, lakes, mountain ranges, and plains.

At a certain stage in the development of matter, a new form of movement of matter arose—organic life.

Science has established that the organic form of movement of matter has existed on Earth for about a billion years, and that during this period colossal changes have occurred within it.

With the appearance of life, a new layer was formed on the surface of the Earth—the biosphere—which is of vast importance in changing our planet's surface. Organisms, by changing, affect their surrounding external environment, being in particular the main cause of the soil-forming process. Thanks to living organisms, deposits of coal, peat, vast underground basins of oil, chalk mountains, limestones, and coral islands were formed.

At a certain stage of its development, the organic form of movement of matter divided into two branches—plant and animal—with their characteristic types of metabolism, different ways of life, and different properties. Plants were the reason for the presence of free oxygen in the Earth's atmosphere. Thereby, the necessary conditions were created for the development of animals that breathe with lungs, and humans.

The Earth experienced several eras and periods, each characterized by its own climatic zones, its own distribution of land and water basins, its own geological features, as well as its own plant and animal inhabitants in water and on land.

Man, as the highest link in the chain of evolutionary development of organisms, appeared on Earth in the very last geological epoch of its existence, about a million years ago.

The separation of man from the animal world and his further development occurred on the basis of labor activity. The decisive condition that created man was labor, beginning in the proper sense of the word with the manufacture of tools of production.

The ancestor of man did not know how to make tools of labor and lived like other animals off the gifts of nature. Man first learned to make the simplest tools of labor: the stone axe, the knife, and later the bow and arrow. By means of these tools, he obtained food for himself and built shelter. But human society moved forward, and at a certain stage of development, man learned to domesticate animals and cultivate the plants he needed. Thus developed cattle breeding and agriculture.

At a certain stage in the development of the social division of labor, private property arose, and on its basis—the division of society into classes, with the appearance of which the state inevitably arose as a result of the irreconcilability of class contradictions, as an instrument for the suppression and oppression of one class by another.

Marxism-Leninism disproved the fabrications of the ideologists of the exploiting classes about the eternity of the class division of people into slaves and masters, about the eternity of the state, proving that there was a time when there were neither classes nor states that they arose only at a certain stage of

social development, and that the further development of social relations will lead to a classless communist society.

The greatest service of Marx and Engels is the discovery of the objective laws of social development. Marx and Engels proved that human society develops depending on changes in the mode of production. With a change in the mode of production, all other social relations change as well.

The development of human society passed through a series of stages—social formations. Primitive society was replaced by the slave-owning system, which was replaced by feudalism. Feudalism was replaced by capitalism, which necessarily everywhere will be replaced by a new system—communism.

The development of each of these socio-economic formations and the replacement of one formation by another occur by virtue of objective economic laws.

Creatively developing materialist dialectics, the Marxist-Leninist science of society and objective laws of social development, J. V. Stalin, in his classic work *Economic Problems of Socialism in the USSR*, showed that economic laws are historical in character. They arise on the basis of certain economic conditions and die away with the disappearance of these conditions. “One of the distinguishing features of political economy,” teaches J. V. Stalin, “is that its laws, unlike the laws of natural science, are impermanent, that they, or at least the majority of them, operate during a definite historical period, after which they yield place to new laws. However, these laws are not destroyed, but forfeit their validity owing to new economic conditions and leave the scene in order

to yield place to new laws, which are not created by the will of man, but arise on the basis of new economic conditions"[131].

Guided by this crucial proposition of Marxism regarding the historical nature of the laws of economic development, J. V. Stalin discovered the basic economic law of modern capitalism and the basic economic law of socialism. The doctrine of J. V. Stalin on the objective nature of the laws of social development existing independently of human will, on the historical nature of these laws, and on their succession is of vast importance for a proper understanding of the processes of development of society, this highest form of the movement of matter.

Such, in broad outline, is the picture of the movement and development of nature and society.

Philosophically generalizing all the rich factual material proving the development of nature and society, Comrade Stalin wrote in the work *Anarchism or Socialism?*: "...starting from astronomy and ending with sociology, the idea finds confirmation everywhere that there is nothing eternal in the world, that everything changes, everything develops. Consequently, everything in nature must be considered from the point of view of movement, development. And this means that the spirit of dialectics permeates all modern science"[132].

Movement and Rest

Movement, development is a form of being of matter. Just as movement is unthinkable without matter, so matter is

[131] *J. V. Stalin, Economic Problems of Socialism in the USSR, pp. 5–6.*
[132] *J. V. Stalin, Col. Works, vol. 1, p. 301.*

unthinkable without movement, change, development. However, a proper dialectical understanding of movement and development includes the recognition of relative rest, temporary equilibrium in the process of movement and development. This relative rest, temporary equilibrium can be represented in a two-fold manner.

First, in the process of movement, understood as spatial displacement, a body may temporarily be at rest at a given point. However, such rest is only relative, for in the world around us there is no matter without movement. In the universe there are no resting bodies; everything moves, displacing itself in space. The smallest particles of cosmic dust and cosmic rays move in space, as do clusters of nebulae.

At immense speeds, colossal clusters of stars (galaxies) move. In one of these galaxies, the Sun moves, carrying along the planets of the solar system with their satellites. The Earth moves both around the Sun and around its own axis.

Thus, there are no material bodies that do not move in space. But in this infinitely diverse movement of galactic systems, individual galaxies, the Sun, the terrestrial globe, etc., a given object located on the terrestrial globe may be at relative rest.

Secondly, temporary rest, relative equilibrium, is an essential moment of the very development of matter. Engels wrote that rest is an indispensable condition for the differentiation of matter. From the point of view of a dialectical understanding of development, rest, temporary equilibrium, is that state in which imperceptible quantitative changes accumulate in an object, which will ultimately lead to a qualitative change of the given

object or phenomenon into another, new one, different from the past.

The process of change and development is not a continuous, unbroken stream. On the contrary, in the constant development of the material world there are boundaries, stages in development, different forms of movement of matter—a qualitative diversity of material bodies, objects, and phenomena.

Temporary rest in the process of the development of matter is always connected with the formation of specific laws inherent to a given form of movement of matter. A particular form of movement of matter, having arisen on the basis of general dialectical laws of the development of matter and being subordinate to these general laws, has its own specificity, its own features, its own laws. Specific are the laws of the physical, chemical, and organic forms of the movement of matter. Distinct from them are the laws of the social form of movement of matter. The laws inherent to a specific form of movement qualitatively separate it from other forms.

Within each of the forms of movement of matter, development and change take place. In the exact same way, the boundaries between them are not dead, but fluid. Therefore, transitions from one form of movement to another, for example, from physical to chemical, occur all the time, but the difference and a certain stability remain.

Materialist dialectics does not recognize absolute rest or absolute stability, but it does not deny relative rest and relative stability in development. Relative rest, temporary equilibrium

is also movement and development, but occurring within the limits of a given form of movement of matter—say, a given organic species or a given social formation—prior to the transition into a new qualitative state, prior to the formation of a new organic species or a new social system.

The denial of relative rest leads ultimately to the denial of movement and development. Development is always change, a transition from one state to another.

Development proceeds from a given state of an object to a new one, distinct from it. Therefore, sophists, portraying the surrounding reality as a stream in which nothing is stable, inevitably arrive at the denial of development.

Metaphysics, in its struggle against dialectics, proceeds along two paths. On the one hand, indivisible "elements of the world" are sought out and invented (Dühring and other mechanists), as well as constant elements of heredity—"ids," "genes," "determinants" (Mendelism-Morganism) and similar metaphysical entities. On the other hand, relative rest and stability in development are denied. Ultimately, both paths of metaphysical distortion of reality lead to idealism.

Critiquing Dühring, Engels pointed out that recognizing the existence of immutable elements of the world inevitably leads to recognizing the existence of absolute rest, but from absolute rest there is no transition to movement, no bridge that would connect absolute rest with movement. From this, in turn, inevitably follows the recognition of a first impulse, a divine force, a "creator" of the universe. Thus, the recognition of

absolute rest leads directly and immediately to idealism. To the same leads the denial of relative rest.

Basic Forms of Movement of Matter

"Once we have come to know the forms of movement of matter... we have come to know matter itself..."[133], wrote Engels.

In the diversity of processes of change in bodies and natural phenomena, materialist dialectics distinguishes a series of basic, qualitatively distinct forms of movement of matter. These forms of movement are the following: mechanical, physical, chemical, organic (life), and social.

These forms are stable, distinct from one another, and at the same time connected with one another. They are unified in their materiality, since they are merely different forms of the movement of matter.

A relatively simple form of movement is mechanical. Mechanical movement is the spatial displacement of bodies relative to one another. The laws of mechanical movement are studied by mechanics. Engels points out that all movement is connected with some displacement—displacement of celestial bodies, terrestrial masses, molecules, atoms. "The higher the form of movement, the less significant this displacement becomes. It in no way exhausts the nature of the corresponding movement, but it is inseparable from it. Therefore, it must be investigated before everything else"[134].

---

[133] *F. Engels, Dialectics of Nature, 1952, p. 184.*
[134] *Ibid., p. 44.*

A more complex form of movement is physical. By the physical form of movement is understood the aggregate of such types of movement as thermal processes, studied by thermodynamics, and so-called statistical physics; electromagnetic (and in particular light) processes, studied by electrodynamics (and optics); atomic processes—a special form of movement of micro-objects, studied by so-called quantum mechanics; nuclear processes, studied by nuclear physics.

Mechanical and physical forms of movement are inherent to all areas of the material world. They exist in all other forms—chemical, organic, and social.

Chemical processes occurring in bodies form a special form of motion — chemical. Chemical processes occurring in inorganic nature are studied by inorganic chemistry. Chemical processes in organic bodies constitute the subject of a special science called organic chemistry.

With the emergence of life on Earth, a new form of motion arose — organic, studied by a group of biological sciences; with the emergence of society — social, which is the highest of all forms of motion of the objective world. It is studied by a group of social sciences, the general foundation of which is historical materialism. The methodological foundation of all sciences studying nature and society is dialectical materialism — the science of the laws of development of nature and society.

All forms of motion are not isolated from one another, but are closely interconnected.

Engels emphasizes the transitions of some forms of motion into others, pointing out their connection and interdependence.

"Mechanical motion of masses turns into heat, into electricity, into magnetism; heat and electricity turn into chemical decomposition; on its part, the process of chemical combination again gives rise to heat and electricity, and through the medium of the latter — magnetism; and finally, heat and electricity in turn produce mechanical motion of masses"[135].

Every new higher (complex) form of motion of matter arises on the basis of a lower one and includes it within itself. But the laws of a lower form of motion do not exhaust the essence of a higher form of motion that has developed on its basis; the laws of a higher form of motion are not reducible to the laws of a lower one. On the other hand, the laws of a higher form do not extend to lower ones. Thus, the laws of electromagnetism cannot at all be reduced to the laws of mechanics, and mechanical motion, contained in electromagnetic processes in a subordinate form, does not exhaust the essence of electromagnetic processes.

All attempts to reduce electrodynamics to mechanics, which were undertaken many times throughout the history of physics in the 18th–19th centuries, ultimately suffered a complete collapse. Similarly, the chemical form of motion, which includes physical processes as a subordinate moment, is not reducible to physical motion. The irreducibility of complex chemical motion to physical processes was revealed with

[135] *F. Engels, Dialectics of Nature, 1952, p. 52.*

ultimate clarity, in particular, in the failure of the so-called "resonance theory," the fundamental flaw of which consisted precisely in the attempt to subordinate chemistry to physics. Just in the same way, chemistry does not exhaust the essence of the organic form of motion.

Metaphysicians, distorting reality and the data of science, have made and continue to make a multitude of attempts to identify the laws of higher forms of motion with the laws of lower forms. On this basis arose anti-scientific, sterile theories that view an organism either as a thermal engine or as a chemical laboratory. Attempts to explain vital phenomena solely by chemical or physical laws have no scientific ground beneath them and inevitably lead to a dead end, leading to idealism.

The highest form of motion — social — has its own specific laws of development inherent only to it. Bourgeois sociologists in our time, distorting the dialectics of societal development, attempt to apply the laws of mechanical, biological, and other phenomena to the life of society.

For example, in 1951 in the American journal *Science*, an article was published by two authors, E. V. Liver and J. Brown, entitled "The Necessity of General Laws in Social Sciences". Although at the beginning of the article the authors write that "today we urgently need certain laws dealing with the dynamics and statics of society," nevertheless in the article there is not even a shadow of a desire or attempt to uncover the objective laws of social development. The authors call society a "sociocosmos" and view social phenomena by applying the laws of physics, chemistry, biology. Biologizing social phenomena, they drag out into the light the pseudo-theory of

Virchow ("organism is a state of cells") and place it at the basis of their consideration of society. The desire to prove the eternity of such categories as private property, the eternity of the class of capitalists and the class of wage workers, etc., is the goal of the authors' "searchings" in the article.

In another American journal (*The Journal of Philosophy*, No. 8, 1951), a certain Wilson published a work entitled "Mechanics and Historical Laws". Wilson's writings are an attempt to give an overview of the literature published in the USA on this issue, so the article shows not only the author's point of view, but also the general direction of the "researches" of modern bourgeois sociologists.

A characteristic feature and general tendency of all points of view cited by the author is the denial of the laws of societal development, economic laws in particular, and the transfer of the laws of physics, chemistry, biology, psychology to social phenomena.

Thus, one of the "researchers," Zilsel, profoundly remarks that "some economic facts can be understood through psychological insight". "Psychological insight" instead of scientific research! Translated into plain language, this means: religion instead of the science of society.

The goal of all these reactionary statements and "theoretical" discoveries boils down to knocking social science off the true path, substituting the study of social phenomena with mysticism, "proving" that the development of society is not a lawful historical process, but a chaos of contingencies governed by the will of the Almighty. It is clear that all such

attempts to distort the scientific understanding of social development are made in order to hide the social causes leading the capitalist system to inevitable ruin.

Machists and their followers in Russia — Bogdanov and others — "accused" Marxism of not applying biological categories to explain social phenomena, such as "struggle for existence," "natural selection," etc.

In his book *Materialism and Empirio-criticism*," exposing the sophistry of the Machists, V. I. Lenin showed that a "non-biological" approach to society is not a shortcoming, but a merit of Marxism. Marxist science of society rejects so-called "Social Darwinism," which tries to explain social phenomena using biological categories. Marxism provides the only scientific understanding of the laws of societal development as a new, higher form of motion of nature. Marxism views social life as a process carried out on the basis of its own inherent laws. The laws of the biological or physical form of motion are inapplicable to society and cannot explain the social process of development.

Exposing the Machists, V. I. Lenin wrote: "...the application of the concepts of 'selection', 'assimilation and disassimilation' of energy, energetic balance, etc., etc., in application to the field of social sciences is a *meaningless phrase*. In fact, *no study* of social phenomena, *no clarification of the method* of social sciences can be given with the help of these concepts. Nothing is easier than to stick an 'energetic' or 'biologico-sociological' label on phenomena like crises, revolutions, class struggle, etc.,

but nothing is more sterile, scholastic, and dead than this occupation"[136].

This characterization given by Lenin to all attempts to reduce higher forms of motion to lower ones is an essential methodological guideline for the scientific understanding of the relationship between the main forms of motion of matter.

Development as the Emergence of the New and the Dying Away of the Old

Lenin repeatedly pointed out that in the 20th century "everyone agrees" with the principle of development. However, not every "acceptance" of development is a correct, dialectical-materialist understanding of development.

Moreover, numerous theories of development in bourgeois philosophy, sociology, and natural science were specially created and are created today in opposition and defiance to the only scientific, dialectical concept of development.

There are two concepts of development, one of which is scientific, dialectical. The scientific, dialectical concept of development is an integral element of the worldview of the proletariat. The second concept — metaphysical, unscientific, reactionary — is in our time a theoretical weapon of the ideologists of the imperialist bourgeoisie.

These two concepts of development are diametrically opposed in their understanding of the most important questions of development. There are essentially three such questions: what is development, how does development occur, and what are the

[136] *V. I. Lenin, Works, vol. 14, 4th ed., p. 314.*

driving forces of development? Our task includes considering the first question, the question of what development is.

Marxist-Leninist dialectics teaches that motion, development, is not a simple displacement of ready-made, immutable objects, a recombination of eternal entities occurring in a closed circle with a constant, inevitable return to the old. *Development is the constant emergence of the new, higher, progressive, and the dying away, destruction of the old, obsolete.*

Lenin wrote on this matter:

"'Everyone agrees' with the 'principle of development' in the 20th century (and at the end of the 19th century too). — Yes, but this superficial, unthought-out, accidental, philistine 'agreement' is that kind of agreement by which truth is suffocated and vulgarized. — If everything develops, then everything passes from one state into another, for development is demonstrably not a simple, universal and eternal growth, increase (respective decrease), etc. — If so, then... evolution must be understood more precisely as the emergence and destruction of everything, mutual transitions"[137].

Dialectical development as the emergence and destruction, as the appearance of the new and the dying away of the old, is the most important, unalterable law inherent in all forms of motion of matter. Science testifies to the fact that development is the irresistible appearance of the new, higher, more complex.

[137] *V. I. Lenin, Philosophical Notebooks, 1947, p. 239.*

Soviet scientists have established that the emergence and destruction of celestial bodies is an unending process. This process of the demise of some celestial bodies and the emergence of others occurs in present times as well, as convincingly proven by the Soviet scientist V. A. Ambartsumian.

Confirmation that development occurs from lower to higher, from simple to complex, is the stage-by-stage nature of plant development discovered by Academician Lysenko.

The theory of stage development shows that an organism in its individual development passes from one stage to another, the new stage being higher relative to the previous stage. Thus, at the stage of vernalization, a plant cannot produce a stem, let alone form an ear and grain. Their formation occurs at new, higher stages, but these higher stages themselves are impossible without the vernalization stage.

A vivid example of development as the appearance of the new and the dying away of the old is the development of society. J. V. Stalin in his work *Anarchism or Socialism?* writes:

"They say that social life is in a state of ceaseless motion and development. And this is true: life cannot be considered something immutable and frozen, it never stops at one level, it is in eternal motion, in an eternal process of destruction and creation. Therefore, in life there always exists the *new and the old, the growing and the dying, the revolutionary and the counter-revolutionary*"[138].

[138] *J. V. Stalin, Works, vol. 1, p. 298.*

Subordinating to the general law of development as the dying away of the old and the appearance of the new, development from lower to higher, humanity has passed through various socio-economic formations of society.

The replacement of one social formation by another, the demise of the old, the emergence and development of the new is an objective law of social development. Each new formation in relation to the previous, old one, is higher, more progressive, since it corresponds to a new level of productive forces.

The initial, earliest and lowest social formation is the primitive communal system. The primitive communal system was replaced by the slave-owning system, which corresponded to a higher level of development of productive forces. The slave-owning system was the first class formation. But the slave-owning system gave way to a higher system in relation to it — the feudal system, which was replaced by a new system — the capitalist one. Being more progressive compared to the feudal system, the capitalist system, by virtue of the general law of development, must also naturally perish as not corresponding to the new level of development of society's productive forces. This process of the demise of the old, capitalist system is happening before our eyes.

The Great October Socialist Revolution opened a new era in human history — the era of revolutionary transition from the old, capitalist world to the new, socialist world. As a result of the emergence of the world's first Soviet socialist state, the world split into two camps — the camp of socialism and the camp of capitalism. The world capitalist system is becoming increasingly weaker, while the forces of socialism and

democracy are steadily growing and strengthening. After World War II, a number of states in Central and South-Eastern Europe fell out of the capitalist system, in which the people's democratic system was established and which embarked on the path of socialist construction. A heavy blow to imperialism was dealt by the historic victory of the great Chinese people. The peoples of colonies and dependent countries rose up in active struggle for their freedom and national independence. Ever larger masses of people around the world are being drawn into a decisive struggle against American imperialism, standing up in defense of peace and the national independence of their countries.

Thus, human society naturally developed and continues to develop, obeying the general law of development as the dying away of the old and the appearance of the new, as motion from lower to higher.

Irresistibility of the New, Progressive

The irresistibility of the new, progressive is an unalterable law of development inherent in matter at all stages of its development, in all its forms. The new, having originated, enters into a struggle with the old. The process of this struggle weakens the old and strengthens the new.

The irresistibility of the new is based on the following objective moments inherent in the process of development of nature and society.

In the process of development, the origination of the new occurs within the womb of the old. Each subsequent stage

naturally follows the previous one, and each previous stage prepares the ground, creates conditions for the subsequent one. Therefore, every phenomenon contains within itself the past, present, and future, the old and the new.

For example, in order for life on our planet to become possible, it was necessary for such forms of motion of matter as physical and chemical to reach a certain level of development and complexity, creating the conditions necessary for the emergence of life.

Academician Oparin describes the process of complication of chemical substances that led to the formation of living beings as follows: "First, simple solutions of organic substances arose, their behavior was determined by the properties of their constituent atoms and the arrangement of these atoms in molecules. But gradually, as a result of the growth of these molecules and their complication, new qualities emerged, and the simplest organo-chemical relations were overlaid with new colloid-chemical laws. They were already determined by the mutual arrangement of molecules in space. However, for the emergence of primary living beings, even these laws were still insufficient. For this, it was necessary for colloid formations in the process of their evolution to acquire qualities of an even higher order, allowing them to pass to the next stage of organization of matter. Here, in the process of formation, biological laws came to the fore. 'Competition' in the rate of growth and natural selection created such a form of

organization of matter that is inherent in living beings known to us today"[139].

Only through the complication of chemical substances and the emergence of new physical features could life emerge as a new form of motion of matter. Its appearance was prepared by lower forms of motion of matter — physical and chemical, and only when these forms created the necessary conditions did the emergence of life become possible.

The process of the emergence of the new within the womb of the old is manifested even more clearly in social development.

J. V. Stalin points out this feature in the development of society.

"The third feature of production," writes J. V. Stalin, "consists in the fact that the emergence of new productive forces and the relations of production corresponding to them occurs not separately from the old system, not after the disappearance of the old system, but within the womb of the old system, occurs not as a result of deliberate, conscious human activity, but spontaneously, unconsciously, independently of human will"[140].

Since the new arises and develops within the womb of the old, it enters into a contradiction with the old, and these contradictions between the new and the old spill over into the form of a struggle. The new fights for its existence, for its growth, while the old stubbornly resists, does not want to leave the historical stage, and offers resistance to the new.

---

[139] *A. I. Oparin, The Origin of Life on Earth, ed. Academy of Sciences USSR, M.–L. 1941, p. 264.*

[140] *J. V. Stalin, Problems of Leninism, 1952, p. 598.*

The struggle of the new with the old is the driving force of the development process, the source of this development.

Since the process of lawful development always goes from the old to the new, progressive, the new, appearing and developing within the womb of the old, is always at first significantly weaker than the old. However, the further the process of development goes, the more the new, progressive grows and strengthens. The old, by virtue of the development of the new, becomes reactionary, and its elimination proves to be inevitable.

This law of the irresistibility of the new, progressive is manifested especially clearly in social life during the transition from one social formation to another. New social forces are *always weak and insignificant at first, but however weak they may be, in the end they win, and the old system gives way to the new.*

Thus, for example, in Russia in the second half of the 19th century, the proletariat was still small in number, and the labor movement was weak. However, the proletariat, being a new, thoroughly revolutionary class, grew and developed alongside the development of capitalism, and already at the beginning of the 20th century (in 1905) proved to be a great revolutionary force, and in 1917, fulfilling its historical mission, accomplished the socialist revolution.

Thus, what was weak at first proved to be mighty and irresistible in the process of development.

The irresistibility of the new is a law of social development. However, the process of struggle between the new and the old

does not proceed smoothly, in the form of a straight line. The history of social development knows many examples when the new, progressive suffered a temporary defeat and progressive forces in the struggle against reaction had to retreat. Summing up the results of the 1848 revolution, Marx and Engels wrote: "At present everyone knows that wherever there is a revolutionary convulsion, it must be behind it a social want, the satisfaction of which is prevented by outworn institutions. This want may not yet be felt so strongly, may not yet be so general as to ensure immediate success; but every attempt at its forcible suppression will only bring it forth stronger and stronger, until it breaks its fetters. If, then, we have been beaten, we have nothing to do but to begin again from the beginning"[141].

From the cited position of Marx, it follows that if a given social movement is progressive, if advanced social forces stand behind it, then even if it has suffered defeat now, even if the old at a given stage proved to be stronger and won — the demise of the old and the victory of the new are equally inevitable.

Consequently, the task boils down to ensuring that the social forces standing behind the new, after setback and defeat, do not abandon the struggle, but, accumulating strength, lead it to complete victory over the old.

Developing this position of Marx, V. I. Lenin wrote:

"'Historical action is not the pavement of Nevsky Prospekt,' said the great Russian revolutionary Chernyshevsky. A

[141] *K. Marx, Selected Works, vol. II, Gospolitizdat, 1941, p. 32.*

revolutionary would not 'agree' to a revolution of the proletariat only 'on condition' that it proceeds easily and smoothly, that there is immediately combined action of the proletarians of different countries, that there is a guarantee in advance against defeats, that the road of revolution is broad, free, straight, that one does not have to occasionally, while heading toward victory, bear the heaviest sacrifices, 'sit out in a besieged fortress' or break through the narrowest, impassable, winding, and dangerous mountain paths — such a person is not a revolutionary, has not freed themselves from the pedantry of the bourgeois intelligentsia, and in fact will constantly slide into the camp of the counter-revolutionary bourgeoisie, like our Right Socialist-Revolutionaries, Mensheviks..."[142]

In the work *Economic Problems of Socialism in the USSR*, J. V. Stalin once again emphasized the huge role played by the struggle of advanced classes against the dying forces of society. Uncovering the class background of the utilization of economic laws, J. V. Stalin showed that "the banner-bearer of using economic laws in the interests of society is always and everywhere the advanced class, whereas the dying classes resist this cause"[143]. Therefore, in the economic field, the discovery and application of a new law affecting the interests of dying forces of society is impossible without struggle, without overcoming resistance on the part of these forces.

The victory of the new must be prepared, it must be fought for, not awaited as if it will come by itself — so teach the great leaders of the proletariat, V. I. Lenin and J. V. Stalin.

---

[142] *V. I. Lenin, Works, vol. 28, 4th ed., p. 50.*

[143] *J. V. Stalin, Economic Problems of Socialism in the USSR, pp. 49–50.*

A vivid example of the struggle for the new, advanced, progressive is the heroic history of the Communist Party of the Soviet Union. Such historical events as the Great October Socialist Revolution, the industrialization of the country, the transition from fragmented peasant farming to collective agricultural production are those historical milestones through which the working class, led by the Communist Party and its leaders Lenin and Stalin, marched to the victory of socialism in the USSR.

In the Great Patriotic War, the new, socialist system fully demonstrated its great strength and power, its vitality, its irresistibility.

On the strength and power of the Soviet system, on its invincibility, V. I. Lenin wrote:

"A nation will never be defeated in which the workers and peasants in their majority have come to know, feel, and see that they are defending their own, Soviet power — the power of working people, that they are defending a cause whose victory will ensure for them and their children the opportunity to use all the benefits of culture, all the creations of human labor"[144].

Under the leadership of the Communist Party of the Soviet Union, the Soviet people are successfully moving forward, which is expressed in the unprecedented historical development of the economy, culture, in such strengthening of the moral-political unity of Soviet society and the rise of Soviet

[144] *V. I. Lenin, Works, vol. 29, 4th ed., p. 292.*

patriotism that *"now there is no force in the world that could turn our people back, back to capitalism"*[145].

The decisions of the 19th Congress of the Communist Party of the Soviet Union are of the greatest world-historic significance.

In the directives of the congress for the Fifth Five-Year Plan for the development of the USSR, a grandiose program for the development of the national economy, socialist culture, technology, science, and art is outlined, and a further increase in the material and cultural level of the people is planned. The fulfillment of the fifth five-year plan will be a major step forward on the path of development from socialism to communism. By strengthening and developing the socialist economy and culture, we consolidate the cause of peace worldwide.

Before our eyes, a fierce struggle between the new and the old is taking place in the world arena, a struggle of the progressive camp of supporters of peace and democracy against the reactionary camp of imperialism and warmongers.

In the course of the struggle between the new and the old, there is a continuous growth in the forces of the new, the camp of peace and democracy, and conversely, a weakening of the forces of the old, the camp of war and imperialism.

The forces of the camp of peace, democracy, and socialism, united by a community of interests, grow and strengthen every day. The strength and power of the Soviet Union, representing the leading force of the anti-imperialist camp, is steadily

[145] *V. M. Molotov, Stalin and Stalinist Leadership, Gospolitizdat, 1949, p. 11.*

increasing. Ever newer successes in economic and cultural construction are achieved by the countries of people's democracy developing along the path to socialism. The economy and culture of the People's Republic of China, whose people are building a new life with huge enthusiasm, are developing rapidly. Peaceful construction is being successfully carried out in the German Democratic Republic.

Conversely, in the camp of imperialism and war, deep internal contradictions are observed, mutual infighting among imperialists over sales markets, raw materials, and spheres of capital investment is occurring.

As a result of the disintegration of the single world market, the sphere of application of forces of the main capitalist countries has narrowed and will steadily contract, the conditions of the world capitalist market are continuously deteriorating. This causes an exacerbation of contradictions between imperialist countries. Contradictions are growing between the USA and England, the USA and France, the USA and other European capitalist countries. The struggle between West Germany and France within the so-called European Coal and Steel Community is intensifying, and due to competition among the capitalists of these countries, a conflict between them over the Saar region is brewing.

Trying to find an exit from the general crisis of capitalism that worsened after the Second World War, the imperialists took the path of preparing and unleashing a new war, with the main aggressive power — the USA — forcefully driving other capitalist countries toward war. Accompanying the preparation for war with an attack on democratic forces and the fascization

of state systems both in the USA and in other capitalist countries, as pointed out by G. M. Malenkov, American imperialism acts as a global gendarme, against which "already now a wave of hatred and resistance is rising on the part of the oppressed peoples".

In the rear of the imperialists, a powerful national-liberation movement of peoples is growing, and the forces of peace supporters represented by millions of honest physical and mental workers are continuously increasing.

All this is a source of internal weakness of the camp of imperialism and war.

In his classic work *Economic Problems of Socialism in the USSR*, J. V. Stalin showed with all persuasiveness how all the intensifying contradictions in the camp of imperialist countries inevitably lead to the unleashing of imperialist wars between capitalist countries. J. V. Stalin exposed the groundlessness of the assertion that the United States of America has supposedly so subjugated other capitalist countries that it will not allow them to go to war with one another.

Showing the groundlessness of such a point of view, J. V. Stalin formulated the most important requirement of Marxist analysis — to draw conclusions not on the basis of external phenomena flickering on the surface, but on the basis of "those underlying forces which, although acting imperceptibly for now, will nevertheless determine the course of events".

Uncovering the underlying processes taking place now in capitalist countries, J. V. Stalin teaches: "Outwardly everything seems to be 'all right': the United States of America has put

Western Europe, Japan, and other capitalist countries on rations; Germany (Western), England, France, Italy, Japan, having fallen into the clutches of the USA, obediently carry out the orders of the USA. But it would be wrong to think that this 'well-being' can be preserved 'for ever and ever,' that these countries will endlessly tolerate the domination and oppression of the United States of America, that they will not attempt to break free from American bondage and embark on the path of independent development".

"They say that the contradictions between capitalism and socialism are stronger than the contradictions between capitalist countries. Theoretically, this is, of course, true. It is true not only now, at the present time — it was true also before the Second World War. And this was more or less understood by the leaders of capitalist countries. And yet the Second World War began not with a war against the USSR, but with a war among capitalist countries. Why? Because, firstly, a war with the USSR, as a country of socialism, is more dangerous for capitalism than a war among capitalist countries, for if a war between capitalist countries raises only the question of the predominance of certain capitalist countries over other capitalist countries, then a war with the USSR must necessarily raise the question of the existence of capitalism itself. Because, secondly, the capitalists, although they make noise for 'propaganda' purposes about the aggressiveness of the Soviet Union, themselves do not believe in its aggressiveness, as they take into account the peaceful policy of the Soviet Union and know that the Soviet Union itself will not attack capitalist countries.

"But from this it follows that the inevitability of wars between capitalist countries remains in force"[146].

Uncovering the underlying processes taking place now in capitalist countries, J. V. Stalin teaches: "Outwardly everything seems to be 'all right': the United States of America has put Western Europe, Japan, and other capitalist countries on rations; Germany (Western), England, France, Italy, Japan, having fallen into the clutches of the USA, obediently carry out the orders of the USA. But it would be wrong to think that this 'well-being' can be preserved 'for ever and ever,' that these countries will endlessly tolerate the domination and oppression of the United States of America, that they will not attempt to break free from American bondage and embark on the path of independent development".

"They say that the contradictions between capitalism and socialism are stronger than the contradictions between capitalist countries. Theoretically, this is, of course, true. It is true not only now, at the present time — it was true also before the Second World War. And this was more or less understood by the leaders of capitalist countries. And yet the Second World War began not with a war against the USSR, but with a war among capitalist countries. Why? Because, firstly, a war with the USSR, as a country of socialism, is more dangerous for capitalism than a war among capitalist countries, for if a war between capitalist countries raises only the question of the predominance of certain capitalist countries over other capitalist countries, then a war with the USSR must necessarily

[146] *J. V. Stalin, Economic Problems of Socialism in the USSR, pp. 33, 34, 35.*

raise the question of the existence of capitalism itself. Because, secondly, the capitalists, although they make noise for 'propaganda' purposes about the aggressiveness of the Soviet Union, themselves do not believe in its aggressiveness, as they take into account the peaceful policy of the Soviet Union and know that the Soviet Union itself will not attack capitalist countries.

But from this it follows that the inevitability of wars between capitalist countries remains in force"[147].

J. V. Stalin points out that dying classes do not voluntarily leave the stage. They strive to use all opportunities to prolong their existence. Through all their activity, reactionary classes prevent the transformation of a progressive possibility into reality and frequently achieve a temporary victory if progressive forces do not display sufficient activity and persistence in the struggle for the new.

Thus, in 1918–1920 in a whole series of European countries (Germany, Hungary, etc.), there were objective conditions for the victory of the proletariat over the bourgeoisie and the overthrow of capitalism. However, due to the betrayal of social-democracy, the weakness of communist parties in these countries, and a number of other reasons, the possibility of victory was not converted into reality.

Conversely, in Russia in 1917, the Communist Party was able to organize the masses for the struggle against autocracy and imperialism, was able to take advantage of the prevailing

[147] *J. V. Stalin, Economic Problems of Socialism in the USSR, pp. 33, 34, 35.*

internal and international situation, and in revolution defeated the forces of reaction defending the old. Without this revolutionary struggle carried out by the masses during the October period under the leadership of the Communist Party, the victory over capitalism would have remained a possibility, albeit a real possibility.

A possibility in social development does not turn into reality on its own, automatically. Struggle is required to realize a progressive possibility, as well as the mobilization of the masses to overcome the resistance of reactionary classes defending the old.

The ability to distinguish possibility from reality, not to confuse them, not to mistake the possible for the real, the ability to identify in a given reality all possibilities and fully utilize them for the victory of the new is of immense importance both for a correct understanding of the process of social development and for guiding this process.

V. I. Lenin and J. V. Stalin repeatedly pointed out the theoretical and practical importance of distinguishing the categories of possibility and reality.

"Namely in 'methodology'... one must distinguish the possible from the real"[148], wrote Lenin.

Exposing the attempts of enemies of the Soviet people — Bukharinites — to replace the dialectical understanding of development with the opportunistic theory of "drift" and "spontaneity," J. V. Stalin, in his report to the 16th Party

[148] *V. I. Lenin, Works, vol. 35, 4th ed., p. 194.*

Congress, stated that the Soviet system provides colossal possibilities for the complete victory of socialism. "But possibility is not yet reality. In order to turn possibility into reality, one must, first of all, cast aside the opportunistic theory of drift, rebuild (reconstruct) the national economy, and launch a decisive offensive against capitalist elements in town and countryside"[149].

"It turns out, thus," J. V. Stalin continued, "that one must strictly distinguish between the *possibilities* available in our system and the *utilization* of these possibilities, the *conversion of these possibilities into reality*.

"It turns out that cases are fully permissible when possibilities for victory exist, but the party does not see these possibilities or does not know how to use them properly, as a result of which defeat may occur instead of victory"[150].

The possibility of the victory of socialism in the USSR was ensured by the establishment of the dictatorship of the proletariat. The remnants of undefeated exploiting classes tried in every way to restore capitalism. The Communist Party and the Soviet government took all measures to eliminate the possibility of restoring capitalism and to turn the possibilities of building socialism in the USSR into reality. The Party crushed the worst enemies of the working class — Trotskyites and Bukharinites, who pushed our country onto the path of restoring capitalism. The Party took a firm course toward the industrialization of the country and the collectivization of

[149] *J. V. Stalin, Works, vol. 12, p. 339.*
[150] *Ibid., p. 341.*

agriculture, mobilized the working people to eliminate the kulaks as a class, and prepared the offensive of socialism along the entire front.

With the construction of socialism in the USSR and the establishment of such new driving forces as the moral-political unity of all the people, friendship among peoples, and Soviet patriotism, further profound changes occurred in the character of the dialectical transformation of possibility into reality.

First of all, the very content of possibility changed sharply. As long as exploiters and the kulak class existed, as long as antagonistic contradictions between working people and exploiters took place, there were two possibilities in the country's development — either to go forward to socialism, or backward to capitalism. The nature of these possibilities was diametrically opposed.

Speaking at the Conference of Marxist Agronomists in 1929, J. V. Stalin said: "Hence, the question stands as follows: *either one path, or the other, either backward — to capitalism, or forward — to socialism. There is no third path and cannot be*"[151].

With the victory of socialism, such diametrically opposed possibilities, behind which hostile classes stood, ceased to exist. All social groups making up Soviet society move along one line — toward communism.

However, even under socialism, possibility becomes reality through struggle against the old. That is why notions about the

[151] *J. V. Stalin, Works, vol. 12, p. 146.*

absence of conflict in the life of socialist society are harmful. The "theory" of non-conflict has as its methodological foundation the "theory" of drift, which is inherently anti-scientific. The "theory" of drift and the "theory" of non-conflict based on it distort the real process of development.

Preaching the absence of any conflicts under socialism is extremely harmful to practical activity. It distracts from the struggle against shortcomings and survivals of capitalism. Under socialism, it is necessary to expose and overcome in struggle the remnants of bourgeois ideology in people's consciousness, to fight against attempts to drag corrupt ideas of decaying bourgeois culture into science, literature, and art; it is necessary to wage a struggle against nationalism, cosmopolitanism, and other forms of reactionary ideology that can penetrate the consciousness of a backward section of our intelligentsia. In the report at the 19th Party Congress, G. M. Malenkov pointed to the struggle against survivals of capitalism in people's minds as one of the most important tasks of the Party.

Thus, the struggle for a new reality presupposes and requires the exposure of the remnants of the old.

The movement of Soviet society toward communism represents a process of converting the possibility of building communism into reality. In order for communism to become a reality, it is necessary to fully utilize the possibilities inherent in socialism and to develop them. The transformation of possibility into reality represents under socialism a process of struggle between the old and the new, a process of struggle of the entire Soviet people for further successes in the economy,

science, and culture, a struggle of the Soviet people for an even higher, even more progressive way of Soviet life.

J. V. Stalin in his work *Economic Problems of Socialism in the USSR* raised Marxist-Leninist teachings on the relationship between possibility and reality, and on turning possibility into reality, to a new, higher level.

Comrade Stalin teaches that in order to use all the possibilities of socialism and turn them into reality, it is necessary to study the objective economic laws of the socialist mode of production and learn to apply them expertly. "...The law of balanced development of the national economy," teaches J. V. Stalin, "gives our planning organs the possibility to correctly plan social production. But possibility must not be confused with reality. These are two different things. In order to turn this possibility into reality, one must study this economic law, master it, learn to apply it with full knowledge of the matter, and draft plans that fully reflect the requirements of this law. It cannot be said that our annual and five-year plans fully reflect the requirements of this economic law"[152].

This statement by J. V. Stalin is of paramount methodological importance for a correct understanding of the relationship between possibility and reality, and for guiding the task of converting possibility into reality.

[152] *J. V. Stalin, Economic Problems of Socialism in the USSR, pp. 8–9.*

Practical Significance of the Propositions on Universal Motion, Change, and Development in Nature and Society

Marxist dialectics recognizes nothing as eternal or unchangeable; it considers everything in motion, change, becoming, and dying away.

The proposition of the Marxist dialectical method concerning motion and development in nature and society is of immense importance for science. This is clearly seen in the example of the struggle between Michurinist biology and Weismannism-Morganism. Weismannism-Morganism denied the appearance of the new in the development of living matter and reduced its development to the recombination and simplification of the eternal, immortal hereditary substance. As a result, Weismannism-Morganism inevitably arrived at idealism.

On the contrary, at the foundation of Michurinist biology lies the correct, dialectical view of organic nature as a process of continuous development and change.

Characterizing the development of living nature, Michurin wrote:

"Some excursionists, whose number reaches up to 5,000 people per year with us, sometimes ask approximately these questions: — 'Why breed any additional improved new varieties of fruit plants when we already have many of our old varieties?' To such naive persons, I have to repeat what I stated as long as forty years ago in many articles: the life of all nature is not something frozen in its forms; it continuously moves and constantly changes, and all forms..."

"...of living beings that have for any reason stopped in their development are inevitably doomed to destruction. Much of what previously seemed best in terms of suitability to the living conditions of past years is at present already unfit and requires replacement"[153].

Michurinist biology, consistently applying the dialectical doctrine of development, was able to uncover and explain the factors of organism variability, understand the properties of heredity, prove the directionality and inheritability of changes that occurred in an organism under the influence of environmental conditions, and reveal that the sole cause of organism variability is a change in their living conditions. On this basis, Michurinist biology was able to raise biological science to a new, higher stage of its development. Michurinist biology proved capable not only of explaining the development of life, but also of actively directing this process in accordance with the interests of the national economy — creating new breeds of animals and varieties of agricultural plants.

The propositions of the Marxist dialectical method concerning the universality of development, the struggle of the new with the old, and the irresistibility of the new can be applied directly to science itself.

If everything develops, then science cannot stand still either. The requirement for development preserves science from ossification and dogmatism. It obliges scientists not to rest on their laurels, but to seek new paths in science, overcome the

[153] *I. V. Michurin, Selected Works, M., Selkhozgiz, 1948, pp. 548–549.*

old, see the sprouts of the new in science, support this new, and strengthen it.

The Central Committee of the Communist Party has set major new tasks before science.

Comrade Malenkov stated in his report at the 19th Congress: "To further develop advanced Soviet science with the task of taking first place in world science. To direct the efforts of scientists toward a faster solution of scientific problems related to the utilization of the vast natural resources of our country. To strengthen the creative alliance of science with…" production, bearing in mind that this alliance enriches science with practical experience, and helps practical workers to solve more quickly the tasks facing them"[154].

Setting Soviet science the task of taking first place in world science, the Party indicates concrete ways to solve this task.

The most important condition for the development of science is the struggle against everything that is old and obsolete, which hinders the forward movement of science. "However," said G. M. Malenkov at the 19th Congress, "in a number of branches of science, the monopoly of individual groups of scientists who brush aside growing fresh forces, shield themselves from criticism, and attempt to decide scientific questions by administrative means has not yet been fully eliminated. No branch of science can successfully develop in a stale atmosphere of mutual praise and hushing up of errors; attempts

[154] *G. Malenkov, Report to the XIX Party Congress on the Work of the Central Committee of the All-Union Communist Party (Bolsheviks), p. 78.*

to establish the monopoly of individual groups of scientists inevitably breed stagnation and decay in science"[155].

The Party calls upon science workers to fight against dogmatism and Talmudism, and to eliminate the Arakcheyev-like regime, group loyalty, and the undervaluation of young, growing scientific forces that exist in some branches of science. Only in this way, the Party teaches, can the successful development of advanced Soviet science be ensured.

Recognizing no eternal and unalterable social orders, economic structures, political regimes, eternal laws, or immutable moral principles, and regarding them as the product of historical development, dialectics directs people's attention to changing the existing order, obliges them to seek new ways to transform nature, and to actively contribute to the revolutionary transformation of society.

Marx, Engels, Lenin, and Stalin, applying the theory of development to the analysis of social life, determined the paths for transforming the social system and stood at the head of the powerful movement of the proletarian masses along the path to communism.

All activity of the Marxist-Leninist party is a vivid expression of the practical application of the theory of development to society.

"If the world is in continuous movement and development," says J. V. Stalin, "if the dying away of the old and the growth of the new is a law of development, then it is clear that there

[155] *Ibid., p. 96.*

are no more 'unshakeable' social orders, 'eternal principles' of private property and exploitation, 'eternal ideas' of the subordination of peasants to landlords, and workers to capitalists."

Hence, the capitalist system can be replaced by the socialist system, just as the capitalist system replaced the feudal system in its time.

Hence, one must orient oneself not on those strata of society which are no longer developing, even though at the present moment they represent the predominant force, but on those strata which are developing and have a future, even though at the present moment they do not represent the predominant force.

In the eighties of the last century, in the era of the Marxists' struggle against the Narodniks, the proletariat in Russia represented an insignificant minority compared to the individual peasantry, which constituted the overwhelming majority of the population. But the proletariat was developing as a class, whereas the peasantry, as a class, was disintegrating. Precisely because the proletariat was developing as a class, the Marxists oriented themselves toward the proletariat. And they were not mistaken, for, as is well known, the proletariat subsequently grew from an insignificant force into a first-rate historical and political force.

Hence, in order not to err in politics, one must look forward, not backward[156].

---

[156] *J. V. Stalin, Problems of Leninism, 1952, pp. 579–580.*

Guided by the Marxist doctrine of development and viewing capitalism as a transient socio-economic formation, the Marxist-Leninist Party set the task of overthrowing capitalism and building communism. The Communist Party rallied and led the masses of working people, effecting the overthrow of the bourgeois-monarchist system in Russia in 1917. Understanding the process of social development as the dying away of the old and obsolete, and the emergence of the new and nascent, the Communist Party led the movement of new, progressive forces in the struggle for a new, higher social system — communism — and within a short historical period accomplished the construction of socialism in the USSR.

Today, the construction of socialism is being carried out by the people's democratic countries of Central and South-Eastern Europe. At the head of this powerful movement stand communist parties, guided by the Marxist-Leninist science of the laws of development of nature and society, the revolution of oppressed and exploited masses, the victory of socialism in all countries, and the construction of a communist society.

Proceeding from the dialectical principle that in the process of social development the new, progressive is irresistible, the Communist Party, in its struggle for a new social system, has never retreated from accomplishing the tasks before it. Whatever difficulties stood in the way, the Party overcame them, confident in the triumph of the working class cause, in the triumph of communism.

In the years of severe trials — the temporary defeat of the 1905 revolution and the subsequent Stolypin reaction, during the preparation for the October Revolution, in the years of the

Civil War when 14 capitalist countries marched against the young Soviet Republic, in the years of blockade, famine, and economic devastation, under conditions of treacherous betrayal by the Mensheviks of the cause of socialism and active opposition by the enemies of socialism — Trotskyites and Bukharinites — the Communist Party, led by Lenin and Stalin, confidently marched along the outlined path. The Communist Party waged an uncompromising struggle against the old and always stood on the side of the new and progressive.

"...The Party," says J. V. Stalin, "did not succumb to the threats of some or the howls of others, and confidently marched forward, despite everything. The merit of the Party lies in the fact that it did not adapt to the backward, was not afraid to go against the stream, and continuously maintained the position of the leading force"[157].

The Communist Party at every historical moment knew how to find the new and progressive and offer it support. As a result of the Party's activity, the new and progressive, initially weak, became strong and all-conquering.

After the October Revolution, during the transition period, there were five economic structures in the Soviet Republic: patriarchal (subsistence), small-commodity, private-capitalist, state-capitalist, and socialist. The socialist structure was still weak, but the Party proceeded from the progressiveness of the socialist structure, and from the fact that it alone could and must become dominant. Directing the efforts of the Soviet

---

[157] *J. V. Stalin, Speeches at Election Meetings of Voters of the Stalin Electoral District of Moscow, December 11, 1937, and February 9, 1946, Gospolitizdat, 1953, p. 20.*

people toward the utmost development of the socialist structure, the Party achieved a state where all other economic structures were displaced, and the socialist structure became powerful and the sole dominant one in our country. V. I. Lenin, in the very first years of Soviet power, noticed in the *subbotniks* a new attitude of the masses toward labor and decisively supported this new phenomenon. V. I. Lenin characterized *subbotniks* as a "great beginning" and attached immense historical importance to them, seeing in them the prototype of a communist attitude toward labor. Lenin pointed out that this was the beginning of a upheaval more fundamental than the overthrow of the bourgeoisie, for it was a victory over one's own indiscipline, inertia, petty-bourgeois egoism, and over habits that cursed capitalism left as a heritage to the worker and peasant.

J. V. Stalin noticed and decisively supported the Stakhanovite movement when it was just beginning. At the very start of the Stakhanovite movement's development, J. V. Stalin, with brilliant foresight, saw the new that it carried within itself, and foresaw its historical significance, its power, and its invincibility. "Today Stakhanovites are still few," said Comrade Stalin in 1935, "but who can doubt that tomorrow there will be ten times as many? Is it not clear that Stakhanovites are innovators in our industry, that the Stakhanovite movement represents the future of our industry?..."[158]

[158] *J. V. Stalin, Problems of Leninism, 1952, p. 534.*

J. V. Stalin, in his work *Economic Problems of Socialism in the USSR*, showed that raising the cultural and technical level of workers to the level of technical personnel, the rudiments of which J. V. Stalin discovered in the Stakhanovite movement, is of primary importance for the transition from socialism to communism. If not just individual groups of workers, but the majority of workers raised their cultural and technical level to the level of engineering and technical personnel, then, says J. V. Stalin, "our industry would be raised to a height unattainable for the industry of other countries"[159].

J. V. Stalin pointed out that one of the main conditions for preparing the transition to communism is raising collective-farm property to the level of public property. J. V. Stalin opened the path to raising collective-farm property to the level of public property through the rudiments of product-exchange between state industry and collective farms, existing in the form of "commodity-exchange" (*otovarivaniye*) of agricultural products. J. V. Stalin states that "the task consists of organizing these rudiments of product-exchange in all branches of agriculture and developing them into a broad system of product-exchange" so as to eliminate commodity circulation and "include the main property of collective farms, the output of collective-farm production, into the general system of nationwide planning"[160].

Proceeding from the fact that development is the emergence of the new and the dying away of the old, J. V. Stalin teaches that

---

[159] *J. V. Stalin, Economic Problems of Socialism in the USSR, 1952, p. 28.*
[160] *Ibid., p. 94.*

a sense of the new is a precious quality that every worker must possess.

Our era, the great socialist era, is an era of innovators, creators of a new, socialist economic system, new forms of labor, new communist culture, art, morality, and a new social system — communism. The period of transition from socialism to communism abounds with examples demonstrating the truth and immense practical significance of the considered propositions of the Marxist dialectical method.

The ability of the Communist Party to find the new and support it in a timely manner is visible in every decision of the Party and government on issues of the economy, science, and culture. The Party opens up inexhaustible possibilities before the Soviet people that lie hidden in the socialist — economic and political — system, and conducts immense work in mobilizing the masses for the struggle to utilize these possibilities, for converting the possibility of building communism into reality.

The Central Committee of the Party, in its daily leadership of the Party and country in building a communist society, provides brilliant examples of the ability to find the new and achieve its victory. The resolutions of the Central Committee of the Party on ideological questions, and the discussions on philosophy, biology, physiology, linguistics, and political economy conducted under the guiding influence of the Central Committee of the Party and personally Comrade Stalin, offer a model of how to reveal the new and progressive in ideological work. At the same time, these decisions expose everything rotten, obsolete, and reactionary that represents survivals of bourgeois ideology. Guided by a dialectical understanding of

development and exposing the theory of drift, the Party teaches the Soviet people to fight against the old and conservative, to eliminate survivals of capitalism in people's consciousness, and to banish the conservative and obsolete from science, art, and literature.

Uprooting the old, the Party calls for vigilance and uncompromising resistance toward any survivals of capitalism, remnants of bourgeois ideology, and views and moods alien to socialism that are spread and inflated by undefeated remnants of groups hostile to Soviet power.

Guided by Marxist dialectics and the law of the irresistibility of the new and progressive in the struggle against the old and conservative, the Communist Party exposes the old, ensures the victory of the new over the old, and confidently leads our people toward a bright future — toward communism.

Noting the great organizing and mobilizing role of the Party in the forward movement of the Soviet country, G. M. Malenkov said at the 19th Congress: "Our mighty Motherland is in the bloom of its strength and is marching toward new successes. We possess everything necessary to build a complete communist society. The natural riches of the Soviet country are inexhaustible. Our state has proven its ability to use these vast riches for the benefit of the working people. The Soviet people have shown their ability to build a new society and look confidently into the future."

At the head of the peoples of the Soviet Union stands a party tested and tempered in battle, steadfastly carrying out the Leninist-Stalinist policy. Under the leadership of the

Communist Party, a world-historic victory of socialism in the USSR has been achieved, and the exploitation of man by man has been eliminated forever. Under the leadership of the Party, the peoples of the Soviet Union are successfully fighting to achieve the great goal of building communism in our country.

There are no forces in the world that could stop the forward movement of Soviet society. Our cause is invincible. We must hold the helm firmly and go our own way, without succumbing to provocations or intimidation[161].

[161] *G. Malenkov, Report to the XIX Party Congress on the Work of the Central Committee of the All-Union Communist Party (Bolsheviks), pp. 108–109.*

DEVELOPMENT AS A TRANSITION OF QUANTITATIVE CHANGES INTO RADICAL, QUALITATIVE CHANGES

★

K. V. MOROZ

Metaphysical and Dialectical Understanding of Development

In the famous fragment "On the Question of Dialectics," V. I. Lenin, comparing two mutually opposite conceptions of development, wrote:

"Two basic (or two possible? or two historically observed?) conceptions of development (evolution) are: development as decrease and increase, as repetition, *and* development as a unity of opposites (the division of a unity into mutually exclusive opposites and their reciprocal relation). In the first conception of motion, *self-movement* remains in the shade, its *moving force*, its source, its motive (or the source is shifted to the outside—god, subject, etc.). In the second conception, the chief attention is directed precisely to knowledge of the source of '*self*-movement'. The first conception is dead, pale, dry. The second is living. *Only* the second supplies the key to the 'self-movement' of everything existing; only it supplies the key to the 'leaps,' to the 'break in continuity,' to the 'transformation into the opposite,' to the destruction of the old and the emergence of the new"[162].

[162] *V. I. Lenin, Philosophical Notebooks, 1947, pp. 327–328.*

Metaphysicians reduce movement to the mechanical displacement of bodies in space, representing development only as quantitative changes in phenomena, as an increase or decrease of one and the same thing once and for all of a given object or phenomenon. For the metaphysical conception, development is a flat evolution, without a break in continuity, without leaps, without transitions from an old qualitative state to a new one, without the struggle of opposites as the source of development.

The metaphysical conception gives a distorted, one-sided picture of the objective development of the world, in which everything is reduced to simple growth or reduction, to purely quantitative changes.

The metaphysical understanding of development took shape in the 17th–18th centuries, although elements of it existed as early as Ancient Greece. In the 18th century, materialist philosophers, as well as natural scientists, believed that atoms, of which matter consists, are the simplest and at the same time homogeneous for all forms of matter, indivisible tiny bodies. Natural scientists therefore saw their task merely in "seeking out homogeneous matter as such and reducing qualitative differences to purely quantitative differences formed by combinations of identical tiny particles..."[163].

In biology, the metaphysical point of view was most clearly manifested in the theory of preformationism, according to which the embryonic seed contains within itself a ready-made microscopic organism—the prototype of the future adult living

[163] *F. Engels, Dialectics of Nature, 1952, p. 203.*

being. Naturally, the development of an organism from the perspective of this theory is merely a quantitative increase, a simple growth of parts already existing in embryonic form.

One of the representatives of the metaphysical understanding of development was the French philosopher Robinet (1735–1820), who believed that all objects and phenomena of the material world possess one and the same property—organicity (animateness),—an increase or decrease of which determines the difference between objects and phenomena. The formation of a stone, an oak, a horse, etc., according to Robinet, is a purely quantitative process where everything depends on the number, proportion, order, and combination of the principle of life—organicity—that is identical for stone, oak, horse, etc.

The metaphysical understanding of development as simple quantitative growth was conditioned by the level of development of science at that time. The most developed sciences were the mechanics of terrestrial and celestial bodies and mathematics. Physics, chemistry, biology, and other sciences were in embryonic states. The peculiarity of such sciences as mechanics and mathematics consists in the fact that, in studying natural phenomena, they abstract from the qualitative specificity of phenomena and consider them only from the standpoint of quantitative properties and relations. This circumstance, due to ignorance of dialectics, served as one of the reasons why philosophers and natural scientists of the 17th–18th centuries attempted to explain every change by the movement of bodies in space, and reduced all qualitative differences observed in nature to quantitative ones.

The natural-scientific discoveries of the 19th century (especially the discovery of the organic cell, the law of conservation and transformation of energy, and Darwin's theory of the evolution of organic nature) introduced substantial changes to prevailing views on the surrounding world. Natural science demonstrated that different forms of matter are not homogeneous, that qualitative differences exist between them, that development cannot be reduced solely to quantitative changes, and that *development is simultaneously radical, qualitative changes of objects and phenomena*.

Alien to the metaphysical conception of development was the view that interaction exists between quantity and quality, that development occurs as a break in continuity and *discrete parts of various stages (atoms, masses, celestial bodies) "are various nodal points that condition various qualitative forms of existence of universal matter..."*[164]

The metaphysical understanding of development as simple quantitative growth also has its class roots. Metaphysics is stubbornly defended by the bourgeoisie and its ideologists.

The bourgeoisie and its defenders use the metaphysical conception of development to deny the conformity to law of the proletarian revolution, to limit the movement of the masses to a struggle for minor reforms within the framework of the capitalist system. The metaphysical conception of development in modern bourgeois science serves as the foundation for various idealistic, reactionary theories directly linked to

[164] *F. Engels, Dialectics of Nature, 1952, p. 236.*

clericalism and the misanthropic ravings of American imperialists.

In biology, for example, the metaphysical conception of development is defended by the Weismannists-Morganists. Weismannists-Morganists deny the role of the environment in the development of organic nature and exclude the inheritance of acquired characteristics by subsequent generations. The idea of development as the emergence of the new and the dying away of the old is alien to them. According to their assertions, the basis of life in any organism is a certain invented, unchangeable substance—the gene. The gene allegedly determines the nature of the organism, acts as the carrier of hereditary continuity, and is the sole condition for the development of plants and animals.

"All these theories of heredity," says Academician Lysenko, "put one and the same incorrect proposition at their foundation, although they present it in different ways. This proposition boils down to the view that the development of organisms is a simple increase or decrease, that new properties in organisms *can only manifest themselves, but not appear*, not arise from the old. After all, in biological science to this day, many continue to assert that in an organism cells can only come from cells, chromosomes only from the same chromosomes, and so on. Meanwhile, everyone knows that any organ in an organism develops from an initial organ that is completely different from it; for example, an eye does not come from an eye at all, nor a leaf from a leaf, and so on. Why then must special laws exist

for chromosomes that are not characteristic of the general laws governing the development of organisms?"[165]

Speaking of the unchangeability of the fictitious hereditary substance—the gene—the Weismannists-Morganists openly preach vile racist theories, justifying imperialistic violence, national oppression, and the mass extermination of supposedly "inferior" peoples.

Michurinist biology, being one of the most important components of the natural-scientific foundation of the Marxist-Leninist worldview, regards the development of living nature as a transition of quantitative changes into radical, qualitative ones, as the emergence of new traits and forms and the destruction of old ones.

The Marxist dialectical method is radically opposed not only to various forms of metaphysics, but also to Hegel's idealistic dialectics.

If from the standpoint of the philosophy of Marxism the transition of quantitative changes into radical, qualitative changes is one of the main laws of development of the material world, then according to Hegel, the transition of quantitative changes into qualitative ones acts not as a law of nature's development, but as a stage in the development of a certain absolute idea. Whether Hegel speaks of quantity, quality, or measure, or of the transition from one qualitative state to another, he always has in mind not objects and phenomena of

[165] *T. D. Lysenko, Agrobiology, 4th ed., 1948, p. 329.*

material reality, but abstract-logical concepts absolutized by him—"quality," "quantity," and "measure" as such.

On the contrary, Marxist materialist dialectics asserts that the objects and phenomena of nature themselves possess qualitative and quantitative definiteness, that the transition of quantitative changes into radical, qualitative ones acts within it as a law of the development of objective reality, which is comprehended by people and used by them as one of the logical principles for studying the objects and phenomena surrounding us.

The classic exposition of the third main feature of the Marxist dialectical method, in which this law is embodied, is given by Comrade Stalin in his work *On Dialectical and Historical Materialism*. "In opposition to metaphysics," writes J. V. Stalin, "dialectics considers the process of development not as a simple process of growth, where quantitative changes do not lead to qualitative changes, but as a development which passes from insignificant and imperceptible quantitative changes to open changes, to radical changes, to qualitative changes; where qualitative changes occur not gradually, but rapidly, abruptly, in the form of a leap-like transition from one state to another state; and occur not accidentally, but in accordance with laws, as a result of the accumulation of imperceptible and gradual quantitative changes"[166].

[166] *J. V. Stalin, Questions of Leninism, 1952, p. 576.*

Quality and Quantity

Measure

What is included in the concept of quality?

Quality is a philosophical category serving to denote the internal definiteness, the specificity of things and phenomena of the world around us. Quality expresses a fundamental property, the essence of an object or phenomenon.

The quality of certain objects and phenomena is revealed in comparison with the quality of other objects and phenomena. Quality indicates the boundaries separating some phenomena of material reality from others. A change in quality entails a radical change in the object or phenomenon itself.

Quality, expressing the essence of objects and phenomena, is inseparably linked with a definite, stable form of motion or a series of motions. Engels says that an object is moving matter, and the various forms and types of matter itself can be known only through motion. "Motion is not merely a change of place; in realms above mechanics, it is also a change of quality"[167].

The generally accepted division in science of natural phenomena into mechanical, physical, chemical, and the phenomena of organic life points to the major qualitative differences of the material world, to qualitatively different forms of the motion of matter.

The inseparability of quality from motion and the dependence of quality on definite processes of change and development

[167] *F. Engels, Dialectics of Nature, 1952, p. 201.*

stand out clearly when new phenomena arise in both inorganic and organic nature. Thus, modern shale, Engels points out, differs fundamentally from the silt from which it is formed; chalk differs from the unbonded microscopic shells of which it consists; sandstone differs from unbonded sea sand, which in turn arose from the finest particles of granite.

The diversity of forms of motion of matter also conditions the diversity of forms of qualitative definiteness. Organic life as a form of motion of matter is richer than the physical and chemical forms, for it includes other forms of motion (mechanical, physical, chemical). Higher animals have such organs and body parts that unicellular organisms lack (nervous tissue, brain, bones, etc.).

Quality is an objective property of objects and phenomena. In opposition to metaphysical and idealistic philosophical systems that consider quality a subjective category dependent only on man and his sensations, dialectical materialism considers quality to be the same objective reality as moving matter itself is objective and real.

When speaking of red, warm, hard, and various other properties of objects or phenomena, we merely express the qualitative definitenesses objectively inherent in objects and phenomena. Sensation, as the "direct connection of consciousness with the external world," as the "transformation of the energy of an external stimulus into a fact of consciousness" (*Lenin*), connects man with the external world. Sensation is a subjective image of objective objects; in sensation, the objective qualities of perceived objects are revealed.

From the fact that the quality of objects is revealed in sensations, idealist philosophers drew the conclusion that all qualities, or some of them, are nothing more than our subjective sensations. Thus, as early as the 17th century, the English philosopher John Locke divided all qualities into primary and secondary. Color, sound, and taste Locke considered secondary, subjective qualities, existing only insofar as man exists. And only such qualities as extension, shape, impenetrability, motion, and rest were considered by Locke to be primary, having objective significance, and inseparable from the objects themselves. Locke's position on the subjectivity of secondary qualities is an idealistic position that strives to prove the dependence of the qualities of the material world on human consciousness.

The subjectivist understanding of quality was manifested most sharply among representatives of the subjective-idealistic direction in philosophy, such as Berkeley, Hume, and their followers Mach, Avenarius, and other Machists. Reducing objects and phenomena of the material world to a combination or complex of sensations, subjective idealists thereby viewed the qualities of objects as properties of human consciousness. The ideologists of modern American-English imperialism, outright representatives of various subjective-idealistic trends in America and Europe, also deny the objective character of qualities.

In reality, the qualities of things are objective; they are inseparable from the phenomena of the real world reflected by our consciousness.

Quality is not something that exists independently, apart from objects themselves. "...Qualities do not exist," wrote Engels, "there are only *things possessing qualities*, and moreover infinitely many qualities. Any two different things always have certain common qualities (at least the properties of corporality), other qualities differ between them in degree, and finally, other qualities may be completely absent in one of these things"[168].

The diversity of connections and mediations existing in the world conditions the diversity of concrete forms of manifestation of qualitative definiteness. The quality of things is revealed through their *properties*, which represent nothing other than the expression of quality in relation to other objects.

Quality reveals itself through properties, and the sum total of the latter forms a given qualitative definiteness of an object or phenomenon. In this respect, an organic unity exists between quality and property. However, quality and property are not equivalent. Quality is the essence, the complete specificity of a thing, whereas a property reveals the essence of a thing only from one side or another.

Not all properties express the qualitative definiteness of objects and phenomena to an equal degree. Some of them touch upon more essential sides, while others touch upon less essential ones. Thus, anarchy of production, periodic crises of overproduction, the impoverishment of the working masses, and a number of other similar properties are essential features of capitalism. The disappearance, for example, of periodic

[168] *F. Engels, Dialectics of Nature, 1952, p. 184.*

crises—one of such essential and characteristic properties of the capitalist mode of production—can occur only together with the disappearance of capitalism itself, whereas a change in the periods of alternation or duration of crises does not affect the essence of capitalism.

The loss or acquisition by an object of a particular non-essential property, or even a series of non-essential properties, does not yet entail its qualitative change. A plant that loses properties such as flowering and fruiting for the winter does not cease to be a plant.

Such is the manifestation of qualitative definiteness inherent in objects and phenomena.

What, then, is quantity?

Quantity is a philosophical category serving to denote the definiteness of objects and phenomena from the side of number, magnitude, pace, degree, volume, etc.

Objects and phenomena have not only qualitative definiteness, but also quantitative definiteness, representing in themselves a unity of quality and quantity. Thus, a molecule of one substance can differ from a molecule of another only by a different number of atoms; for example, oxygen (O_2) and ozone (O_3). Atoms differ from one another by the quantity of electrons, protons, neutrons, and other particles that make up the atom. In social life, alongside the qualitative side, there is also a quantitative side. Thus, one type of society differs from another not only by the character of production relations, but also by the level of development of productive forces, the

growth rate of industry, the size of personal and national income, etc.

The establishment of the socialist mode of production in the USSR means not only a radical change in the character of production relations (the replacement of capitalist production relations—relations of dominance and subordination—by socialist production relations—relations of cooperation and mutual assistance among workers free from exploitation), but also a growth in the volume and pace of industry and agriculture, the prosperity, and the culture of the working people of the Soviet country unprecedented in history.

Quantitative definiteness is just as diverse as qualitative definiteness; each of them expresses the diversity of forms of moving matter from different sides. In one case, quantity acts as a number, and we say: ten or twenty degrees of heat, a hundred or a thousand machines. In another case, quantity signifies a degree of comparison, and we speak of higher labor productivity, or a faster flight of an airplane or bird. In a third case, quantity expresses spatial relations, and we speak of height, length, and width. Quantity points to many other relations as well.

Every object or phenomenon has its own quantitative definiteness, characteristic only of it. Thus, every chemical element possesses its own quantitative characteristic: its atomic weight, its charge, its atomic volume, etc. Every social system is characterized by a definite level of development of productive forces, etc.

Quantity, like quality, is objective; it is inseparable from the objects and phenomena themselves. There is no quantity in general; rather, there are objects possessing particular quantitative characteristics. The concepts of number and figure, says Engels, are not taken from nowhere, but solely from the real world reality. Before human concepts of number and figure took shape, things having a definite form and a definite numerical expression must have existed.

Quantity cannot be considered as something external with respect to objects and phenomena; quantity, like quality, expresses their essential side. Temperature is, for water, an inalienable property of its physical state, just as a definite ratio of hydrogen and oxygen is characteristic of its chemical composition. Only certain quantitative changes, and even then in a strictly defined relation, do not affect the qualities of an object. Thus, raising the temperature of water from 1 to 99 degrees (Celsius) does not change the essential traits of water. Similarly, the capitalist character of an enterprise does not change when one capitalist is replaced by a joint-stock company.

Such are the general features of the quantitative definiteness of objects and phenomena.

In clarifying the nature of quality and quantity, it is necessary to bear in mind one more important circumstance pointed out by Engels. Every quality has many quantitative gradations, such as shades of color. On the other hand, quantity is full of qualitative differences. Thus, unity acts as the simplest number, and at the same time it contains within itself a diversity. It is the base number of the entire system of positive and negative

numbers, the expression of any number raised to the zero power, the value of all fractions whose numerator and denominator are equal to each other, etc. Zero is the negation of any definite quantity and at the same time has a very definite content. Added to any number on the right, it increases it tenfold; it annihilates any number multiplied by it, etc.

These examples show that quantity and quality are dialectically interrelated categories; in objective reality, quality and quantity are inseparable from each other. This organic unity of qualitative and quantitative definiteness constitutes the *measure* of a given object or phenomenon.

Measure is the quality of an object with its inherent quantitative definiteness. Measure expresses the limits within which quantitative changes do not cause qualitative changes and within which objects and phenomena remain themselves. An inorganic body, if divided into smaller and smaller particles, will not immediately yield a qualitative change. But as soon as we bring the process of division down to the molecule of the given substance, any further fragmentation is already accompanied by the destruction of the given quality and the transition to a new one. Instead of a molecule of a complex substance, atoms of its constituent elements are formed.

The moments of transition from one measure to another are called nodes or points of transition from one state to another, while the entire chain of transitions from some quantitative-qualitative unities to others is called a *nodal line of measures*.

Engels points out such nodes and turning points in the development of nature as the transition from the mechanics of celestial bodies to the mechanics of small masses on individual celestial bodies, from the mechanics of masses to the mechanics of molecules, from the physics of molecules to the physics of atoms (chemistry), from ordinary chemical action to the chemistry of proteins (life).

The development of human society also occurs through the transition of quantitative changes into qualitative ones, through the transition from one measure to another. On the basis of the growth of productive forces and labor productivity, the primitive system, for example, gave way to the slaveholding system, slaveholding to feudal, and feudal to capitalist. Capitalism, the last antagonistic social formation, is replaced by a qualitatively new system—the socialist system.

The nodal line of measures reflects the history of the progressive, law-governed development of given objects and phenomena. It shows how quantitative changes lead to the emergence of qualitatively new forms.

Such is the main characteristic of quality, quantity, and measure. Let us now proceed to consider the question of how the process of transition of quantitative changes into radical, qualitative ones proceeds.

The Transition of Quantitative Changes into Qualitative — The Law of Development of Nature and Society

Engels wrote that in nature the law of transition of quantitative changes into qualitative ones can be expressed in this way:

"...in nature qualitative changes—in a manner strictly determined for each individual case—can occur only through the quantitative addition or quantitative subtraction of matter or motion (so-called energy).

All qualitative differences in nature are based either on different chemical composition, or on different quantities or forms of motion (energy), or—as is almost always the case—on both. Thus, it is impossible to alter the quality of any body without the addition or subtraction of matter or motion, i.e., without a quantitative change in this body"[169]. At the same time, qualitative and quantitative changes in nature always occur as a result of the interaction of objects and phenomena.

"The change of form of motion is always a process that takes place between at least two bodies, of which one loses a definite amount of motion of a given quality (e.g., heat), while the other receives a corresponding amount of motion of another quality (mechanical motion, electricity, chemical decomposition). Consequently, quantity and quality correspond to each other here mutually and reciprocally"[170].

Thus, changes in the physical properties of objects represent qualitative changes caused by quantitative changes. For example, the gradual heating of a metal initially does not affect its physical state, but as soon as the temperature reaches a certain threshold (1083 C for copper, 327 C for lead), a sharp transition to a new physical state takes place: solid metal becomes liquid.

---

169 *F. Engels, Dialectics of Nature, 1952, p. 39.*
170 *Ibid.*

"In a word," writes Engels, "the so-called constants of physics are for the most part nothing other than the designation of nodal points where quantitative <change> addition or subtraction of motion causes a qualitative change in the state of the corresponding body,—where, consequently, quantity is transformed into quality"[171].

The same can be said of chemical properties. Chemistry, says Engels, can be called the science of the qualitative changes of bodies occurring under the influence of changes in quantitative composition. For example, two atoms of nitrogen and one atom of oxygen yield a compound called nitrous oxide (N_2O). The same two atoms of nitrogen, taken with five atoms of oxygen, form dinitrogen pentoxide (N_2O_5)—a solid.

The periodic table of elements shows how the properties of elements depend on the magnitude of the positive nuclear charge, which is numerically equal to the atomic number of the element.

The transition of quantitative changes into qualitative ones is observed in biological processes as well. Darwin's discovery established the idea of the development of living nature in biological science. But Darwin's error was that he envisioned the origin of some species from others as a continuous line of gradual changes, without recognizing qualitative changes by means of leaps.

Michurinist biology proves that the development of organic nature cannot be reduced solely to gradual accumulations of

[171] *F. Engels, Dialectics of Nature, 1952, p. 41.*

minor changes. Animal and plant species, representing interconnected links in the development of organic nature, contain within themselves features of both similarity and difference. The boundaries between species, despite all their relativity, point to those qualitative differences that separate one species from another. Therefore, the formation of new species is a break in continuity, a leap-like transition from one qualitative state to another.

Individual development of organisms is also subject to the law of transition of quantity into quality, which is confirmed by the theory of the stage development of plants developed by T. D. Lysenko. Cereal plants, completing the cycle of development from the old seed to the new seed, pass through two stages: vernalization and the light stage. This means that in addition to all other conditions required for plant life (minimum moisture, access to air, etc.), they require a specific temperature level during the vernalization stage, and a specific duration of light exposure during the light stage. Thus, the stages represent qualitatively different phases in the life of plants caused by quantitative changes.

A brilliant confirmation of the law of transition of quantitative changes into qualitative ones is provided by the discoveries of Stalin Prize winner Professor O. B. Lepeshinskaya.

Summarizing the discoveries of his time in the field of natural science, Engels concluded that life on Earth arose from non-living matter as a result of lengthy and complex processes.

"Millennia probably passed before the conditions arose in which the next step forward became possible, and from this

formless protein, thanks to the formation of a nucleus and a membrane, the first cell arose. But along with this first cell, the foundation was given for the formation of the entire organic world. First there developed, as we must assume based on all data from the paleontological record, countless species of acellular and cellular protists, of which only *Eozoon Canadense* has come down to us, and of which some gradually differentiated into the first plants, and others into the first animals. And from the first animals there developed, mainly by way of further differentiation, countless classes, orders, families, genera, and species of animals, and finally that form in which the nervous system reaches its fullest development—namely vertebrates, and again, among these, that vertebrate in which nature arrives at self-consciousness—man"[172].

Professor O. B. Lepeshinskaya showed experimentally how the transition from living substance lacking cellular structure to a cell occurs, thereby confirming the correctness of Engels' propositions regarding the origin of life on Earth. For a long time, Virchow's point of view prevailed in science, according to which every cell allegedly originates only from a cell. O. B. Lepeshinskaya proved that in nature processes occur such as the emergence of non-cellular substance from cellular formations and, conversely, the emergence of cells from non-cellular substance. The process of cell formation from living non-cellular substance is a series of accumulations, a series of intermediate formations. The gradual change of living substance under the influence of physical-chemical external and internal factors leads to the creation of new qualitative

[172] *F. Engels, Dialectics of Nature, 1952, p. 13.*

formations, the cell arises, and the transition of quantitative changes into qualitative ones takes place.

The law of transition of quantitative changes into radical, qualitative ones is a law not only of nature, but also of social life. In explaining the essence of capitalist production, Marx notes that not every sum of money can be transformed into capital. For such a transformation, a definite minimum of money in the hands of an individual owner is necessary.

"Here, as in natural science," Marx notes, "is confirmed the correctness of that law... that purely quantitative changes at a certain stage pass into qualitative differences"[173].

One of the manifestations of the law of transition of quantitative changes into radical, qualitative ones in social life is also the replacement of one mode of production by another, the slow accumulation of diverse contradictions during the period of so-called peaceful development and the resolution of these contradictions during a social upheaval, during a revolution.

Thus, under capitalism, a process of accumulation of elements, or prerequisites, for the revolutionary replacement of it by socialism first takes place (the continuous growth of contradictions inherent in capitalism, the growth of the proletariat, the growth of its class consciousness and organization, the gradual accumulation of experience in the revolutionary struggle of the masses, etc.), and then a period of radical, qualitative changes arrives—a period of revolutionary

[173] *K. Marx, Capital, Vol. I, 1951, p. 314.*

transformation of the capitalist system into a socialist system (the overthrow of the existing power and creation of a new power, replacement of old relations of production by new ones, etc.).

The transition of quantitative changes into qualitative ones also occurs in the process of the development of knowledge, in the sphere of ideology. Thus, in the development of philosophy, a vivid example of the transition of quantitative changes into a radical, qualitative change is the emergence of Marxist philosophy, which, being a genuine discovery and revolution in philosophy, "could not occur without a preliminary accumulation of quantitative changes, in this case the results of the development of philosophy prior to the discovery of Marx and Engels"[174].

Thus, the transition of quantitative changes into radical, qualitative changes is a universal law; it manifests itself in the development of nature, in the development of society, and in the development of knowledge.

In clarifying the nature of the transition of quantitative changes into qualitative ones, it is also necessary to bear in mind that the new qualitative definiteness of an object or phenomenon formed as a result of gradual quantitative changes is at the same time a new quantitative definiteness. In social life, this is evident from the fact that every new mode of production, being a new qualitative state of society, is inseparable from new quantitative manifestations. Thus, for example, the rapid

---

[174] *A. A. Zhdanov, Speech at the Discussion on G. F. Alexandrov's Book "History of Western European Philosophy", 1952, p. 8.*

development of industry and agriculture, the rapid growth of prosperity and culture of the working people of the USSR are conditioned by nothing other than the nature of the socialist system, its fundamental economic law, and its advantages over the capitalist system.

Evolution and Revolution. The Leap

Quantitative and qualitative changes are two forms of the movement of matter. "...From the point of view of the dialectical method," says Comrade Stalin, "evolution and revolution, quantitative and qualitative changes, are two necessary forms of one and the same movement"[175].

V. I. Lenin, in his article "Differences in the European Labour Movement," pointed out that actual history includes various tendencies, "just as life and development in nature include both slow evolution and rapid leaps, breaks in continuity"[176].

In objects and phenomena, there is always the new and the old. In each of them, alongside the old, dying-away qualitative state, a new qualitative state is born, and after a certain quantitative accumulation, a radical, qualitative change occurs —the new overcomes the old.

The evolutionary form of development means that the new gradually matures within the old quality. The revolutionary form of development is a transition to a new qualitative state. Evolution prepares the conditions for revolution, while the latter completes evolution and contributes to its further work.

---

[175] *J. V. Stalin, Works, Vol. 1, p. 309.*

[176] *V. I. Lenin, Works, Vol. 16, 4th ed., p. 319.*

"Movement is evolutionary," J. V. Stalin points out, "when the progressive elements spontaneously continue their daily work and introduce minor, *quantitative* changes into the old order.

Movement is revolutionary when those same elements unite, become imbued with a single idea, and rush against the enemy camp in order to destroy the old order at its roots and introduce *qualitative* changes into life, establishing a new order"[177].

Comrade Stalin points out that the transformation of quantitative changes into radical, qualitative changes occurs "in the form of a leap-like transition from one state to another...". A leap, a revolutionary form of movement, is a break in continuity, a transition from one qualitative state to another. A leap is a necessary link in the process of development. It is not for nothing that Engels said that all nature consists of leaps.

Some bourgeois natural scientists and philosophers view leap-like transitions from one state to another as a manifestation of chance in development. Thus, Cuvier in his time believed that the emergence of new species of animals and plants was linked to recurring catastrophes (cataclysms) from time to time, as a result of which old forms of life were destroyed and everything was created anew. Catastrophes, according to Cuvier, occur suddenly, without any connection with preceding development, and are caused by unknown reasons.

Comrade Stalin, in his work *Anarchism or Socialism?*, showed the complete groundlessness of the metaphysical theory of cataclysms and substantiated the fundamental difference

---

177 *J. V. Stalin, Works, Vol. 1, p. 301.*

between the Marxist understanding of revolutionary development and Cuvier's theory of catastrophes.

Reducing the development of living nature to sudden, causeless leaps is nothing other than a manifestation of metaphysics and obscurantism in science. Weismannism-Morganism is such a reactionary metaphysical and idealistic trend, explaining new qualitative formations in the organic world as chance. On the contrary, the power of Michurinist biology lies in the fact that it links the development and change of living beings not with accidental moments, but with a law-governed process of the disappearance of old and the emergence of new traits in organisms under the influence of environmental conditions. Qualitative formations in organic nature, the disappearance of old organisms and species, and the leap-like appearance of new organisms and species occur as a result of preceding gradual quantitative changes in organisms due to changes in the conditions of their existence, changes in their surrounding environment, i.e., quite in accordance with laws.

Imperceptible quantitative changes in organisms, occurring due to changes in their surrounding environment, lead to radical, qualitative changes because the further existence and development of the organism or species as a whole can no longer take place within the framework of the old qualitative state, within the framework of the old type of metabolism. The transition from the old quality to the new becomes inevitable. This transition takes place by means of a leap, which arrives with irresistible force, arrives in accordance with laws.

The significance of the leap lies in the fact that it gives rise to a new phenomenon, creates new, decisive conditions for the further process of development.

In social development, leaps occur as revolutionary transitions from one social system to another. The rule of old, reactionary classes can be destroyed only through violence. Marx directly speaks of a physical clash between people as a means of resolving class antagonism. Only when there are no antagonistic classes will "social evolutions cease to be political revolutions"[178].

V. I. Lenin also points to the exceptional importance of social revolutions in societal life. "...It is precisely in such periods," teaches Lenin, "that those numerous contradictions are resolved which accumulate slowly during periods of so-called peaceful development. It is precisely in such periods that the direct role of various classes in determining the forms of social life manifests itself with the greatest force, and the foundations of the political 'superstructure' are created, which then rest for a long time on the basis of renewed relations of production"[179].

Comrade Stalin, concretizing and developing one of the most important propositions of historical materialism—on the contradiction between new productive forces and old relations of production—speaks of the conscious activity of the masses, of violent revolution as the decisive conditions for replacing old production relations with new ones. Within the womb of the old society, development occurs spontaneously until the

---

[178] *K. Marx, The Poverty of Philosophy, Gospolitizdat, 1941, p. 149.*
[179] *V. I. Lenin, Works, Vol. 13, 4th ed., p. 22.*

newly emerged productive forces reach maturity. When this moment arrives, "the existing relations of production and their carriers—the ruling classes—turn into that 'insurmountable' barrier which can only be removed from the path through the conscious activity of the new classes, through the violent actions of these classes, through revolution"[180].

The greatest leap in history is the Great October Socialist Revolution, which "marks a radical turn in the world history of humanity from the old, capitalist world to the new, socialist world"[181]. The October Revolution brought radical changes to social life. It overthrew the power of landlords and capitalists and established the dictatorship of the proletariat, opening a new era in the development of all humanity.

The transition from an old quality to a new quality can be fairly prolonged in time. Marx and Engels repeatedly warned that the transition from bourgeois society to socialist society must not be understood as an unexpected and short-term blow. One cannot think, Engels wrote, as if a revolution can be made in a single day. In reality, it represents a long-term process of development of the masses under conditions that foster its acceleration[182].

Developing the propositions of Marx and Engels, Lenin in his work *The Immediate Tasks of the Soviet Government* wrote that, according to Marx and Engels, leaps in social life are turning points in world history that sometimes span periods of

---

[180] *J. V. Stalin, Questions of Leninism, 1952, p. 600.*
[181] *J. V. Stalin, Works, Vol. 10, p. 239.*
[182] *K. Marx and F. Engels, Selected Letters, 1948, p. 370.*

ten years or more. Lenin speaks here of an era of great leaps, of such a transition from an old qualitative state to a new one that encompasses an entire stretch of historical development. In such an epoch of a great leap, an entire set of major tasks is resolved, the implementation of which ultimately leads to the complete destruction of the old quality and the establishment of the new quality.

"The real interest of the epoch of great leaps," wrote Lenin, "consists in the fact that the abundance of debris of the old, accumulated sometimes faster than the quantity of germs (not always immediately visible) of the new, requires the ability to single out the most essential in the line or chain of development. There are historical moments when, for the success of the revolution, it is most important of all to accumulate more debris, i.e., to blow up more old institutions; there are moments when enough has been blown up, and the next line becomes 'prosaic' (for a petty-bourgeois revolutionary, 'boring') work of clearing the soil of debris; there are moments when careful nurture of the germs of the new, growing from under the debris on soil poorly cleared of rubble, is most important of all"[183].

The destruction of the political rule of landlords and the bourgeoisie and the establishment of the dictatorship of the proletariat as a result of the Great October Socialist Revolution created the real conditions for a radical, revolutionary transformation of society in our country. The industrialization of the country, the collectivization of agriculture, and the

[183] *V. I. Lenin, Works, Vol. 27, 4th ed., pp. 243–244.*

cultural revolution—these are the links that determined the triumph of socialism in the USSR; herein lies the transition from the old qualitative state of society to its new qualitative state.

Comrade Stalin, in a speech to voters of the Stalin election district of the city of Moscow on February 9, 1946, clearly defined the essence of the radical changes that took place in the USSR. "Such unprecedented growth in production," said J. V. Stalin, "cannot be considered a simple and ordinary development of a country from backwardness to progress. This was a leap by which our Motherland turned from a backward country into an advanced one, from an agrarian country into an industrial one"[184].

The very emergence of human society can also be called a great leap. The emergence of man from the animal world was a long and complex process; it required not only a very extended period of time, but also a series of so-called small leaps. Human society formed as a result of a series of qualitative transformations which, following one after another, imparted to society its inherent definiteness, conditioned by fundamentally different laws of development. An upright gait, the freeing of the hand and its transformation into an organ of labor, the emergence of production, the ever-greater development of the brain and sense organs, the appearance of specifically human thinking and articulate speech—these are individual links in the formation of human society.

---

[184] *J. V. Stalin, Speeches at Election Meetings of Voters of the Stalin Election District of Moscow, Dec 11, 1937 and Feb 9, 1946, 1953, p. 18.*

However, recognition of the very fact of the existence of leaps in the surrounding world does not yet yield a complete understanding of the features of the development of any concrete process. Dialectical materialism teaches one to approach the analysis of leaps concretely-historically, to see the qualitative difference and diversity in the character of the leaps themselves.

The character of a leap is determined by the nature of the developing object or phenomenon, by its interconnection with other objects or phenomena. Engels points out that constants, nodal points of transition from one qualitative state to another, vary in nature. Chemical-physical processes are one thing; the life of animals and plants is another. It is completely obvious that the process of formation of new forms of living nature differs fundamentally from transitions in non-living nature. The diversity of concrete forms of matter's existence determines the diversity of forms of leap-like transitions from some states to others.

It is extremely important to see the various forms of leaps in social life. The collectivization of agriculture in the USSR was a revolution that, as stated in the *Short Course on the History of the CPSU(b)*, resolved a number of fundamental questions of socialist construction. It liquidated the most numerous exploiting class in our country—the kulaks, transferred the most numerous working class—the class of peasants—from the path of individual farming to the path of public, collective farming, and provided Soviet power with a socialist base in the most extensive field: agriculture. "Thereby, the last internal sources for the restoration of capitalism were destroyed, and at

the same time, new, decisive conditions necessary for building a socialist national economy were created"[185].

However, this was a revolution of a completely new type, a revolution carried out from above, on the initiative of state power with direct support from the millions of the peasantry.

Of exceptional importance for a deep understanding of the Marxist-Leninist formulation of the question of the character of leaps and the transition from one qualitative state to another is the work of Comrade Stalin, *Marxism and Problems of Linguistics*. In this work, J. V. Stalin points out that transitions from an old quality to a new one can occur in some conditions suddenly, by means of an explosion, and in others—gradually, without an explosion.

Thus, the transition of a language from an old quality to a new one occurs not by means of an explosion, but through the gradual accumulation of elements of the new quality and the gradual dying away of elements of the old quality.

Comrade Stalin provides a comprehensive theoretical justification for the possibility of transition from an old quality to a new one not only by means of an explosion, but also without an explosion.

"In general, it must be said for the information of comrades who are fascinated by explosions," says Comrade Stalin, "that the law of transition from an old quality to a new one by means of an explosion is inapplicable not only to the history of language development—it is not always applicable to other

[185] *History of the CPSU(b). Short Course, p. 292.*

social phenomena of a base or superstructure nature. It is obligatory for a society divided into hostile classes. But it is by no means obligatory for a society that has no hostile classes. Over the course of 8–10 years, we accomplished in our country's agriculture a transition from a bourgeois individual-peasant system to a socialist, collective-farm system. This was a revolution that liquidated the old bourgeois economic system in the countryside and created a new, socialist system. However, this turnover was accomplished not by means of an explosion, i.e., not through the overthrow of the existing power and the creation of a new power, but through a gradual transition from the old bourgeois system in the countryside to the new one. And it was possible to accomplish this because it was a revolution from above, because the turnover was carried out on the initiative of the existing power with the support of the main masses of the peasantry"[186].

The transition from an old qualitative state to a new one that occurs without an explosion, by means of the gradual accumulation of elements of the new quality and the dying away of the old quality, must not be confused with the evolutionary form of movement.

The bourgeois individual-peasant economic system gave way to the collective-farm socialist system through a gradual transition, without an explosion, yet Comrade Stalin directly calls this transition a revolution.

Thus, not only leaps occurring by means of an explosion, but also leaps occurring by means of a gradual transition from an

[186] *J. V. Stalin, Marxism and Problems of Linguistics, pp. 28–29.*

old quality to a new one, represent a revolutionary form of movement. Denying the revolutionary character of such leaps would mean nothing less than reducing movement solely to an evolutionary form, solely to quantitative changes, which is completely incorrect. "For all its gradualness," teaches Engels, "the transition from one form of motion to another always remains a leap, a decisive turn"[187].

The scientific formulation of the question regarding the various paths and forms of transition from an old quality to a new one is of immense importance for understanding the laws governing the development of socialist society. The October Socialist Revolution was a leap where an explosion, i.e., the violent destruction of the power of landlords and capitalists and the establishment of Soviet power, was a law-governed and completely inevitable matter. In the transition of Soviet society from socialism to communism, however, matters stand differently.

In the USSR, there are no classes hostile to one another. Consequently, there is no ground for social explosions or political revolution. On the contrary, on the basis of the victory of the socialist mode of production, such driving forces have emerged as the moral-political unity of Soviet society, the friendship of peoples, and Soviet patriotism. The Soviet state, the Communist Party of the Soviet Union, and the people represent a single whole.

Soviet people see in the Communist Party and the Soviet State the defenders of their vital interests, and they consider all

[187] *F. Engels, Anti-Dühring, 1952, p. 63.*

measures of the Party and Government to be their own vital cause. In the struggle for communism, the initiative of the Communist Party and the Soviet State is warmly supported by the people. Under such conditions, the transition from an old qualitative state to a new one occurs in a fundamentally different way than in a society consisting of hostile classes. Under socialism, leaps and qualitative changes in society are accomplished not by means of an explosion, but through the gradual overcoming of the old and accumulation of the new. At the same time, at the head of the people's struggle for the victory of the new stand the Soviet State and the Communist Party.

Concretizing the proposition of Marxist-Leninist dialectics on the various paths of transition from one qualitative state to another, Comrade Stalin, in his new work of genius, *Economic Problems of Socialism in the USSR*, points to the specific nature of economic development in a country of socialism. "The point is," writes Comrade Stalin, "that under our socialist conditions, economic development occurs not by way of upheavals, but by way of gradual changes, where the old is not simply abolished outright, but changes its nature as applied to the new, retaining only its form, while the new does not simply destroy the old, but penetrates into the old, changing its nature and its functions without breaking its form, but using it for the development of the new"[188].

In his work *Economic Problems of Socialism in the USSR*, Comrade Stalin indicated the paths and conditions for the

[188] *J. V. Stalin, Economic Problems of Socialism in the USSR, p. 53.*

gradual transition from socialism to communism. The fulfillment of the main preliminary conditions for the transition to communism outlined by Comrade Stalin, taken together, will mean the greatest qualitative transformations in the life of Soviet society, a leap from one economy—the economy of socialism—to another, higher economy—the economy of communism.

Proceeding from the instructions of Comrade Stalin, the 19th Congress of the Communist Party of the Soviet Union outlined a grandiose program of economic and cultural construction for the coming years, the fulfillment of which will be a major step along the path of Soviet society's development from socialism to communism.

Development as Movement Along an Ascending Line

The transition of quantitative changes into radical, qualitative ones means that the process of development occurs not as a simple repetition of what has been traversed, but as a progressive movement, as a transition from simple to complex, from lower to higher, from an old qualitative state to a new qualitative state.

In the philosophy of the past, as well as in modern bourgeois philosophy, a metaphysical view gained wide currency according to which movement and development allegedly occur in a closed circle, as a repetition of one and the same process given once and for all.

Critiquing the metaphysical view of development that prevailed in the 18th century, Engels wrote: "Nature is in eternal movement; this was known back then as well.

But according to the view of that time, this movement revolved just as eternally in one and the same circle and, thus, remained, strictly speaking, in the same place; it always led to one and the same consequences"[189].

According to this metaphysical view, the stellar world and the solar system remain as they have been from time immemorial; here nothing is destroyed and nothing arises anew. Not a single animal, not a single plant on earth since the most ancient times has become qualitatively different. The history of society is also allegedly a repetition of one and the same stages. Most indicative in this respect is the social theory of the Italian philosopher Vico (1668–1744), who believed that society undergoes continuously repeating cycles. According to Vico, it first experiences a period of infancy, when a religious worldview and despotism prevail; then arrives a period of youth with the rule of aristocracy and chivalry; finally, a period of maturity, when science and democracy flourish and when, at the same time, society goes backward into decline. The period of decline is again replaced by a period of infancy, and so on and so forth.

In bourgeois sociology of the epoch of imperialism, the "theory of cycles" acquired an openly reactionary character. This is evidenced by the views of Spengler—an ideologist of German imperialists and one of the ideological predecessors of fascism. Society, according to Spengler, passes through three stages of development: origin, flourish, and decline. The modern stage of human history, he declared, is allegedly the "stage of

---

[189] *F. Engels, Ludwig Feuerbach and the End of Classical German Philosophy, Gospolitizdat, 1952, p. 21.*

decline," when "all achievements of modern culture must be destroyed". Wars of conquest and the enslavement of one person by another are allegedly dictated by the very course of human history. The specificity of 20th-century civilization is such, preached this obscurantist, that man strives toward the conquest of territories. Such was the "philosophy" of one of the first ideologists of German imperialists.

In the same spirit regarding the "demise of civilization" and the "movement of society backward," the lackeys of American-English instigators of a new world war shout today.

"Like swine we are rolling down the slope to a barbaric existence among dirty ruins," asserts in his "creation" *The Road to Serfdom* [sic] the outright obscurantist and misanthrope W. Vogt. European lackeys of American imperialists echo him. "By the end of the current century, unless something unforeseen happens," preaches the notorious ideologist of imperialist reaction B. Russell, "the following may occur: the end of human life, and possibly of all life on Earth, a return to barbarism, the unification of the world under the rule of one government" (meaning the world domination of American monopolists). Reactionary sociologist Albert Schweitzer, in his book *Philosophy of Civilization* published in 1949, asserts that modern Western civilization is in a state of deep decline, for the Earth allegedly no longer has in reserve gifted peoples capable of taking their proper place in the future. The "way out" seen by lackeys of American imperialism consists in calling upon Americans to take the place of "leader in the spiritual life" of humanity.

Thus, pessimistic prophecies about the "demise of civilization" and the "end of human life" serve the dark cause of imperialist reaction—the desire to force the peoples of capitalist countries to submit tamely to American imperialists.

Such "theories" are a sign of the deep decay of the capitalist system. They serve as a "theoretical justification" for imperialist banditry, a means of struggling against the striving of the masses toward communism. The inevitable demise of the outworn capitalist system is interpreted by them as the demise of all civilization. Such are the rogue tricks of the authors of the "theory of cycles".

The proposition regarding progressive, forward development in pre-Marxist philosophy was formulated by Hegel in the form of the law of the "negation of the negation". In Hegel, this law acts as the foundation for constructing his entire system. However, the rational idea of development along an ascending line in Hegel is given in an idealistic, mystical form.

Marx and Engels subjected Hegel's idealistic dialectics to sharp critique. They created a new method, fundamentally opposite to Hegel's idealistic dialectics—the Marxist dialectical method. But in the works of Marx and Engels, the expression "negation of the negation," introduced into philosophy by Hegel, was retained in a number of cases. It is completely obvious that the expression "negation of the negation," like all other propositions of dialectics, has a fundamentally different meaning in Marx and Engels than in Hegel, fundamentally opposite to Hegel's idealistic dialectics—the Marxist dialectical method. But in the works of Marx and Engels, the expression "negation of the negation," introduced into philosophy by

Hegel, was retained in a number of cases. It is completely obvious that the expression "negation of the negation," like all other propositions of dialectics, has a fundamentally different meaning in Marx and Engels than in Hegel.

When Dühring put forward the false assertion that Marx allegedly uses the Hegelian formula "negation of the negation" to substantiate his socio-economic conclusions, Engels gave a crushing rebuff to absurd assertions of this kind. Marx never, wrote Engels, proved the historical necessity of replacing capitalism with socialism on the basis of the "negation of the negation". Marx's conclusions were always based on the study of vast factual material, on data from the real historical process taking place. Marx put into this formula the meaning that in the real world development proceeds along an ascending line, that negation of the old by the new takes place.

V. I. Lenin also spoke out against the distortion by enemies of Marxism of the concept "negation of the negation" in Marx's teaching.

When in the 1890s a representative of liberal Populism, Mikhailovsky, came out with slanderous fabrications addressed to Marx, asserting that Marx allegedly proves his propositions by nothing other than the Hegelian "triad" (thesis—antithesis—synthesis), Lenin gave Mikhailovsky a sharp rebuff.

"...Engels says," wrote Lenin, "that Marx never even thought of 'proving' anything by Hegelian triads, that Marx only studied

and investigated the real process, that he recognized the fidelity of a theory to reality as its sole criterion"[190].

Formulating the main features of the Marxist dialectical method, Comrade Stalin characterized the process of development as progressive movement along an ascending line, from simple to complex, from lower to higher.

"...The dialectical method holds," writes Comrade Stalin, "that the process of development should be understood not as movement in a circle, not as a simple repetition of what has been traversed, but as progressive movement, as movement along an ascending line, as a transition from an old qualitative state to a new qualitative state, as development from simple to complex, from lower to higher"[191].

Movement along an ascending line from lower to higher, from simple to complex, is an immutable law of development. This occurs because the new qualitative state enters into contradiction with the old, as a result of which the new overcomes and negates the old.

The classics of materialist dialectics point out that the struggle of the new with the old and the negation of the old by the new must be understood in accordance with the objective nature of the replacement of the old by the new. In comparison with the old, the new qualitative state of an object or phenomenon acts as richer and more complete in its content.

---

[190] *V. I. Lenin, Works, Vol. 1, 4th ed., p. 146.*

[191] *J. V. Stalin, Questions of Leninism, 1952, p. 576.*

In dialectics, Engels said, to negate does not mean simply to say "no," or to declare a thing non-existent, or to destroy it by any means. It must be remembered that the new grows on the base of the old and includes within itself everything positive that was in the old. "Not empty negation, not senseless negation," wrote Lenin, "not skeptical negation, hesitation, or doubt is characteristic and essential in dialectics—which undoubtedly contains within itself an element of negation and, moreover, as its most important element,—no, but negation as a moment of connection, as a moment of development, with the retention of the positive..."[192]

Every new socio-economic formation preserves and further develops the positive achievements created by previous generations of people, developing productive forces, technology, science, and culture.

Comrade Stalin ridiculed those woe-Marxists who asserted that the proletariat should not make use of old technical achievements, but should destroy old "bourgeois" railways, buildings, machine tools, and equipment and build everything anew—those who earned the nickname "troglodytes."

The progressive character of movement, however, does not exclude temporary deviations from the main tendency of forward movement.

The Marxist dialectical method teaches one to see not only the ascending progressive line of development in nature and society, but also possible temporary retreats, backward

---

192 *V. I. Lenin, Philosophical Notebooks, 1947, p. 197.*

movements—for example, reactionary movements in social life. In each historical epoch, Lenin said, there are always individual movements now forward, now backward, deviations from the average type and average tempo of movement. Development along an ascending line is a complex and contradictory process that contains within itself elements of backward movement, zigzags, etc.

"...To picture world history," wrote Lenin, "as advancing smoothly and neatly forward, without gigantic leaps backward at times, is undialectical, unscientific, and theoretically incorrect"[193].

This proposition Comrade Stalin vividly illustrates with the example of the development of revolution. "...A revolution," says J. V. Stalin, "usually develops not in a straight ascending line, in the manner of a continuous build-up of enthusiasm, but by way of zigzags, by way of offensives and retreats, by way of ebbs and flows, which temper the forces of the revolution in the course of development and prepare its final victory"[194].

History knows such backward movements as the restoration of the Bourbon dynasty in France after the defeat of Napoleon I, the epoch of reaction in Russia after the defeat of the 1905–1907 revolution, the Hitlerite regime in Germany in 1933–1945, the establishment of Tito's spy-provocateur fascist clique in Yugoslavia, the present-day fascistization of the USA, etc.

But these backward movements in history do not alter the general progressive line of historical development. By virtue of

---

[193] *V. I. Lenin, Works, Vol. 22, 4th ed., p. 296.*
[194] *J. V. Stalin, Works, Vol. 7, p. 94.*

the objective laws of reality, progressive movement ultimately always breaks its way through despite temporary ebbs and all the apparent randomness of historical events.

Indeed, no matter how fierce tsarist autocracy was during the period of reaction, no matter what harsh measures it took against the proletariat, victory in the end remained on the side of the latter. The same can be said of fascism. The establishment of an open fascist dictatorship in a number of bourgeois countries is undeniably a step backward, a manifestation of reaction. But as the practice of revolutionary struggle shows, the rule of fascism is temporary and transient. A vivid example of this is the collapse of a number of reactionary, fascist, and pro-fascist regimes in several countries as a result of World War II.

The old world, the world of capitalism, has exhausted its progressive possibilities. Capitalist relations of production have turned into fetters on social development. The new world, the world of socialism, is growing and strengthening, irresistibly replacing historically outworn capitalist society.

With every passing day, the consciousness of the need to struggle for a new, socialist life matures in the minds of the working masses of capitalist countries. Standing in the way of the masses toward socialism are the forces of imperialism and reaction.

These reactionary forces strive to stifle freedom wherever possible and to plant fascism. But no matter how imperialist reaction fumes or rages, it cannot halt the forward movement of society, cannot break the will and striving of the masses for

peace, democracy, and socialism, nor prevent the collapse of capitalism. We live in an age when all roads lead to communism. Therefore, the anti-imperialist forces defending the rights and independence of peoples, peace, and historical progress are invincible. To these forces belongs the future.

At the head of the powerful camp of peace, democracy, and socialism stands the Soviet Union and its glorious Communist Party, which have earned through their decisive struggle against imperialist forces of aggression and reaction the love and trust of all freedom-loving peoples. Comrade Stalin, in his historical speech at the 19th Congress of the Communist Party of the Soviet Union, showed how great the significance of mutual trust and mutual support is between our country and our party, on the one hand, and brotherly peoples and brotherly parties abroad—on the other, in the struggle against imperialism and reaction; he showed along which path the working people of the entire globe must go in order to defend the cause of peace, democracy, and socialism. Comrade Stalin's speech at the 19th Congress of the Communist Party is a guide to action for all peoples in their struggle against warmongers, against reaction and fascism.

Significance of the Proposition on the Transition of Quantitative Changes into Radical, Qualitative Ones for the Practical Activity of the Party of the Proletariat

The third feature of Marxist dialectics teaches us to view development as a transition from quantitative changes to radical, qualitative ones. The application of this proposition to the history of society, to the practical activity of the party of the proletariat, leads to crucial revolutionary conclusions. "If,"

points out Comrade Stalin, "the transition of slow quantitative changes into rapid and sudden qualitative changes constitutes a law of development, then it is clear that revolutionary transformations accomplished by oppressed classes represent a completely natural and inevitable phenomenon."

This means that the transition from capitalism to socialism and the liberation of the working class from capitalist oppression can be accomplished not by way of slow changes, not by way of reforms, but only through qualitative changes to the capitalist system—by way of revolution.

Therefore, in order not to err in policy, one must be a revolutionary, not a reformist[195].

Adherents of metaphysics, enemies of dialectics and socialism, fear the revolutionary method of cognition and transformation of social life. Reformists of all stripes, right-wing socialists included, in their attempts to justify the peaceful growing of capitalism into socialism and to excuse their refusal of proletarian revolution and the dictatorship of the proletariat, relied and continue to rely on the metaphysical denial of radical, qualitative transformations of society through leaps, through revolutions. They insist on the planned, harmonious development of capitalist society, without social explosions or upheavals.

The "Economists," Mensheviks, and revisionists of the Second International opposed a decisive struggle against capital, attempting to reduce the labor movement to forms acceptable

[195] *J. V. Stalin, Questions of Leninism, 1952, p. 580.*

to the bourgeoisie. In the field of philosophy, as Lenin pointed out, revisionists dragged behind bourgeois professorial "science," vulgarized Marxist philosophy, replacing Marxist revolutionary dialectics—which seemed to them too "clever"—with the bourgeois theory of evolution as a theory of "simple" and quiet growth.

Opportunists heavily weaponized and propagated the notorious "theory of productive forces," the essence of which is that the development of the capitalist economy allegedly leads automatically and by itself to socialism.

The opportunist line of serving the bourgeoisie is continued in our time by right-wing socialists, but they do so in an even more dangerous form for the cause of socialism than their predecessors. They claim that a transition to socialism is possible through the gradual transformation of capitalist enterprises into "socialist" ones, and the transformation of the bourgeois state into a "socialist" state. In this way, they do not step out directly and openly as opponents of the socialist transformation of society or as enemies of democracy. On the contrary, they swear their allegiance to the cause of democracy and socialism. But at the same time, they reject the only possible path of transition from capitalism to socialism indicated to the working people by Marxism-Leninism: the path of the revolutionary transformation of capitalist society into a socialist one, the destruction of the bourgeois state and private ownership of the means of production.

In this regard, the reasoning of such a right-wing socialist as the recently deceased leader of the Austrian right-wing socialists, Renner, is indicative. In his work *New World and*

Socialism, published in 1946, he asserted that allegedly nowadays the contradiction between labor and capital "is not typical and does not determine the course of development." Acting as an open apologist for bourgeois democracy, Renner declared that the most suitable institution for the peaceful realization of socialism is the bourgeois state with its attributes of "democracy" and "rule of the people," which allegedly can defend the interests of "all classes," of "all strata of society." Since in the state apparatus nowadays the majority consists of socialists and trade-union workers, Renner argued, the matter should only be about the latter taking the upper hand in parliamentary elections, as the Labourites managed to do in 1945 in England.

In the same vein argue other right-wing socialists as well.

Thus, in books published in 1952 by Labourite theorists titled *Socialism: A New Statement of Principles* and *New Fabian Essays*, it is argued in every way that modern capitalism has allegedly "transformed" and undergone "radical" changes, so that it already represents not a "bourgeois society, but a post-capitalist society."

In these works, the idea is advanced that in England today there are no mutually opposed classes, and the modern English state "is no longer an executive committee of the bourgeoisie: the bourgeoisie becomes managed and works for society." Opposing the idea of the revolutionary replacement of capitalism with socialism, Labourite "theorists" assert that "there are no two fundamental and opposite systems, but only an endless series of transitional systems," understanding by a "series of transitional stages" nothing other than state-

monopoly capitalism and the subordination of the state apparatus to giant monopolies.

Thus, while advocating socialism in words, right-wing socialists in deed strive to keep the working masses of capitalist countries in the chains of imperialist slavery, to convince them of the "necessity" of preserving the capitalist system.

The assertion of right-wing socialists that the transformation of capitalist society into a socialist one is allegedly possible without breaking capitalist structures in a revolutionary way is refuted by the entire experience of history. History teaches that not a single social structure gives way to another without a radical breakdown of its economic and political foundations, and not a single ruling class gives way to another without a struggle, without decisive battles.

The bourgeoisie will never surrender its privileges, will never transfer the means of production and political power into the hands of society as a whole. The transition from capitalism to socialism can be accomplished only through radical, qualitative changes to the old capitalist system—by way of revolution.

We would be acting very foolishly, wrote Engels, if we folded our hands and calmly waited to receive our rights. No one will liberate us, proletarians, if we do not liberate *ourselves*.

That is why the founders of scientific communism paid special attention to showing the proletariat and the broad masses of working people that their liberation can be achieved only through a proletarian revolution and the winning of the dictatorship of the proletariat. The teaching of Marx and Engels

on the revolutionary transformation of capitalist society into a socialist one was continued and brilliantly developed further under new historical conditions by Lenin and Stalin. The victory over the bourgeoisie, Lenin and Stalin teach, is impossible without a decisive breakdown of the old economic and political order, without a long, persistent, and fierce struggle.

"There has never yet been a case in history," teaches Comrade Stalin, "where a dying bourgeoisie did not try to use all the remnants of its strength to defend its existence"[196].

In his work *Anarchism or Socialism?*, Comrade Stalin pointed out that the decisive means by which the proletariat will overthrow the capitalist system is the socialist revolution[197].

Steadfastly propagating the idea of the revolutionary transformation of capitalist society into a socialist one, the classics of Marxism-Leninism warn that one must not jump over unexhausted stages of the labor movement, nor solve the tasks of revolutionary transformation of society without preliminary preparation. The Marxist understanding of the forms and methods of the revolutionary class struggle excludes both the reformist recognition of only partial demands that do not touch the foundations of capitalism, and various types of left-wing antics and demands for sudden, unprepared "leaps."

Lenin and Stalin pointed out that alongside the revisionists of the Second International—who recognize only partial reforms as the sole means of transition from capitalism to socialism—

---

[196] *J. V. Stalin, Works, Vol. 12, p. 37.*
[197] *See J. V. Stalin, Works, Vol. 1, p. 345.*

the enemies of Marxism are anarchists, who recognize only sudden and unprepared explosions and catastrophes. Rejecting the evolutionary form of development, anarchists reject the preparatory work for a victorious revolution, and consequently, revolution itself. "Great days" of revolution, they say, come all by themselves, spontaneously.

Despite formal differences, reformists and anarchists have in common that both oppose the revolutionary struggle of the working class, against the necessity of winning the dictatorship of the proletariat. Both serve as channels of bourgeois influence, as agents of the bourgeoisie in the labor movement. "Both of them," wrote Lenin, "hamper the most important, most urgent cause: uniting workers into large, strong, well-functioning organizations capable of functioning well under any conditions—organizations imbued with the spirit of class struggle, clearly aware of their goals, and educated in a truly Marxist worldview"[198].

The Bolshevik Party, under the leadership of Lenin and Stalin, always waged a relentless struggle on two fronts: against right-wing as well as against "left" opportunists. Thus, during the period of industrialization of the country and collectivization of agriculture, the party smashed the bitterest enemies of the working class—the Trotskyites and Bukharinites, who, starting with attacks on the theoretical and tactical foundations of Marxism-Leninism, ended up turning into a gang of provocateurs, murderers, and spies, into direct agents of fascism.

---

[198] *V. I. Lenin, Works, Vol. 16, 4th ed., p. 319.*

"Without smashing the Trotskyites and Bukharinites," teaches Comrade Stalin, "we could not have prepared the conditions necessary for building socialism"[199].

J. V. Stalin repeatedly pointed to the necessity of precisely accounting for objective conditions, their readiness and maturity when implementing various strategic measures. For example, during the period of continuous collectivization, the Bolshevik Party waged a relentless struggle against manifestations of right opportunism—consisting in the desire to let collectivization drift on its own and thereby ruin it—as well as against "leftist" excess-makers who attempted to transfer peasants onto the collective-farm path by administrative pressure.

In February 1930, 50 percent of peasant farms had been collectivized. This was a tremendous victory for the Party and the Soviet State. But instead of consolidating the achieved successes and following the path of economic and organizational strengthening of collective farms, some officials began to be carried away by high percentages of collective-farm growth and tried to transition immediately to the highest form of cooperation—the commune. Such "leftist" excesses in the collectivization of peasant farms played into the hands of enemies, creating favorable ground for kulak agitation against collective farms.

The Party gave "leftist" excess-makers a decisive rebuff. In his articles "Dizzy with Success" and "Reply to Collective-Farm Comrades," J. V. Stalin showed with utmost clarity what the

[199] *History of the CPSU(b). Short Course, p. 344.*

strength of collective farming was and how collective farms should be built. From the fact that we have all the prerequisites for the complete victory of socialism in the countryside and that the peasantry willingly joins collective farms, Comrade Stalin stated, it does not follow at all that the transformation of the countryside in the spirit of socialism must begin directly with the highest form—the commune. The point is not to bring the coverage of peasant farms to 100 percent without accounting for real possibilities, but to strengthen existing collective farms in economic and organizational respects.

"The art of leadership is a serious matter," points out Comrade Stalin in the article "Dizzy with Success." "One must not fall behind a movement, for to fall behind means to break away from the masses. But one must not run ahead either, for to run ahead means to lose the masses and isolate oneself. Whoever wants to lead a movement and preserve connection with millions of masses at the same time must wage a struggle on two fronts—against those who lag behind and against those who run ahead"[200].

The Leninist-Stalinist proposition on combining two forms of movement is of immense significance both in our people's struggle for communism and in the struggle of working people in capitalist countries against the power of capital and reaction.

Implementing the great plan of completing the construction of a socialist society and the gradual transition from socialism to communism, Soviet people under the leadership of the Communist Party of the Soviet Union are moving toward the

[200] *J. V. Stalin, Works, Vol. 12, p. 199.*

heights of communism. It is completely obvious that such an epochal historical leap is possible only if corresponding conditions and prerequisites are created.

Comrade Stalin, in his work of genius *Economic Problems of Socialism in the USSR*, outlined a majestic program of communist construction in our country, gave a deep scientific solution to such social problems and program questions of communism as the elimination of antithesis between town and country, between mental and physical labor, and also worked out the question of eliminating essential differences remaining between them in socialist society. The program propositions advanced by Comrade Stalin on the main preliminary conditions for preparing the transition to communism—uninterrupted growth of all social production with a predominant growth of the production of means of production, raising collective-farm property to the level of public property, replacing commodity circulation with a system of product-exchange, and the cultural growth of members of society to a level that would secure for all members of society the all-around development of their physical and mental abilities—determine the paths and perspectives for the forward movement of Soviet society.

Pointing to these conditions for the transition to communism, Comrade Stalin simultaneously warns against reckless running ahead—transitioning to higher economic forms without first creating the prerequisites for such a transition.

The struggle for the triumph of communism in the USSR means strengthening the foundations and principles of socialism. The all-around strengthening and development of

the two forms of socialist property ensures the transition to a single, communist form of property. The all-around strengthening and development of the monetary system and trade prepares the transition to communist distribution—without money and trade. The all-around development of a culture national in form and socialist in content leads to a unified communist culture in form and content. The all-around strengthening of the basic principle of socialism "from each according to his ability, to each according to his work" prepares the conditions for the transition to the basic principle of communism "from each according to his ability, to each according to his needs."

The Marxist-Leninist teaching on two forms of movement serves as a theoretical weapon in the struggle of working masses in capitalist countries against capitalist slavery. It teaches that a radical transformation of capitalist society is unthinkable without a decisive breakdown of old economic and political relations. Until the working classes under the leadership of the proletariat overthrow the political rule of the bourgeoisie and take power into their own hands, no partial transformations will lead to the replacement of capitalism with socialism. The practice of building socialism in the USSR and in the countries of people's democracy serves as the brightest confirmation of this.

At the same time, the teaching of materialist dialectics on two forms of movement warns against errors called by Lenin the "infantile disease of 'leftism'." Communist and workers' parties, and all working people of the capitalist world, face the complex and difficult task of gathering forces, using all forms

and methods of struggle, doing painstaking "everyday" work among all strata of the working population, for only such preparatory work can lead to radical, qualitative transformations and the triumph of socialism.

DEVELOPMENT AS THE STRUGGLE OF OPPOSITES

★

F. I. KALOSHIN

The fourth feature of the Marxist dialectical method, which obliges us to consider development as a contradictory process, as a struggle of opposites, is the central point of the dialectical-materialist understanding of nature, society, and thought. This principle of approach to objects and phenomena Lenin calls the essence or "kernel" of dialectics. The approach to phenomena, objects, and processes as containing internal contradictions helps reveal the very source of development and change in nature and society, the cause of the inevitable dying away of the old and the emergence of the new, and to understand more deeply the progressive nature of development as a movement from the simple to the complex, from the lower to the higher.

Therefore, it is no coincidence that the question of the recognition or denial of internal contradictions in things and phenomena was the subject of the most fierce struggle between dialecticians and metaphysicians throughout the history of the development of philosophical thought.

Two Conceptions of Development

In the history of the development of human thought, as Lenin pointed out, we encounter two opposite conceptions of the understanding of development: dialectical and metaphysical, or vulgar-evolutionist.

The vulgar-evolutionist, metaphysical conception considers development as a simple increase or decrease of objects or phenomena. Supporters of this conception assert that the source of motion lies not in the objects themselves, but outside them. The metaphysical conception denies the struggle of the new with the old. A thing, an object, according to the metaphysical view, cannot contain mutually contradictory properties at the same time. In objects and phenomena there are no contradictions; contradictions allegedly belong only to our thoughts. The notorious Dühring, being a metaphysician, wrote that "a contradictory representation is a category that can belong only to a combination of thoughts, but by no means to reality."

The metaphysical conception is incapable of revealing the internal content of the process of development, of explaining the process of transformation of quantitative changes into qualitative ones. In the metaphysical understanding of development, there is no room for the emergence of the new; development is limited to the boundaries of the old, it is closed in a monotonous, constantly repeated circle.

Under such a conception of development, writes Lenin, "*there remains in the shadows self-movement, its driving force, its source, its motive (or this source is transferred outside — God, subject, etc.)*"[201].

Therefore, such a point of view is "dead, poor, dry" (*Lenin*). If science were to adopt this point of view, it would reach the

[201] *V. I. Lenin, Philosophical Notebooks, 1947, p. 328.*

absurd conclusion that our Earth and the entire organic and inorganic world, existing for millions of years, are immutable, and the process of their development is merely a quantitative increase or decrease of the immutable features of the initial state. The history of the development of human society from this point of view is a movement in a closed circle.

Sometimes metaphysicians claim that they allegedly are not averse to recognizing contradictions, but their understanding of contradictions fundamentally differs from the dialectical-materialist one.

Metaphysicians deny the main distinguishing feature of dialectical-materialist understanding of contradictions, they deny the struggle of opposites inside an object. Metaphysical "recognition" of contradictions reduces to recognizing only external contradictions between objects and phenomena.

One of the most dangerous varieties of the metaphysical conception is the "equilibrium theory," widely used by the enemies of Marxism. The "equilibrium theory" is irreconcilably hostile to Marxism-Leninism. The initial thesis of this metaphysical "theory" is not the struggle of opposing forces, but their equilibrium. According to this "theory," in nature and society there is no "self-development" or "self-movement," no internal contradictions of the process of development. The "equilibrium theory" absolutizes quantitative growth and denies qualitative development. It asserts that it is possible to reconcile contradictions and balance opposites.

The "equilibrium theory" as a philosophical weapon in the struggle against Marxism was defended as far back as Dühring.

By the “equilibrium theory,” the revisionist Bogdanov substituted Marxist dialectics. A supporter of this anti-Marxist theory and a preacher of the peaceful growing of the kulak into socialism was the enemy of the people Bukharin.

A variety of this notorious “equilibrium theory” is the bourgeois theory of “organized capitalism,” which denies the internal contradictions of capitalism, the contradictions between productive forces and relations of production, and the contradictions between labor and capital.

Right-wing socialists of all countries rely on the “equilibrium theory” in their “philosophical” arguments, preaching class harmony and advancing the reactionary “theory” of the peaceful and gradual growth of capitalism into socialism. The supporters of this “theory” are the bitterest enemies of Marxism, enemies of the socialist revolution.

The metaphysical conception, in whatever form it is expressed, is the philosophical screen behind which the enemies of socialism hide their insidious anti-Marxist activity. The routing of the metaphysical conception is a paramount task of every Soviet scientist and specialist, in whatever field they may work.

V. I. Lenin dealt a crushing blow to metaphysics and raised the Marxist doctrine on the struggle of opposites to a new, higher level.

In a whole series of his works, V. I. Lenin thoroughly and comprehensively develops the law of the struggle of opposites as the kernel of dialectics. The definitions given by Lenin reveal the essence of this most important dialectical law.

"*In its proper sense, dialectics,"* says Lenin, "*is the study of contradiction in the very essence of objects..."*[202]

In the famous fragment "On the Question of Dialectics," Lenin, in contrast to the metaphysical conception, deeply reveals the significance of the law of the struggle of opposites in knowing the source of self-movement and self-development. The struggle of opposites in nature and society is the vital foundation of all development. Everything that exists, develops, and changes by virtue of the struggle of opposites. "*Development,"* says Lenin, "*is the 'struggle' of opposites."*[203]

V. I. Lenin emphasizes that only the Marxist conception of dialectical development is viable, that "*only it furnishes the key to 'leaps,' to a 'break in continuity,' to a 'transformation into the opposite,' to the destruction of the old and the emergence of the new."*[204]

In explaining the movement and development of nature and society, the dialectical-materialist conception does not resort, like metaphysics, to the unscientific hypothesis of a "first impulse." For a Marxist, the source of movement and development lies not outside matter, but within matter itself — it is the internal contradictions of objects and phenomena, the struggle of opposites.

The dialectical-materialist understanding of development as the struggle of opposites is the only scientific system of views,

---

202 *V. I. Lenin, Philosophical Notebooks, 1947, p. 237.*
203 *Ibid., p. 327.*
204 *Ibid., p. 328.*

correctly reflecting the real picture of the development of the objective world.

Whatever phenomenon, object, or process in nature, society, or thought we study, we will always discover a struggle of opposing forces, tendencies, directions, etc. The presence in all phenomena of nature and society of mutually exclusive, contradictory tendencies and the struggle of these contradictions is the universal law of the development of matter.

"*In opposition to metaphysics,"* writes Comrade Stalin, "*dialectics holds that internal contradictions are inherent in all things and natural phenomena, for all of them have their negative and positive sides, their past and future, their dying away and developing sides; and that the struggle between these opposites, the struggle between the old and the new, between that which is dying away and that which is being born, between that which is dying away and that which is developing, constitutes the internal content of the process of development, the internal content of the transformation of quantitative changes into qualitative ones."*

Therefore, the dialectical method holds that the process of development from the lower to the higher takes place not as a harmonious unfolding of phenomena, but as a disclosure of the contradictions inherent in objects and phenomena, as a 'struggle' of opposing tendencies operating on the basis of these contradictions."[205]

[205] *J. V. Stalin, Problems of Leninism, 1952, p. 578.*

In this classic formulation, Comrade Stalin deeply and comprehensively reveals the essence of the law of the struggle of opposites, the struggle of the new with the old as the fundamental law of development.

Stalin's definitions and characterizations of this law are an outstanding contribution to the treasury of Marxist dialectics.

This formulation given by Comrade Stalin of the proposition on the struggle of opposites as a law of development reveals a whole series of major points in understanding all dialectics, providing a key to understanding the character of movement and change.

Comrade Stalin showed that the struggle of opposites, the struggle between the new and the old, is the internal content of the law of the transition of quantitative changes into qualitative ones and of the progressive process of development from the lower to the higher.

J. V. Stalin points out that internal contradictions are inherent in all objects and natural phenomena, for every phenomenon has its past and future, its positive and negative, the new and the old. The struggle between these opposing tendencies and processes is the source of development.

The proposition of development as a struggle of opposites is a synthesizing law, the summit of the Marxist dialectical method, which reveals the laws of development and change of all processes in nature, society, and thought.

This universal law of dialectics completes the overall picture of the dialectical process of development of the objective world,

uncovering the sources of all development, the sources of change in all processes and phenomena in objective reality.

In pre-Marxist philosophy, the question of contradiction as the source of movement and change was illuminated by Hegel. "*In characterizing their dialectical method, Marx and Engels,"* points out Comrade Stalin, "*usually refer to Hegel as the philosopher who formulated the main features of dialectics."*[206] This also applies to the question of contradictions. However, between the Marxist-Leninist conception of development and the Hegelian understanding of contradictions there exists, as between the entire Marxist dialectical method and Hegel's dialectics, a fundamental difference, a principled opposition. The Marxist-Leninist understanding of contradictions is *materialist*. According to this conception, the objective, material world develops and changes by virtue of the struggle of opposites. The struggle of opposites occurs in nature, in society, and is reflected in our representations and concepts.

Hegel's understanding of contradictions, on the other hand, is idealist. Hegel speaks of the dialectics of self-development of concepts, thoughts, the "absolute idea," and not of the material, objective world. As Lenin pointed out, Hegel merely guessed the dialectics of things in the dialectics of concepts; "*he precisely guessed, no more."*[207]

Hegel recognized that contradiction is the source of development and change, and in this lay the "rational kernel" of his method. But, being an idealist, he interpreted this most

---

[206] *J. V. Stalin, Problems of Leninism, 1952, p. 574.*
[207] *V. I. Lenin, Philosophical Notebooks, 1947, p. 169.*

important law of dialectics in an idealist way. For Hegel, logic precedes history, and contradiction is the source of movement not of nature or history, but of “pure thought.” Furthermore, even in the development of thought, Hegel places in the foreground not the struggle of opposites, but their unity, reconciliation, and unification at a higher stage of development.

Moreover, according to Hegel's assertion, the dialectical process of development, the struggle of opposites, takes place only in the past and is excluded in the phenomena of the present and future.

Recognition of the dialectical development of the society contemporary to Hegel should have led him to recognize the necessity of changing the existing social system and the necessity of the further development of philosophy. But Hegel, by virtue of his conservative political views, strove to preserve and perpetuate the feudal-absolutist social order that existed then in Germany. In addition, he claimed to discover absolute truth in the ultimate instance. Therefore, betraying his own principle of development, Hegel arrived at the reactionary conclusion of the reconciliation of opposites in society, the idealization of the Prussian monarchy, and ultimately sought metaphysically to eliminate all contradictions from contemporary reality.

The Marxist-Leninist understanding of the struggle of opposites fundamentally differs from the Hegelian idealist understanding.

Regrettably, among some Soviet philosophers, one encounters views on the law of the struggle of opposites which show that they have inadequately mastered Lenin's characterization of this law — "development is the struggle of opposites" — and seek the source of development not in the struggle, but in the *unity* of opposites. Thus, for example, Comrade V. P. Chertkov, in the article "Some Questions of Dialectics in the Light of J. V. Stalin's Work on Linguistics" (published in the collection *Questions of Dialectical and Historical Materialism in J. V. Stalin's Work "Marxism and Problems of Linguistics"*, Moscow, 1951), put forward the incorrect proposition that "without a certain unity there can be no struggle of opposites, and thus no internal source of self-development of objects and phenomena of nature" (p. 316).

Development, the classics of Marxism-Leninism teach, is defined *not by the unity of opposites, but by the struggle of opposites*. In this, and in this alone, lies the source of the self-development of objects, phenomena, and processes. The classics of Marxism always emphasized the absolute nature of the struggle of opposites and the relative nature of unity. Consequently, elevating the unity of opposites to the decisive and defining factor of development and self-development means moving backward toward Hegelianism and opportunism.

In our press, the Hegelian formula of the identity of opposites has already been subjected to criticism, a formula given considerable space in the works of some philosophers, in particular in the abstract of the doctoral dissertation of S. B. Tsereteli, "Toward the Marxist-Leninist Understanding of the

Logical." The author distorts the Marxist-Leninist understanding of the law of development through the struggle of opposites and fails to provide the opportunity to properly and deeply understand the dialectics of the struggle between the new and the old, between revolution and reaction, peace and war, socialism and capitalism, etc. What identity can there be here? Here the struggle manifests in various forms between forces that are new, advanced, progressive, and forces that are old, dying, reactionary.

Materialist dialectics teaches that the struggle of opposites is an all-encompassing law of the development of nature, society, and thought. By virtue of this law, nature and society develop and change, the life of peoples changes, and human thought develops.

Marx and Engels were the first in the history of the development of dialectics to provide a scientific-materialist foundation for this vital principle of dialectics, proving that contradictions in the objective, material world are resolved through struggle, and that this struggle leads to the destruction of the old and reactionary, and to the victory of the new and progressive. Marx and Engels brilliantly applied this great principle to history and to the life of human society. They exposed the contradictions that served as the main driving force in human history — the contradictions between productive forces and relations of production, and the contradictions between exploiters and the exploited. Marx and Engels comprehensively studied and analyzed the contradictions of the last antagonistic socio-economic formation — capitalism — and proved the inevitability of the

sharpening of these contradictions and the impossibility of their resolution on the basis of the capitalist system.

V. I. Lenin and J. V. Stalin continued and deepened the Marxist analysis of the contradictions of capitalism in accordance with new conditions and new tasks of the revolutionary movement.

As is known, the work of the founders of Marxism unfolded in the era of pre-monopoly capitalism. The work of Lenin and Stalin unfolded in the era of imperialism and proletarian revolutions, when all main contradictions of capitalism sharpened dramatically. Lenin deeply and comprehensively studied the features of the contradictions of the era of imperialism and proletarian revolutions. He exposed and summarized the most characteristic types and forms of contradictions of imperialism and outlined concrete political and tactical tasks facing the proletariat and its allies in coming battles.

A correct understanding of the deepest and principal contradictions was the key for the Bolshevik Party to analyze all other contradictions of the era of imperialism and proletarian revolutions. The dialectical analysis of the main contradictions of the new era enabled the great Lenin to discover the law of the uneven economic and political development of capitalist countries in the era of imperialism and to scientifically substantiate one of the most important tenets of Leninism — the possibility of the victory of socialism initially in a single, separate country.

Brilliantly applying dialectics to the analysis of social life, Comrade Stalin continued Lenin's analysis of the contradictions of the imperialist era and the revolutionary ways to resolve them. Special attention was devoted by J. V. Stalin to studying the main contradictions of imperialism — contradictions between proletarians and capitalists, contradictions between imperialist countries, and contradictions between colonies and metropolises.

Analyzing the period of the general crisis of capitalism, Comrade Stalin showed that the world had split into two camps — the anti-imperialist and democratic camp, on the one hand, and the camp of imperialism and war, on the other; he substantiated the law-governed nature and inevitability of the growth of the forces of democracy and socialism, and the weakening of the forces of reaction and imperialism.

In his brilliant work *Economic Problems of Socialism in the USSR*, Comrade Stalin showed what expresses the process of the further deepening of the general crisis of the world capitalist system. The most important result of the Second World War, as Comrade Stalin points out, is the disintegration of the single, all-embracing world market and the formation of two parallel world markets: on the one hand, the market of the countries of the socialist and democratic camp, and on the other — the market of the countries of the imperialist camp. Two parallel world markets confront each other. The countries of the peaceful, democratic camp, relying on the selfless, friendly, technically first-rate assistance of the USSR and on mutual economic cooperation and mutual assistance, steadily increase the rate of industrial development and will soon not

only no longer need imports of goods, but will themselves be capable of exporting the surplus of their production to other countries. Trade turnover between democratic countries is growing rapidly, and the capacity of the new world market is increasing. On the contrary, the world capitalist market is shrinking. As a result of the formation of the parallel market of democratic camp countries, the sphere of application of forces of the main capitalist countries (USA, England, France) to world resources has shrunk and will continue to shrink; consequently, market conditions for these capitalist countries will worsen, and plant underutilization in these countries will increase. "*In this,"* writes Comrade Stalin, "*strictly speaking, consists the deepening of the general crisis of the world capitalist system in connection with the disintegration of the world market."*[208]

Comrade Stalin discovered the fundamental economic law of modern capitalism, the operation of which leads to the further deepening of the contradictions of imperialism. J. V. Stalin discovered the fundamental economic law of socialism, developed the political economy of socialism, created the theory of the development of socialist society, and revealed new dialectical laws of the era of socialism.

Comrade Stalin showed that the law of the struggle of opposites, inherent in all socio-economic formations, under the conditions of socialism manifests differently than in the antagonistic socio-economic formations preceding socialism. Emphasizing the necessity of an historical approach to

---

[208] *J. V. Stalin, Economic Problems of Socialism in the USSR, pp. 31–32.*

analyzing the character of contradictions, splitting contradictions into antagonistic and non-antagonistic, Comrade Stalin for the first time in Marxist literature defined the new character of contradictions in the era of socialism, establishing that overcoming these contradictions is possible only through the development and strengthening of the socialist system.

The Struggle of Opposites as a Law of Development of Nature, Society, and Thought

All phenomena and processes of development in nature and society are encompassed by the struggle of opposites.

The struggle of opposites occurs in the macrocosm and in the microcosm. The solar system represents a complex unity. Between the Sun as the center of this system and all other planets, a complex interaction occurs, based on the struggle of two opposing forces: the centripetal force of attraction and the centrifugal force of repulsion. The struggle between these opposing forces is one of the most important laws of the existence and development of the solar system.

The struggle of opposites occurs in the microcosm as well — in the atom, which represents a unity of opposites: a positively charged nucleus and negatively charged electrons.

The struggle of opposites occurs in any living organism — plant, animal, human.

"*Life,"* as Engels pointed out, "*is the mode of existence of protein bodies, the essential element of which consists in constant metabolic exchange with their surrounding external nature, and with the cessation of this metabolism, life also*

ceases, which leads to the decomposition of protein."[209] That is why everywhere we encounter any protein body that is not in the process of decomposition, we without exception encounter the phenomena of life. Any plant or animal organism cannot live without this continuous link with its surrounding material world. The cessation of metabolism, as Engels points out, causes the death of the organism, the decomposition of protein, and consequently transforms the living into the dead.

Metabolism is an essential and fundamental aspect of the process of life. The essence of metabolism manifests in the interaction of two contradictory processes: *assimilation* — the process of the absorption by the organism of substances coming from the external environment and the building from them of substances of its living body, and *dissimilation* — the process of the breakdown of living matter, complex organic compounds into simpler ones with the release of potential energy stored in these complex organic compounds.

Here it is necessary to emphasize that the process of assimilation and dissimilation in an organism occurs simultaneously and continuously. Assimilating substances coming from the external environment, the organism simultaneously dissimilates them, and the energy released in the process is used again for carrying out assimilation.

The process of assimilation and dissimilation in an organism is a universal process of life, in whatever form it manifests. O. B. Lepeshinskaya in her work *The Origin of Cells from Living Matter and the Role of Living Matter in the Organism* points

[209] *F. Engels, Dialectics of Nature, 1952, p. 244.*

out that in living matter that lacks a cellular structure, "there is protein," that it "is capable of metabolism" and "will display signs of vital activity, i.e., will remain, on the one hand, itself, and at the same time will change"[210].

Lepeshinskaya notes that in non-cellular living matter, as well as in the cell, constant self-renewal and development occur. Thus, the process of assimilation and dissimilation is a complex dialectical process representing one of the numerous varieties of the universal law of the struggle of opposites.

One of the forms of manifestation of the law of the struggle of opposites is the observed process in nature of the interaction of *heredity* and *adaptability* in organisms.

As is known, thanks to heredity, certain properties of an animal or plant organism can be passed on from generation to generation, from age to age for example, drought resistance of seeds, egg-laying capacity of birds, etc. Thanks to the adaptability of an organism to its surrounding environment, certain properties of organisms can change sharply and differ significantly from those usually characteristic of a given species of organism.

Between heredity and adaptability there exists an internal interconnection.

Michurinist biology established that "*heredity is the effect of concentrating the effects of environmental conditions*

---

[210] *O. B. Lepeshinskaya, The Origin of Cells from Living Matter and the Role of Living Matter in the Organism, Publishing House of the Academy of Medical Sciences of the USSR, 1950, p. 180.*

assimilated by organisms over a series of preceding generations."[211]

By heredity, Michurinist biology understands the property of an organism to demand for its life and development certain environmental conditions and to react in a specific way to these or those conditions. If these conditions do not correspond to the demands of the organism, then by virtue of the emergence of contradictions between the organism and the environment, the organism must change. If it changes in accordance with the new environmental conditions, it will change its hereditary nature. Then the organism will adapt to the environment. If the organism does not master the new conditions, it will perish. Thus, in the process of an organism's development, a contradiction is revealed between its heredity and adaptability, which Engels defined as one of the main contradictions of the evolutionary process.

The struggle of opposites, contradiction, is the driving force of the development of both nature and society. The history of the development of society is the history of the succession of modes of production, the history of the development of productive forces and relations of production, the history of the establishment and victory of new productive forces and corresponding new relations of production, and consequently, the history of the struggle of new, growing, developing classes with old, dying ones leaving the historical arena.

---

[211] *T. D. Lysenko, Agrobiology, 4th ed., 1948, p. 635.*

With the exception of the primitive communal system, "the history of all hitherto existing society," states the Manifesto of the Communist Party, was the history of class struggles.

Freeman and slave, patrician and plebeian, lord and serf, guild-master and journeyman, in a word, oppressor and oppressed, stood in constant opposition to one another, carried on an uninterrupted, now hidden, now open fight, a fight that each time ended, either in a revolutionary reconstitution of society at large, or in the common ruin of the contending classes[212].

"*The modern bourgeois society that has sprouted from the ruins of feudal society,"* Marx and Engels state further, "*has not done away with class antagonisms. It has but established new classes, new conditions of oppression, new forms of struggle in place of the old ones."*[213]

Marx and Engels showed that the irreconcilable class struggle of the proletariat against the bourgeoisie, brought to the point of the proletariat gaining political supremacy in society — the dictatorship of the working class — is the condition for transforming capitalist society into a socialist one.

The classics of Marxism-Leninism waged a persistent struggle against petty-bourgeois "socialists," opportunists, and reformists, against all those who were repelled by the Marxist idea of the irreconcilable class struggle of the proletariat against the bourgeoisie and the idea of the dictatorship of the proletariat. V. I. Lenin repeatedly emphasized that Mensheviks

---

[212] *K. Marx and F. Engels, Manifesto of the Communist Party, Gospolitizdat, 1952, p. 32.*
[213] *Ibid., p. 33.*

and other social-reformists dislike recognizing the struggle of opposites. They tend to emphasize the *unity* of opposites, rather than the struggle between them. Such a philosophy provides a "theoretical justification" for their anti-Marxist stance in the class struggle. It allows them to pursue a policy of class reconciliation and blunting of contradictions.

Lenin incisively exposed the opportunist nature of such views. "*Petty-bourgeois democrats,"* wrote Lenin, "*are inherently disgusted by* class struggle, dream of doing without it, strive to smooth over and reconcile, to dull sharp edges."[214] Therefore, in theory as well, they exhibit philistine sentimentality toward nature and history, attempting to purge them of contradictions and struggle.

The enemies of the Soviet people — right-wing capitulators and Bukharinites — preached the theory of the dying down of the class struggle, the theory of the peaceful growing of capitalists, NEP-men, and kulaks into socialism. Comrade Stalin in his historic speech "On the Right Deviation in the C.P.S.U.(B.)" exposed and routed this restorationist, capitulatory theory of the enemies of our Motherland and emphasized with special force the irreconcilability of the opposition of interests between antagonistic classes. "*One of two things,"* said Comrade Stalin: "*either between the class of capitalists and the working class that has come to power and organized its dictatorship there is an irreconcilable opposition of interests, or there is no such opposition of interests, and then*

[214] *V. I. Lenin, Works, vol. 30, 4th ed., p. 88.*

only one thing remains — to declare the harmony of class interests.

One of two things:

either Marx's theory of class struggle, or the theory of the growing of capitalists into socialism;

either the irreconcilable opposition of class interests, or the theory of harmony of class interests."[215]

"*Abolition of classes through fierce class struggle of the proletariat — such is Lenin's formula.*

Abolition of classes through the dying down of class struggle and the growing of capitalists into socialism — such is Bukharin's formula.

What can there be in common between these two formulas?"[216]

The new socialist social order in the USSR arose and triumphed as a result of the Great October Socialist Revolution, as a result of establishing the proletarian dictatorship, as a result of the consistent class struggle of the proletariat and poor peasantry against all forces and traditions of capitalism.

Just as once occurred with opportunists in Russia, modern reformist trade union leaders and right-wing socialist party leaders dislike the dialectical principle of the irreconcilability of the struggle of the proletariat with the bourgeoisie. Bourgeois and right-wing socialist theorists gloss over the class struggle between the proletariat and the bourgeoisie, declaring

---

[215] *J. V. Stalin, Works, vol. 12, pp. 30–31.*
[216] *Ibid., p. 33.*

that the basis of bourgeois society is not class struggle, but class peace.

Political demonstrations, strikes, and armed clashes between the proletariat and the bourgeoisie at every step refute all assertions of right-wing socialists about the harmony of class interests and confirm the tenets of Marxism-Leninism on the struggle of opposites, on the irreconcilability of class contradictions in a society divided into antagonistic classes.

Under modern conditions, the driving force of history is the struggle between anti-imperialist, progressive forces, forces of socialism and democracy, on the one hand, and reactionary forces, imperialist forces, on the other hand. This complex and multifaceted struggle encompasses economic, political, and ideological processes of social life. Hundreds of millions of people from all countries and continents participate in this struggle. The victory of progressive forces, the forces of democracy and socialism, is inevitable. The guarantee of this is that at the head of the forces of progress stands the Soviet Union — the stronghold of peace and democracy throughout the world.

Internal and External Contradictions

Characterizing the struggle of internal opposites, internal contradictions, as the defining factor of the development process, as the decisive condition for any development and change in objects, phenomena, and processes, the Marxist dialectical method by no means belittles the role and significance of external contradictions. External contradictions, contradictions between an object or phenomenon and

surrounding conditions, while not being defining, exert a certain and sometimes very significant influence on the development of objects and phenomena.

A clear distinction between external and internal contradictions is of huge importance both for cognition and for revolutionary practical activity.

This is clearly shown by the following example.

Developing Lenin's teaching on the possibility of building socialism in a single country, Comrade Stalin characterized two groups of contradictions: internal contradictions existing between the proletariat and the peasantry inside the country, and external contradictions existing between the country of socialism and capitalist countries.

Touching upon the question of internal contradictions, Comrade Stalin pointed out that in the era of the dictatorship of the proletariat, every opportunity exists to overcome the internal contradictions inherent in the transitional period for building a socialist society.

Comrade Stalin teaches that in the transitional period from capitalism to socialism inside our country, there were forces and opportunities both for eliminating antagonistic contradictions between the working masses of town and country and capitalist elements, and for overcoming non-antagonistic contradictions between the proletariat and the peasantry. Developing Marxist-Leninist theory on this crucial question, Comrade Stalin dealt a crushing blow to Trotskyite and Bukharinite capitulators and panic-mongers, arming our people with invincible confidence in the victory of socialism.

Touching upon the question of external contradictions — contradictions between the country of socialism and the capitalist encirclement — Comrade Stalin pointed out that these contradictions “consist in the fact that as long as there is a capitalist encirclement, there will be the danger of intervention by capitalist countries, and as long as there is such a danger, there will also be the danger of restoration, the danger restoration of capitalist order in our country"[217].

Comrade Stalin noted that "a full guarantee against intervention, and therefore the ultimate victory of socialism, is possible, in view of this, only on an international scale, only as a result of the joint efforts of the proletarians of several countries, or—even better—only as a result of the victory of the proletarians of several countries"[218].

The danger of capitalist intervention disappears only after the destruction of imperialism, after the victory of the proletarian revolution in the decisive capitalist countries.

Thus, J. V. Stalin showed that there is an essential difference between internal and external contradictions; he emphasized that identifying internal and external contradictions leads to a departure from Leninism, to a betrayal of Leninism.

"Whoever confuses the first group of contradictions, which are completely surmountable by the efforts of one country, with the second group of contradictions, which require for their resolution the efforts of the proletarians of several countries, commits a gross error against Leninism; he is either a

---

[217] *J. V. Stalin*, Works, vol. 7, p. 118.
[218] *Ibid.*

muddlehead or an incurable opportunist"[219], Comrade Stalin used to say.

The relationship between internal and external contradictions is determined primarily and mainly by the internal regularities of development.

The USSR has existed for 35 years already. During these years, the capitalist world has attempted to exert military, economic, and political pressure on our country in order to alter the internal process of development of socialist society and turn our country into an appendage of the world capitalist economy. However, all machinations of the imperialists and their hired agents ended in failure.

During the Great Patriotic War with Hitler's Germany, the fascist invaders inflicted enormous damage upon the national economy and brought much grief and suffering to the Soviet people. But no one has ever succeeded—and no one will ever succeed—in altering the internal process of development of our country toward communism.

Comrade Stalin's proposition on the interaction of internal and external contradictions is of vital methodological importance for all sciences. Internal contradictions are the primary, leading ones. Internal contradictions are the source of development of a given object or phenomenon. External contradictions, without altering the general regularity of internal developmental processes in things, objects, and phenomena, are nevertheless active factors influencing them. External contradictions can

[219] *Ibid.*, p. 119.

create new ratios of internal contradictory forces depending on the type of development, and on the role, goal, and character of external factors.

Antagonistic and Non-Antagonistic Contradictions

In the study of social life, one must distinguish two types of contradictions—*antagonistic* and *non-antagonistic*. These contradictions differ significantly from one another in their character.

Antagonistic contradictions are inherent in a society divided into hostile classes; they steadily grow and intensify, ultimately leading to an explosion, to revolution. On the contrary, non-antagonistic contradictions are those behind which stand no hostile classes with irreconcilable class interests. Therefore, if the main feature of antagonistic contradictions is the necessity of their violent resolution through revolution and the destruction of the foundation that gives rise to these contradictions, non-antagonistic contradictions do not require such a method for their resolution. They can be resolved through other means and methods.

The economic basis of antagonistic contradictions in society is private ownership of the means of production and the exploitation of man by man.

The fundamental contradiction of capitalism—the contradiction between labor and capital—is an antagonistic contradiction. This contradiction can be resolved only through bringing the class struggle of the proletariat to a socialist revolution. Armed uprising against the capitalists, seizure of state power by the proletariat, establishment of the dictatorship

of the proletariat, liquidation of the bourgeoisie as a class, construction of socialism—such is the path to resolving the antagonistic contradictions between the proletariat and the bourgeoisie. Having seized power in its hands, the proletariat liquidates private property in the means of production and the exploiting classes, thereby destroying the very source of social antagonisms.

Characterizing the antagonistic contradictions inherent in capitalism, and pointing out that capitalism has become entangled in these contradictions insurmountable for it, Comrade Stalin says:

"This means that capitalist relations of production have ceased to correspond to the state of the productive forces of society and have come into irreconcilable contradiction with them.

This means that capitalism is pregnant with revolution, called upon to replace the current capitalist ownership of the means of production with socialist ownership.

This means that the sharpest class struggle between the exploiters and the exploited constitutes the fundamental feature of the capitalist system"[220].

Another striking example of antagonistic contradictions is the contradiction between imperialist powers, manifested in the struggle for raw material markets and sales markets, in the struggle for maximum profits.

[220] *J. V. Stalin*, Problems of Leninism, 1952, p. 597.

As is known, the presence of this kind of antagonistic contradictions between imperialist predators inevitably leads to imperialist wars.

Comrade Stalin, in his landmark work *"Economic Problems of Socialism in the USSR"*, subjected to critique the incorrect positions of certain comrades who asserted that, due to the new international situation arising after World War II, wars between capitalist countries had ceased to be inevitable.

Giving a profound analysis of the contradictions between Japan and the United States of America, between West Germany and the USA, between Britain, France, and the USA, J. V. Stalin proved that one of the main contradictions of imperialism—the contradiction between capitalist countries—remains in force today. Considering the struggle for raw material and sales markets, and the struggle for maximum profits among imperialist predators—the USA on one side, and Britain and France on the other—J. V. Stalin concluded that sooner or later these contradictions between capitalist countries will escalate into a military conflict, for "capitalist Britain, followed by capitalist France, will ultimately be forced to break free from the embrace of the USA and enter into conflict with them to secure an independent position and, of course, high profits..."

Reviewing the relations formed after World War II between the USA, Britain, France, and other victorious capitalist countries on one hand, and Japan and West Germany on the other, Comrade Stalin pointed out that it would be a mistake to consider Germany and Japan permanently knocked out of commission.

"...What guarantee is there," asks J. V. Stalin, "that Germany and Japan will not rise to their feet again, that they will not attempt to break free from American bondage and live their own independent lives? I think there are no such guarantees.

But it follows from this that the inevitability of wars between capitalist countries remains in force"[221].

Summarizing historical experience, Comrade Stalin teaches that, despite the fact that theoretically the contradictions between capitalist countries and the Soviet Union are stronger than those between various capitalist countries, in World War II "the struggle of capitalist countries for markets and the desire to drown their competitors proved practically stronger than the contradictions between the camp of capitalism and the camp of socialism"[222].

This occurs, J. V. Stalin points out, "firstly, because a war with the USSR, as a country of socialism, is more dangerous for capitalism than a war between capitalist countries; for if a war between capitalist countries raises only the question of the predominance of certain capitalist countries over other capitalist countries, a war with the USSR must necessarily raise the question of the very existence of capitalism itself. Secondly, because the capitalists, although shouting for 'propaganda' purposes about the aggressiveness of the Soviet Union, do not themselves believe in its aggressiveness, as they take into account the peaceful policy of the Soviet Union and

[221] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 35.
[222] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 35.

know that the Soviet Union will not attack capitalist countries itself"[223].

And if imperialist states led by the most predatory, imperialist parties history has ever known attack the countries of socialism and democracy, the facts of the past cannot be ignored. "And these facts show that as a result of World War I, Russia broke away from the capitalist system, and as a result of World War II, an entire series of countries in Europe and Asia broke away from the capitalist system. There is every reason to believe that a third world war will cause the collapse of the world capitalist system"[224].

Antagonistic contradictions also manifest themselves in the field of ideology. Bourgeois ideology and socialist ideology are irreconcilable. Bourgeois ideology reflects the interests of a small group of exploiters. Socialist ideology expresses the interests of hundreds of millions of working people.

Bourgeois ideology sets itself the goal of preserving and perpetuating the exploitation of man by man and the division of society into exploiters and the exploited. Socialist ideology is directed at the elimination of exploitation of man by man, at the liquidation of class distinctions.

Bourgeois ideology strives to preserve and strengthen the modern exploiting system—capitalism. Socialist ideology arms the working masses in the struggle for the destruction of capitalism and the construction of communism.

---

[223] *Ibid.*, p. 34.

[224] *G. Malenkov*, Report to the XIX Party Congress on the Work of the Central Committee of the C.P.S.U.(B.), p. 33.

Bourgeois ideology is an ideology of bestial nationalism and racial hatred. Socialist ideology is an ideology of equal rights for races and nationalities, an ideology of friendship among peoples.

Two opposing ideologies reflect two worlds, two systems—the dying system of capitalism and the steadily developing and strengthening system of socialism.

In a class society, antagonistic contradictions exist in all spheres of social life—in economics, politics, and ideology. They find their expression in the deployment of fierce class struggle.

V. I. Lenin repeatedly demanded uncovering all forms of antagonism and exploitation under capitalism in order to help the proletariat resolve them revolutionary-wise.

Antagonistic contradictions are inherent only in a society divided into exploiters and the exploited. V. I. Lenin pointed out that one must not equate antagonism and contradiction. Exposing the anti-Marxist views of the enemy of the people, Bukharin, Lenin said that antagonism and contradiction are not at all the same thing; under socialism, the former disappears, while the latter remains.

The struggle of opposites is a struggle between the progressive and conservative sides of development, a struggle between the new and the old in an object, phenomenon, process, etc., a struggle between the positive and the negative, between the emerging and the dying out—a struggle of the most diverse, comprehensive, and multifaceted nature, possessing various types and forms.

As a result of the struggle of opposing forces and tendencies, the struggle of antagonistic classes, and the struggle of different ideas and worldviews, old socio-economic relations are destroyed, old ideas and concepts die off, and new ones are created. The struggle of opposites, the struggle between the new and the old, constitutes the source, the driving force of progressive development in nature, society, and thought.

The law of the struggle of opposites, of development through contradictions, is a universal law operating under socialism as well. At the XV Party Congress, Comrade Stalin said: "...we have a past, we have a present, and a future; we have contradictions between them, and we cannot move forward by smooth rocking on the waves of life. Our advance proceeds in the manner of struggle, in the manner of developing contradictions, in the manner of overcoming these contradictions, in the manner of exposing and liquidating these contradictions"[225].

"We always have something dying off in life. But that which is dying off does not want to die simply; it fights for its existence, defending its obsolete cause.

We always have something new being born in life. But that which is born is not born simply; it squeaks, it cries, defending its right to existence.

The struggle between the old and the new, between the dying off and the emerging—such is the basis of our development"[226].

---

[225] *J. V. Stalin*, Works, vol. 10, pp. 330–331.
[226] *Ibid.*, p. 331.

From the fact of the existence in society of antagonistic and non-antagonistic contradictions follow different paths for overcoming them. Overcoming antagonistic contradictions is possible only through the revolutionary destruction of the foundation of this antagonism. On the contrary, overcoming non-antagonistic contradictions takes place on the basis of existing social order and serves as a means for its further strengthening.

The revolutionary character of the Marxist dialectical method manifests itself in a scientific-materialist approach to discovering fundamental contradictions, in the ability to expose and unravel them, and to find the correct ways to overcome them.

The founders of Marxism teach that it is not enough to find contradictions; one must strive for their complete resolution in order to ensure the possibility of steady forward motion of society.

After the Great October Socialist Revolution, during the period of transition to socialism, internal antagonistic contradictions between the working people and the overthrown, but not yet liquidated, bourgeoisie still took place in the USSR. These contradictions could be resolved only through the suppression and liquidation of the bourgeoisie in the city and in the countryside.

Antagonistic contradictions in the Soviet Land manifested and were resolved under special conditions, distinct from the conditions of an exploiting society. If, for example, under capitalism, antagonistic contradictions exist under the

dominance of the old over the new, in the USSR the dominant position belongs to the new, not the old. That is why the overcoming of antagonistic contradictions in the USSR took place not by liquidating the foundations of the existing system, as occurs under capitalism, but, on the contrary, by strengthening and developing the foundations of socialism. The destruction of exploiting classes, including the liquidation of the last exploiting class—the kulaks—was carried out in our country not contrary to the policy of Soviet power, but, on the contrary, on the initiative of Soviet power, with support from below by the broad masses of working people.

The liquidation of the kulaks as a class through full-scale collectivization destroyed the last internal sources of capitalist restoration in the country. The decisive conditions necessary for building a socialist national economy were created.

Characterizing this new form of overcoming contradictions—a form inherent only to the era of building socialism—Comrade Stalin notes that "this was a deepest revolutionary upheaval...", that "the distinct feature of this revolution consisted in the fact that it was carried out *from above*, on the initiative of the state power, with direct support *from below* by the millions-strong masses of peasants fighting against kulak bondage, for a free collective-farm life"[227].

Raising Marxist dialectics to the highest level and enriching it with new experience of socialist construction, Comrade Stalin revealed the diversity of paths for liquidating contradictions and showed the direct dependence of these paths on the type of

[227] *"History of the C.P.S.U.(B.). Short Course"*, pp. 291–292.

development, on the nature of the contradictions, and on specific historical conditions.

In Soviet society, alongside antagonistic contradictions, new contradictions of a non-antagonistic character were already operating during the transition period to socialism.

An example of this type of contradiction was the contradiction between the proletariat and the peasantry. Why were these contradictions non-antagonistic? Because, besides contradictions, the proletariat and the peasantry also shared common interests on fundamental issues of social development, which outweighed these contradictions and served as the basis for the alliance of workers and peasants.

During the period of socialist construction, a correct understanding of the nature of various contradictions and the ways to resolve them had immense political and practical significance. It is known that vile enemies of socialism—the Trotskyites—advanced a counter-revolutionary theory regarding the antagonistic character of contradictions between the proletariat and the peasantry. Exposing the counter-revolutionary fabrications of the Trotskyites, Comrade Stalin pointed out that, unlike the contradictions between the working class and the kulaks, which steadily grow and sharpen up to the liquidation of the kulaks as a class, the contradictions between the working class and the peasantry are smoothed out and favorably resolved "as growth of industrialization proceeds, i.e., as the strength and influence of the proletariat in the country grow"[228].

[228] *J. V. Stalin*, Works, vol. 13, p. 20.

Overcoming non-antagonistic contradictions between the working class and the peasantry in our country was carried out not through violence, but through re-education, through breaking old traditions, and through convincing the peasantry of the advantages of the collective-farm system. The working class, under the leadership of the Communist Party, provided all conditions for a voluntary transition of the peasantry to a new, socialist path and helped the working masses of the countryside make this transition.

One of the non-antagonistic contradictions in the transition period from capitalism to socialism was the contradiction between the most advanced socio-political system of our Homeland and the backward technology that existed in the country during the early years of Soviet power.

To resolve this contradiction, the party of the Bolsheviks, guided by the instructions of Comrade Stalin, set before the Soviet people the task of catching up with and surpassing technically advanced capitalist countries, thereby providing the advanced, socialist system with advanced technology. And this task was accomplished in a remarkably short historical timeframe.

However, the introduction of advanced technology and the socialist industrialization of our Homeland took place amidst fierce class struggle with internal and external enemies. Thus, in this period, non-antagonistic contradictions were still closely intertwined with antagonistic ones.

In the course of socialist construction, a new contradiction arose, expressed in the lagging of small-scale peasant farming

behind socialist industry. Industry, developing according to the laws of expanded socialist reproduction, moved forward in giant leaps. Agriculture lagged more and more behind industry, because small-scale peasant farming is incapable of developing according to the laws of expanded reproduction. It does not always have the opportunity to carry out even simple reproduction.

Characterizing this contradiction that arose in the process of socialist transformation of our country and in the struggle of the new against the old, Comrade Stalin pointed out in 1929: "Can we advance our socialized industry at an accelerated pace with such an agricultural base as small-scale peasant farming, which is incapable of expanded reproduction and, moreover, represents the predominant force in our national economy? No, we cannot. Can Soviet power and socialist construction rest for a more or less prolonged period on *two different* bases—on the basis of the largest and most unified socialist industry and on the basis of the most fragmented and backward small-commodity peasant economy? No, we cannot"[229].

Guided by the wise instructions of Comrade Stalin, our party and the Soviet people successfully overcame this contradiction. The Communist Party outlined the socialist path of rural development—a path that led to uniting small peasant farms into large collective farms equipped with advanced agricultural machinery and science, transforming working peasants into active participants in building socialism. By correctly determining the nature of contradictions and proposing correct

[229] *J. V. Stalin*, Works, vol. 12, p. 145.

methods to overcome them, the Communist Party brought to life the Leninist-Stalinist policy of industrializing the country and collectivizing agriculture.

Non-antagonistic contradictions are inherent in the socialist social system; they are resolved not by force, but through the gradual dying away of elements of the old quality. They do not lead to explosions, but are resolved through planned organizational activity of working people under the leadership of the Soviet socialist state and the Communist Party.

The socialist mode of production, as Comrade Stalin showed, is characterized by full conformity between productive forces and production relations, for the social character of the production process is reinforced by public ownership of the means of production. People's relations to one another in the production process under a socialist society are relations not of antagonism, but of solidarity, not of enmity, but of comradely cooperation.

However, this does not exclude the presence of non-antagonistic contradictions between productive forces and production relations, for the development of production relations lags and will lag behind the development of society's productive forces. For example, in Soviet socialist society, collective-farm property and commodity circulation are successfully used to develop socialist society and bring unquestionable benefit to society; they will continue to bring benefit in the near future. "But it would be unforgivable blindness," teaches Comrade Stalin, "not to see that these phenomena are at the same time already beginning to hamper the powerful development of our productive forces, since they

create obstacles to full coverage of the entire national economy, especially agriculture, by state planning. There can be no doubt that the further we go, the more these phenomena will hamper the further growth of our country's productive forces. Consequently, the task is to liquidate these contradictions by gradually converting collective-farm property into public property and introducing product exchange—also gradually—in place of commodity circulation"[230].

Consequently, contradictions between productive forces and production relations exist in socialist society as well. The productive forces of society are the most mobile and revolutionary forces of production. They move ahead of production relations.

Production relations are transformed to fit the character of the productive forces only after some time. This proposition is true both for the development of class-antagonistic formations and for the development of socialist society.

However, in class-antagonistic formations, contradictions between productive forces and production relations, due to the presence of dying classes, inevitably grow into an opposition during their development and are resolved through explosions, i.e., revolutions. In a socialist society, although inert forces exist that do not understand the need for changes in production relations, matters usually do not reach conflict between production relations and productive forces, for socialist society has the opportunity to timely bring lagging production relations into conformity with the character of productive forces. This is

[230] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 68.

possible because in a socialist society there are no dying classes capable of organizing resistance, and because the Communist Party and the Soviet government, pursuing a correct policy, timely notice growing contradictions and take measures to overcome them by adapting production relations to the growth of productive forces.

In modern Soviet society, there are no antagonistic classes, and consequently, there is no class struggle between them. "The feature of Soviet society at the present time," says Comrade Stalin, "unlike any capitalist society, consists in the fact that it no longer contains antagonistic, hostile classes; exploiting classes have been liquidated, while workers, peasants, and intelligentsia, who make up Soviet society, live and work on the basis of friendly cooperation"[231]. Instead of class struggle, which was the main driving force of development in every antagonistic society, in Soviet society there is a commonwealth of the working class and peasantry.

Driving forces of development of Soviet society have become the moral and political unity of the Soviet people, friendship of peoples, and Soviet patriotism.

However, the Soviet people in their struggle for a gradual transition from socialism to communism must fight against agents of bourgeois intelligence sent into our country, fight against unliquidated remnants of various groups hostile to the Soviet people. The Soviet people also have to fight against ideologically unstable people infected with nationalistic prejudices, carriers of bourgeois views and bourgeois morality,

[231] *J. V. Stalin*, Problems of Leninism, 1952, p. 629.

careerists, renegades, embezzlers of socialist property, and against various remnants of capitalism in the consciousness of certain people. Therefore, constant and high political vigilance is the quality required of all Soviet people.

V. I. Lenin said that "our task is to overcome all resistance of capitalists, not only military and political, but also ideological, which is the deepest and most powerful"[232]. Remnants of such ideological resistance of capitalism in our country are vestiges of capitalism in people's consciousness.

Socialist society emerged out of capitalist society; therefore, in this society, there cannot help but be traces, remnants, and vestiges of the old capitalist society. That is why under socialism, contradictions exist between new, socialist principles, deeds, ideas, tasks, and the vestiges of capitalism in people's consciousness. Hence the historical necessity to eliminate birthmarks of capitalism through a consistent struggle against various kinds of bourgeois influences, bourgeois cosmopolitanism, nationalism, etc.

"In our Soviet society," said G. M. Malenkov at the XIX Congress of the Communist Party of the Soviet Union, "there is not and cannot be a class basis for the dominance of bourgeois ideology.

In our country, the dominant ideology is socialist ideology, the unbreakable foundation of which is Marxism-Leninism. But we still retain remnants of bourgeois ideology, vestiges of private-property psychology and morality. These vestiges do not die

---

[232] *V. I. Lenin*, Works, vol. 31, 4th ed., p. 345.

off on their own; they are very persistent, can grow, and a decisive struggle must be waged against them. We are also not immune to the penetration of alien views, ideas, and attitudes from the outside, from capitalist states, and from within, from unliquidated remnants of groups hostile to Soviet power. One must not forget that enemies of the Soviet State try to spread, stoke, and fan all kinds of unhealthy attitudes, ideologically decomposing unstable elements of our society"[233].

The struggle against remnants of capitalism in people's consciousness, wherever and however they manifest themselves, is a paramount task of all party and Soviet organizations, for the struggle against remnants of capitalism in people's consciousness is a struggle against the influence of bourgeois ideology on Soviet people, a struggle for the total triumph and victory of socialist ideology over bourgeois ideology, a struggle for communism.

The Great Communist Party and the Soviet State are the leading and directing force in the Soviet people's struggle against all vestiges and remnants of the old. The Communist Party of the Soviet Union and the Soviet State actively contribute to the growth of the new and its victory, facilitating the rapid destruction of the old and reactionary.

Critique and Self-Critique as a Form of Overcoming Non-Antagonistic Contradictions

[233] *G. Malenkov*, Report to the XIX Party Congress on the Work of the Central Committee of the C.P.S.U.(B.), p. 94.

As a result of the victory of socialism in the USSR, new dialectical regularities in the development of Soviet society arose—regularities inherent only to the socialist socio-economic formation. These regularities were first theoretically summarized in the works of Comrade Stalin.

Comrade Stalin discovered a new dialectical regularity in the development of Soviet society—the driving force of progressive development from lower to higher under conditions of socialism and communism: critique and self-critique.

In the article *"Against Vulgarizing the Slogan of Self-Critique"*, Comrade Stalin wrote that "the beginning of self-critique dates back to the very emergence of Bolshevism in our country, to the very first days of its inception as a special revolutionary current in the working-class movement"[234]. From the very nature of the Communist Party, its revolutionary spirit, its ultimate goals, paths, and means of struggle, its irreconcilability toward any conservatism, routine, rigidity, or stagnation, stems the party's attitude toward critique and self-critique—this invincible and constantly operating weapon in the arsenal of Bolshevism.

Right-wing socialist parties in the West, which call themselves "labor" and "socialist", are in fact bourgeois parties. The bourgeois nature of these parties—the Labour Party in Britain, the Socialist Party in France, etc.—excludes the possibility of applying the method inherent in genuine working-class parties: the method of revolutionary critique and self-critique.

---

[234] *J. V. Stalin*, Works, vol. 11, p. 127.

Therefore, in these parties, there is not and cannot be critique and self-critique. Critique and self-critique from below is a phenomenon alien to these parties, for being bourgeois agents in the working-class movement, they seek to hide their bourgeois views and blur the true nature of their domestic and foreign policies. Such parties are in fact defenders of the interests of monopoly capital and imperialists. There, critique and self-critique are severely persecuted and banished. Any attempt by rank-and-file members of the Labour Party in Britain or the Socialist Party in France to criticize internal and external policies pursued by the leaders of these parties is suppressed by the latter and individuals expressing critique are expelled from their ranks.

The bourgeoisie and bourgeois parties, Comrade Stalin points out, do not tolerate critique and self-critique; they hide the truth from rank-and-file party members and from the people, because "they need only allow any serious self-critique, any free critique of their own shortcomings, for not a stone to be left standing of the bourgeois system"[235].

The Communist Party, educated by Lenin and Stalin, is the most advanced, revolutionary party in the world. The Party of Communists is the vanguard detachment of working people in their struggle to strengthen and develop socialist society and to build communism. Therefore, critique and self-critique—the ability to expose and decisively correct one's shortcomings and mistakes in the interests of victorious revolutionary struggle and the successful construction of communism—is one of the

[235] *J. V. Stalin*, Works, vol. 7, p. 122.

main features of the Leninist method. Comrade Stalin teaches that "the slogan of self-critique is the basis of our party action, a means for strengthening the proletarian dictatorship, the soul of the Bolshevik method of training cadres"[236].

In the article *"Against Vulgarizing the Slogan of Self-Critique"*, Comrade Stalin noted that self-critique aims to develop party spirit, strengthen Soviet power, improve socialist construction, train cadres, and strengthen labor discipline. Critique and self-critique lead to exposing negative phenomena, omissions, and shortcomings, and uncovering everything obsolete that hampers the forward movement of Soviet society.

Comrade Stalin teaches us to strictly distinguish revolutionary self-critique from alien and hostile critique. If revolutionary critique sets itself the goal of instilling party spirit, strengthening socialism, and educating cadres in the spirit of the great ideas of communism, then hostile critique sets itself the goal of undermining party spirit, debunking Soviet power, and weakening the great cause of struggle.

[236] *J. V. Stalin*, Works, vol. 11, p. 114.

THE MATERIALITY OF THE WORLD AND THE LAWS OF ITS DEVELOPMENT

★

N. F. OVCHINNIKOV

Marxist philosophical materialism gives a scientific, materialistic interpretation of the phenomena of nature and society. In its essence, Marxist philosophical materialism is directly opposed to philosophical idealism in all its forms.

In the work *"On Dialectical and Historical Materialism,"* J. V. Stalin, characterizing Marxist philosophical materialism, formulates its basic features, which reveal the content of materialistic theory as an organic part of dialectical materialism—the worldview of the Marxist-Leninist party.

Comrade Stalin gives a classical formulation of the first basic feature of Marxist philosophical materialism: *"In contrast to idealism, which regards the world as the embodiment of an 'absolute idea,' a 'world spirit,' 'consciousness,' Marx's philosophical materialism holds that the world is by its very nature* ***material****, that the multiform phenomena of the world constitute different forms of matter in motion, that interconnection and* ***interdependence of phenomena****, as established by the dialectical method, constitute the laws of the development of matter in motion, that the world develops in accordance with laws of the movement of matter and stands in no need of any 'world spirit.'*[237]

---

[237] *J. V. Stalin, Questions of Leninism, 1952, pp. 580–581.*

Throughout the history of philosophy, the question of the materiality of the world has been and remains the subject of a fierce struggle between materialism and idealism. Idealism strives to reduce the diversity of world phenomena to a certain spiritual principle—the "absolute idea," "consciousness," "sensations," etc.

The main question of philosophy, around which an irreconcilable struggle between materialism and idealism takes place, is the question of the relation of being and thinking, of matter and consciousness. The first feature of Marxist philosophical materialism, which speaks of the materiality of the world and the objectivity of the laws of its development, is the basis of the materialistic solution to the main question of philosophy—the question of the primacy of matter and the secondary nature of consciousness.

The first feature of Marxist philosophical materialism includes the question of the unity of the world, the Marxist-Leninist doctrine of matter, of the objectivity of the forms of existence of matter—motion, space, time. The interconnection and interdependence of phenomena are thus viewed as laws of the development of matter in motion, inherent in the material world itself, independently of our consciousness.

Unity of the world—in its materiality

Marxist philosophical materialism, insisting on the objective existence of the world, emphasizes its unity. The unity of the world consists in its materiality. Only matter in motion is the basis and source of everything that exists. In the world, there is nothing except matter in motion in its diverse manifestations.

Countless phenomena of the surrounding world have a single material nature; they stem from the movement of matter itself and do not need any otherworldly "spiritual" forces.

Consciousness itself is considered as a product of matter, which in its development reaches such a high degree of organization that it gives rise to consciousness.

Marxist philosophical materialism, by showing that the world is material by its very nature, is directly opposed to idealism, which considers the world to be the embodiment of an "absolute idea," "world spirit," "consciousness," etc. In this reduction of all diverse phenomena to an "absolute idea," "world spirit," "consciousness," idealism sees the unity of the world. For idealists, the world is ideal by its nature; it allegedly requires special, non-material forces for its existence.

In contrast to idealistic monism, Marxist philosophy places at the foundation of its materialistic theory the recognition of a single *material* origin of all things and processes in the world around us. Answering the question of what the world is by its nature, Marxist philosophy advances the basic materialistic proposition—the world by its nature is material.

Being fundamentally opposed to idealism, Marxist philosophical materialism resolutely rejects all dualistic philosophical constructions that proceed from the recognition of two origins—spiritual and material. Marxist philosophical materialism most consistently and deeply carries out materialistic monism, the idea of the material unity of the world.

J. V. Stalin in his work *"Anarchism or Socialism?"* emphasizes that nature is one and indivisible. But, being one and indivisible, it exists in two different forms—material and ideal. However, both of these forms are merely a manifestation of single matter. In contrast to dualists, who sever the ideal and the material and deny their close connection, J. V. Stalin emphasizes the monism of materialistic theory. *"Single and indivisible nature,"* says Comrade Stalin, *"expressed in two different forms—material and ideal; single and indivisible social life, expressed in two different forms—material and ideal,—that is how we should look at the development of nature and social life.*

Such is the monism of materialistic theory."[238]

Materialistic philosophy has always relied and continues to rely on the development of natural scientific knowledge. The insufficient level of development of science and the class limitations of the materialist philosophers of the past, the contemplative and metaphysical character of their materialism, and their inability to consistently extend the materialistic worldview to the realm of social phenomena caused the limitations of pre-Marxist materialism in its treatment of the material unity of the world.

Ancient materialists, for example, attempted to reduce all diverse forms of matter to some particular, concrete form and manifestation (fire, air, water, etc.). The primary, spontaneous materialism of the ancients seeks the unity of nature "...in

[238] *J. V. Stalin, Works, vol. 1, pp. 312–313.*

something definite and physical, in something special, as Thales in water."[239]

In the 17th–18th centuries, during the dominance of mechanicism, materialist philosophers represented matter as unchangeable, qualityless atoms, whose motion is subject to the laws of mechanics. Metaphysical and at the same time mechanical materialism of pre-Marxist philosophy saw proof of the material unity of the world in its assumed possibility of reducing all diverse phenomena of nature to the simple mechanical movement of material bodies.

In the process of the development of natural science, new, qualitatively distinct forms of matter in motion were discovered and studied. The impossibility of reducing electromagnetic, chemical, biological, and other phenomena of the material world to mechanical phenomena became apparent. All this led to the necessity of substantiating the idea of the material unity of the world in a new way, in accordance with the new achievements of science.

Solving this historical task, K. Marx and F. Engels created a monistic materialistic philosophy proceeding from a single principle of explaining all phenomena of nature and society.

In developing dialectical materialism, Marx and Engels substantiated the understanding of the unity of the world based on the whole history of science, particularly on the great discoveries of natural science in the 19th century. Marx and Engels dealt a crushing blow to idealism, to idealistic attempts

[239] *F. Engels, Dialectics of Nature, 1952, p. 147.*

to seek the unity of the world in some "spiritual" principle or to derive it from the unifying capacity of human thinking.

Subjecting Dühring to critique, Engels shows that the recognition of the very fact of the existence, the fact of the being of the world, is still far from sufficient for solving the question of the unity of the world. The unity of the world cannot consist simply in being, for different content (including idealistic) can be put into the concept of being.

Engels shows that the true unity of the world consists in its materiality and that the materiality of the world is proved by the long and difficult development of philosophy and natural science.[240]

Relying on the data of contemporary science, Engels showed that natural science reveals the unity of all natural processes more and more. The law of conservation and transformation of energy revealed the inseparable connection of various physical phenomena. The discovery of the cell served as proof of the unity of plant and animal organisms. Darwin's theory discovered the general laws of evolution of organisms, showing that all existing living organisms arose as a result of a natural process and do not need any divine power to explain their origin.

In new historical conditions, in connection with the revolution in natural science in the late 19th and early 20th centuries, V. I. Lenin, using new natural-scientific material, substantiates

[240] *See F. Engels, Anti-Dühring, 1952, p. 42.*

Engels's idea of the material unity of the world. Developing Engels's proposition on the unity of the world, V. I. Lenin says:

"Engels showed, using Dühring as an example, that any consistent philosophy can derive the unity of the world either from thinking—then it is helpless against spiritualism and fideism... and the arguments of such a philosophy inevitably reduce to fraudulent phrases—or from that objective reality which exists outside of us, has long been called matter in epistemology, and is studied by natural science."[241]

Relying on data from contemporary science, V. I. Lenin connects the proposition on the unity of the world with the principle of the development of matter.

"...The universal principle of development," says Lenin, *"—must be combined, linked, joined with the universal principle of the* ***unity of the world, nature, motion, matter,*** *etc."*[242]

The unity of the world manifests itself in the development of interrelated and interacting things and phenomena of objective reality. J. V. Stalin links the first feature of the Marxist dialectical method directly with the first feature of Marxist philosophical materialism, with the proposition on the material unity of the world, showing that the interconnection and interdependence of phenomena established by the dialectical method represent the objective laws of the development of matter in motion.

---

[241] *V. I. Lenin, Works, vol. 14, 4th ed., p. 160.*

[242] *V. I. Lenin, Philosophical Notebooks, 1947, p. 239.*

Modern science, with all its factual content, confirms the proposition of the material unity of the world. Modern astronomy shows that the Earth is one of the planets of the solar system. Celestial bodies—planets, comets, asteroids—are subject to the same laws of motion as the motion of the Earth. Under the conditions of our Earth's surface, the same laws apply as in the entire solar system. The phenomenon of a falling stone, for example, occurs under the influence of the same gravitational force that determines the laws of motion of planets around the Sun.

Modern astronomy has shown not only the unity of the laws of motion of celestial bodies, but with the help of spectral analysis and other modern scientific methods has also proven the unity of their chemical composition.

It has been clarified that on all celestial bodies known to astronomy, there is not a single chemical element that is not found on Earth. It has also been established that meteorites falling to Earth consist of the same chemical elements as our Earth.

Even if science were to discover new and hitherto unknown chemical elements on celestial bodies, this would not in the least shake the principle of the material unity of the world and would only mean the expansion of our knowledge of the structure of matter. Modern science possesses sufficient means to clarify the specific physicochemical conditions for the existence of elements and will always be able to either find newly discovered elements on Earth or synthesize them under laboratory conditions.

The unity of the world is also manifested in the fact that the laws governing the structure of atoms of chemical elements are everywhere identical in their essential features.

Modern physics has clarified the structure of atoms of chemical elements and showed that they can transform into one another. Mendeleev's Periodic System established that diverse chemical elements are united by a single law governing their alteration and transformation into one another. In this alteration of chemical elements, the material unity of the world is clearly revealed, for the very fact of the mutual transformation of material objects demonstrates that a single matter lies at the foundation of all these transformations.

The entire inexhaustible diversity of different types of matter and different forms of its motion represents a single lawful system in which natural science discovers not only specific laws, but also general laws of motion. A law having such a general character is, for example, the law of conservation and transformation of energy, which V. I. Lenin calls the *"establishment of the fundamental tenets of materialism..."*[243]

This law shows that various physical phenomena (electricity, heat, mechanical motion, etc.) are revealed as specific forms of motion of a single, fundamentally underlying matter, for these forms exhibit eternal, unceasing qualitative transformations while maintaining quantitative conservation of material motion.

---

243 *V. I. Lenin, Works, vol. 14, 4th ed., p. 318.*

The law of conservation and transformation of energy remains valid in the realm of biological phenomena as well. K. A. Timiryazev, through his work on plant photosynthesis, proved the applicability of this law to plants. He thereby showed that the law of conservation and transformation of energy holds true in both the inorganic and organic worlds. This discovery dealt a decisive blow to idealistic notions regarding various kinds of "vital forces" that allegedly govern the development of living organisms.

Michurinist biology showed that the development of living organisms needs neither any spiritual force nor any non-material "hereditary substance." The specific, qualitative characteristics of organisms consist in their ability to require certain conditions necessary for their life, in their property to respond in a certain way to these conditions, and to assimilate (absorb) them. Living organisms exist in inseparable unity with external conditions, including non-living nature, and represent a unity of a specific organic form and conditions of existence.

Creating a materialistic doctrine of higher nervous activity, I. P. Pavlov proceeded from a crucial proposition of biology regarding the inseparable unity of the external environment and the organism itself. Exploiting the historical limitations of natural scientific knowledge regarding the complex activity of the human brain, reactionary idealistic philosophy sought to prove that human thought activity was allegedly not connected to material processes occurring in the brain. I. P. Pavlov, through his classical studies of unconditioned and conditioned reflexes, showed that thought processes are closely connected with physiological processes occurring in the cerebral cortex of

the brain. The works of I. P. Pavlov decisively dismiss idealism's attempts to view thought processes in isolation from matter. All research results of I. P. Pavlov serve as excellent confirmation of Lenin's remarkable proposition that thought is a function of a material organ—the brain.

Marxism, having created the science of the laws of social development, extended the idea of the material unity of the world to the sphere of social phenomena.

Marxism placed the analysis of the material conditions of society's life, the analysis of a historically determined mode of production of material goods, at the foundation of understanding all social phenomena. Only the materialistic understanding of history turned sociology into a science, enabling humanity for the first time in history to scientifically explain the most diverse social phenomena—from the specifics of production to language and various forms of social consciousness.

The unity of the world implies a certain qualitative distinctness among objects that are fundamentally material and unified. The discovery of the unity of the world should not consist in attempts to reduce the qualitative diversity of matter to any qualityless basis. Such attempts, as already noted, are typical of a mechanical and at the same time metaphysical understanding of nature. The unity of the world is revealed in the laws inherent in material objects themselves, in their mutual transformations, in the unity of qualitatively distinct material objects with surrounding conditions, and in the presence of universal laws applicable to the most diverse realms of the material world.

The materiality of the world is proved not by a mere reference to isolated, concrete data of natural science. These data, taken by themselves, serve merely as an illustration of the unity of the world. Only the entirety of human social-historical practice, the entire history of human knowledge, convinces us of the materiality of the world. The whole history of natural science, the sum total of data from modern science, and the daily practice of people serve as the foundation of the materialistic worldview.

The Marxist-Leninist Concept of Matter

The concept of matter is the core concept of Marxist philosophical materialism. In contrast to idealism, which denies the materiality of the world, Marxist philosophical materialism bases its understanding of reality on the recognition of objective reality existing outside and independently of human consciousness.

The philosophical concept of matter was developed as a result of long historical development in comprehending the laws of nature and society.

The word "matter" itself comes from the Latin word *"materia,"* which means material for building. In ancient times, there existed a naive view of the world according to which everything that exists is built from some single, concrete substance of nature. Thales, for instance, taught that water is the primary element and foundation of all that exists.

In the course of the further development of the materialistic worldview, a more general concept of matter as something opposed to the phenomena of consciousness was elaborated. In

connection with the dominance of mechanistic views, matter was usually conceived as a inert, passive principle brought into motion by external forces foreign to matter. Often, the question of the causes of matter's motion was silenced, bypassed, or left open.

Marx and Engels, in creating dialectical materialism, overcame the historical limitations of metaphysical views on matter characteristic of all preceding materialistic philosophy. They showed that matter itself contains within itself the source of motion.

Marx and Engels substantiated the position that consciousness is a product of the development of matter, a function of specially organized matter. Marx wrote: *"It is impossible to separate thought from matter that thinks. Matter is the subject of all changes."*[244] *"...Our consciousness and thinking,"* said Engels, *"—however supersensuous they may seem, are the product of a material, bodily organ, the brain."*[245]

The concept of matter primarily expresses the most general "property" of all things—to be an objective reality, to exist outside and independently of our consciousness. The word "matter," says Engels, is nothing more than an abbreviation in which we comprehend, according to their common properties, a multitude of different sensorily perceived things.[246]

---

[244] *See F. Engels, Socialism: Utopian and Scientific, Gospolitizdat, 1952, p. 9.*

[245] *F. Engels, Ludwig Feuerbach and the End of Classical German Philosophy, 1952, p. 19.*

[246] *See F. Engels, Dialectics of Nature, 1952, p. 187.*

Developing the philosophical materialism of Marx and Engels, V. I. Lenin provides a more complete definition of matter: *"Matter is a philosophical category denoting the objective reality which is given to man in his sensations, which is copied, photographed and reflected by our sensations, existing independently of them";*[247] *"...matter is that which, acting upon our sense organs, produces sensation; matter is objective reality given to us in sensation, etc."*[248]

By defining matter as objective reality given to us in sensations, Lenin directs a blow against all varieties of idealism that in one way or another deny the existence of objective reality, matter, or reject the possibility of knowing it.

At the end of the 19th and beginning of the 20th centuries, the development of physics brought truly revolutionary discoveries: the discovery of radioactivity, the complex structure of the atom, the proof of the variability of electron mass depending on changes in its velocity, etc.

Distorting the true meaning of new discoveries, Machists utilized the difficulties in the development of physics to substantiate their subjective-idealistic philosophy.

New discoveries were interpreted by them as proof of the "disappearance of matter."

The denial of the fundamental concept of philosophical materialism—the concept of matter—led to a crisis in physics. V. I. Lenin pointed out that *"in philosophical terms, the*

---

247 *V. I. Lenin, Works, vol. 14, 4th ed., p. 117.*
248 *Ibid., p. 133.*

essence of the 'crisis in modern physics' consists in the fact that old physics saw in its theories 'real knowledge of the material world,' i.e., a reflection of objective reality. The new current in physics sees in theory only symbols, signs, marks for practice, i.e., it denies the existence of an objective reality independent of our consciousness and reflected by it."[249] *"The essence of the crisis in modern physics consists in the breakdown of old laws and fundamental principles, in the rejection of objective reality outside consciousness, i.e., in replacing materialism with idealism and agnosticism."*[250]

In reality, the new discoveries in no way meant and do not mean the "disappearance of matter" as an objective reality existing outside and independently of us. Moreover, the new discoveries in physics indicate that science has once again confirmed the fact of the objective existence of matter, that it has taken a major new step along the path of studying the structure of matter, and has revealed its properties and laws even more fully and deeply.

Machists also attempted to use another feature of physics' development to attack the concept of matter. Physics of the late 19th and early 20th centuries began to apply mathematical methods more broadly in its theoretical research; physical theories received abstract mathematical formulation in the form of systems of equations, laws expressed by mathematical formulas, etc. Theoretical physics became predominantly mathematical physics. This penetration of mathematics into

---

[249] *V. I. Lenin, Works, vol. 14, 4th ed., p. 243.*

[250] *Ibid., p. 245.*

physics was interpreted by idealists as new alleged proof of the "disappearance of matter."

"The great success of natural science," written Lenin, "—the approach to such uniform and simple elements of matter whose laws of motion admit mathematical treatment, causes matter to be forgotten by mathematicians. 'Matter disappears, only equations remain.'"[251]

In reality, as Lenin showed, the mathematical equations entering physical theories do not "eliminate" matter, but merely allow for a more precise reflection of the movement of matter. Every genuinely scientific abstraction reflects nature deeper and more fully than simple contemplation, because with the help of abstractions, science uncovers the most essential aspects in things and processes of the objective world.

Modern reactionary idealistic philosophy attacks the basic concept of Marxist philosophical materialism—the concept of matter. Fighting against the concept of matter, philosophical reactionaries seek to undermine the very foundation of scientific knowledge, acting as overt enemies of science. The reactionary English philosopher B. Russell interprets matter merely as a simple way of grouping observed phenomena. He claims that, for example, "elementary" particles, atoms, molecules, and other objects studied by science are merely logical structures, not material bodies.

Thus, modern reactionaries in philosophy pursue a far from new idealistic line of denying matter. They repeat the devices

---

[251] *V. I. Lenin, Works, vol. 14, 4th ed., p. 294.*

of the subjective idealist Bishop Berkeley, who taught that the concept of matter—this cornerstone of materialism—must be eliminated from science. The latest "physical" idealists repeat Machist techniques of criticizing materialism, long exposed by V. I. Lenin in his book *"Materialism and Empirio-criticism."* Subjecting the Machists to devastating critique, Lenin wrote: *"Their denial of matter is a long-known epistemological solution to epistemological questions in the sense of denying an external, objective source of our sensations, an objective reality corresponding to our sensations."*[252]

The Leninist understanding of matter, developed in the book *"Materialism and Empirio-criticism,"* has immense significance for all modern natural science, for the theoretical generalization of the latest achievements of science.

Natural science studies precisely that objective reality existing outside human consciousness which in epistemology is called matter.

Therefore, the concept of matter is not only the basic concept of Marxist philosophical materialism, but also the most important initial concept of natural science. Science would turn into an empty game of the mind if it were not guided by the conscious or unconscious recognition of objective reality reflected in the concepts and laws of science. Matter is inexhaustible, infinite in its forms and manifestations. On the basis of relatively lower forms of its development, more and more complex forms of matter arise, with their own specific laws. No science can develop if it does not reflect in its

[252] *Ibid., pp. 132–133.*

concepts and laws particular concrete aspects of developing matter. Genuine science does not construct arbitrary schemes; it turns to material reality itself, testing the correctness of its theories through practice.

The Marxist-Leninist concept of matter is of decisive importance not only in the realm of natural science, but also in the domain of the social sciences.

Recognition of the materiality of the world is an essential condition for a genuinely scientific approach to both the study of the laws of nature and the study of the laws of social life.

In our popular-scientific philosophical literature, there has been a division of the concept of matter into a philosophical concept and a so-called "natural-scientific" concept. Such a division is fundamentally incorrect.

There are no two concepts of matter—philosophical and "natural-scientific." There is one Marxist-Leninist philosophical concept of matter, which lies at the foundation of all individual branches of science studying various sides, properties, or types of matter and its motion.

Physicochemical sciences, for example, study the structure of matter, revealing the laws to which its presently known structural forms—macroscopic bodies, molecules, atoms, "elementary" particles—are subject. These sciences investigate the most diverse properties of structural forms of matter, reveal their connection and mutual transitions, their development, and, in accordance with one or another level of scientific progress, yield a more or less comprehensive picture of the physicochemical structure of matter.

However, these concepts of the structure of matter and its individual concrete properties, as studied by natural science, must not be identified with the philosophical concept of matter, which encompasses *all* objective reality with its infinitely diverse forms and countless properties. One cannot, for example, identify the concept of mass, which is one of the essential properties of any material object, with the concept of matter. Solving the main question of philosophy in a materialistic manner, it is necessary to see the distinction between concrete data on the properties of individual types of matter and the philosophical question regarding the relation of thought to being.

"Materialism and idealism," writes V. I. Lenin, *"—differ in one or another solution to the question of the source of our knowledge, of the relation of knowledge (and the 'psychic' in general) to the physical world, whereas the question of the structure of matter, of atoms and electrons, is a question that concerns only this 'physical world.'"*[253]

Natural-scientific concepts of the structure of matter are by no means a matter of indifference to philosophical materialism. Engels pointed out that *"materialism must change its form with every epoch-making discovery in natural science."* V. I. Lenin, in his work *"Materialism and Empirio-criticism,"* materialistically generalized the achievements of natural science during the period following Engels's death. From this, it is clear that one cannot sever the Marxist-Leninist philosophical concept of matter from natural-scientific

253 *V. I. Lenin, Works, vol. 14, 4th ed., pp. 246–247.*

concepts of its structure, forms of existence, etc. Such a severance can lead to the detachment of philosophy from natural science. Meanwhile, natural science, by investigating the diverse properties of matter and revealing its laws, proves the truth materialist doctrine and serves as the granite foundation of materialism.

The development of natural-scientific knowledge about the structure, properties, and laws inherent to matter provides increasingly rich material to confirm the truth of the Marxist-Leninist teaching on matter and the forms of its existence.

In order to understand more deeply the Leninist-Stalinist formulations of the principles of dialectical materialism, it is necessary to become acquainted—if only briefly—with modern concepts regarding the structure of matter.

Modern Concepts of the Structure of Matter

The entire history of science shows that our knowledge of the properties of matter and its structure develops, enriches itself, and deepens.

Even Leucippus and Democritus believed that ordinary visible bodies, possessing the most diverse properties, consist of invisible atoms, the varied combinations and cohesion of which form the entire diversity of the surrounding world. The atoms themselves, according to Democritus, are absolutely indivisible and simple. They differ from one another only in size, shape, and position.

These initial atomistic concepts were merely brilliant guesses about the structure of matter. The natural-scientific atomistic

theory of the structure of matter was first developed in the works of the great Russian scientist M. V. Lomonosov. He was the first in the history of science to apply the atomistic hypothesis to explain the chemical properties and structure of various substances and to study diverse physical phenomena.

In the course of further scientific development, atomistic concepts of the structure of matter were developed and refined. It was established that atoms can combine into molecules, which represent relatively strong formations composed of several (often a very large number of) atoms. The works of Dalton were of great importance in the development of chemical atomistics. The theory of the chemical structure of complex molecules was first developed in detail by the Russian chemist A. M. Butlerov.

A huge role in the development of scientific atomistics was played by the great Russian scientist D. I. Mendeleev. The Periodic Law of chemical elements, discovered by D. I. Mendeleev, serves as the foundation for all modern teaching on the structure of matter.

Each chemical element represents an aggregate of homogeneous atoms that possess fully defined properties. After the discovery of the periodic law, chemical elements could no longer be viewed as separate, completely unconnected, absolutely independent types of matter: they appeared as a definite, regular system of qualitatively distinct forms of a single matter. The chemical elements known at present, roughly speaking, form as a result of various combinations all the diversity of substances in the world around us.

In the epoch of the discovery of the periodic law, physics had not yet penetrated inside the atom. The atom still seemed an indivisible particle of matter. However, Mendeleev's periodic law even then contained in essence the knowledge of the variability of chemical elements and bore witness to their interconnection.

The process of the mutual transmutations of atoms of chemical elements, experimentally discovered by modern physics, helped to penetrate inside the atom and discover its complex structure.

Major discoveries in the field of physics that changed previous concepts regarding the unchangeability of atoms began at the end of the 19th century. During this period, the existence of a negatively charged particle—the electron—was established. In 1896, the French physicist Becquerel discovered the phenomenon of radioactivity. It was established that radioactive elements emit so-called *alpha-rays*, which represent, as was later clarified, the nuclei of the helium atom; *beta-rays*, which are a stream of electrons; and *gamma-rays*, which represent electromagnetic radiation of higher energy.

Detailed study of radioactive phenomena showed that the process of emitting alpha- and beta-rays is accompanied by the transmutation of the original radioactive chemical element into another chemical element.

Physics revealed the laws governing the transition of one chemical element into another, discovering that the emission of alpha-particles decreases the atomic number of the element by two units and, consequently, shifts it two positions to the left in

Mendeleev's periodic system. The emission of beta-particles (electrons) increases the atomic number of the element by one unit and, consequently, shifts it one position to the right.

On the basis of experimental and theoretical research, a new theory of atomic structure was created. According to this theory, an atom of any chemical element represents a complex formation consisting of a heavy positively charged nucleus and electrons orbiting around the nucleus. The nucleus of the simplest atom—the hydrogen atom—consisting of a single particle, received the name *proton*.

The motion of electrons in an atom occurs according to special, quantum laws that differ from the laws of the former, so-called classical physics. In particular, it was established that electrons in an atom do not possess a continuous, but only a discrete series of energy values. In accordance with this, atoms emit light (radiation) not continuously, but in specific, discrete portions (quanta).

The processes of emission and absorption of light affect **only the outer shell of the atom, which consists of electrons**. The same can be said about chemical changes occurring with various chemical elements. Only radioactive transmutations of atoms affect deeper changes—changes in the atomic nucleus itself. The transmutation of one type of atom into another, and correspondingly the transmutation of one chemical element into another, occurs as a result of the restructuring of atomic nuclei.

In 1932, a particle was discovered having a mass close in magnitude to the mass of a proton, but having no electrical

charge at all. This particle received the name *neutron*. Soviet physicists proposed the proton-neutron model of the atomic nucleus. According to this model, currently recognized by all of science, the nucleus of any atom consists of two types of heavy particles: protons and neutrons. The magnitude of the positive charge of the nucleus is determined by the number of protons in the nucleus. The mass of the nucleus, expressed by its mass number, is determined by the total number of protons and neutrons taken together. The protons and neutrons that make up the nucleus are bound by special nuclear forces that significantly exceed in magnitude the forces previously known to physics, such as electrical attraction and Newtonian gravitational forces.

The nature of nuclear forces has not yet been fully uncovered by modern science. But there are certain considerations suggesting that a very large role in the mechanism of nuclear interactions is played by special particles—*mesons*—which have a mass intermediate between the mass of an electron and the mass of a proton. Mesons were discovered in 1937 during the study of cosmic rays.

In a detailed investigation of the energetic aspect of beta-decay (the emission of electrons from the atomic nucleus), difficulties arose connected with the application of the law of conservation and transformation of energy. Some bourgeois physicists attempted to use these emerging difficulties to cast doubt on this fundamental law of modern natural science. However, physics overcame these difficulties and, in the process of overcoming them, arrived at the discovery of a new particle—the *neutrino*—which has no charge and possesses a very small

mass. The decisive factor in this discovery was the firm conviction in the truth of the law of conservation and transformation of energy. Thus, the development of science itself swept away all idealistic attempts to deny the applicability of the law of conservation and transformation of energy to atomic phenomena.

In 1932, another material particle was discovered in cosmic rays, possessing a mass equal to the mass of an electron and carrying a positive charge. This particle received the name *positron*. It turned out that the positron can be emitted by atoms of radioactive elements. According to modern concepts, the emergence of a positron in the process of beta-decay occurs as a result of the intranuclear transmutation of a proton into a neutron.

Modern physics has discovered a remarkable phenomenon: the conversion of a pair of particles—a positron and an electron—into gamma-quanta or, in other words, gamma-photons. The reverse process of converting hard photons into a pair—a positron and an electron—has also been studied. The discovery of these phenomena, termed by bourgeois physicists as the "annihilation" (destruction) of an electron and a positron and the "materialization" of a photon, actually means the discovery of the fact of qualitative conversion of different material objects.

Thus, modern science is aware of the following material particles, which have been named "elementary" particles: protons, neutrons, electrons, positrons, mesons (positive, negative, and possibly neutral), neutrinos, and photons. Atoms, which previously seemed simple, indivisible formations,

revealed a very complex structure. The nucleus of an atom consists of protons and neutrons. At a relatively large distance from the nucleus, a certain number of electrons orbit, equal to the number of protons in the atomic nucleus. Inside the nucleus, special forces of binding, colossal in magnitude, exist between protons and neutrons. An important role in the interaction between nuclear particles is played by mesons. Combinations of atoms form more complex structural forms: molecules and ordinary bodies.

It should be noted that the name "elementary" particle by no means signifies that science has reached the limit of the divisibility of matter. The smallest particles of matter known at present are "elementary" only at the current level of scientific development. There is no doubt that physics will move further into the depths of matter and discover the "complex" structure of these particles. Of course, the "complexity" of "elementary" particles will have a completely different nature compared, say, to the complexity of atoms.

One of the characteristics of the "elementary" particles known to physics is the profound difference in their essential properties, allowing them to be divided into two groups.

Some of them (protons, neutrons, electrons, positrons, mesons) belong to *substance particles*. They possess a so-called "rest mass" and can move at the most varied speeds. Other particles, such as photons, differ qualitatively from substance particles. They can move only at a very high speed (the speed of light). In connection with this, they have a mass of a different nature; "rest mass," which substance particles possess, is absent in photons.

Unlike substance, photons are called *field particles*. Modern physics has shown that matter exists in two qualitatively distinct forms—in the form of a field and in the form of substance. Physics is aware of electromagnetic, gravitational, and intranuclear fields. Field and substance are two inextricably linked forms of matter. For all their specific characteristics, they possess properties common to all material objects: photons, for example, representing a peculiar variety of the electromagnetic field, possess both mass and energy.

The entire sum of modern knowledge about the structure of matter, its various properties, and manifestations reveals the inexhaustible richness of matter itself, witnessing the immense success in human knowledge of the material world.

20th-century physics once again confirms the proposition regarding the inexhaustibility of nature in all its parts and manifestations.

"*The electron is as inexhaustible as the atom, nature is infinite...*"[254] — wrote Lenin in the book *Materialism and Empirio-criticism*.

Along with this, this Leninist proposition is of essential significance for the further development of modern science regarding the structure of matter. Matter as objective reality, given to man in his sensations, is comprehended ever more deeply in the process of scientific development. Old concepts of unchangeable, completely simple atoms have been replaced by new concepts of their unusually complex structure.

---

[254] *V. I. Lenin, Coll. Works, vol. 14, 4th ed., p. 249.*

New material formations have been discovered namely —"elementary" particles, previously unknown to science. It was discovered that matter exists in two qualitatively distinct forms—in the form of substance and field. Along with this, the fact of the atomistic structure of matter was and remains unshakable. The atomistic theory of the structure of matter became firmly established in science, receiving further development and refinement.

E. Mach and W. Ostwald at one time fiercely fought against materialist atomistics, asserting that atoms are merely "creations of our mind," intended for an "economical" systematization of our experiences. W. Ostwald prophesied the allegedly impending collapse of the atomistic theory of the structure of matter, stating that atoms would soon be found only in the dust of libraries. The history of science reduced these idealistic prophecies to dust.

Modern reactionaries of science continue unsuccessfully to attack the atomistic theory. They are no longer able to deny the obvious fact of the existence of atoms. They make attempts to distort the very understanding of the atom or "elementary" particle, declaring them to be auxiliary constructs, etc.

One of the modern followers of Machism, the fascistizing idealist-physicist Jordan, attempts to revive the anti-scientific constructions of his philosophical teachers. He writes that "the atom that we know... is deprived of all sensory qualities and is characterized only by a system of mathematical formulas." "The atom," he declares, "is only a framework for classifying experimental facts." Eddington declared "elementary" particles studied by modern physics to be non-existent. According to

Eddington, they are merely "conceptual (from the word concept—notion) carriers of a series of changes."

In reality, modern science possesses deeper knowledge in the field of the atomistic structure of matter than was the case, for example, in the 19th century. It has revealed the inexhaustible richness of forms of matter, the complexity of its atomistic structure, and the irreducibility of matter to any absolutely simple and unchangeable elements. All results of modern science confirm the correctness of dialectical materialism, which, unlike metaphysical materialism, denies the existence of any unchangeable elements lying at the foundation of all natural phenomena, and denies the existence of an "unchangeable essence of things." *"Unchangeable,"—wrote Lenin,—"from the point of view of Engels, is only one thing: this is—the reflection by human consciousness (when human consciousness exists) of the external world that exists and develops independently of it."*[255]

The development of Soviet physics, like the development of other branches of Soviet science, is under the influence of Marxist-Leninist philosophy. Its materialist principles serve as a reliable weapon in the struggle against "physical" idealism, which often penetrates the very content of physical theories. The principles of dialectical materialism on the materiality of the world serve as a theoretical foundation for the development of general physical theories of matter and motion. They help to deeply analyze and generalize experimental data of modern

[255] *V. I. Lenin, Coll. Works, vol. 14, 4th ed., p. 249.*

physics and to draw further conclusions from them, moving science forward.

The process of comprehending moving matter is infinite, and science will endlessly deepen our knowledge of matter, giving an ever fuller, more perfect picture of the structure of matter and the laws of its motion and development.

Motion—the Mode of Existence of Matter

Motion is the fundamental mode of existence of matter. It is internally inherent to matter and inalienable from it. The motion of matter is its ceaseless, never-ending change. Matter is unthinkable in frozen forms; no material thing can exist without participating in one form of motion or another.

In contrast to idealism and metaphysics, which sever motion from matter, believing that the motion of matter is caused by special non-material forces or a divine impulse, Marxist philosophical materialism considers motion as a form of existence of matter and seeks the source of motion within matter itself.

"*Motion,"—says Engels,—"considered in the most general sense of the word, i. e., understood as the form of being of matter, as an internally inherent attribute of matter, embraces all changes and processes occurring in the universe, starting from simple displacement and ending with thought."*[256]

Attempts to sever motion from matter, to consider motion without matter, motion as such, lead to idealism. "*...To sever motion from matter,"—says Lenin,—"is equivalent to severing*

[256] *F. Engels, Dialectics of Nature, 1952, p. 44.*

thought from objective reality, severing my sensations from the external world, i. e., crossing over to the side of idealism.'"[257]

"*An idealist would not even think of denying that the world is motion, namely: the motion of my thoughts, concepts, sensations. The question of what moves, the idealist will reject and consider absurd: a shift of my sensations occurs, concepts disappear and appear, and that is all. Outside of me, there is nothing. 'It moves'—and that's that.'"*[258]

An idealistic separation of motion from matter was preached in his time by Ostwald. A prominent chemist, but a petty philosopher, as Lenin called him, Ostwald attempted to reduce all natural phenomena to "pure" energy. Having created a confused philosophical concept of energetism that claimed to rise "above" materialism and idealism and "overcome" their opposition, Ostwald essentially developed a new variant of subjective-idealistic philosophy. He wrote: "That all external phenomena can be represented as processes between energies —this circumstance is most easily explained by the fact that the processes of our consciousness themselves are energetic and transfer this property of theirs (*aufprägen*) to all external experiences."

V. I. Lenin noted on this occasion: *"This is pure idealism: not our thought reflects the transformation of energy in the external world, but the external world reflects the 'property' of our consciousness!'"*[259]

---

257 *V. I. Lenin, Coll. Works, vol. 14, 4th ed., p. 254.*
258 *Ibid.*
259 *V. I. Lenin, Coll. Works, vol. 14, 4th ed., p. 258.*

In contrast to all varieties of idealism that sever motion from matter, Marxist philosophical materialism views qualitatively distinct types of motion as fundamental forms of existence of qualitatively distinct material objects.

Material motion has the most diverse forms: simple spatial displacement, diverse physical phenomena, chemical changes, processes inherent to living organisms; motion characterizing social phenomena. The study of various forms of motion of matter means the study of various forms of matter itself.

Whatever form of motion of matter we consider, whatever variety of types of motion it contains, they all represent an inseparable unity of qualitatively distinct material objects with their corresponding qualitatively distinct forms of motion. Mechanical motion is inseparably bound to bodies moving in space. Various physico-chemical phenomena represent specific forms of motion inherent to molecules, atoms, "elementary" particles, and fields.

Life, as a special form of motion of matter, is, according to Engels' definition, the mode of existence of protein bodies. Living organisms continuously self-renew; a constant metabolism occurs within them. Thus, motion, being the form of existence of matter, is inseparable from material objects themselves.

The inseparability of matter and motion is further manifested in the fact that the properties of specific material bodies are revealed only in their specific motions. Of a body that was not in motion, there is simply nothing to say; such a body does not exist.

The nature of moving bodies and their qualitative characteristics stem from the corresponding forms of motion[260]. The nature, say, of atoms of chemical elements is determined by that specific form of motion whose laws are studied by modern atomic physics. In the realm of biology, one can similarly observe the inseparable connection and interdependence of material organic forms and corresponding biological forms of motion. If we take, for example, particular organs of living organisms, their structure and specific morphological features—in a word, their biological nature—are entirely determined by the functions they carry out in the life process of the entire organism.

In contrast to mechanistic, metaphysical concepts, Marxist philosophical materialism teaches that the diverse forms of motion of matter cannot be reduced to any "simplest" form of motion, nor are they exhausted by the latter. The process of complication of material objects occurs in an inseparable connection with the complication of the forms of motion of matter.

Processes of transition from one form of motion to another possess specific characteristics. Within the limits of physico-chemical phenomena, such conversions of forms of motion take place where, say, the electromagnetic form of motion in a given concrete process disappears as such and converts into mechanical motion. Such a process occurs, for example, in an electric motor, where a continuous inflow of electrical energy ensures continuous rotational motion of the electric motor's

---

260 *See F. Engels, Dialectics of Nature, 1952, p. 197.*

armature. One need only stop this inflow, and rotation will cease. Consequently, a complete conversion of the electromagnetic form of motion into mechanical motion occurs here (of course, in this process, a certain relatively insignificant portion of energy goes to various unrecoverable losses and converts into other forms of energy).

Let us take another example—the fall of a stone from a certain height. In this case, at the end of the fall, the mechanical motion of the stone disappears as such and converts into the atomic-molecular motion of the surrounding environment, raising its temperature.

The emergence of more complex forms of material motion, such as chemical or biological motion, is bound to a whole complex of conversions in which simpler forms of motion do not disappear, but are preserved as secondary forms accompanying the given, more complex form of motion of matter. The chemical form of motion, for example, includes as subordinate forms mechanical motion, electromagnetic processes, and others, and is not reduced to them.

Natural science, particularly physics, provides a remarkable natural-scientific substantiation of the philosophical proposition regarding the inseparability of motion from matter.

The law of conservation and transformation of energy serves as the natural-scientific basis for the Marxist philosophical materialist proposition regarding the inseparable connection between matter and motion. The law of conservation and transformation of energy expresses the fact of qualitative conversion of forms of material motion alongside quantitative

conservation of motion. It shows that motion is closely bound to matter itself and is the form of its existence. Engels emphasizes that the main point in the law of conservation and transformation of energy is the expression of qualitative conversions of the very forms of motion of matter. It was precisely with the discovery of this fact, wrote Engels, that "the last memory of an extramundane creator is wiped out."[261]

The law of conservation and transformation of energy, expressing the mutual transmutation of forms of material motion, is an unshakable achievement of science. All subsequent natural-scientific discoveries confirmed, deepened, and expanded concepts of the action of this law. Thus, for example, modern physics has revealed a close connection between energy and mass. Mass is one of the most important physical properties of all material objects and expresses their inertial and gravitational properties.

Since old, classical physics dealt with relatively low speeds of motion, mass did not reveal its dependence on the motion of a body. Modern physics has established that the mass of a body changes depending on the speed of motion: the greater the speed of motion of a body, the greater its mass. Thus, it became clear that mass, as one of the fundamental properties of a material object, depends on the conditions of motion of that object and, consequently, on energy.

For the first time, the interconnection of mass and energy was revealed in the study of light phenomena. This interconnection stemmed back from the remarkable experiments of the Russian

[261] *F. Engels, Anti-Dühring, 1952, p. 13.*

physicist P. N. Lebedev, who proved the existence of light pressure. The law of the interconnection of mass and energy ($E=mc^2$), discovered by modern physics, means that any material object possessing mass of one nature or another necessarily possesses a corresponding type of energy. And vice versa, a material object possessing a supply of one type of energy or another necessarily possesses mass.

Sometimes physicists interpret this law as allegedly proving the conversion of mass into energy, and at times go even further and claim the conversion of substance and even matter into energy.

A. Einstein, for example, who himself wrote that Mach had a decisive influence on the formation of his philosophical worldview, in many of his works considers mass, and consequently matter, as a concentration of energy. Other bourgeois physicists in various versions repeat these idealistic arguments of Einstein, seeing in the law of interconnection of mass and energy a "refutation" of materialism.

For example, the physicist K. Darrow in his book *Atomic Energy*, speaking of uranium fission, writes: "This is a process involving the transformation of matter in large quantities into something that is not matter." K. Chase, referring to Einstein's formula, says: "At the present time, matter, strictly speaking, is a form of energy."

Such an interpretation of the law of interconnection of mass and energy is one of the techniques of modern "physical" idealism aimed at distorting the content of new discoveries in physics. In reality, the law of interconnection of mass and

energy by no means implies the conversion of mass, let alone matter, into energy. The law of the interconnection of mass and energy means that two essential properties of matter are inseparably bound to each other. This inseparable connection of mass and energy testifies that during the qualitative conversion of physico-chemical forms of motion of matter, the conservation of fundamental properties of material objects takes place. Energy is the measure of the motion of matter. The inseparable connection of mass and energy testifies to the inseparable connection between matter and motion.

All results of modern science clearly demonstrate the reactionary, anti-scientific nature of all idealistic fabrications regarding special, non-material sources of motion alleged to lie outside matter.

Matter itself carries within it the source of motion. Material things do not exist except in motion, change, and development. Motion is the ceaseless change of material things and phenomena, and is the fundamental mode of their existence.

Space and Time—Objective Forms of Existence of Matter

Space and time are inalienable objective forms of existence of matter. The recognition of the objective reality of space and time stems from the recognition of the materiality of the world. *"Recognizing the existence of objective reality, i. e., moving matter, independently of our consciousness, materialism must inevitably also recognize the objective reality of time and space..."*[262] Material motion, space, and time, as fundamental

[262] *V. I. Lenin, Coll. Works, vol. 14, 4th ed., p. 162.*

forms of being of matter, exist in an organic, inseparable unity conditioned by the unity of the material world.

Matter is unthinkable outside motion, and the motion of matter always proceeds in space and time. Therefore space and time are as inseparable from matter as motion. There is not a single material object that does not possess extension or does not exist in time; "...the basic forms of all being," says Engels, "are space and time; being out of time is as great an absurdity as being out of space"[263]. "There is nothing in the world," says Lenin, "except moving matter, and moving matter cannot move otherwise than in space and in time"[264].

Space is a form of the being of matter, characterizing the extension of material objects. There is no space as such, detached from material things and not filled with matter. At the same time, space is not pure, qualityless extension. It is characterized by specific properties that depend on the material objects themselves. Every material object has its own spatial relations. The Solar System has certain specific spatial relations, a crystal has others, and an atom has others still. In the Solar System, for example, planets move along ellipses, with the Sun located at one of the foci. These geometric curves characterize the specific spatial relations of the bodies of the Solar System. In a crystal, atoms are arranged in a strictly defined spatial order characteristic of that given crystal. One character or another of spatial arrangement of atoms in a crystal lattice affects its physical properties. In an atom, electrons, moving according to special laws studied by

[263] *F. Engels*, Anti-Dühring, 1952, p. 49.
[264] *V. I. Lenin*, Coll. Works, vol. 14, 4th ed., p. 162.

quantum mechanics, form an electron cloud in space around the atomic nucleus. Thus, the essence of space is revealed through the study of specific forms of the motion of material objects.

The essence of time as a fundamental form of the being of matter is also revealed in the motion of matter. Time presupposes moving things.

Time is a form of the being of matter, characterizing the sequence of material processes, expressing the objective connection of material motion. The motion and development of matter can proceed only in space and time. Time is the primary condition of any development.

Everything exists in time, for nothing in the world is at rest; everything is subject to motion and change. But, on the other hand, there is no time without material things subject to change. Idealists sever time from matter, considering it as existing prior to material things.

Idealism denies the objectivity of space and time and arrives at absurd notions that space and time are supposedly generated by human consciousness.

Berkeley, for example, views space and time as forms of subjective experiences. According to Kant, space and time are *a priori* (independent of experience) forms of human sensory perception of the world. These forms are supposedly not inherent in the things themselves, but are allegedly initial forms of "pure", i.e., deprived of any objective content, subjective contemplation. Space and time, according to Kant, are conditioned not by the nature of things themselves, but by the

nature of human consciousness. In Hegel, space and time act as moments in the development of the "absolute idea". Hegel severs space and time from each other. Nature, according to Hegel, has no development in time and merely unfolds its diversity in space. Time appears in the Hegelian system only at the stage of the development of the "absolute spirit". The metaphysical rupture of space and time led Hegel to a complete contradiction with natural science, to a meaningless notion of the development of nature in space, but outside of time.

Machists, in their interpretation of space and time, preached the same idealistic absurdity: that man does not exist in space and time, but rather space and time are allegedly generated by man. Mach, continuing the subjective-idealist line in his interpretation of space and time, claimed that "space and time are ordered systems of series of sensations". The Machist Bogdanov, repeating Mach, asserted that space and time are forms of people's "socially organized experience".

V. I. Lenin exposed the groundlessness of subjective-idealist Machist "theories" regarding space and time. "If the sensations of time and space," Lenin wrote, "can give man a biologically useful orientation, it is solely on condition that these sensations reflect *objective reality* outside man: man could not adapt biologically to the environment if his sensations did not give him an *objectively correct* idea of it"[265].

Modern idealism attempts to revive subjective-idealist views on space and time. Bergson, as early as the beginning of the 20th century, advanced the mystical concept of "pure

[265] *V. I. Lenin*, Coll. Works, vol. 14, 4th ed., p. 166.

duration," completely severed from matter and graspable only through intuition. J. Jeans essentially repeated the Kantian interpretation of time: according to J. Jeans, "time is a fiction created by our own minds". Eddington claimed that space and time must be replaced by a more general subjective notion about the ordering of natural events. H. Weyl provides a new variant of the subjective-idealist interpretation of time: "Time," he asserts, "is the simplest form of the stream of consciousness". Bourgeois physicists Bohr and Heisenberg propose abandoning either the causal study of atomic phenomena or their consideration in space and time.

In contrast to idealism, Marxist philosophical materialism, in full agreement with natural science, recognizes the objectivity of space and time, their inseparable connection with each other and with moving matter.

The natural-scientific understanding of space and time has always proceeded from the recognition of the objective reality of space and time. In Newtonian mechanics, space and time were viewed as existing objectively, independently of human ideas.

However, Newton, while developing his mechanics based on the recognition of the objectivity of space and time, advanced the notion of "absolute" space, which remains always identical and immovable, independent of material objects. Similarly, time, according to Newton, flows absolutely uniformly and completely independently of the motion of matter.

This historical limitation of the Newtonian doctrine of space and time—consisting in Newton severing space and time from

material objects—was overcome by the further development of science. Modern physics concretely demonstrates the inseparable connection of space and time with matter. It confirms the proposition that time cannot be considered as pure duration, unbound to material processes. The passage of time reveals its close dependence on the motion of material objects. This dependence has received direct experimental confirmation. The study of "elementary" particles—mesons—which were mentioned above, showed that they exist for a very short interval of time, after which they decay, transforming into other particles. It turned out that the lifespan of mesons, or, as it is customary to say in physics, their lifetime, significantly depends on their speed of motion. It has been experimentally established that the lifetime of a meson increases as its speed of motion increases. Modern physics has also uncovered the inseparable connection and mutual dependence of the spatial and temporal characteristics of a moving body.

An analysis of spatial forms constitutes the content of geometry, which considers the spatial relations of things, abstracting from the things themselves. Geometry, as a science studying the spatial relations of the external world, is the result of prolonged abstracting work of human thought.

Even in antiquity, Euclidean geometry was created. The main propositions of Euclidean geometry firmly entered the system of scientific knowledge about the spatial relations of material objects. Space is considered

in Euclidean geometry as absolutely homogeneous, possessing no curvature, and having three dimensions. The three-dimensionality of space is expressed in the fact that through

every point in space one can draw three—and only three—mutually perpendicular straight lines. Such three mutually perpendicular straight lines drawn from any given point in space are called coordinate axes.

All material objects exist in three-dimensional space. No matter how large or small the objects of the objective world are, their motion can occur only in real space having three dimensions. "Natural science," says Lenin, "does not doubt that the matter it investigates exists only in space of 3 dimensions, and therefore the particles of this matter, even if they were so small that we could not see them, *necessarily* exist in the same space of 3 dimensions"[266].

Natural-scientific knowledge about space is continuously changing and being enriched. Since the emergence of Euclidean geometry, this knowledge has undergone significant changes.

The great Russian mathematician N. I. Lobachevsky, in 1828–1829 in the 19th century, created a new, non-Euclidean geometry that more accurately and deeply reflects the properties of real space and its connection with matter. Lobachevsky's geometry revealed the limitations of Euclidean geometry and established that Euclidean geometry is only a first, approximate picture of real space. The development of science led to the necessity of providing a new, more precise concept of real space than Euclidean geometry. Of course, Euclidean geometry even now finds wide application in physics and technical sciences. But at the same time, specific

[266] *V. I. Lenin*, Coll. Works, vol. 14, 4th ed., p. 168.

cases of physical phenomena occur, the investigation of which leads to the idea of the existence of special spatial, geometric relations different from Euclidean ones.

In creating the new, non-Euclidean geometry, Lobachevsky proceeded from the most important materialist proposition regarding the inseparable connection of space with matter, and the decisive role of matter in relation to the properties of space.

In the system of Euclidean geometry, there is a "parallel postulate," which can be formulated as follows: through a point lying outside a line, only one straight line parallel to it can pass in the same plane with it. Analyzing the theoretical foundations of geometry, Lobachevsky came to the conclusion that depending on various physical conditions, geometries different from Euclidean can exist, in which the parallel postulate is not fulfilled or, more precisely, takes on a different form.

Investigating various possibilities of geometric relations, Lobachevsky arrived at the following formulation of the parallel postulate: through a given point, at least two parallel lines can be drawn to a given line in a shared plane. Lobachevsky developed a logically harmonious system of a new geometry that differs significantly from the former system of geometric knowledge. One of the main propositions of Lobachevsky's geometry is the establishment of a relationship between line segments and angles. This proposition directly leads to establishing a dependence, for example, between the length of the sides of a triangle and its angles. If, for instance, in Euclidean geometry the sum of the interior angles of any triangle equals two right angles, in Lobachevsky's geometry this sum of angles of a triangle is less than two right angles.

These unusual results, which contradict Euclidean geometry, are difficult to visualize precisely because we use spatial relations on terrestrial scales where Euclidean geometry holds true. The truth of the new geometry can be experimentally discovered, for example, on astronomical scales, on the scale of the universe. Some visual representations of the validity of Lobachevsky's geometry can also be obtained under conditions of our terrestrial, Euclidean space. For this, it is necessary to take special saddle-like surfaces called pseudospheres. On a pseudosphere, one can test the validity of Lobachevsky's geometry (more precisely, planimetry) and, in particular, visually observe the fulfillment of the postulate stating that through a given point lying outside a line, at least two parallel lines can be drawn.

Subjective idealists have attempted and continue to attempt to use the mutability of our knowledge about space and time to substantiate their idealistic "theories". The French physicist-idealist H. Poincaré claimed that the emergence of new geometries allegedly signifies the ability of our intellect to completely arbitrarily construct any geometric systems.

In reality, the new concepts of space and time created by Lobachevsky do not abolish the old concepts; they only refine and enrich them. Lobachevsky's geometry, reflecting the real properties of space, represents a further development of Euclidean geometry and includes it as a special case. The old geometry contained a particle of absolute truth that entered the new, more general geometry, which more fully reflects the properties of objectively real infinite space. Euclidean geometry remains valid under terrestrial scale conditions as a

known approximation to the properties of real space. The deviations of Euclidean geometry from Lobachevsky's geometry under normal conditions of scientific practice are so negligible that within these limits, Euclidean geometry was and remains the geometric foundation of physics and engineering sciences.

Lobachevsky's great discovery dealt a decisive blow to Kantian apriorism. The basic concepts of Euclidean geometry, which had existed for over two thousand years, had acquired the appearance of absolute truths independent of experience, of practice. Kant, developing his subjective-idealist doctrine of space and time as *a priori* forms of sensibility, appealed to the "absoluteness" and unshakeability of geometric axioms. The creation of non-Euclidean geometry convincingly showed that spatial forms are forms inherent in things themselves, not in the human mind. The change of concepts of space in the new, non-Euclidean geometry signifies an ever fuller approximation of our knowledge to absolute truth.

Unlike space, which has three dimensions, time possesses the property of unidirectional flow. Time is irreversible. The past and the future cannot swap places. The irreversibility of time stems from the progressive development of matter in the process of historical succession of its forms of motion.

The properties of space and time are inexhaustible. A deeper cognition of these properties in Lobachevsky's geometry prepared the shift in physical concepts of space and time. Modern physics shows that the properties of space are inextricably linked with the phenomena of gravitation inherent

in matter. New physics thus refines the concepts of space and time that existed in old physics.

From these new achievements of science, bourgeois scientists draw reactionary, idealistic conclusions. Idealistically interpreting the results of modern physical research, Einstein, and especially those who speculate on his discoveries, go so far as to make assertions about the finiteness of the world in space and time, try to "scientifically" prove the divine creation of the world, calculate that the world was allegedly created about two billion years ago, etc.

Space and time are infinite. Matter is infinite in space and eternally exists in time. The infinity of space means the unlimited extent of the world in all directions. The universe has no boundaries: neither up nor down, nor right nor left, nor forward nor backward. The infinity of time means that the material world has always existed, that there was never a beginning of the world, and its development will never have an end. Individual forms of matter will replace one another, but the material world as a whole is indestructible and eternal.

The data of modern science testify to the infinity of the material world in space and time. Our Earth is one of the planets of the Solar System. The Sun is merely one of billions of stars constituting a giant stellar system called the Galaxy. The dimensions of our Galaxy reach 80,000–100,000 light-years across (1 light-year equals the distance traveled by light in one year). Far beyond our Galaxy lies an innumerable multitude of other similar stellar systems, which together form an even more vast system called the Metagalaxy. As astronomical instruments and observation methods improve,

ever newer stellar worlds are discovered, and increasingly distant regions of cosmic space are studied.

Scientific concepts of space and time change and are refined with the development of science. But the discovery of new properties of space and time cannot shake the firm materialist proposition that they exist objectively and are forms of the being of matter. "The mutability of human ideas about space and time," Lenin pointed out, "no more refutes the objective reality of both than the mutability of scientific knowledge concerning the structure and forms of motion of matter refutes the objective reality of the external world"[267].

The achievements of modern natural science repeatedly confirm the doctrine of dialectical materialism concerning the objectivity of space and time, and convince us once again that the material world has always been, is, and will be eternally moving, eternally developing matter existing in space and time.

Laws of Development of Moving Matter

The laws of moving matter are essential, real connections between objects and phenomena inherent in the very nature of matter itself.

The laws of the development of matter exist objectively and express relations independent of human consciousness, relations of things and processes themselves arising from their nature.

Science in its content is a reflection of these laws. "...Science," says J. V. Stalin, "cannot live and develop without recognizing

[267] *V. I. Lenin*, Coll. Works, vol. 14, 4th ed., p. 163.

objective laws, without studying these laws"[268]. Any attempt to deny the objective laws of moving matter is an attempt to undermine the very foundations of scientific knowledge. "The driver of laws out of science," says V. I. Lenin, "is in fact merely the smuggling in of the laws of religion"[269]. On the contrary, recognition of the objective lawfulness of nature is recognition of the right of science to an ever fuller cognition of these laws. Insisting on the existence of objective laws of nature and society reflected in our cognition, dialectical materialism thereby emphasizes the primary task of science: to know and reveal these objective laws in its concepts and formulations. "...The idea of causality, necessity, lawfulness, etc.," says V. I. Lenin, "is a reflection in the human head of the laws of nature..."[270].

The most general laws of the development of matter are revealed by dialectical materialism as all-encompassing laws of motion, change, and development of nature, society, and human thought. These laws are the laws of materialist dialectics, which is the most complete and profound doctrine of development. Specific individual sciences study the specific laws inherent in qualitatively different forms of the motion of matter. For example, the laws of development of living organisms are revealed by Michurinist biological science. The laws of social phenomena were first revealed in the doctrine of Marx–Engels–Lenin–Stalin.

---

[268] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 85.
[269] *V. I. Lenin*, Coll. Works, vol. 20, 4th ed., p. 182.
[270] *V. I. Lenin*, Coll. Works, vol. 14, 4th ed., p. 4.

Having discovered the laws of social development, primarily the laws of economic development, Marxism simultaneously exposed the objective character of these laws. "...Just as in natural science, the laws of economic development are objective laws reflecting processes of economic development that take place independently of the will of people. People can discover these laws, know them, and, relying on them, utilize them in the interests of society, give a different direction to the destructive action of certain laws, limit their sphere of operation, give free play to other laws that are making their way forward; but they cannot abolish them or create new economic laws"[271].

Consequently, in both natural and social sciences, the laws of science reflect objective processes of nature and society. The objectivity of laws is their most crucial characteristic. Recognition of objective laws of nature and society serves as a necessary condition for scientific foresight. Only by relying on a deep knowledge of the objective processes of nature and society can we know where and how they will develop, and foresee the future.

Cognition of the objective laws of nature and society is possible only through cognition of causal connections, cognition of necessity. Causality and necessity are essential, integral sides of lawful connections. Recognition, for example, of the objectivity of causal connections means recognition of objective laws independent of man. Conversely, the denial of

[271] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 5.

causality in nature and society means the denial of objective laws.

Considering the objective laws of the development of matter, we become convinced that not a single phenomenon in nature arises or disappears without a corresponding cause that determined its emergence or destruction. The causal connection of phenomena acts as a crucial characteristic of any lawful connection.

In order to uncover the laws of development of objects and phenomena of nature, it is necessary to clarify the causal connections of these objects and phenomena. "To understand individual phenomena," says Engels, "we must tear them out of the universal connection and consider them in isolation, and in that case, the alternating movements appear before us—one as cause, the other as effect"[272].

Idealism denies the presence of objective causal connections. The leitmotif of modern reactionary bourgeois philosophy and sociology is the denial of causality and, consequently, the denial of objective laws of nature and society. Modern reactionaries in science, bourgeois scientists, and philosophers who attempt to eliminate the concepts of lawfulness and causality from science, often rely in their anti-scientific fabrications on the subjective-idealist constructs of Hume and Kant.

The English philosopher Hume, being a subjective idealist and an agnostic, denied the very possibility of the existence of

[272] *F. Engels*, Dialectics of Nature, 1952, p. 184.

objective causal connections in nature. The fact that one phenomenon follows another phenomenon, he asserted, gives no ground for asserting their causal connection. Perverting the real process of human cognition, Hume attempted to attribute to humanity the view that causality allegedly means the simple habit of always observing one event after another. Thus, proceeding from the idea that a conclusion about objective causal connection cannot yet be drawn from a simple sequence of observed phenomena, Hume "substantiated" the denial of causality.

In reality, man comprehends the causal relations of objects and phenomena not because he observes a simple sequence of events. Naive and fantastical inferences about causal connection based on simple juxtaposition of observed facts are characteristic of early periods of human history. In that era, the undeveloped state of socio-historical practice and the dominance of a religious-mystical worldview did not allow the discovery of real causal connections of natural phenomena, and a simple sequence of phenomena was often passed off as their causal relations.

It is known, for example, that Egyptian priests noticed that after the appearance of the star Sirius in the rays of the morning dawn, the flooding of the Nile begins. This observation served as one of the grounds for unscientific astrological notions about the direct influence of celestial bodies on terrestrial events. In reality, these two phenomena are not in a cause-and-effect relationship with each other. The appearance of Sirius and the flooding of the Nile are two repeating events coincident in time, each caused by its own lawful connections.

The real disclosure of objective causal connections occurs not as a result of simple observation of a sequence of events (though the sequence of events plays an important role in establishing causal connections), but as a result of practical activity; Engels states that the concept of causality is substantiated thanks to human practical activity[273].

Kant, declaring the world of "things-in-themselves" unknowable, also denied the presence of objective causal connections in nature. Causality, according to Kant, is allegedly an *a priori* form of human intellect into which the latter arranges perceived phenomena. This form, according to Kant, is given to human intellect prior to any experience and serves to order perceptions.

Hume and Kant subjectively and idealistically perverted the actual, real connections of objects and phenomena of nature. V. I. Lenin, subjecting the subjective-idealist constructs of Machist philosophy to devastating criticism, wrote in his book *Materialism and Empirio-criticism*: "The subjectivist line on the question of causality is philosophical idealism (to the varieties of which belong the theories of causality of both Hume and Kant)..."[274]

Mach, idealistically interpreting causality, asserted that all forms of causality stem from subjective strivings. He attempted to eliminate the concept of causality from science and replace it with the concept of functional dependence. There is neither cause nor effect in nature, he claimed. Exposing Mach, V. I.

---

[273] *See F. Engels*, Dialectics of Nature, 1952, p. 182.
[274] *V. I. Lenin*, Coll. Works, vol. 14, 4th ed., p. 142.

Lenin wrote: "The really important epistemological question that divides the philosophical trends is not the degree of precision reached by our descriptions of causal connections, or whether these descriptions can be expressed in a precise mathematical formula, but whether the source of our knowledge of these connections is the objective lawfulness of nature, or properties of our mind, its innate capacity to appreciate certain *a priori* truths, etc. This is what irrevocably divides the materialists Feuerbach, Marx, and Engels from the agnostics (Humeans) Avenarius and Mach"[275].

Modern reactionary idealist philosophy attempts to pervert the achievements of science, seeing in these achievements a "refutation" of causality. Eddington, for instance, interpreted the achievements of quantum mechanics as a new "proof" of indeterminism, a denial of causality in nature. In reality, science has arrived at a deeper cognition of causal connections than was present in old physics, thereby once again confirming the crucial proposition of dialectical materialism that the discovery of a new, more precise mathematical formulation of causal connections in no way denies their objective existence, but, on the contrary, demonstrates a deepening and refinement of our knowledge of these causal connections.

Investigating the laws of change of chemical elements, physics discovered that the transformation of one chemical element into another occurs as a result of a change in nuclear charge. The change in nuclear charge occurs, in turn, as a result of the ejection of an alpha-particle (helium nucleus) or a beta-particle

[275] *V. I. Lenin*, Coll. Works, vol. 14, 4th ed., pp. 146–147.

(electron) from the atomic nucleus, or as a result of their capture by the nucleus.

Science is never limited to revealing the causal connection of any two phenomena of interest. In the latter example, physics cannot limit itself to clarifying the immediate causes of changes in chemical elements—that is, radioactive radiation—and must go further to clarify the causes of the radioactive radiation itself of a given atom of a chemical element. In this movement of science toward an ever deeper cognition of the laws governing changes in chemical elements, a crucial role is played by the materialist conviction in the indispensable presence of causal dependence among all objects and phenomena in nature.

Thus, cognition of the objective causal connections of objects and phenomena of the material world is a necessary condition for knowing the laws of development of nature and society, for causality is a crucial, integral characteristic of lawfulness.

The laws of development of material objects and natural phenomena are revealed by various branches of science.

Physics studies the laws of motion of so-called "elementary" particles of matter, discovers the laws prevailing in the world of atoms, and approaches the explanation of the laws by which the atomic nucleus is structured. Physics also studies the laws of structure of solids made of atoms and molecules. Crystallography (a branch of physics) reveals the laws by which the process of crystal formation occurs—solids constructed from orderly arranged atoms in a specific manner. It also studies the laws of atomic arrangement in the crystal

lattice. Modern physics also studies the laws of motion characteristic of the electromagnetic field, approaching the disclosure of laws characteristic of gravitational and intranuclear fields.

The laws of atomic development are revealed in the periodic law of chemical elements of D. I. Mendeleev. Mendeleev's Law lies at the foundation of all modern physico-chemical doctrines on the structure of matter.

Astronomy studies the laws of motion of celestial bodies in our solar system—planets, comets, asteroids. It deals with the study of processes occurring on the Sun and other stars, and discovers the laws of stellar development. Astronomy also speaks of the laws of origin and development of our Solar System.

Geology—the science of the Earth—studies the laws of processes occurring in the Earth's crust, investigates the structure of the Earth, and studies the physico-geographical changes that have occurred throughout the history of the Earth. Geology clearly demonstrates that the laws of Earth's development existed even before the appearance of man upon it. Thereby, the objective character of natural laws is most visually revealed, dealing a blow to the subjective-idealist understanding of the laws of nature.

Biology studies the objective laws of the development of living nature. Michurinist biology proceeds from the conviction that the mutual conditionality and interconnection of living organisms with the conditions of their existence constitute the laws of the biological form of the motion of matter. Living

organisms develop according to their own laws inherent in their very material nature, needing no "spiritual" factors —"entelechies," "purposeful activity," and other idealistic fabrications. In opposition to the idealistic understanding of nature, Michurinist biology explains the laws of development of living organisms through the historically established adaptability of organisms to the material conditions of their existence.

It is clear that all laws discovered by natural science exist objectively, inherent in material objects themselves, independently of our consciousness. Science reflects these laws and finds them in nature. All branches of natural science study the objective laws of nature. Recognition of the objective laws of nature serves as a crucial condition for the development of genuine science. Insisting on the objectivity of the laws of nature and society, dialectical materialism equips man with a powerful weapon in his active, conscious activity in the interests of social development.

The Significance of the Propositions of Marxist Philosophical Materialism on the Materiality of the World and the Laws of Its Development for the Practical Activity of Communist Parties

The extension of the propositions of philosophical materialism to the study of social life and the application of these propositions to the practical activity of the party of the proletariat are of immense importance.

The first feature of Marxist philosophical materialism, if taken as applied to social phenomena, states that the mutual connection and mutual conditioning of the phenomena of social

life constitute the laws of the development of society. This means that social life, the history of society, ceases to be an accumulation of "accidents," for the history of society becomes a lawful development of society, and the study of the history of society turns into a science[276].

All philosophy prior to Marxism was unable to give people an understanding of the real laws of historical development. The history of society was reduced to a simple description of events, and historians sought the causes of historical movement either in the actions of "wise legislators" or in the manifestations of a "supreme will." History turned into a chaos of accidents; it was impossible to trace any lawful connection between phenomena.

The emergence of Marxism was a fundamental revolution in views on social life, on the history of society. Lenin points out that by extending materialism to the domain of social phenomena, Marx and Engels put an end to the views on society as a mechanical aggregate of individuals arising and changing accidentally, and for the first time placed sociology on a scientific footing. The materialist conception of history is the only scientific understanding of it; it is a synonym for social science[277].

Marxism-Leninism teaches that the source of social development must be sought not in the heads of people, not in good wishes, but in the conditions of the material life of

---

[276] *J. V. Stalin*, Problems of Leninism, 1952, p. 583.

[277] *See V. I. Lenin*, Coll. Works, vol. 1, 4th ed., pp. 124, 125.

society, in the laws of development of successive modes of production.

The laws of the development of society do not depend on the will and consciousness of people. They take shape in the very process of material production. "In the social production of their life," says Marx, "men enter into definite, necessary relations that are independent of their will—relations of production which correspond to a definite stage of development of their material productive forces"[278].

A change in the productive forces of society leads to a change in relations of production, and consequently, to a change in the entire mode of production. A change in the mode of production leads to a change in the whole of society.

Modern capitalist society emerged as a result of the lawful development of preceding modes of production. Crises, unemployment, imperialist wars—all these phenomena flow lawfully from the very nature of the capitalist mode of production itself. Capitalism, by the entire course of historical development, is doomed to perish and must inevitably be replaced everywhere by a historically more progressive, socialist mode of production.

The bourgeoisie makes desperate attempts to delay the lawful course of history. Bourgeois professors create theories of "regulated capitalism." Contrary to the objective laws of capitalist production, they invent various "sensible measures"

[278] *K. Marx*, A Contribution to the Critique of Political Economy, Gospolitizdat, 1951, p. 7.

with the aim of preventing crises that inevitably flow from the very nature of the capitalist mode of production itself. They propose introducing a system of planning alien to the very nature of capitalism.

In reality, no intervention by the bourgeois state is capable of changing the objective laws of the capitalist economy. The complete failure of attempts by certain bourgeois figures to "improve" the decaying capitalist system once again bears witness to the irrepressibility of the laws of social development and underscores their objective character. J. V. Stalin, in his report at the XVI Party Congress, spoke about such bourgeois figures who tried to "prevent" and even "eliminate" economic crises: "These gentlemen forget that economic crises are an inevitable result of capitalism"[279]. "...Bourgeois governments of all ranks and colors, bourgeois figures of all degrees and abilities—all without exception have tried to test their strength at 'preventing' and 'destroying' crises. But they have all suffered defeat. They suffered defeat because it is impossible to prevent or destroy economic crises while remaining within the framework of capitalism"[280].

Marxism-Leninism teaches that only a deep cognition of the objective laws of social development can serve as a condition for a successful struggle for the victory of a new social system. The creation of a science of the objective laws of social development gave the proletariat and its party a powerful theoretical weapon in its practical and political struggle. That is why Marxism, as the science of the laws of development of

---

[279] *J. V. Stalin*, Coll. Works, vol. 12, p. 243.
[280] *Ibid.*

nature and society, of the revolution of the oppressed and exploited masses, of the victory of socialism in all countries, and of the building of a communist society, meets with fierce hatred from the apologists of the reactionary bourgeoisie—modern bourgeois philosophers, sociologists, and economists.

Modern bourgeois reactionary philosophy, attempting to justify the capitalist order, denies the laws of social development, fiercely attacks the materialist understanding of history, and denies the very possibility of a science of the laws of social development.

Modern bourgeois sociologists intensely preach the impossibility of knowing the laws of social phenomena. They attempt to convince the masses of people that no such laws exist at all. The American reactionary sociologist Becker insists that the laws of society are artificially created by people, the "leaders of the state," and calls upon the people to support the aggressive, predatory policy of the rulers of Wall Street.

Denying the objective character of historical laws, turning the history of society into chaos and the result of arbitrary actions, bourgeois sociologists speak out against the conclusions of social science regarding the inevitable demise of capitalism. They develop mystical ideas about the decisive role of the individual psyche in social life. "It's not about economics, but about our psyche. Change your consciousness, and everything will change without any struggle," declare these reactionaries, declaring the struggle against capitalism to be a futile endeavor. All these idealist tricks of the lackeys of American-British imperialists, faithfully serving their masters, are aimed at undermining the will of the masses of people for the struggle

against capitalist slavery, for the struggle for peace, democracy, and socialism.

In modern bourgeois sociology, various "biological" views on social phenomena are acquiring wider and wider currency, serving as a pseudo-scientific basis for misanthropic racial "theories." J. V. Stalin says regarding racial "theory" that it is "as far from science as heaven is from earth..."[281] Racial "theory" served German fascists in their time in their predatory war against freedom-loving peoples. In our day, racist "theory" is intensely propagated in America and used for the ideological preparation of war against the Soviet Union and the countries of people's democracy. Racists openly praise the "exploits" of American troops in Korea who used bacteriological weapons, napalm bombs, and other means and methods of mass destruction of people.

Racism perverts the data of anthropology, ethnography, history, psychology, and biology; it denies the specificity of social phenomena and reduces all social phenomena to the purely biological nature of man. The American racist sociologist Winston claims, for example, that the division into classes in capitalist society is explained by heredity. In doing so, he uses Morganism-Mendelism to "prove" that immutable hereditary genes allegedly determine a person's belonging either to the racially full-fledged class of capitalists or to the racially inferior class of the proletariat. In reality, all these pseudo-scientific constructs about the allegedly biological—and therefore eternal—nature of the class division of society

[281] *J. V. Stalin*, Coll. Works, vol. 13, p. 296.

are the fabrications of obscurantists and have nothing in common with genuine science.

Marxism-Leninism teaches that the laws of social development cannot be reduced to any simpler laws, such as biological laws.

Biology is unable to provide an answer to the questions of why human society in certain epochs of development is a class society, what determines the content of human mental activity, what the causes of historical development are, etc. The answer to these questions is provided only by historical materialism, which sees the basis of historical development in the conditions of the material life of society, in the mode of production of material goods.

The materialist understanding of history radically rejects all idealist, reactionary constructs. Historical materialism, as opposed to all varieties of historical idealism, demands a concrete, historical approach to the study of social phenomena, and insists on a concrete investigation of the objective laws inherent in a given socio-economic formation.

The party of the proletariat in its practical activity relies on the objective laws of social development, on a concrete study of these laws in a given historical period; "...the practical activity of the party of the proletariat," teaches Comrade Stalin, "must be based not on the good wishes of 'outstanding individuals,' not on the requirements of 'reason,' 'universal morality,' etc., but on the laws of development of society and on the study of these laws"[282].

[282] *J. V. Stalin*, Problems of Leninism, 1952, p. 583.

The laws of the development of society are, above all, the laws of the development of production, the economic laws of the development of society.

Revealing the first feature of production—which consists in the fact that it is always in a state of change and development—Comrade Stalin shows that "the party of the proletariat, if it wishes to be a real party, must master, first of all, the knowledge of the laws of development of production, the knowledge of the laws of economic development of society.

Hence, in order not to make mistakes in policy, the party of the proletariat must proceed, both in drafting its program and in its practical activity, primarily from the laws of development of production, from the laws of economic development of society"[283].

Analyzing the laws of development of production, Comrade Stalin shows that "social production consists of two sides, which, for all their being inextricably linked with each other, nevertheless reflect two series of different relations: the relations of men to nature (productive forces) and the relations of men to one another in the process of production (relations of production). Only the presence of both sides of production gives us social production, regardless of whether we are speaking of the socialist system or of other social formations"[284].

The productive forces of society consist of the instruments of production and the people who carry out the production of

---

[283] *Ibid.*, p. 591.

[284] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 63.

material goods thanks to their production experience and labor skills.

In the process of production, people enter into definite relations that are independent of their will—relations of production. Relations of production include, as Comrade Stalin points out: forms of ownership of the means of production; the position of various social groups in production and their mutual relations stemming therefrom; and the forms of distribution of products entirely dependent on them. The productive forces of society are the most mobile and revolutionary element of production. Depending on changes in productive forces, people's relations of production and their economic relations change as well. The productive forces of society are not only the most revolutionary element of production, but also its determining element.

"Whatever the productive forces are," says Comrade Stalin, "such must be the relations of production"[285].

J. V. Stalin fully revealed the content and role of the economic law of the *obligatory correspondence of relations of production to the character of the productive forces*. By virtue of this law, a change in relations of production occurs, replacing old relations of production with new ones. Moreover, the specific nature of the development of relations of production, the dialectics of their development, lies in the fact that from playing the role of a brake on the productive forces (old relations of production), they move to the role of their chief engine (new relations of production), and from the role of the chief engine to the role of a brake on the productive forces.

---

[285] *J. V. Stalin*, Problems of Leninism, 1952, p. 593.

"...New relations of production," emphasizes Comrade Stalin, "are that chief and decisive force which actually determines the further, and moreover powerful, development of the productive forces, and without which the productive forces are doomed to stagnation, as is currently the case in capitalist countries"[286].

Such, in general outline, are the laws of development of productive forces and relations of production, comprehensively revealed by Comrade Stalin in his brilliant works.

Recognition of the objective laws of development of nature and society, which do not depend on the will of people, does not at all mean that people are powerless before these laws, or that the operation of particular laws of social development is absolutely unavoidable. "It has been proved," writes J. V. Stalin, "that society is not powerless in the face of laws, that society, having comprehended economic laws and relying on them, can limit their sphere of operation, utilize them in the interests of society and 'harness' them, as is the case with respect to the forces of nature and their laws..."[287]

In a class society, the utilization of particular laws has a class nature. The advanced classes of society utilize comprehended economic laws in the interests of social development. Reactionary classes resist this process.

The utilization of objective laws of social development occurs to one degree or another in all social formations. "In the epoch of the bourgeois revolution, for example, in France, the bourgeoisie utilized against feudalism the well-known law of

---

[286] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 61.
[287] *J. V. Stalin*, Economic Problems of Socialism in the USSR, p. 6.

the obligatory correspondence of relations of production to the character of the productive forces, overturned feudal relations of production, created new, bourgeois relations of production, and brought these relations of production into line with the character of the productive forces that had grown in the womb of the feudal system. The bourgeoisie did this not by virtue of its special abilities, but because it was vitally interested in it. The feudals resisted this process not out of sheer stupidity, but because they were vitally interested in preventing the realization of this law."

The same must be said regarding the socialist revolution in our country. The working class utilized the law of the obligatory correspondence of relations of production to the character of the productive forces, overturned bourgeois relations of production, created new, socialist relations of production, and brought them into correspondence with the character of the productive forces. It was able to do this not by virtue of its special abilities, but because it was vitally interested in this matter. The bourgeoisie—which from an advanced force at the dawn of the bourgeois revolution had already managed to turn into a counter-revolutionary force—resisted in every way the implementation of this law in practice; it resisted not out of its own disorganization, and not because the spontaneous character of economic processes pushed it to resist, but primarily because it was vitally interested against bringing this law into life[288].

[288] *J. V. Stalin*, Economic Problems of Socialism in the USSR, pp. 48–49.

Objective laws of social development, the foundation of which lies in the conditions of the material life of society, exist under the socialist social system as well. Like all socio-economic formations, the socialist social system develops on the basis of objective economic laws, which no one has the power to create or abolish.

Knowledge of the laws of social development and knowledge of economic laws arm Soviet people with unshakeable confidence in the struggle for building a classless, communist society.

In his work *Economic Problems of Socialism in the USSR*, J. V. Stalin formulated the most important economic laws of the socialist mode of production, such as the basic economic law of socialism, the law of balanced (proportional) development of the national economy, and others. On the basis of an analysis of the objective conditions and laws of the development of socialism in the USSR, Comrade Stalin outlined a comprehensive program of measures necessary for the transition from socialism to communism.

Relying on the basic economic law of socialism discovered by Comrade Stalin, and fulfilling the requirements of this law, the Soviet people, led by the Communist Party of the Soviet Union, are successfully solving the great historical task of building a communist society through a gradual transition from socialism to communism. The 19th Congress of the Communist Party of the Soviet Union, in its directives for the Fifth Five-Year Plan, outlined concrete paths for achieving the continuous growth of all social production with the aim of ensuring the maximum satisfaction of the constantly growing

material and cultural needs of the Soviet people in the current five-year period.

In our days, as the struggle of the peoples of the world against obsolete capitalist orders intensifies, the Leninist-Stalinist doctrine on the laws governing the movement of society toward communism becomes the banner of the working people of capitalist countries in their struggle for peace, democracy, and socialism.

Knowledge of the objective laws of social development discovered by Marxism-Leninism arms the working people of all countries with a firm confidence in the inevitable demise of capitalism, and in the necessity of a decisive and organized struggle against historically obsolete capitalist orders.

ON THE PRIMACY OF MATTER AND THE SECONDARY NATURE OF CONSCIOUSNESS

★

P. T. BELOV

The Basic Question of Philosophy

The great and basic question of philosophy is the question of the relationship of thinking to being, of spirit to nature. In the history of philosophical teachings, there were and are a multitude of schools and sub-schools, a multitude of all kinds of theories that disagree with one another on a whole series of major and secondary problems of world outlook. Monists and dualists, materialists and idealists, dialecticians and metaphysicians, empiricists and rationalists, nominalists and realists, relativists and dogmatists, skeptics, agnostics, and proponents of the knowability of the world, and so on and so forth. In turn, each of these trends has within itself a multitude of shades and branches. To make sense of the abundance of philosophical trends would be extremely difficult, especially since proponents of reactionary philosophical theories deliberately invent "new" names (such as empiriocriticism, empiriomonism, pragmatism, positivism, personalism, etc.) in order to hide the decayed content of long-exposed idealist theory under the signboards of new "isms."

Identifying the main, basic question of philosophy provides an objective criterion for determining the essence and character

of every philosophical trend, allowing one to navigate the complex labyrinth of philosophical systems, theories, and views.

For the first time, a clear and precise scientific definition of this basic question of philosophy was given by the founders of Marxism. In his work *Ludwig Feuerbach and the End of Classical German Philosophy*, Engels wrote:

"The great basic question of all philosophy, especially of more recent philosophy, is that concerning the relation of thinking to being."[289]

"The answers which the philosophers gave to this question split them into two great camps. Those who asserted that spirit existed before nature and, therefore, in the last instance, assumed world creation in one form or another—and among the philosophers, for example, with Hegel, this creation of the world often assumes a still more intricate and impossible shape than in Christianity—comprised the camp of idealism. The others, who regarded nature as primary, belong to the various schools of materialism."[290]

Any attempts by reactionary philosophers to bypass this fundamental worldview question, as if to "rise" above the "one-sidedness" of materialism and idealism, any attempts by idealists to hide the essence of their views behind the screen of a new "ism" have always and everywhere led and lead only to

[289] *F. Engels*, Ludwig Feuerbach and the End of Classical German Philosophy, 1952, p. 15.
[290] *Ibid.*, p. 16.

new confusion, to new charlatanism, and ultimately to a more or less open admission of the existence of an afterlife.

"Behind the mass of new terminological artifices," says V. I. Lenin, "behind the litter of erudite scholasticism, we always found, without exception, *the two basic lines, the two basic trends in answering the philosophical questions*. Whether nature, matter, the physical, the external world should be taken as primary—and consciousness, spirit, sensation (—experience, according to the *widespread* terminology of our time), the psychical, etc., as secondary—that is the fundamental question which *in fact continues to divide philosophers into two great camps*."[291]

The Marxist-Leninist solution to the basic question of philosophy is absolutely clear, categorical, and permits no deviations from materialism. An exhaustive formulation of this solution is given by Comrade Stalin in his brilliant work *On Dialectical and Historical Materialism*.

"*In opposition to idealism*," points out J. V. Stalin, "which asserts that only our consciousness really exists; that the material world, being, nature, exists only in our consciousness, in our sensations, ideas and concepts—Marxist philosophical materialism holds that matter, nature, being, is an objective reality existing outside and independent of our consciousness; that matter is primary, since it is the source of sensations, ideas, consciousness, and that consciousness is secondary, derivative, since it is a reflection of matter, a reflection of being; that thought is a product of matter which has reached a high degree

[291] *V. I. Lenin*, Coll. Works, vol. 14, 4th ed., p. 321.

of perfection in its development, namely, a product of the brain, and the brain is the organ of thought; and that therefore one cannot separate thought from matter without committing a grave error."[292]

The idealist answer to the basic question of philosophy is directly opposed both to science and to common sense, and merges with the dogmas of religion. Some idealists (Plato, Hegel, Berkeley, theologians of all religions, etc.) appeal directly without any circumlocution to the idea of God, a supernatural, mystical principle. Other representatives of idealism (Machists, pragmatists, semanticists, and others and others) arrive at the same propositions of religion through convoluted gnoseological reasoning. Thus, rejecting any supposedly "extra-experiential" postulates and recognizing as real only the consciousness of the philosophizing subject itself, they inevitably arrive at solipsism, i. e., at the denial of the real existence of the entire surrounding world, the existence of anything at all except the consciousness of the philosophizing subject. And coming to this dead end, they inevitably appeal to the "saving" idea of a deity, in whose consciousness they dissolve the whole world and human individual consciousness with all its contradictions.

However idealist theories may differ among themselves, there never was and is no essential difference between them.

V. I. Lenin points out that the whole so-called difference between idealist schools boils down merely to the fact that "a very simple or very complex philosophical idealism takes as its

[292] *J. V. Stalin*, Problems of Leninism, 1952, p. 581.

basis: very simple, if it comes down openly to solipsism (*I* exist, the whole world is only *my* sensation); very complex, if instead of the thought, representation, sensation of a living human being a dead abstraction is taken: nobody's thought, nobody's representation, nobody's sensation, thought in general (the absolute idea, the universal will, etc.), sensation as an indefinite 'element,' 'psychical,' substituted under the whole of physical nature, etc., etc. Thousands of shades are possible here between the varieties of philosophical idealism, and it is always possible to create a thousand and first shade, and to the author of such a thousand and first system (e.g., empiriomonism) its difference from the rest may seem important. From the standpoint of materialism these differences are absolutely essential."[293]

Idealists of all times and all countries have always asserted and continue to assert one and the same thing, recognizing consciousness, spirit, idea as the primary basis of all that exists, while declaring material bodies and all infinite nature, reality, as secondary, derived from consciousness.

Every sensible person not versed in the "subtleties" of idealist philosophy, upon encountering statements of this kind from idealists, is bewildered: what nonsense is this, how can any sane person deny the reality of the existence of the surrounding external world and the whole universe? And those who are bewildered are completely right: idealist ravings differ little from the ravings of a madman. In this respect, V. I. Lenin

[293] *V. I. Lenin*, Coll. Works, vol. 14, 4th ed., p. 255.

compares idealists to the inhabitants of "yellow houses" (i. e., psychiatric hospitals).

However, idealism is not simply nonsense, otherwise it would not have persisted for millennia in human heads. Idealism has its theoretical-cognitive (gnoseological) roots and its class, social roots. It is no coincidence that many representatives of bourgeois science, including natural scientists, find themselves in the nets of religion and idealism. It is no coincidence that millions upon millions of working people in capitalist countries continue to remain religious people; and religion is the elder sister of idealism, a variety of the idealist worldview.

Gnoseological roots of idealism lie in the contradictory nature of the relationships between the subject (consciousness) and the object (being).

"The approach of the mind (human) to an individual thing," says V. I. Lenin, "the taking of a copy (= concept) of it *is not* a simple, direct, mirror-dead act, *but a complex, split, zigzagging one, which includes* the possibility of the flight of fantasy from life; moreover: *the possibility of the transformation* (and, furthermore, an unnoticed, unperceived by man transformation) *of an abstract concept, idea, into a fantasy (in the final analysis = God)*. For even in the simplest generalization, in the most elementary general idea ('table' in general), *there is* a certain grain of *fantasy*."[294]

The reflection of things in human consciousness is a complex, biologically and socially contradictory process. For example,

[294] *V. I. Lenin*, Philosophical Notebooks, 1947, p. 308.

one and the same object for sensory perception seems hot at one moment, cold at another, sweet at one moment, bitter at another, depending on conditions. The coloring of the very same bodies looks different under different conditions. Finally, only a limited circle of properties of things is accessible to human direct sensory perception. Hence the conclusion about the relativity of sensory data. The same relativity is inherent in logical cognition as well. The history of cognition is the history of the successive replacement of old, outdated representations and theories by other, more perfect ones.

All this, if one forgets the main thing—that no matter how contradictory the process of cognition may be, it reflects the real material world existing outside us and independently of us, and that our consciousness is only a copy, a photograph, a reflection of eternally existing and developing matter—if one forgets this main point, many philosophers, tangled in gnoseological contradictions, rush into the embrace of idealism.

Studying, for example, intra-atomic, intra-nuclear phenomena and other physical processes in which the deepest properties of matter are manifested, modern physicists subject these phenomena under study to complex mathematical processing. Mathematics in this case turns out to be a powerful lever in the hands of the physicist, helping to establish and express the laws of the microworld in formulas. However, becoming accustomed to operating primarily with mathematical calculations and lacking the opportunity to directly see atoms and even smaller units of matter, the physicist who does not stand firmly on the positions of philosophical materialism

"forgets" about objective nature behind mathematical symbols. As a result of such "forgetting," Machist physicists declare: matter has disappeared, only equations remain. It turns out that having begun to study nature, the physicist helpless in philosophy arrives at the denial of the real existence of nature, sliding into the abyss of idealism and mysticism.

Let us take another example—also from the history of natural science.

Investigating the nature of the living body, biologists at one time established that the cells of various species of animals and plants are characterized by their own special set of chromosomes—peculiar threads into which the nucleus of a biological cell is transformed at the moment of its division. And so, not knowing the true causes of heredity and its variability, metaphysical biologists purely deductively and speculatively concluded that the cause of heredity and variability is entirely embedded in the chromosome, that in the chromosome of a germ cell every concrete feature of the future individual is allegedly predetermined trait of the future individual. And since an organism has a multitude of concrete hereditary traits, these biologists began (again, purely speculatively) to divide the chromosome thread into separate pieces ("genes"), which were declared to be the determiners of heredity. But the development of the actual properties of living organisms does not fit into the contrived scheme of chromosome genetics; then the proponents of this theory—Weismannists-Morganists—began to cry out about the "unknowability of the gene," about the non-material nature of the "immortal" "substance of heredity," and so on and so forth.

Instead of subjecting the initial premises of the chromosome theory of heredity to a complete revision and listening to the voice of practice of the innovators of agricultural production, bourgeois geneticists, not knowing the real driving forces of the development of living organisms, rush into idealism and clericalism.

The main point here is that bourgeois scientists ignore the role of practice in the process of cognition, in solving all gnoseological contradictions. Encountering certain difficulties in science, in cognition, they approach their resolution only speculatively. And since without taking practice into account it is impossible to scientifically solve a single theoretical question, philosophers who ignore the role of practice in cognition become completely entangled in contradictions and sink up to their ears in the quagmire of idealism.

At the same time, one must remember the enormous oppression of religious traditions, which in the conditions of the bourgeois system weigh heavily on people's minds from childhood and constantly knock them off course toward mysticism.

"Human knowledge," says V. I. Lenin, "is not (respectively, does not follow) a straight line, but a curve line, which infinitely approaches a series of circles, a spiral. Any segment, fragment, piece of this curve line can be transformed (one-sidedly transformed) into an independent, complete, straight line, which (if one cannot see the wood for the trees) leads then into the mire, into clerical obscurantism (where it is *anchored* by the class interest of the ruling classes). Linearity and one-sidedness, woodenness and petrification, subjectivism and subjective blindness voila (there you have.—*Ed.*) the

gnoseological roots of idealism. And clerical obscurantism (= philosophical idealism), of course, has gnoseological roots, it is not groundless, it is a *barren flower*, undoubtedly, but a barren flower growing on the living tree of living, fruitful, true, powerful, omnipotent, objective, absolute human knowledge."[295]

The constant argument of idealists boils down to the reasoning that consciousness supposedly deals only with sensations and representations: whatever object is considered, for consciousness it is a sensation (perception of color, shape, hardness, weight, taste, sound, etc.). Turning to the external world, idealists say, consciousness does not go beyond the bounds of sensations, just as one cannot jump out of one's own skin.

However, no sensible person has ever for a moment doubted that human consciousness deals not simply with "sensations as such," but with the object world itself, with real things that exist outside consciousness and independently of consciousness, with phenomena.

And so, coming up against the dialectically contradictory relationship between object and subject, the idealist begins to guess: what could be there, "on the other side" of sensations? Some idealists (Kant) assert that "things-in-themselves" exist "there," acting upon us, but which are allegedly unknowable in principle. Others (for example, Fichte, Neo-Kantians, Machists) say: there is no such "thing-in-itself," a "thing-in-itself" is also a concept, and therefore, again, a "construction of

[295] *V. I. Lenin*, Philosophical Notebooks, 1947, p. 330.

the mind itself," of consciousness. Therefore, they claim, only consciousness really exists. All things are nothing more than a "complex of ideas" (Berkeley), a "complex of elements" (sensations) (Mach).

Idealists can in no way get out of the enchanted circle of sensations which they themselves have invented. But this "enchanted circle" is easily broken, the contradiction is resolved, if one takes into account the arguments of human practical activity, if the testimony of practice (everyday experience, industry, the experience of the struggle of revolutionary classes, the experience of social life as a whole) is placed at the basis of solving the fundamental question of philosophy: on the relation of thinking to being, of consciousness to nature.

In practice, people are convinced daily that sensations, representations, concepts (if they are scientific) do not fence off, but connect consciousness with the external, material world of things, that there are no "things-in-themselves" unknowable in principle, that with every new success of social production we learn more and deeper about the objective properties and regularities of the surrounding material world.

Take, for example, modern aviation technology. Every gram of metal in an airplane is both a plus, increasing the structural strength, and a minus, burdening the load of the machine, reducing its maneuverability. To what degree of precision must one know the aerodynamic properties of materials, engines used in aircraft construction, properties of air, in order to correctly calculate the maneuverability of machines with their speeds on the order of the speed of sound! And if aviation

technology moves forward in such rapid steps, it means our knowledge about things is reliable. It means sensations do not fence off consciousness from the external world, but connect with it; it means consciousness is not enclosed in an "enchanted circle" of sensations, but goes beyond the limits of this "circle" into the material world of things, which man cognizes, and having cognized, subjects to his own power.

The successes of the industry of synthetic chemistry, producing artificial rubber, silk, wool, dyes, organic compounds close to proteins; the successes of spectral analysis, radar, and radio engineering in general, the successes in studying intra-atomic phenomena up to the practical utilization of inexhaustible sources of intra-atomic energy—all these are irrefutable arguments for materialism, against idealism.

And after this, idealist cretins are still found who continue to assert that we supposedly do not know and cannot know anything about the existence of the material world, that "only consciousness is real." In his time, F. Engels, in refuting the arguments of agnosticism, cited as an example the discovery of alizarin in coal tar as a fact of outstanding importance, vividly proving the reliability of human knowledge. Against the background of the technical achievements of the mid-20th century, this fact may seem relatively elementary. However, from a fundamental gnoseological point of view, it remains in full force, pointing to the decisive role of experience, practice, and industry in resolving all the difficulties of cognition.

Besides gnoseological roots, idealism also has its *social, class roots*. Were it not for the class roots of idealism, this anti-scientific philosophy would not have lasted long.

The division of society into hostile classes, the separation of mental labor from physical labor and the antagonistic opposition of the former to the latter, the merciless oppression of exploitation—all this gave rise and gives rise to religious and idealist illusions about the rule of the "eternal" spirit over "mortal" nature, that consciousness is everything, while matter is nothing. The extreme entanglement of estate and class relations in pre-capitalist societies, the anarchy of production in the era of capitalism, the helplessness of people before the spontaneous laws of history created illusions about the unknowability of the external world. The conclusions of idealism, mysticism, and religion are advantageous to reactionary classes and serve dying capitalism. Therefore, everything in modern bourgeois society that stands for capitalism and against socialism feeds, supports, and fuels idealist fabrications.

It can be stated directly that in our time, in an age of exceptional successes of science, technology, and industry in mastering the laws of nature, in an age of the greatest successes of the revolutionary struggle of the working class for mastering the laws of social development, the class roots of idealism are the *main reasons* for the preservation of this anti-scientific, reactionary philosophy.

And it is no coincidence that of all the varieties of idealism, the most fashionable among the bourgeoisie now are trends of subjective idealism, which reject objective laws of nature and open the way for unbridled arbitrariness, lawlessness, and charlatanism. German imperialism developed its wild adventurous aggression under the banner of Nietzschean

voluntarism. The imperialists of the USA now undertake their adventures under the banner of pragmatism, logical positivism, semanticism—varieties of a specifically American philosophy of business that justifies any atrocities as long as they promise profits to Wall Street magnates.

The objective course of history inevitably leads to the demise of capitalism, to the inevitable victory of socialism worldwide. That is why the objective laws of reality so frighten the reactionary bourgeoisie and its ideologists. That is why they do not want to reckon with the objective laws of historical development and seek justification for their anti-popular actions in anti-scientific systems of philosophy. It is precisely for this reason that the imperialist bourgeoisie rushes into the embrace of idealism, and particularly subjective idealism.

Imperialist reaction shrinks from nothing. It attempts to rely directly on the obscurantism of the Middle Ages, resurrecting, for example, the shade of "Saint" Thomas (Aquinas), one of the chief Christian theologians of the 13th century, and forming the philosophical trend of neo-Thomism.

Such are the social, class roots of modern idealist theories. In doing so, however, one cannot fail to note the following. Striving through the propaganda of idealism, clericalism, and obscurantism to befuddle the working masses, the bourgeoisie at the same time befuddles itself, becoming completely mired in anti-scientific devilry and losing all criteria for its own orientation in the turbulent stream of modern events. Everyone knows into what abyss the Hitlerites led themselves by professing the theories of Nietzscheanism, the "myth of the 20th century," etc. The same fate awaits the American

imperialists as well. Desiring to entangle others, they themselves become entangled in the gloom of pragmatism, logical positivism, semanticism, etc., thereby accelerating their own demise and the collapse of the capitalist system as a whole.

Such is the fate of the dying reactionary forces of society that do not wish to voluntarily depart from the historical stage.

* *

*

The whole history of philosophy, starting from ancient Chinese and ancient Greek schools, is a history of the fiercest struggle between materialism and idealism, the line of Democritus and the line of Plato. In resolving the basic question of philosophy, Marxist philosophical materialism relies on the great traditions of the materialism of the past and continues these traditions. Mercilessly crushing idealism of all shades, Marx and Engels relied on Feuerbach, the French materialists of the 18th century, F. Bacon, ancient materialists, etc. Exposing Machism, V. I. Lenin in his brilliant work *Materialism and Empiriocriticism* refers to Democritus, Diderot, Feuerbach, Chernyshevsky, and other outstanding materialist philosophers and natural scientists of the past. V. I. Lenin advised to continue reprinting the best materialist and atheistic works of old materialists, for even today they have not lost their significance in the struggle against idealism and religion.

However, Marxist philosophical materialism is not a simple continuation of old materialism. Proceeding quite correctly in resolving the basic question of philosophy from the primacy of

matter and the secondary nature of consciousness, pre-Marxist materialists were at the same time generally metaphysical, contemplative materialists. In resolving the basic question of philosophy, they did not take into account the role of revolutionary-practical human activity. The relationship of consciousness to being usually presented itself to them as a purely contemplative (theoretical or sensory) relationship. Even if some of them spoke of the role of practice in cognition (partly Feuerbach and especially Chernyshevsky), they still lacked a materialist understanding of history for a scientific understanding of practice itself.

Criticizing the limitations of all old materialism and formulating the foundations of a scientific proletarian worldview, Marx wrote in his famous *Theses on Feuerbach*: "The chief defect of all hitherto existing materialism—that of Feuerbach included—is that the thing, reality, sensuousness, is conceived only in the form of the *object* or of *contemplation*, but not as *human sensuous activity, practice*..."[296]

Being idealists in the field of history, pre-Marxist materialists naturally could not give a scientific interpretation of the laws governing the emergence and development of human consciousness, and could not give a materialist solution to the question of the relationship of social consciousness to social being.

[296] *F. Engels*, Ludwig Feuerbach and the End of Classical German Philosophy, 1952, p. 54.

"The philosophers," Marx pointed out in conclusion of the *Theses on Feuerbach*, "have only *interpreted* the world in various ways; the point, however, is to *change* it."[297]

Therefore, Marxist philosophical materialism is not and could not be a simple continuation of old materialism.

Very many of the old materialists, for example, strayed either into hylozoism (i. e., attributing the property of sensation to all matter)[298], or into vulgar materialism. Vulgar materialists see no difference between consciousness as a property of matter and the remaining properties of substance, and regard consciousness as a peculiar evaporation, a secretional discharge produced by the brain. The errors of the old materialists were inevitable, as the old materialists were unable to scientifically resolve the problem of the generation of consciousness by matter.

Unlike them, Marxist philosophical materialism asserts that consciousness is a property not of all, but only of highly organized and specially organized matter. Consciousness is a property only of biologically organized living matter, a property that arises and develops in accordance with the emergence and perfection of living forms.

In his work *Anarchism or Socialism?*, J. V. Stalin points out: "Wrong is the idea that the ideal side, and consciousness in general, precedes in its development the development of the material side. Living beings did not yet exist, but so-called external, 'inanimate' nature already existed. The first living

---

297 *Ibid.*, p. 56.

298 Even G. V. Plekhanov paid tribute to such a point of view.

creature possessed no consciousness, it possessed only the property of *irritability* and the first rudiments of sensation. Then in animals the capacity for sensation gradually developed, slowly passing into *consciousness*, in accordance with the development of the structure of their organism and nervous system."[299]

Comrade Stalin criticizes as untenable the viewpoint of vulgar materialists who equate consciousness with matter. He writes: "...the idea that consciousness is a form of being by no means signifies that consciousness by its nature is the same as matter. Only vulgar materialists thought so (for example, Büchner and Moleschott), whose theories fundamentally contradict Marx's materialism and whom Engels rightly ridiculed in his *Ludwig Feuerbach*." [2]

Consciousness is a *special* property of matter, a property of *reflecting* external things and their interconnections in the thinking human brain. Social consciousness, in turn, is a product of social being.

Although not all nature possesses consciousness, this by no means signifies that the latter is an accidental property in nature. Generalizing the data of natural science and relying on them, Marxist philosophical materialism asserts that consciousness is a completely lawful and, under appropriate conditions, inevitable result of the development of forms of matter, for the *possibility* of sensation and consciousness is embedded in the very foundation of matter as its inherent potential property.

---

[299] *J. V. Stalin*, Coll. Works, vol. 1, p. 313. [2] *Ibid.*, p. 317.

Speaking of the eternal, invincible, and inexhaustible development of matter, of the emergence and disappearance of some of its forms and their replacement by other forms, including the possibility of the emergence and disappearance in infinite nature of living and thinking beings, Engels wrote: "...no matter how many millions of suns and earths arise and pass away; no matter how long a time may elapse before in a solar system and on only one planet the conditions for organic life are created; no matter how countless the organic beings must arise and perish before from their midst animals develop with a brain capable of thought, finding for a short span conditions suitable for life, only to be ruthlessly exterminated later—we have the certainty that matter remains eternally the same in all its transformations, that none of its attributes can ever be lost, and that therefore with the same iron necessity with which it will again exterminate on earth its highest creation—the thinking spirit—it must somewhere else and at another time produce it again."[300]

Marxist philosophical materialism flatly rejects the absurd fabrications of obscurantists about the "immortality of the soul," the "afterlife," etc., and, relying on the unshakeable data of science and practice, reveals the true laws governing the invincible generation of consciousness by matter—the laws of eternal transformations of some forms of matter into others, including the transformations of inanimate matter into living matter and vice versa.

[300] *F. Engels*, Dialectics of Nature, 1952, pp. 18–19.

In simple mineral bodies, of course, there is no irritability, no sensation. However, even here there are already possibilities which, under the condition of a qualitatively different organization of matter (a living body), give rise to biological forms of reflection of the external world. Where living protein arises, the property of irritability, and then sensation, naturally and inevitably arises.

The same must be said regarding the emergence of human consciousness. Compared to the mental abilities of even higher animals, it represents a qualitatively new phenomenon of a higher order, which in the animal world does not exist. But its emergence is based on those preparatory biological prerequisites that take shape in the prolonged natural-historical progress of animal species and their higher nervous organization.

Consciousness is a property of matter. "The opposition of matter and consciousness," pointed out V. I. Lenin, "has absolute significance only within the bounds of a very limited area: in this case exclusively within the bounds of the fundamental gnoseological question of what to recognize as primary and what as secondary. Beyond these limits, the relativity of this opposition is beyond doubt."[301]

This same idea is emphasized by J. V. Stalin in his work *Anarchism or Socialism?*, speaking of unified and indivisible nature expressed in two forms—material and ideal.

[301] *V. I. Lenin*, Coll. Works, vol. 14, 4th ed., pp. 134–135.

In *Philosophical Notebooks*, V. I. Lenin notes again that "the difference of the ideal from the material is also not unconditional, not excessive."[302]

Beyond the bounds of the fundamental gnoseological question, the material and the ideal act as different forms of manifestation of unified and indivisible nature. Human consciousness exists in reality. It develops historically in space and time through millions and millions of minds replacing one another through generations of people. The consciousness of an individual person is just as accessible to natural-scientific investigation as any other property of moving matter. The great merit of Ivan Petrovich Pavlov consists precisely in the fact that he was the first in the history of science to discover and develop an objective (natural-scientific) method for studying psychical phenomena.

However, having said that consciousness develops not only in time, but also in space, one must not draw an equals sign between consciousness and matter, as vulgar materialists do.

The point concerns only a critique of the notorious proposition of idealists (Kant, Hegel, Machists, etc.) that consciousness is an "atemporal" and "aspacial" category. In general, the relationship of matter and its properties to space and time cannot be imagined in a simplified, Newtonian manner. That too would be a concession to vulgar, mechanistic materialism.

Consciousness exists on Earth, but it does not exist on the Moon, nor on red-hot stars. Is this not a relationship to space!

---

302 *V. I. Lenin*, Philosophical Notebooks, 1947, p. 88.

The claims of the Machist Avenarius to the right to arbitrarily "add thought" to consciousness everywhere were called obscurantism by V. I. Lenin. If, says Engels in the quote cited above, matter will someday exterminate on Earth its highest creation—the thinking spirit, it will again and inevitably produce it somewhere else and at another time. Only in this sense do we speak in this case of the development of consciousness in space and time.

Therefore, one cannot accept as correct the sweeping (and essentially unclarifying) statement that consciousness is something atemporal and aspacial. In the works of the classics of Marxism-Leninism, such a characterization of consciousness is nowhere to be found. And this is no accident, for all forms of matter and resolutely all its properties—including consciousness—exist and develop in time and space, since matter itself exists and can exist only in time and space.

At the same time, consciousness is certainly not some kind of "secretion," "juice," "evaporation," as vulgar materialists think. What then is the fundamental difference between matter and consciousness? Briefly speaking, it consists in the following.

Any substance, any other form of matter has its objective content within itself—molecular, atomic, or electromagnetic content, which can, so to speak, be measured and weighed. On the contrary, the objective content of consciousness is found not in consciousness itself, but outside it—in the external world reflected by consciousness. Consciousness, therefore, has no other content than that which is external to it, independent of it, and reflected by it from the material world.

V. I. Lenin criticized Joseph Dietzgen on this question not at all for recognizing consciousness as a material property, but because Dietzgen, with his clumsy expressions, blurred the difference between the material and the ideal on the plane of the fundamental epistemological question, claiming that the difference between a table in consciousness and a table in reality is no greater than the difference between two real tables. This was already a direct concession to the idealists, who strive precisely to pass off the products of consciousness itself as reality.

In fact, the representation of an object and the object itself are not two equally real objects. The representation of an object is merely a mental image of a real object; it is not material, but ideal. The objective content of thought is contained not within itself, but outside it.

Of course, consciousness is connected, coupled with certain biochemical and physiological (including electromagnetic) movements in the brain. Modern physiology has established, for example, that at the moment when human consciousness is not strained, being in a calm (resting) state, uniform electromagnetic oscillations occur in the brain (alpha waves = about 10 oscillations per second). But as soon as intense mental work begins, say, a person sets about solving a mathematical problem, extraordinarily fast electromagnetic oscillations are excited in the brain. Work on the task stops — these rapid wave oscillations stop. The uniform alpha oscillation is restored again.

It turns out that thinking is connected with certain tensions of an electromagnetic nature occurring in brain tissue. However,

the *content* of thinking in this case is not these electronic movements in the brain. They are only a condition for the process of thinking. The content of the latter is that task which the brain was solving. And in a given mathematical task, forms of relationships between things and phenomena located *outside consciousness, in the world external to consciousness*, were reflected.

In this lies the specificity of consciousness as a property of matter. But this difference between matter and consciousness is not absolute, not excessive. It is permissible and obligatory only within the limits of formulating the fundamental philosophical question. Beyond these limits, matter as primary and consciousness as secondary act as two sides of a single and indivisible nature.

V. I. Lenin points out that “the picture of the world is a picture of how matter moves and how *matter thinks*.”

Scientific Data on the Emergence of Consciousness as a Property of Matter

For idealists, the problem of the origin of consciousness remains a fundamentally unsolvable enigma. Idealists are unable not only to solve, but even to state this question correctly. Evading the direct formulation of the question regarding the relation of thinking to being, modern idealists in their philosophical theories "desire" to remain only "within the limits of experience" (meaning, of course, subjectively-idealistically understood experience, as a stream of sensations, representations, etc.). Therefore, regarding the origin of consciousness, they can say virtually nothing except a hollow

tautology that consciousness is consciousness (unless, of course, one counts a more or less veiled appeal to the supernatural). Such is the "depth" of their "wisdom."

Conversely, materialism, and in particular Marxist philosophical materialism, directly addresses advanced natural science on this question, which studies in detail and experimentally the deepest properties of inorganic and organic matter.

What specifically does 20th-century science tell us about the generation of consciousness by matter? In modern natural science, this question divides into two independent, yet most closely interconnected problems: 1) the problem of the origin of the living from the non-living, and 2) the problem of the emergence and development of the properties of irritability, sensation, and consciousness in proportion to the progressive development of biological forms. Indeed, if sensation, consciousness in general is a property only of highly and specially organized matter (living matter), then the question of the generation of consciousness by matter primarily rests upon the question of the origin of the living from the non-living, the question of the origin of life.

With rightful pride, we must immediately emphasize that in our time, Russian and Soviet science—with its greatest discoveries of the second half of the 19th and first half of the 20th centuries, which laid the foundation for a number of new branches in natural science and raised natural science as a whole to a new stage—gives the most data for the practical, scientific-natural resolution of the centuries-old problem of the

origin of life and the transformation of non-sensing matter into sensing matter.

Continuing the line of Mendeleev and Butlerov, Soviet scientists have advanced far in studying the chemistry of organic bodies, interrelationships, and mutual transitions between organic and inorganic nature. The discoveries of V. I. Vernadsky in the field of geobiochemistry, the discoveries of N. D. Zelinsky and his students, A. N. Bakh, A. I. Oparin, and their students, and the achievements of scientific research institutes in Moscow, Leningrad, and other scientific centers in the field of protein chemistry, biochemistry, up to the artificial synthesis of proteins (from resynthesis products) displaying certain biological properties (e.g., immune and enzymatic properties)—all this sheds a bright light on the problem of the origin of the living from the non-living.

In turn, the great achievements of Russian, Soviet materialist biology—the works of K. A. Timiryazev, I. V. Michurin, N. F. Gamaleya, O. B. Lepeshinskaya, T. D. Lysenko, and other prominent biologists and microbiologists, the works of I. M. Sechenov, I. P. Pavlov, and their followers—also irrefutably speak of the origin of sensing matter from non-sensing matter, confirming the steadfast propositions of Marxist philosophical materialism.

* * *

Toward resolving the question of the origin of the living from the non-living, and the essence of life as a specific biochemical material process, modern natural science approaches from two sides. Chemistry, geochemistry, and biochemistry—from the

point of view of analyzing the patterns of transformation of inorganic substances into organic ones, the patterns of synthesis of increasingly complex organic compounds, up to the formation of proteins (at a certain level of complexity of which the living arises); and from the point of view of elucidating the essence of initial biochemical reactions. Conversely, theoretical biology, cytology, and microbiology approach the same question from the point of view of studying living forms themselves, starting from the highest down to the lowest, most elementary manifestations of life. Thus, branches of modern natural science—some ascending from non-living nature to living, others descending from living forms to non-living nature—converge at the junction of the two, in studying the origin and essence of assimilation and dissimilation—the biological process of metabolism.

Summarizing the scientific data of his time, F. Engels wrote three-quarters of a century ago in *Anti-Dühring*:

> "*Life is the mode of existence of protein bodies*, and this mode of existence consists essentially in the constant self-renewal of the chemical constituents of these bodies."
>
> "Life — the mode of existence of a protein body — consists, therefore, primarily in that a protein body is at every given moment both itself and at the same time something else — and that this occurs not as the result of some process to which it is subjected from without, as happens with dead bodies. On the contrary, life, the metabolism

> occurring through nutrition and excretion, is a self-accomplishing process inherent, inborn to its bearer — protein, a process without which life cannot exist. And from this it follows that if chemistry ever succeeds in artificially producing protein, this latter must exhibit phenomena of life, even if the weakest."[303]

The subsequent development of advanced natural science wholly confirmed Engels' brilliant definition of the essence of life and his prediction regarding the possibility of the artificial synthesis of protein bodies, including those that will possess the first signs of the living.

Data from modern advanced science on the essence and origin of life can be briefly summarized as follows:

The living is not something accidental on Earth. The aggregate of all living beings on Earth—the *biosphere*—is a natural product of the geochemical evolution of our planet's surface. The biosphere continues to play an essential, exceptionally important role in all further geochemical processes of the Earth's crust, determining the character of rock formation, soil formation, atmospheric composition, and the general distribution of chemical elements in the upper layers of the crust, hydrosphere, and atmosphere.

> "Living organisms, from a geochemical point of view, are not an accidental fact in the chemical mechanism of the Earth's crust; they form its most

[303] F. Engels, *Anti-Dühring*, 1952, pp. 77–78.

> essential and inseparable part. They are inseparably linked with the inert matter of the Earth's crust, with minerals and rocks... Great biologists have long recognized the inseparable bond connecting an organism with its surrounding nature."[304]

Leaving aside certain undoubtedly erroneous philosophical conclusions permitted by the prominent Russian scientist and founder of geobiochemistry V. I. Vernadsky, it is necessary to emphasize with all firmness that his works on geochemistry and the biosphere contain exceptionally important scientific-natural generalizations and discoveries valuable for a materialist understanding of the origin of life on Earth.

The living is formed from the very same chemical elements that make up the rest, mineral part of nature.

The composition of an organism's living body includes almost all (including radioactive) chemical elements of Mendeleev's periodic system, some in larger, others in smaller proportions. But no matter how small the proportion of certain chemical elements in protoplasm quantitatively (their presence in organisms is detected only through spectral analysis), they nevertheless play an essential role in the vital activity of protein, and their absence causes the death of the organism.[305]

From a geochemical point of view, living matter, as V. I. Vernadsky said, is *oxygenated matter, rich in hydrogen and*

---

[304] V. I. Vernadsky, *Essays on Geochemistry*, Gosizdat, M.–L. 1927, p. 41.

[305] It can be noted, for example, that soils lacking a trace element such as copper cannot be used for growing cereals; soil containing no boron is unsuitable for sugar beet cultivation, etc.

carbon. However, the significance of carbon in organisms is determined not by its quantity, but by its exceptional chemical properties—granting unlimited possibilities for chemical association, which forms the backbone of all subsequent complexities in the development of organic molecules.

A living organism creates its body from substances of non-living matter. In the works of K. A. Timiryazev, it was shown how in the green leaf of a plant—this natural laboratory—the primary formation of organic matter occurs from inorganic origin, forming the basis of nutrition for all subsequent life forms on Earth. K. A. Timiryazev demonstrated that both organic photosynthesis and all other biochemical processes in organisms are strictly subordinate to the unshakeable laws of the universe: the laws of conservation and transformation of matter and energy.

> "Just as not a single atom of carbon," said K. A. Timiryazev, "is created by a plant, but enters it from the outside, so not a single unit of heat released by plant matter upon combustion is created by life, but is borrowed, in the final analysis, from the sun. The law of conservation of energy holds true in general over animal and plant organisms, explainingto us the connection between the activity of an organism and the expenditure of its matter."[306]

[306] K. A. Timiryazev, *Selected Works*, vol. II, M. 1948, pp. 341, 340.

Chemistry, biochemistry, and biology experimentally prove that in an organism there are no special mystical forces invented by idealists ("entelechy," "soul," "vital force," etc.) that supposedly "enliven" "inert matter." All properties of the living, including the deepest processes of biological metabolism, arise from the internal complexity and contradictoriness of living matter itself. Every organism is an historically formed concentration of external conditions. Organisms at all stages of their development evolve in an inseparable unity with these material conditions.

Before our very eyes, so to speak, an uninterrupted chemical interchange of substances occurs between living and non-living nature. Over a certain period of time, a complete renewal of the physical composition of the organism actually takes place. Chemical substances that formed the living body (and every molecule of living protein) die off and are removed from the organism, while new chemical compounds coming from the external environment, becoming the tissue of the organism, acquire all the properties of living matter.

> "Every living body," says Academician T. D. Lysenko, "builds itself from non-living material; in other words, from food, from the conditions of the external environment... A living body consists, as it were, of individual elements of the external environment converted into elements of the living body."[307]

[307] T. D. Lysenko, *Agrobiology*, 4th ed., 1948, pp. 459–460.

In this regard, it is important to emphasize that non-living matter, as it is assimilated by an organism and thus transformed into living matter, *not only fully reproduces all the properties of living matter in place of that which it replaces, but also generates new, higher biological properties beyond that*, due to which life progresses both in terms of stage development of individuals and in the general plan of phylogenesis.

K. A. Timiryazev, as a natural scientist, gives a definition of the essence of life, distinguishing the living from the non-living, fully confirming Engels' thought.

> "The main property characterizing organisms," wrote the great Russian materialist scientist, "distinguishing them from non-organisms, lies in the constant active exchange between their substance and the substance of the surrounding environment. The organism constantly receives substance, transforms it into its likeness (assimilates, incorporates), changes it again, and excretes it. The life of the simplest cell, a clump of protoplasm, the existence of an organism consists of these two transformations: reception and accumulation — excretion and expenditure of substance. On the contrary, the existence of a crystal is conceivable only in the absence of any transformations, in the absence of any exchange between its substance and the substances of the environment."[308]

[308] K. A. Timiryazev, *Selected Works*, vol. II, 1948, p. 334.

> "In a clump of protein substance, the entire diverse chemistry of a living body is potentially given."[309]

Smashing vitalists, neovitalists, and other idealists in science, K. A. Timiryazev proved with facts, based on colossal experimental material, that in the biochemistry of a living body there is nothing except matter, except "nature," developing according to the insurmountable laws of nature itself.

Banished from the domain of understanding primary physiological processes, idealists in biology attempted to transfer their artifices to the interpretation of the nature of heredity and its variability. However, idealism was utterly defeated on this battlefield as well.

In an intense struggle against idealistic, Weismannist-Morganist genetics, K. A. Timiryazev, I. V. Michurin, and T. D. Lysenko deeply and comprehensively proved that in an organism there is no supposedly immortal "substance of heredity" distinct from the body. The regularities of heredity and its variability also have a fully comprehensible, material nature, consisting entirely of interactions between the organism and the environment.

To seek some special "substance of heredity" in an organism is the same as seeking a "soul" or "vital force" independent of the organism's body.

The fact that, in reproducing, individuals reproduce *organisms like themselves* is determined not by supernatural or special "determinants of heredity," but by dialectical laws of

---

[309] Ibid., p. 371.

interconnection and interdependence of all parts of a living body—between atoms and their groups in a living protein molecule, between molecules in protoplasm and the cell, between cells in tissues, between tissues in organs, and organs in the organism.

Reproducing from a germ cell or a vegetative bud, as if regenerating, an organism unfolds all its potential properties in accordance with the law of interconnection and interdependence of molecules, cells, tissues, etc.

> "Figuratively speaking," writes Academician T. D. Lysenko, "the development of an organism is, as it were, the uncoiling from within of a spiral coiled in the previous generation."[310]

Such are the conclusions of modern advanced natural science, which consistently and materialistically interprets life as one of the forms of motion of matter.

Modern advanced natural science (astronomy, physics, chemistry, biology) has thoroughly exposed idealistic theories of the "eternity of life," "panspermia," etc. Life on Earth is of terrestrial origin, the result of an extremely prolonged natural synthesis of increasingly complex organic substances. Wherever life exists on other planets of the Solar System[311] or

---

[310] T. D. Lysenko, *Agrobiology*, 4th ed., 1948, p. 463.

[311] Regarding life on Mars, science already possesses fairly reliable data. Soviet scientists have created a new branch of natural science—astrobotany, which studies Martian flora. Hypotheses regarding the presence of life on Venus are also being put forward with increasing persistence.

on planets of other stars, it can everywhere only be the result of the development of matter on that given planet, for life is inseparable from the conditions of its existence and is conceivable only as a product of the development of those very conditions.

In Academician A. I. Oparin's book *The Origin of Life on Earth*, first published in 1936 and summarizing from the standpoint of materialism the achievements of science in the USSR and abroad, the main stages of possible natural organosynthesis were outlined, starting from the first carbide compounds to proteins capable of precipitating from solutions in the form of various colloidal deposits, which could then evolve into living matter. Of course, in the course of further developments in cosmogony, geology, chemistry, and biology, changes and refinements in scientific-natural representations regarding specific links in the overall picture of the original emergence of the living from the non-living are inevitable. But however individual scientific conclusions may change, one thing remains immutable—living, organic matter arose and proceeds from inorganic, non-living nature according to the laws of development of matter itself.

The emergence of life signified the greatest qualitative leap, a turning point in the development of matter on Earth. A sharp turn in the development of matter in this case consists, in the final analysis, in the fact that chemical transformation processes turn into biochemical ones, distinguished, strictly speaking, by a new type of chemical association and dissociation within the organic molecule itself.

A non-living chemical compound is a closed system, all valence and other bonds of which are usually satisfied and tied together. This gives the molecule stability and equilibrium. The stability of a non-living molecule and the stationarity of its chemical composition are achieved through its relative inertness toward surrounding bodies. (As soon as such a molecule enters into reactions, it alters its chemical composition, yielding another compound.)

Conversely, the stability of a living molecule is achieved by its continually carrying out the *self-renewal of its chemical composition* through the constant reception (assimilation) of new atoms and their groups from the external environment and the excretion of such outside (dissimilation). Just as the visible stability of the shape of a fountain jet or a candle flame is determined by the rapid passage of particles through these forms, so the relative stability and constancy of the chemical composition of a living protein molecule is achieved by an uninterrupted and lawful movement of specific chemical particles passing through it, captured from without and excreted outside. From this flows the observed sharp asymmetry of the living protein molecule, for from one, so to speak, end it constantly associates, and from the other—dissociates.

One cannot agree that living protoplasm is formed from non-living molecules. The essence of life—regular metabolism—determines the character of chemical bonds (association and dissociation) inside the living protein molecule itself. It would be more accurate to say that biological metabolism itself—the unity of assimilation and dissimilation—derives from a

qualitatively new type of chemical association and dissociation forming in the living protein molecule, as opposed to non-living chemical compounds.

The living protein molecule is an extremely complex chemical formation consisting of many tens of thousands of atoms, including most elements of Mendeleev's periodic system. According to modern data, the living protein molecule contains up to 50 thousand individual amino acid units. These amino acid units themselves are highly diverse. The molecular weight of such a chemical compound reaches 2–3 million. According to the theory of N. I. Gavrilov and N. D. Zelinsky, an extremely bulky protein molecule (macromolecule) consists of several less bulky, but in turn very complex units (micromolecules). Within such a structure, ever-new forms of chemical bonds arise, which, compared to original covalent and ionic bonds, are characterized by greater flexibility, instability, and mobility. As a result, such a molecular system ultimately acquires an exceptionally mobile, fluid character overall.

That is why protein molecules, like no other chemical compounds, possess the ability to associate into increasingly large complexes, both among themselves and with other organic and inorganic compounds. The physicochemical structure of such a substance possesses the properties of liquid crystals with all their inherent capacities for movement, growth, budding, and the formation of bulkier forms characteristic of crystalline compounds placed in an appropriate medium. Living protein acquires enzymatic activity, accelerating and self-regulating the course of biochemical processes.

The relative stability of the mobile system of a living molecule is maintained solely because, through a regular sequence of specific reactions, it constantly and instantaneously attaches new chemical substances to itself from one side, while constantly excreting them back out from the other.

Hence, the qualitative distinction of a living chemical formation, unlike a non-living one, further consists in the fact that living protein can maintain itself as such only to the extent that appropriate chemical materials and energy conditions (external environment) are present, necessary for the protein to continuously pass them through itself, thereby maintaining the relative constancy of elemental chemical composition and a specific energy level of its molecules.

Such is the qualitatively new type of chemical association and dissociation, the appearance of which in the history of chemical evolution on Earth signifies the transformation of non-living protein into living matter.

With the further complication of the internal structure of living matter (the emergence of precellular forms, the biological cell, multicellular organisms, etc.), biochemical metabolic processes grew more complex. An increasingly significant role was assumed by enzymatic and later neural regulation of these processes. But no matter how complex these processes became, and no matter how much the role of enzymes and the nervous system in the organism increased, the roots of the living trace back to the internal specificity of the chemical organization of the living protein molecule itself, causing its constant self-renewal.

If "living matter not having the form of a cell possesses the ability to metabolize, develops, grows, and reproduces,"[312] then undoubtedly the laws of assimilation and dissimilation are inherent in every molecule of such matter.

> "Living matter," says O. B. Lepeshinskaya, "begins with a protein molecule capable of such metabolism whereby this molecule, while preserving itself, develops, gives rise to new forms, grows, and reproduces."[313]

The outstanding discoveries of O. B. Lepeshinskaya in studying the role of non-cellular primary living matter in the organism convincingly demonstrate that life indeed begins with the protein molecule.

Particularly vivid evidence of this comes from Soviet scientific discoveries regarding viruses—these, apparently, most extreme forms of life standing on the boundary between the living and non-living. The smallest forms of viruses represent nothing more than individual protein molecules, and then aggregates of protein molecules, forming an entire spectrum of transitions to the world of bacteria and single-celled organisms.

> "Self-reproduction of viral particles," says prominent Soviet virologist K. S. Sukhov, "signifies their capacity for assimilation and is a quality fundamentally distinguishing them from bodies of non-living nature. At the same time, due

---

312 O. B. Lepeshinskaya, *The Cell: Its Life and Origin*, M. 1950, p. 26.

313 Ibid., p. 46.

> to the simplicity of their organization, viruses retain a number of properties bringing them extremely close to molecular substances. These include their ability to crystallize and their chemical reactivity."
>
> "At this stage of development of living matter," writes K. S. Sukhov further, "life turns out to be reversible; it can cease completely and resume depending on surrounding conditions."[314]

In other words, a viral protein molecule can obviously transition (depending on conditions) from one type of chemical association and dissociation of atoms—inherent to a living, open, and mobile system—to another type, inherent to an internally closed, stationary system of a non-living chemical compound. Such in nature are the natural transitions *from chemistry to biochemistry, from non-living forms of matter to living ones*, established by Soviet scientists.

Abundant factual material obtained by advanced 20th-century natural science comprehensively proves and confirms the truth of Marxist philosophical materialism regarding the unity of all forms of motion of matter, and the origin of living and sensing matter from non-living, non-sensing matter.

* * *

Defending materialism against the encroachments of Machists and expanding Marxist worldview, V. I. Lenin in his work *Materialism and Empirio-criticism* pointed out that natural

---

[314] *Voprosy Filosofii* [Questions of Philosophy], No. 2, 1950, pp. 81–82.

science still faced the great task of concretely, experimentally clarifying how sensing matter arises from non-sensing matter.

> "...It remains to research and research," says V. I. Lenin, "how matter, supposedly non-sensing altogether, is connected with matter composed of the same atoms (or electrons) and yet possessing a clearly expressed capacity for sensation. Materialism clearly poses this as yet unsolved question and pushes toward its resolution, pushes toward further experimental research."[315]

Indeed, regarding the generation of consciousness by matter, the nature of sensation, and consciousness, natural science for a very long time could not provide a scientific answer. If astronomy since the time of Copernicus and Galileo ended pre-scientific Aristotelian-Ptolemaic views on the motion of celestial bodies, if chemistry since the time of Lomonosov and Dalton left behind alchemical and phlogiston theories, the science of mental phenomena up to Sechenov and Pavlov continued to languish at the level of pre-scientific natural-philosophical hypotheses.

> "One may rightly say," states I. P. Pavlov, "that the irrepressible march of natural science since the time of Galileo halts noticeably for the first time before the higher division of the brain, or, generally speaking, before the organ of the most complex relations of animals to the external world. And it

[315] V. I. Lenin, *Works*, vol. 14, 4th ed., p. 34.

> seemed that this was not without reason, that here indeed was a critical moment for natural science, as the brain, which in its highest formation—the human brain—created and creates natural science, itself becomes the object of this natural science."[316]

So long as natural scientists studied weightable, tangible forms of matter and movement, they acted in accordance with fully scientific methods of an objective, materialist approach to phenomena, subsuming them under fundamental laws of nature —the laws of conservation and transformation of matter and energy. But before the sphere of mental phenomena, natural scientists found themselves at a dead end and, abandoning scientific ground, turned to arbitrary natural-philosophical guesswork. I. P. Pavlov noted that "the physiologist at this point abandoned a firm scientific position... taking upon himself the ungrateful task of guessing about the internal world of animals."[317]

Of course, philosophical materialism resolved this question long ago, speaking of the primacy of matter and the secondariness of consciousness as a property of highly organized matter. But this was only in a general theoretical form. Natural science had not yet truly entered this field with its methods of experimental study, which idealism took advantage of, feeling almost like the master in this realm.

I. M. Sechenov was the first in science to point out to natural science the main paths for storming this last fortress for science

---

316 I. P. Pavlov, *Selected Works*, Gospolitizdat, 1951, p. 181.

317 Ibid., p. 183. (My italics.—*P. B.*).

— the brain. I. P. Pavlov carried out its conquest. Henceforth, after the great discoveries of I. P. Pavlov, the fundamental scientific-natural patterns in the realm of the mental life of animals and humans have also been clarified. The brain has been revealed as the material laboratory of spiritual life. "And this," said I. P. Pavlov, "is entirely our Russian, indisputable merit in world science, in general human thought."[318]

A crushing blow was dealt to all systems of "brainless philosophy" and "brainless psychology" by the great discoveries of Sechenov and Pavlov. Idealism was banished from its last refuge as well.

Pointing to the theoretical significance of the successes of physiological science, and bearing in mind primarily the significance of Pavlovian discoveries, V. M. Molotov, speaking at a Kremlin reception for participants of the 15th International Physiological Congress, stated:

> "Modern physiology, materialist at its core, penetrating ever deeper into the essence of life processes in the human organism, as well as in animals and plants, accomplishes, alongside the development of other sciences, a great liberating work for the intellectual development of man, freeing him from all this mold of mysticism and religious vestiges."[319]

---

[318] I. P. Pavlov, *Selected Works*, p. 48.
[319] *Pravda*, August 18, 1935.

Through his doctrine of higher nervous activity, I. P. Pavlov provided a deep natural-scientific substantiation for the core tenets of Marxist philosophical materialism regarding the primacy of matter and secondariness of consciousness, consciousness as a reflection of reality in the brain, and the brain as the material organ of consciousness.

Having accomplished a revolution in the science of mental phenomena, I. P. Pavlov achieved the following:

1. For the first time in the history of science, he proposed, substantiated, and developed an *objective*, i.e., natural-scientific, method for studying mental phenomena.

2. I. P. Pavlov discovered the *conditioned reflex*, thereby handing natural scientists a most powerful tool of experimental research into the laws of the psyche, an instrument for penetrating the secrets of brain function.

3. Analyzing the mechanism of reflection of the external world in the brain of animals and humans, I. P. Pavlov established *three stages, three levels* of organization and cognitive (reflective) capacity of neural tissue: a) the system of *unconditioned reflexes* (inherent to lower brain divisions and undifferentiated tissue in animals lacking a nervous system), characterized by *conductive linkage* (i.e., direct and unalterable connection based on direct contact of a living body with an external stimulus); b) the system of *conditioned-reflex activity* (cerebral hemispheres)—a *mobile locking linkage*, which Pavlov compared to a telephone connection through a switchboard central station; c) the *second signaling system*—the specifically human mechanism of reflecting reality in the

brain through articulate speech—by means of words, concepts, language, and thinking.

4. I. P. Pavlov revealed the structural organization and interaction of centers of higher nervous activity, as well as the main laws of internal movements in neural tissue: the interaction of excitation and inhibition, irradiation and concentration of excitation and inhibition, mutual induction of these processes, etc.

5. Uncovering the dialectic of internal processes of nervous activity, I. P. Pavlov explained the physiological nature of phenomena such as sleep, hypnosis, mental illness, and temperamental traits, thereby banishing idealism from this field of science as well.

6. Through his discoveries, I. P. Pavlov shed a bright light both on concrete pathways of transforming non-sensing matter into sensing matter and on pathways of forming biological prerequisites for the emergence of human consciousness.

7. Finally, through his brilliant tenets regarding the peculiarities of the *second signaling system*, I. P. Pavlov indicated pathways for detailed disclosure of the physiology of thinking, the physiological foundations of the interaction between language and thought.

Considering life as a natural product of the development of matter in the Earth's crust, I. P. Pavlov approached the explanation of decisively all manifestations of animal psychic life from the standpoint of the unity of the organism and the environment, from the standpoint of the progressive adaptation of organisms to their conditions of existence, from the

standpoint of the unity of onto- and phylogenesis in the development of living forms. I. P. Pavlov showed that all nervous activity, starting from the very first manifestations of protoplasm irritability, is subordinated to the function of adapting the organism to the conditions of existence and acts as a means of this adaptation.

"It is perfectly obvious," says I. P. Pavlov, "that the entire activity of the organism must be regular [law-governed]. If the animal were not, to use a biological term, precisely adapted to the external world, it would sooner or later cease to exist. If the animal, instead of heading towards food, turned away from it, instead of running from fire, threw itself into the fire, etc., etc., it would be destroyed in one way or another. It *must* react to the external world so that its entire responsive activity ensures its existence"[320].

These Pavlovian conclusions fully accord with the propositions of Marxist philosophical materialism regarding consciousness as a property of reflection.

Smashing the Machists, V. I. Lenin points out in his book *Materialism and Empirio-criticism* that only by reliably reflecting reality through the nervous system is an animal capable of ensuring a regular metabolism between the organism and the environment. And the fact that animals generally behave correctly in their living environment and adapt to their surroundings—this fact speaks in the most

[320] *I. P. Pavlov, Complete Works, vol. IV, ed. Academy of Sciences of the USSR, M. –L. 1951, p. 22.*

convincing manner that they generally correctly reflect the properties of the world of phenomena surrounding them.

Setting before natural scientists the task of investigating how the transition from non-sensing matter to sensing matter occurs, V. I. Lenin at the same time gave brilliant instructions as to precisely what direction scientists' thought should work in order to solve this problem. In two places in the book *Materialism and Empirio-criticism*, V. I. Lenin repeats the idea that it is impossible to assert that all matter possesses the property of sensation, but "in the foundation of the very structure of matter" it is logical to assume the existence of a property similar to sensation, akin to sensation—the property of reflection[321].

In Engels's works *Anti-Dühring* and *Dialectics of Nature*, there are completely clear indications regarding the fact that a qualitatively new property inherent only in *living* matter—the property of irritability, sensation—arises together with the transition from chemistry to biochemistry, i.e., together with the emergence of metabolism, and stems from the very process of assimilation and dissimilation.

Engels says: "From metabolism through nutrition and excretion —metabolism constituting the essential function of protein— and from the plasticity inherent in protein, stem all other simplest factors of life: irritability, which consists already in the interaction between protein and its food; contractility, revealed already at a very low stage in the absorption of food; capacity for growth, which at the lowest stage includes

[321] *See V. I. Lenin, Works, vol. 14, 4th ed., pp. 34, 81.*

reproduction by division; internal movement, without which neither absorption nor assimilation of food is possible"[322].

Investigating the physiology of irritability and sensation, I. P. Pavlov gave deep scientific confirmation of these ideas of Engels and Lenin. Pavlov establishes the general element that in this respect unites and connects sensing and non-sensing matter. The common factor, according to Pavlov, here consists in the fact that an inanimate body, just as a living one, exists as an individuality only as long as so long as the whole structure of its external and internal organization allows it to resist the influences exerted upon it by the surrounding world.

For in the world everything is interconnected, absolute void does not exist, and every body is directly or indirectly influenced, so to speak, by the rest of the world. And nevertheless, every body resists this enormous external influence for the time being.

Mechanical, chemical, acoustic, optical, and other *mirror-dead acts of reflection* of external influences by a body help it preserve its form until it decomposes or transforms into other forms.

So stands the matter with bodies of inanimate nature. All these properties of inanimate matter are also inherent in a living body, for it consists of the same atoms as physical bodies.

"What actually is in the fact of adaptation?" asks I. P. Pavlov and answers: "Nothing... except the exact connection of the

[322] *F. Engels, Anti-Dühring, 1952, p. 78.*

elements of a complex system among themselves and of their whole complex with the surrounding environment".

But this is, after all, completely the same thing that can be seen in any inanimate body. Take a complex chemical body. This body can exist as such only thanks to the balancing of individual atoms and their groups among themselves and of their whole complex with surrounding conditions.

Just so, the grandiose complexity of higher as well as lower organisms remains in existence as a whole only so long as all its components are finely and accurately connected and balanced among themselves and with surrounding conditions[323].

But living matter is constructed incomparably more complexly than inanimate body. Being extremely complex in its organization, living matter is constantly in a state of unceasing metabolism with the environment. In this non-stop process of assimilation and dissimilation, the inanimate transforms into the living, and vice versa.

In such relationships between the organism and the environment, in order to maintain existence and ensure regularity of metabolism, mechanical, chemical, optical, acoustic, thermal, etc. mirror-dead properties of reflecting external influences alone are insufficient. There is a need for the capacity of a selective biological attitude toward the surroundings from the perspective of what can and cannot be perceived, assimilated, or brought into contact. Thus, in the very process of developing metabolism, during the transition

[323] *I. P. Pavlov, Selected Works, 1951, pp. 135–136.*

from non-living protein to living, from chemistry to biochemistry, simple mechanical, thermal, acoustic, optical, etc. properties of reflection transform into phenomena of biological irritability. More precisely, the second arises on the basis of the first. And on the basis of irritability, as biological forms develop and become more complex, all other, higher forms of reflecting reality grow and arise—sensation, perception, representation, etc.

Emphasizing the *natural, material foundation* of higher nervous reactions of an animal, I. P. Pavlov wrote: "Let this reaction be extremely complex compared to the reaction of a lower animal and infinitely complex compared to the reaction of any inanimate object, but the essence of the matter remains the same"[324].

The idea that the causes of the emergence and development of the properties of irritability, sensation, etc. in living bodies are material causes was expressed very deeply in his time by I. M. Sechenov. Tracing the main stages of the progressive development of forms of sensitivity in living tissues, from the most elementary manifestations of the property of irritability—still evenly spread throughout the body—to the differentiation of special sense organs (smell, vision, hearing, etc.), I. M. Sechenov wrote:

"The environment in which an animal exists proves here to be a factor determining organization. Given an evenly distributed body sensitivity that excludes the possibility of its spatial locomotion, life is preserved only under the condition that the

[324] *I. P. Pavlov, Complete Works, vol. III, book 1, 1951, p. 65.*

animal is directly surrounded by an environment capable of supporting its existence.

The region of life here is of necessity extremely narrow. Conversely, the higher the sensory organization through which the animal orientates itself in time and space, the broader the sphere of possible vital encounters, the more diverse the environment acting on the organization, and the methods of possible adaptations. From this it already clearly follows that in the long chain of evolution of organisms, the complication of organization and the complication of the environment acting upon it are factors conditioning one another. This is easy to understand if one looks at life as the harmony of vital needs with environmental conditions: the greater the needs, i.e., the higher the organization, the greater the demand on the environment to satisfy these needs"[325].

Developing and deepening the ideas of I. M. Sechenov cited here, I. P. Pavlov revealed the concrete mechanism of the progressive development of nervous activity, the mechanism of forming an increasingly complex psychic life in animals, up to the higher monkeys [apes]. This mechanism is the transformation of conditioned reflexes into unconditioned ones.

I. P. Pavlov established that besides permanent (inborn) reflex reactions of the organism, tracing their roots to protoplasmic irritability linked to the biochemical process of metabolism caused by direct contact of a living body with a stimulus, animals with a more complex nervous system are capable of

[325] *I. M. Sechenov, Selected Philosophical and Psychological Works, Gospolitizdat, 1947, pp. 414–415.*

forming temporary reflexes. The organism is the finest membrane that catches and fixes the slightest changes in its surroundings. If a newly appearing stimulus (a new smell, sound, shape of an object, etc.) proves to be indifferent to the performance of vital functions, the animal very soon ceases to react to it, no matter how noticeable it might be in itself.

But if this new stimulus proves to be a signal of approaching food, danger, etc., the organism will soon develop a stereotypical, automatic responsive action—a reflex. These new reflexes, developed during the individual life of an animal, ensure for the organism an ever finer, more differentiated adaptation to the environment, expanding the range of the animal's vital activity.

I. P. Pavlov further indicates that if the direct connection of a given signal with the vital needs of the organism is maintained over a long series of generations, the temporary, conditioned reflex developed to it can gradually become so fixed that it will be transmitted by heredity, i.e., from being individual for each separate specimen, it will become general for the given species of animals—from conditioned, it will turn into unconditioned.

"It may be assumed," writes the great Russian physiologist, "that some of the newly formed conditioned reflexes later turn through heredity into unconditioned ones"[326].

"It is highly probable (and there are already individual factual indications of this)," he says in another work, "that new arising reflexes, while maintaining the same living conditions over a

[326] *I. P. Pavlov, Complete Works, vol. III, book 1, 1951, p. 273.*

series of successive generations, continuously pass into permanent ones. This would thus be one of the effective mechanisms of the development of the animal organism"[327].

Indeed, the very fact that, depending on the duration of training and other contributing factors, conditioned reflexes developed in a laboratory environment become stronger and stronger, speaks of the possibility of their sequential and increasingly deep consolidation, which can ultimately lead to a transition into an unconditioned connection.

The transformation of conditioned reflexes into unconditioned ones expands the base for forming more and more new conditioned reflexes, which can arise only on the base of unconditioned nervous reactions; and the expansion and deepening along *this path of nervous activity of the animal entails quantitative growth and qualitative complication of nervous tissue, the brain.*

Natural selection, relentlessly acting at all stages of life of individuals and species, forms and directs this process of complicating the nervous activity of animals.

Revealing the physiological basis of the progressive complication of higher nervous activity, I. P. Pavlov at the same time gave a materialistic interpretation of the mechanism of formation of increasingly complex *instincts* of animals, expelling idealism from this refuge as well.

I. P. Pavlov points out that "there is not a single essential feature distinguishing reflexes from instincts. First of all, there

[327] *I. P. Pavlov, Selected Works, 1951, p. 196.*

are a multitude of completely imperceptible transitions from ordinary reflexes to instincts"[328].

Comparing one feature of instincts and reflexes after another, I. P. Pavlov points out that reflexes can be no less complex, represent just as sequential a chain of animal actions, be similarly caused by excitations coming from inside the organism, and entirely encompass the vital activity of the organism, just like instincts. "Thus, both reflexes and instincts," says Pavlov, "are regular reactions of the organism to specific agents, and therefore there is no need to designate them with different words. The word 'reflex' has the advantage because from the very beginning it was endowed with a strict scientific meaning"[329].

The materialistic interpretation of animal instinctive behavior by I. P. Pavlov, his discoveries in the field of understanding the material causes of the development of animal instincts from lower to higher, allow us to understand the process of formation of the primary biological prerequisites for the emergence of human consciousness.

* * *

It would be a crude error to imagine the emergence of human consciousness as a process of simple improvement of animal instincts. Human consciousness is qualitatively distinct from animal consciousness; it arises and develops on a qualitatively new basis—on the basis of human labor activity, on the basis of social production.

---

[328] *I. P. Pavlov, Complete Works, vol. IV, 1951, p. 24.*
[329] *Ibid., p. 26.*

Therefore, natural science alone (physiology, biology in general) cannot scientifically solve the problem of the origin and development of thought. Historical materialism, the science of the history of society, the history of language, and other social sciences must come to the aid of natural science.

The classics of Marxism have shown that labor created man, that only thanks to labor did the humanization of a highly developed species of apes that once lived on earth take place.

In his article "The Part Played by Labour in the Transition from Ape to Man," Engels writes: "Labour is the source of all wealth, the political economists assert. It is indeed the source—next to nature, which supplies it with the material that it converts into wealth. But it is even infinitely more than this. It is the primary basic condition for all human existence, and this to such an extent that, in a sense, we have to say that labour created man himself"[330].

In the light of the discoveries of I. P. Pavlov, it is easy to imagine the concrete paths along which the biological prerequisites for the emergence of labor were formed, and accordingly, the prerequisites for the transformation of the instinctive consciousness of the ape into the logical thinking of man.

Engels notes that higher animals possess in embryo, in rudimentary form, all types of intellectual activity[331]. And indeed, one can cite a great many examples of quite sensible animal behavior—for instance, dogs, foxes, bears, beavers, and

---

[330] *F. Engels, Dialectics of Nature, 1952, p. 132.*

[331] *See F. Engels, Dialectics of Nature, 1952, pp. 140, 176.*

especially anthropoid apes. This, of course, does not mean that an equals sign should be placed between animal "consciousness" and human consciousness. It is merely a matter of general biological prerequisites of thought, of the fact that human consciousness is a natural-historical product of brain development—a development that took place while still in the animal kingdom.

Human consciousness is a *qualitatively new* form of reflection compared to the reflection of the external world in the animal brain. Not to mention abstract-logical thinking, which is characteristic only of man, even human sensations, perceptions, and representations are substantially different from those of animals, for these are *meaningful* representations, perceptions, and sensations.

This new leap in brain development occurred thanks to labor. Labor created man, labor gave birth to human consciousness.

The ape—the ancestor of man—led an instinctive life, at first using a stick, a stone, or a bone as a tool only occasionally, in the form provided by nature itself. Higher apes, as well as some other animals, even now sometimes use a stone or a stick as a tool. Many hundreds of thousands, perhaps millions of years had to pass before the accidental use of a tool transformed (according to the laws of transformation of conditioned reflexes into unconditioned ones) for a specific species of ape into a regular habit, became a *labor instinct* transmitted hereditarily from generation to generation.

This was not yet labor. This was an instinct. Marx strictly distinguishes genuine human labor activity from "the first

animal-like instinctive forms of labor"[332], for here the instinct was not yet conscious, and the "labor" activity of the ape differed little from the instinctive behavior of birds or beasts building a nest or a den.

Consequently, in the beginning, labor bore an instinctive character, obeying the laws of formation and development of purely animal reflexes, conditioned and unconditioned, the origin of which is materialistically explained by the teachings of I. P. Pavlov.

But once all subsequent life of this specific species of apes began to base itself more and more on instinctive-labor activity, on forms of instinctive labor, then little by little, reflecting in the brain billions and billions of times, this connection of the organism with surrounding nature *mediated through tools of labor* began to consolidate in consciousness through specific figures of already logical thinking.

As the ape—ancestor of man—over millions of years instinctively *grew together* with the tool of labor and was no longer able to manage without the tool, the *procurement* of the latter became as much a necessity for it as the procurement of food. One can imagine what *new* relations between organism and environment had to be reflected in the brain if the satisfaction of the direct need for food was henceforth mediated by preliminary "care," actions to procure (search, process, store) such objects that are not directly consumed themselves.

---

[332] *K. Marx, Capital, vol. I, 1951, p. 185.*

Thanks to labor, there occurred the isolation in consciousness of more and more new connections between phenomena that were previously hidden. These connections were reflected and fixed in the brain in the form of definite concepts and categories, which were stages of isolating the general, the regular, out of the seeming chaos of individual phenomena.

"Before man," notes V. I. Lenin, "is a net of nature's phenomena. Instinctive man, the savage, does not separate himself from nature. Conscious man separates [himself]; categories are stages of separation, i.e., of cognition of the world, nodal points in the net, helping to cognize it and master it"[333].

The beginning of human consciousness is the transformation of animal instinct into thought. "This beginning," say the founders of Marxism, "bears as much of an animal character as social life itself at this stage; it is a purely herd consciousness, and man is distinguished here from a ram only by the fact that consciousness replaces instinct for him, or that his instinct is conscious"[334].

Experiments of I. P. Pavlov and his followers on apes show all the absurdity and reactionism of the reasoning of proponents of idealistic Gestalt psychology in Europe and America, who since the time of Kant have insisted on the "indivisibility" of dog, cat, or ape "self-consciousness," and on the "independence" of animal mental capacities from their reflex nervous activity.

---

[333] *V. I. Lenin, Philosophical Notebooks, 1947, p. 67.*

[334] *K. Marx and F. Engels, Works, vol. IV, 1938, p. 21.*

Summarizing experimental observations on apes, I. P. Pavlov showed how precisely the *actions* of an ape in a specific setting, its real encounters with surrounding objects, evoke in its brain corresponding representations and associations of these representations, helping it orient itself in the setting and adapt to it.

Action itself, said I. P. Pavlov, gives rise to association in the animal's brain, and not vice versa. I. P. Pavlov mercilessly criticized the idealistic "arguments" of dualist psychologists, positivists, Kantians like Köhler, Koffka, Yerkes, Sherrington, and others, who believed that animal "consciousness" is born and develops independently of movements, from the development of the organism's body. Consistently applying the principle of determinism in the field of the science of the psyche, Pavlov established the material, physiological bases of the generation and development of consciousness.

"An ape," I. P. Pavlov told his students, "has associations relating to the interaction of mechanical objects of nature... if we ask what accounts for the success of the ape compared to other animals, why it is closer to man, it is precisely because it has hands, even four hands, i.e., more than you and I have. Thanks to this, it has the opportunity to enter into very complex relations with surrounding objects. That is why it forms a mass of associations that are absent in other animals. Correspondingly, since these motor associations must have their material substrate in the nervous system, in the brain, the cerebral hemispheres of apes developed more than in others,

and developed precisely in connection with the variety of motor functions"[335].

In the process of the origin and development of human consciousness, in the process of its emergence from the world of animal instinctive representations, alongside labor and on its basis, a huge role was played by language, articulate speech, which is the material shell of thought.

Engels says: "First labor, and then and together with it articulate speech, were the two most essential stimuli under the influence of which the brain of an ape gradually transformed into a human brain, which, for all its similarity to the ape's, far surpasses it in size and perfection"[336].

Smashing the anti-scientific idealistic views of supporters of Marr's theory, J. V. Stalin points out: "Sound language in the history of humanity is one of those forces that helped people separate from the animal world, unite into societies, develop their thinking, organize social production, conduct a successful struggle against the forces of nature, and reach the progress we have at the present time"[337].

Animals that content themselves only with what nature gives them in ready form, in their biological adaptation to the environment, are limited to the reflection in the brain of surrounding phenomena in their narrow and direct relationship to the organism. For this, unconditioned reflexes and

---

335 *I. P. Pavlov, Selected Works, 1951, p. 492.*

336 *F. Engels, Dialectics of Nature, 1952, p. 135.*

337 *J. V. Stalin, Marxism and Problems of Linguistics, 1952, p. 46.*

conditioned-reflex activity of the brain are sufficient. But for man, whose life is based on labor, on social production, reflection in the brain of direct relationships of the organism to natural bodies is insufficient. To carry out material production, it is additionally necessary to reflect in the brain all possible—direct and mediated—relations between natural bodies and phenomena themselves.

For animals in their mutual communication, the sounds they emit are sufficient. But for people, as their connections with nature and with each other expanded and deepened, the sounds an ape is capable of uttering were no longer enough. In the process of labor and labor communication, ape-men were forced to modulate these sounds more and more in order to express in them new and emerging properties and relations of things.

"Need," says Engels, "created its own organ: the undeveloped larynx of the ape was slowly but persistently transformed through modulation for ever more developed modulation, and the organs of the mouth gradually learned to pronounce one articulate sound after another"[338].

A sharp turn in the expansion and deepening of interactions between organism and environment due to the emergence of labor required from the brain a transition to a qualitatively new stage of analysis and synthesis—to the stage of logical thinking connected with speech, with signals through the word, concept.

[338] *F. Engels, Dialectics of Nature, 1952, p. 134.*

The teaching of I. P. Pavlov, consistently carrying out the principles of materialism in the analysis of psychic phenomena, allows us to reveal and understand those new physiological regularities that take shape in the brain during the transition to reflecting reality through signaling by words, articulate speech.

"In the developing animal world at the human stage," says the great physiologist, "an extraordinary addition occurred to the mechanisms of nervous activity. For an animal, reality is signaled almost exclusively only by irritations and their traces in the cerebral hemispheres, directly arriving in special cells of visual, auditory, and other receptors of the organism. This is what we also possess in ourselves as impressions, sensations, and representations of the surrounding external environment, both general-natural and our social, excluding the word, heard and seen. This is the *first signal system of reality*, common to us and animals.

But the word made up the *second, specially our own, signal system of reality*, being the signal of the first signals... However, it cannot be doubted that the basic laws established in the work of the first signal system must also govern the second, because this work is performed by the very same nervous tissue"[339].

Thus, three main stages, three primary phases are distinguished in the history of the development of psychic phenomena, in the development of the property of reflecting reality in living matter. Starting with the first signs of living matter irritability,

[339] *I. P. Pavlov, Selected Works, 1951, p. 234.*

a system of unconditioned reflex reactions to external excitations operates. The range of "overview" at this stage is extremely narrow, when the organism is capable of expediently reacting only to the direct influence of a vitally important agent and cannot rebuild its reflex apparatus in relation to changing settings. The second stage, which is a superstructure over unconditioned reflexes, is the system of conditioned-reflex nervous activity. Drastically widening the horizon of overview, it allowed the organism to expediently react to an infinite number of new stimuli only indirectly linked to the organism's needs, but nonetheless signaling the approach of important changes in the environment. And finally, as the highest product of the development of the brain's analytical capacity—the formation of the *second signal system*, reflecting the phenomena and regularities of the surrounding world through words, through articulate speech.

Developing this thought, I. P. Pavlov wrote: "In man, one may think, specially in his frontal lobes, which animals do not have to such an extent, another signaling system is added, signaling of the first system—speech, its basis or basal component being kinesthetic irritations of the speech organs.

By this, a new principle of nervous activity is introduced—abstraction and simultaneously generalization of the countless signals of the preceding system, in turn, again with analysis and synthesis of these new generalized signals—a principle conditioning limitless orientation in the surrounding world..."[340]

[340] *I. P. Pavlov, Selected Works, 1951, p. 472.*

At this new stage, truly limitless possibilities and capacities for reflecting reality in the thinking brain are opened. Unlike the stimuli (signals) of the first signal system, *every word reflects in itself a whole world of phenomena and signals about it*. "Every word (speech) already generalizes" (Lenin); every word is a generalized expression of whole groups, classes of objects, their properties, their relations among themselves and to man. Precisely through the word is a *concept* formed—this powerful tool of thought.

Thanks to the word, the brain overcomes the limited sphere of reflex-sensory reflection (which provides reflection only of individual phenomena) and enters the expanses of analyzing increasingly deep and complex connections, interweavings, and relations between things, penetrating into the hidden essence of things. The word, language, is a powerful means of developing human consciousness. Comrade Stalin points out:

"Whatever thoughts arise in a human head and whenever they arise, they can arise and exist only on the basis of language material, on the basis of language terms and phrases. Bare thoughts, free from language material, free from language 'natural matter'—do not exist. 'Language is the immediate reality of thought' (Marx). The reality of thought manifests itself in language. Only idealists can speak of thinking not bound to the 'natural matter' of language, of thinking without language"[341].

The role of the word and language in the history of the development of thought is analogous to the role of tools of

[341] *J. V. Stalin, Marxism and Problems of Linguistics, p. 39.*

labor in the history of the development of material production. Just as through the system of tools of labor the achievements of people's labor activity are consolidated and transmitted from generation to generation, due to which social production irresistibly progresses, so in words, in language, and through it, are deposited and are transmitted from generation to generation cognitive successes of thought.

Comrade Stalin writes: “Being directly connected with thinking, language registers and fixes in words and in the combination of words in sentences the results of the work of thought, the successes of man’s cognitive work and, thus, makes possible the exchange of thoughts in human society”[342]. Such are the main stages of the formation, the birth of consciousness as a product of highly organized matter, established by modern most advanced science, leaving no stone unturned from the fictions of idealism, rooted in the ignorant ideas of savages. Potentialities embedded in the very foundation of matter (the property of reflection), with the emergence of living matter, give biological irritability, initially in lower organisms still evenly spread throughout the entire body. With the progress of biological forms, more and more differentiated abilities of sensation and representation arise, until with the transition from monkey to human, human consciousness arises, relying in its development on labor and articulate speech.

[342] *J. V. Stalin, Marxism and Problems of Linguistics, p. 22.*

Social Being and Social Consciousness

Philosophy is the science of the fundamental, universal laws of the development not only of nature, but also of society. Therefore, the main and basic question of philosophy—about the relation of thinking to being—inevitably turns out to be the main question also in understanding the essence of social phenomena, acting here in the plane of the relationship between social consciousness and social being. Moreover, if in the interpretation of the fundamental laws of nature's development in the history of science many bright materialist theories had been put forward earlier, boldly smashing idealism and religion, then in the field of understanding the foundations of social development in pre-Marxist science, idealism held absolute sway— idealism held absolute sway.

Even the most advanced materialist thinkers of the past in matters of sociology remained in the positions of idealism, considering social consciousness as primary and social being as secondary. True, even before Marx—Engels, advanced scholars (philosophers, historians, economists) expressed individual conjectures heading in the direction of a materialist understanding of history. For example, French historians of the Restoration period (Guizot, Mignet, Thierry), English economists (A. Smith and D. Ricardo), in Russia—Herzen, Belinsky, Ogarev, and especially Chernyshevsky, Dobrolyubov, Pisarev. Thus, N. G. Chernyshevsky wrote that "intellectual development, like political and all other development, depends on the circumstances of economic life," that in history always "development moved with the successes of knowledge, which were predominantly conditioned by the

development of labor life and the means of material existence”[343]. D. I. Pisarev, continuing Chernyshevsky's line, stated that “the source of all our wealth, the basis of all our civilization and the true engine of world history consist, of course, in the physical labor of man, in the direct and immediate action of man on nature”[344]. Pisarev said that the decisive force of history “lay and lies always and everywhere —not in individuals, not in circles, not in literary works, but in general and predominantly—in the economic conditions of existence of the popular masses”[345]. But still, all these were only brilliant guesses. The general concept of the driving forces of history even among the great Russian materialists— ideologists of revolutionary democracy of the 19th century remained idealistic, for from their point of view intellectual progress determines by itself the development of all other sides of social life, including economics.

That immediately conspicuous fact that in society, unlike the elemental, blind forces of nature, people endowed with consciousness act, that every act of man is somehow or other conscious, passes through the head, closed to scholars the possibility of discovering the primary, decisive material conditions of society's life that do not depend on human consciousness. Therefore, as soon as the materialists of the past moved to the interpretation of social phenomena, they themselves every time slipped into positions of idealism,

---

[343] “*Notes by N. G. Chernyshevsky to the translation of 'Introduction to the History of the XIX Century' by Gervinus”. See N. G. Chernyshevsky, Collection of Articles, Documents and Reminiscences, M. 1928, pp. 29–30.*

[344] *D. I. Pisarev, Complete Works, vol. 4, ed. 5, 1910, p. 586.*

[345] *D. I. Pisarev, Complete Works, vol. 3, ed. 5, 1912, p. 171.*

asserting as if "opinion rules the world." Following in their time this formula of the French enlighteners of the 18th century, utopian socialists (Saint-Simon, Fourier, Owen, etc.) relied therefore on propaganda alone of socialist ideas, moreover addressed predominantly to the educated, wealthy strata of society, to achieve the elimination of exploitation and oppression of man by man and the transition to socialism. The insolvency of these idealistic dreams was proved by history itself. It must be said that the very character of social production, of the economy in pre-capitalist formations (patriarchal backwardness, routine, feudal fragmentation, etc.), the very structure of society of those historical epochs with its extremely tangled estate relationships obscured the real foundations of social life. Only capitalism, having bound together (through the market, through the social and technical division of labor) all branches of production into a single whole and simplified to the limit antagonistic class relations, exposed these real, material foundations of social life, allowing the ideologists of the proletariat—Marx and Engels—to transform the theory of society into a science. Only from the positions of the working class was it possible to understand the objective laws of history. To pre-Marxist scholars, their class limitation blinded their eyes to the real laws of social life. Only with the emergence of Marxism did an integral materialist teaching on society—*historical materialism*—appear for the first time in the history of thought. "Now",— says Engels in *Anti-Dühring*, — "idealism was driven from its last refuge, from the understanding of history; now the understanding of history became materialist, and a way was found to explain human consciousness from their being instead of the former

explanation of their being from their consciousness"[346]. Pointing out subsequently the essence of the revolution accomplished by Marx in views on history, Engels in his speech at Marx's graveside said: "Just as Darwin discovered the law of development of organic nature, so Marx discovered the law of development of human history: the simple fact, hitherto concealed by an overgrowth of ideology, that mankind must first of all eat, drink, have shelter and clothing, before it can pursue politics, science, art, religion, etc.; that therefore the production of the immediate material means of subsistence and consequently the degree of economic development attained by a given people or during a given epoch form the foundation upon which the state institutions, the legal conceptions, art, and even the ideas on religion, of the people concerned have been evolved, and in the light of which they must, therefore, be explained, instead of vice versa, as had hitherto been the case"[347]. In contrast to all pre-Marxist and anti-Marxist theories without exception, which are idealistic, historical materialism establishes the primacy of social being and the secondariness of social consciousness. Marx says: "The mode of production of material life conditions the social, political and intellectual life process in general. It is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness"[348]. Such is the iron consistency of Marxist philosophical materialism, consistently and comprehensively comprehensive, from natural phenomena to the highest manifestations of social life, treating

---

[346] *F. Engels, Anti-Dühring, 1952, p. 26.*
[347] *K. Marx and F. Engels, Selected Works, vol. II, 1948, p. 157.*
[348] *K. Marx and F. Engels, Selected Works, vol. I, 1948, p. 322.*

consciousness as a product of the development of material being, as a reflection of material being. With the emergence and development of the Marxist, materialist understanding of history, idealistic theories of society did not cease to exist.

Diverse representatives of the bourgeoisie preach to this day in every way various idealistic views on society, from openly clerical "teachings" to those masked by pseudo-socialist phraseology. Like the theories of open troubadours of the imperialist bourgeoisie, the theories of right-wing socialists, as opposed to the sincere errors of the old utopians, are also calculated precisely for deliberate, conscious deception of the working class, for the protection of the privileges of the monopoly bourgeoisie from the revolutionary pressure of the masses. Right-socialist ideologists and politicians are just as sworn enemies of the working class as fascist pogromists, for whom they every time clear the way to power and with whom they are constantly blocking against the true representatives of the interests of the working people. "Modern right social-democracy,— said Comrade Malenkov at the 19th Congress of the Communist Party of the Soviet Union,— in addition to its old role of servants of the national bourgeoisie, has turned into an agency of foreign American imperialism and performs its dirtiest assignments in preparing for war and in the struggle against its own peoples"[349]. Idealist sociologists in our time cannot openly deny the enormous role of the economic factor —industry, industrial progress, etc., in the life of society, in the rise and fall of states. Refining themselves in deliberate lies,

[349] *G. Malenkov, Report to the XIX Party Congress on the Work of the Central Committee of the CPSU(b), p. 23.*

they only try to prove that technical, economic progress itself in the final analysis is supposedly determined by consciousness, since, they say, technology itself, the economy is created by people moved by consciousness, aims, interest.

Idealists can in no way understand that *not all relations forming in society preliminary pass through human consciousness, that the decisive social relations—production relations—form outside of consciousness and are imposed on people with the coercive force of natural laws.* "Entering into intercourse, people,"— says V. I. Lenin,— "in all at all complex social formations—and especially in the capitalist social formation—do not realize what kind of social relations are thereby being formed, according to what laws they develop, etc. For example, a peasant, selling grain, enters into 'intercourse' with world grain producers on the world market, but he does not realize this, does not realize what social relations form from exchange. Social consciousness *reflects* social being—that is what the teaching of Marx consists of"[350]. For example, the proletarians under capitalism from generation to generation must go and sell their labor power to capitalists, work for capitalists, otherwise—death by starvation. It makes no difference whether they realize or do not realize their objective position in the entire system of production relations of capitalism,—it is all the same, as long as the instruments and other means of production are not taken away from the exploiters and turned into socialist property, the proletarians *are forced* to go into hire to the exploiters. Such is the independent-of-human-consciousness material, economic basis

[350] *V. I. Lenin, Works, vol. 14, ed. 4, p. 309.*

of the life of capitalist society, determining all other sides of life of this society. The material, i.e. independent-of-human-consciousness, character of social laws does not disappear with the victory of socialism over capitalism. Economic laws of socialism are also objective. Developing further the theory of Marxism-Leninism, J. V. Stalin in his brilliant work *Economic Problems of Socialism in the USSR* with all force emphasizes the circumstance that the laws of social development are **just as objective as the laws of nature.** "Here, too, as in natural science,— points out Comrade Stalin,— the laws of economic development are objective laws, reflecting processes of economic development which take place independently of the will of people. People may discover these laws, get to know them and, relying upon them, utilize them in the interests of society, impart a different direction to the destructive action of certain laws, restrict their sphere of action, give full scope to other laws which are clearing a way for themselves; but they cannot destroy them or create new economic laws"[351]. By conditions of the material life of society independent of the consciousness of people, historical materialism understands: *the surrounding nature, the geographical environment, then the growth and density of population, i.e., the existence and reproduction of generations of the people themselves who compose society, and, finally, as the chief and decisive element —the mode of social production, embodying within itself the unity of productive forces and production relations in society.* Geographical environment and biological reproduction of generations are material conditions fully sufficient only for

[351] *J. V. Stalin, Economic Problems of Socialism in the USSR, p. 5.*

biological development. Laws of development of animal and plant forms, laws of natural selection, properly speaking, are formed from the interaction of these conditions: the influence of the environment on organisms and the degree of fertility of a given species (which itself is formed in a long process of adaptation of organisms to the environment). But for man, purely animal conditions of development are insufficient, for people do not simply adapt to surrounding nature, but themselves adapt it to their needs, producing by means of instruments of production everything necessary for life: food, clothing, fuel, lighting, even oxygen for breathing where it is lacking. That is why precisely the mode of production of material goods is the main and decisive condition of the material life of society. That is why the degree of influence on society of a given geographical environment and the laws of population in different socio-economic formations are different, corresponding to differences in the mode of production. All the more precisely by the mode of production are determined other sides of life—state and legal, political, judicial, philosophical, religious and aesthetic views of people and their corresponding institutions. “In the social production of their life,— says Marx,— men enter into definite, necessary relations, which are independent of their will—production relations, which correspond to a definite stage of development of their material productive forces. The sum total of these relations of production constitutes the economic structure of society, the real basis, on which rises a legal and political superstructure and to which correspond definite forms of social

consciousness”[352]. Exposing the insolvency of idealistic theories of society, defending and developing further the materialist understanding of social phenomena, V. I. Lenin pointed out: “Hitherto sociologists had found it difficult to distinguish the important and the unimportant in the complex network of social phenomena (this is the root of subjectivism in sociology) and were unable to find an objective criterion for such a demarcation. Materialism provided a fully objective criterion by singling out 'production relations' as the structure of society, and making it possible to apply to these relations that general scientific criterion of repeatability, the applicability of which to sociology subjectivists denied. As long as they confined themselves to ideological social relations (i.e., such as, before taking shape, pass through consciousness... of people), they could not notice the repeatability and regularity in the social phenomena of various countries, and their science in the best case was only a description of these phenomena, a collection of raw material. Analysis of material social relations (i.e., such as take shape without passing through human consciousness: exchanging products, people enter into production relations without even realizing that there is a social production relation here)—the analysis of material social relations immediately made it possible to notice repeatability and regularity and to summarize the orders of different countries into one basic concept of 'social formation'”[353]. The practical significance of these unshakable scientific propositions of Marxist philosophical materialism, historical materialism for the working class, for

[352] *K. Marx and F. Engels, Selected Works, vol. I, 1948, p. 322.*
[353] *V. I. Lenin, Works, vol. 1, ed. 4, pp. 122–123.*

the Communist Party is immense. They provide a reliable theoretical foundation for the strategy and tactics of the revolutionary struggle for socialism and communism. Comrade Stalin points out that if nature, being, the material world is primary, and consciousness, thinking—secondary, derivative, if the material world represents objective reality existing independently of the consciousness of people, and consciousness is a reflection of this objective reality, then from this it follows that the material life of society, its being is also primary, and its spiritual life—secondary, derivative, that the material life of society is objective reality existing independently of the will of people, while the spiritual life of society is a reflection of this objective reality, a reflection of being. "Whatever is the being of society, whatever are the conditions of material life of society,— such are its ideas, theories, political views, political institutions"[354]. In its revolutionary activity, the Communist Party is consistently guided by these theoretical propositions. Organizing and raising the working class, and together with the working class the entire working people for the struggle against capitalism, for socialism and communism, the Communist Party proceeds first of all from the necessity of changing the material basis of society. Only by changing the material, economic basis of society, can one change the entire superstructure rising above it —political and other social views and their corresponding institutions. The development of the USSR in the post-October period at all stages shows the organic connection of the policy of the Communist Party and Soviet power with the

[354] *J. V. Stalin, Questions of Leninism, 1952, p. 585.*

fundamental Marxist philosophical proposition on the primacy of being and the secondariness of consciousness. The Soviet power carried out the expropriation of landlords and capitalists, steadfastly pursued a course towards strengthening the socialist economy, industrialization of the country, increasing the numbers of the working class, then carried out the liquidation of the kulaks as the last exploiting class and transformed the multi-million small-proprietor peasant economy into large-scale socialist collective-farm production. Thus, step by step, the *material, economic basis of socialism* was created and built in the USSR, upon which was erected and strengthened the socialist superstructure in the form of socialist social consciousness, in the form of Soviet political, legal, and cultural institutions corresponding to this consciousness and organizing the masses for the further struggle for communism. Taking then a course toward the gradual transition from socialism to communism, the Communist Party, following the directive of Comrade Stalin, again placed at the forefront the solution of *the main economic task*, i.e., the task of catching up with and surpassing the main capitalist countries from the point of view of the volume of industrial production calculated per capita. "We can do this, and we must do this,— points out J. V. Stalin.— Only in that case if we economically surpass the main capitalist countries can we count on our country being fully saturated with consumer goods, we will have an abundance of products, and we will get the opportunity to make the transition from the first phase of communism to its second phase"[355]. The Fourth Five-Year Plan for the restoration and development of

[355] *J. V. Stalin, Questions of Leninism, 1952, p. 618.*

the national economy of the USSR, its fulfillment and overfulfillment, the further powerful development of the socialist economy on the basis of the Fifth Five-Year Plan for the development of the national economy of the USSR for 1951–1955 demonstrate the practical implementation of the program of accelerated provision of material prerequisites for the transition from socialism to communism. Such is the connection between the initial philosophical proposition of Marxism-Leninism on the primacy of being and the secondariness of consciousness with the policy, strategy, and tactics of the struggle for communism. Right-wing socialists over the last 35 years have repeatedly come to power in a number of European countries. Three times the Labour Party in England took the reins of state government, for many years Germany was governed by German social-democrats, many times socialists formed governments in France, Austria, in Scandinavian countries. But, hiding behind the smokescreen of idealistic theories and confining themselves for show to individual top-level administrative or cultural changes, they never and nowhere touched by an iota the material, economic foundations of capitalism. As a result, their "rule" constantly turned out to be merely a bridge for the coming to power of fascist and other Black-Hundred pogromist parties. Now right-wing socialists help the ruling cliques of the bourgeoisie of their countries to harness peoples to the yoke of Wall Street monopolists. "Direct responsibility for this anti-national policy of the ruling circles is borne also by right-wing social-democrats, primarily the leadership of the Labour Party of England, the French Socialist Party, the Social-Democratic Party of West Germany, right-wing socialists of Sweden,

Denmark, Norway, Finland, Austria and other countries follow in the footsteps of their brethren and throughout the period after World War II fiercely fight against the peace-loving and democratic forces of peoples"[356]. Only Communist and Workers' Parties, steadfastly guided by Marxist-Leninist theory, proceed in their activity from the necessity of fundamental change primarily of the material basis of society. The seizure of power, strictly speaking, is needed by the working class so that, using the powerful weapon of unlimited state power, to break and destroy capitalist production relations, which constitute the basis of capitalism, and in their place to establish socialist relations of fellowship and mutual assistance of people free from exploitation, which constitute the basis of socialism. From the proposition of Marxist materialism on the primacy of social being and the secondariness of social consciousness there by no means follows an underestimation of the role, the significance of ideas in the development of society, which is characteristic of vulgar materialism,— the so-called "economic materialism" (Bernstein, Kautsky, P. Struve, etc.). Already at the origins of opportunism in the parties of the Second International, Engels exposed this kind of vulgarization of Marxism. In a number of letters (to J. Bloch, F. Mehring, C. Schmidt, etc.), Engels pointed out that the Marxist materialist understanding of history has nothing in common with economic fatalism. Engels wrote that "according to the materialist conception of history, the ultimately determining element in history is the production

[356] *G. Malenkov, Report to the XIX Party Congress on the Work of the Central Committee of the CPSU(b), p. 23.*

and reproduction of real life. More than this neither I nor Marx have ever asserted."

"The economic situation is the basis, but the various elements of the superstructure—political forms of the class struggle and its results—constitutions established by the victorious class after a successful battle, etc., legal forms, and even the reflexes of all these actual struggles in the brains of the participants, political, juristic, philosophical theories, religious views and their further development into systems of dogmas—also exercise their influence upon the course of the historical struggles and in many cases ponderably determine their *form*. There is an interaction of all these elements in which, amid all the endless multitude of contingencies... the economic movement finally asserts itself as necessary. Otherwise the application of the theory to any period of history would be easier than the solution of a simple equation of the first degree"[357]. Taking their cue from West-European opportunism, the enemies of Marxism in Russia—the so-called "legal Marxists", "economists", Mensheviks, and subsequently right-wing restorers of capitalism—also interpreted historical development only as an elemental growth of "productive forces", thereby reducing to zero the role of socialist consciousness and organization of the proletariat, the role of theory, the political party and leaders of the working class, denying in general the significance of the subjective factor in social development. Such pseudo-materialist views are no less anti-scientific and no less reactionary than the most rampant fictions of the subjective-idealist persuasion, for if the latter

[357] *K. Marx and F. Engels, Selected Works, vol. II, 1948, pp. 467–468.*

lead to adventurism in politics, then views denying the role of the subjective factor in history doom the working class to passivity, to submissiveness. In his work *Economic Problems of Socialism in the USSR*, Comrade Stalin, exposing and smashing idealist, subjectivist, voluntarist views on the laws of social development, at the same time exposes the fetishistic attitude toward objective laws of nature and society. One cannot create or "transform" objective laws of development, but people can, by knowing these objective regularities, master them, put their action into the service of society.

Historical materialism is equally hostile both to subjectivist, voluntarist theories and to theories of spontaneity and drift.

V. I. Lenin and J. V. Stalin at all stages of the revolutionary struggle waged a relentless struggle against this kind of reactionary theories in the Russian and international working-class movement. "Without revolutionary theory," said V. I. Lenin, "there can be no revolutionary movement"[358].

"Theory," points out Comrade Stalin, "is the experience of the working-class movement of all countries, taken in its general form. Of course, theory becomes directionless if it is not linked with revolutionary practice, just as practice becomes blind if it does not light its path with revolutionary theory. But theory can turn into a tremendous force of the working-class movement if it is formed in inseparable connection with revolutionary practice, for it, and it alone, can give the movement confidence, the power of orientation, and an understanding of the inner connection of surrounding events, for it, and it alone, can help

[358] V. I. Lenin, Works, vol. 5, ed. 4, p. 341.

practice to understand not only how and where classes are moving in the present, but also how and where they should move in the near future"[359].

Thus, explaining the origin, emergence of ideas, theories, views as a result of the development of social being, Marxist materialism not only does not deny their significance in social development, but, on the contrary, in every way emphasizes their role, their significance in history. Depending on whose class interests—reactionary or revolutionary—given theories and views reflect and defend, they play an active role in both cases, either hindering or accelerating historical development. Therefore, before the progressive forces of society there always stands the task—steadfastly to reveal and expose the essence of reactionary views and thereby open the way to the minds and hearts of millions for advanced theories and views that unleash the revolutionary initiative of the masses and organize them for the destruction of obsolete and the establishment of new social orders.

Comrade Stalin points out: "New social ideas and theories arise only after the development of the material life of society has set before society new tasks. But after they have arisen, they become a most serious force, facilitating the resolution of the new tasks set by the development of the material life of society, facilitating the forward movement of society. Here precisely is felt the tremendous organizing, mobilizing, and transforming significance of new ideas, new theories, new political views, new political institutions. New social ideas and theories arise

[359] J. V. Stalin, Works, vol. 6, pp. 88–89.

precisely because they are necessary for society, because without their organizing, mobilizing, and transforming work it is impossible to resolve the mature tasks of the development of the material life of society. Arising on the basis of new tasks set by the development of the material life of society, new social ideas and theories break their way through, become the property of the popular masses, mobilize them, organize them against the obsolete forces of society and facilitate, in this way, the overthrow of obsolete forces of society that hinder the development of the material life of society.

Thus, social ideas, theories, political institutions, arising on the basis of mature tasks of the development of the material life of society, of the development of social being,—themselves react afterwards upon social being, upon the material life of society, creating the conditions necessary in order to bring to completion the resolution of mature tasks of the material life of society and make possible its further development"[360].

Theory, said Marx, itself becomes a material force as soon as it grips the masses.

The history of the Russian working-class movement, the world-historical experience of the Communist Party of the Soviet Union, the history of building socialism and communism in the USSR show in practice the entire inexhaustible significance of these propositions of Marxist materialism for the practice of the revolutionary struggle.

[360] J. V. Stalin, Problems of Leninism, 1952, p. 586.

Lenin and the Leninists did not wait around until the gradual growth of capitalism would finally oust feudalism from Russian life, until the spontaneous working-class movement "by itself" would rise to the level of socialist consciousness; instead, smashing the "legal Marxists" and "economists", they created an independent political party of the working class—a Marxist party of a new type, boldly unfolded organizational and agitational work, introducing socialist consciousness into the working class, joining through the party the mass working-class movement with the theory of scientific socialism.

Lenin, Stalin, and the Bolsheviks did not wait around until the so-called liberal bourgeoisie would finish the political and economic transformation of Russia in a bourgeois manner, after which the proletariat would supposedly "by itself" see immediate prospects for a socialist revolution. No; smashing the tailist attitudes of the Mensheviks, Russian communists headed by Lenin and Stalin steered a course toward having the proletariat lead the popular, bourgeois-democratic revolution, steering a course toward growing the bourgeois-democratic revolution into a socialist one.

Enlightened and organized, educated and tempered in the spirit of Leninist-Stalinist revolutionary activity as the hegemon and leader of great popular forces in the revolutionary struggle, the Russian working class overthrew capitalism, built socialism on one-sixth of the globe, while the West European right-wing socialists—that paid agency of Wall Street in the working-class movement—still go on persuading workers to wait until capitalism "by itself", "peacefully" grows into socialism.

To the mournful lamentations of the Mensheviks that “Russia has not reached such a height of development of productive forces at which socialism is possible,” that Russia lacks literacy, “civilizedness” for the winning of socialism, Lenin replied: “To create socialism, you say, civilizedness is required. Very well. Well, why couldn't we first create such prerequisites of civilizedness among ourselves as the expulsion of the landlords and the expulsion of the Russian capitalists, and then already begin the movement toward socialism?”[361] Why not use such a powerful force as the proletarian state, the planned management of the national economy, for an immeasurably more accelerated development of the country's productive forces than under capitalism? Why not assist the accelerated economic and cultural development of the country by such a measure as the destruction of parasitic classes?

Barely two decades had passed after the Great October Socialist Revolution when the USSR was transformed from an economically backward agrarian country, under the state guidance of the Communist Party, into a powerful industrial power that, in terms of industrial development rates, left the most developed capitalist countries far behind, took first place in Europe in terms of total industrial output, transformed into a country of complete literacy, of the most advanced culture, into a country of victorious socialism, setting its course toward the gradual transition to the second phase of communism.

And conversely, over those same decades, Germany, for example, where reactionary ideology of German right-wing

[361] V. I. Lenin, Works, vol. 33, ed. 4, p. 439.

socialists temporarily prevailed first, and then the Hitlerites, once the most advanced, civilized country of Europe, fell to the level of fascist barbarism. And only the defeat of Hitlerite Germany by the Soviet Army opened for the German people the path to social and cultural rebirth.

The Communist Party constantly takes into account in its activity the great driving force of advanced social consciousness. Developing giant economic construction, the Communist Party simultaneously ever more broadly unfolds active work on overcoming the survivals of capitalism in people's consciousness, on the communist education of the masses.

It is no coincidence that one of the most important functions of the state of victorious socialism is not only the economic-organizational function, but also the cultural-educational work of state organs. The resolutions of the Central Committee of the CPSU(b) in the post-war period on ideological issues, the discussions conducted on questions of philosophy, biology, physiology, linguistics, political economy, and in other fields of knowledge, the guiding instructions of Comrade Stalin, his works dedicated to questions of linguistics, economic problems of socialism in the USSR, the decisions of the XIX Congress of the Communist Party of the Soviet Union on strengthening ideological work in all links of Soviet society—all this speaks to the fact that alongside the creation of the material-technical base of communism, the Communist Party struggles to secure the spiritual prerequisites for the transition of the USSR to the second phase of communism.

Such is the methodological significance in the practice of revolutionary struggle of the propositions of Marxist materialism on the primacy of social being and the secondariness of social consciousness, and at the same time on the active organizing, mobilizing, and transforming role of advanced social ideas. Such is the monolithic integrity and consistency of Marxist philosophical materialism, which speaks of the primacy of matter and the secondariness of consciousness.

KNOWABILITY OF THE WORLD AND ITS LAWS

★

YU. G. GAYDUKOV

Marxist Philosophical Materialism on the Knowability of the World

The question of the relation of thinking to being—the fundamental question of philosophy—is decided, as was shown earlier, materialistically or idealistically depending on what is taken as primary, as determining—matter or spirit. "But the question of the relation of thinking to being," writes Engels, "has yet another side: how do our thoughts about the world surrounding us relate to this world itself? Is our thinking capable of knowing the real world; can we in our ideas and concepts of the real world form a correct reflection of reality?"[362]

The question of the knowability of the surrounding material world by man was and remains a subject of struggle between materialism and idealism. While representatives of materialism proceed from the recognition of the knowability of the material world by man, representatives of idealism deny the possibility of such knowledge; they declare the surrounding world to be mysterious, inaccessible to human knowledge, inaccessible to science. The idealistic denial of the knowability of the world

[362] *F. Engels, Ludwig Feuerbach and the End of Classical German Philosophy, 1952, p. 16.*

by man received wide currency in bourgeois philosophy in the form of agnosticism and skepticism. The line of agnosticism in the history of philosophy was most fully and frankly formulated by the German philosopher I. Kant.

Having admitted the existence of the material world in the form of a "thing-in-itself," Kant declared the latter to be otherworldly, inaccessible to human knowledge, inaccessible to science. He believed that human knowledge is limited to the world of phenomena, that it is unable to penetrate into the world of "things-in-themselves." Kant—wrote Lenin—"admits the existence of the 'thing-in-itself', but declares it to be 'unknowable', fundamentally different from the phenomenon, belonging to another, fundamentally different realm, the realm of the 'otherworld' (*Jenseits*), inaccessible to knowledge, but open to faith"[363].

Having declared the unknowability of "things-in-themselves," Kant advanced a subjective-idealistic theory of knowledge. He argued that the knowing subject, with the help of a priori (non-experiential) forms and categories inherent in thinking, organizes the chaotic world of phenomena, gives it "orderliness," "inner unity," "necessity," and "conformity to law." The English agnostic and skeptic Hume not only denied the possibility of human knowledge of the surrounding world, but also doubted the existence of the world itself; the very thought of the existence of a world independent of man he considered absurd, superfluous. "...Hume," wrote Lenin, "wants to know nothing about the 'thing-in-itself', considers the

[363] *V. I. Lenin, Works, vol. 14, 4th ed., p. 90.*

very thought of it to be philosophically inadmissible, considers it 'metaphysics'..."[364] The agnosticism of Kant and Hume was an attempt to reconcile knowledge with faith, science with religion, by limiting the "pretensions" of science and expanding the rights of religion.

Kantian and Humean agnosticism was subsequently revived by reactionary bourgeois philosophy, and in the last third of the 19th and early 20th century it became widely spread mainly in the form of neo-Kantianism and then Machism. Having revived Kantian agnosticism and subjective idealism, representatives of neo-Kantianism and Machism went even further along the path of subjectivism, subjected Kantianism to criticism from the right, and banished Kant's "thing-in-itself" from their philosophy.

The classics of Marxism-Leninism completely refuted agnosticism and thoroughly demonstrated its scientific invalidity. Criticizing agnosticism, Engels pointed out that a number of theoretical arguments against agnosticism were formulated as early as pre-Marxist philosophy. However, Engels emphasized that the most decisive refutation of these, as well as all other philosophical quibbles, lies not in theory, but in practice, namely in experiment and industry. "And if the neo-Kantians in Germany are striving to revive Kant's views, and the agnostics in England—Hume's views (which never died out there), despite the fact that both theory and practice

[364] *Ibid.*

have long since refuted both, then in a scientific respect this represents a step backward..."[365]

The idealistic nonsense of Kantian and Humean agnosticism was in its time subjected to decisive criticism not only by the founders of Marxism-Leninism, but also by advanced representatives of Russian materialist philosophy of the 19th century—Herzen, Belinsky, Chernyshevsky, Dobrolyubov, and others. In a special addition to the work *Materialism and Empirio-Criticism*, Lenin noted that the outstanding Russian thinker N. G. Chernyshevsky, in his critique of agnosticism, stood fully at the level of Engels[366].

Kantian, neo-Kantian, and Machist ideas are utilized by modern idealistic philosophical systems that are even more mystical and reactionary than neo-Kantianism—pragmatism, neorealism, personalism, logical positivism, existentialism, semantics, etc. All these new-fangled philosophical systems, reflecting the decay and dissolution of bourgeois philosophy in the period of the general crisis of capitalism, direct their edge against science and human reason, against everything advanced and progressive, primarily against Marxism. The creators of these systems proclaim the unknowability of the world, the impossibility of scientific knowledge, and distort the achievements of modern science, trying to prove that it allegedly confirms the Kantian conclusion about the limits of human knowledge, beyond which access is supposedly possible only for faith.

---

[365] *F. Engels, Ludwig Feuerbach and the End of Classical German Philosophy, 1952, p. 18.*

[366] *See V. I. Lenin, Works, vol. 14, 4th ed., pp. 344–346.*

For example, the ideologist of American-British imperialism B. Russell proposes abandoning the path of scientific research based on observation and experiment, and resorting to "pure" logical analysis. Russell denies the knowability of the world and objective truth in science; he views science merely as a "system of propositions" having no relation to practice or the objective world.

Another obscurantist, the American philosopher Santayana, asserts that only that science can be true which bases its conclusions on faith. Representatives of semantic philosophy (Carnap, Chase, Morris, Neurath, and others) declare reality to be mysterious and unknowable, asserting that it cannot be explained, expressed in words, or reflected by science, since the latter is merely a system of conventional signs devoid of any objective content.

American pragmatists (J. Dewey and others), interpreting the process of cognition in a subjective-idealistic spirit as a process of creation, of creating a world by the knowing subject, also deprive human cognition and science of any objective content whatsoever; they declare science to be a "practical art." Science, they argue, must not go beyond the limits of "utility" and practical success, for its task is not the reflection of the objective world, but merely serving the interests of the subject.

The agnosticism of modern bourgeois philosophy exerts a pernicious influence on the development of modern bourgeois science, reinforcing and deepening its state of crisis. Bourgeois scientists try to use data from modern science to justify the fundamental unknowability of the world, to smuggle priestcraft into natural science. Representatives of modern "physical"

idealism (Bohr, Dirac, Schrödinger, Heisenberg, Einstein, and others) argue that the more technical means of physical research are perfected, the more mysterious and unknowable the real world becomes for us, and that it is altogether impossible to "penetrate" into the secrets of nature. The English physicist Dirac asserts that it is allegedly impossible to "create a mental picture" of objective physical processes, and that physics is powerless to explain them.

Following bourgeois reactionary idealist philosophers are modern right-wing socialists, who attempt to smuggle the ideas of reactionary bourgeois philosophy, the ideas of idealism and agnosticism, into the working masses. The propaganda of reactionary bourgeois philosophy among the people is needed by them as a means to entangle the working masses in lies, to hinder the spread of the scientific proletarian worldview—Marxism-Leninism—which is breaking its way through all obstacles to the minds and hearts of millions of working people in capitalist countries.

Noting the idealistic nonsense about the unknowability of the world, Marxist philosophical materialism insists on the knowability by man of the surrounding material world and its laws. "In opposition to idealism," writes Comrade Stalin, "which disputes the possibility of knowing the world and its laws, does not believe in the authenticity of our knowledge, does not recognize objective truth, and holds that the world is full of 'things-in-themselves' which can never be known by science—Marxist philosophical materialism proceeds from the fact that the world and its laws are fully knowable, that our knowledge of the laws of nature, tested by experiment and

practice, is authentic knowledge having the value of objective truths, that there are no unknowable things in the world, but only things not yet known, which will be disclosed and known by the forces of science and practice"[367].

The entire history of science and human practice confirms the correctness of the Marxist-Leninist teaching on the knowability of the world and its laws. Marxist-Leninist epistemology views cognition as a reflection in human consciousness of the surrounding material reality. The process of cognition is a process of reflection in human consciousness of the objective world and its laws. V. I. Lenin noted that "at the foundation of the theory of knowledge of dialectical materialism lies the recognition of the external world and its reflection in the human head..."[368]

This reflection is an ideal (in the form of ideas, thoughts) reproduction in consciousness, in the human head, of the objects and phenomena of objective reality. Initially, this reflection (in sensations and perceptions) appears in the form of sensory images, reflecting only the external aspects of individual objects and phenomena of material reality. Then it rises to logical reflection, manifesting itself in the form of abstract concepts and mental operations with them, as a result of which internal connections and lawful relations of material reality are revealed. Being a reflection of nature and society, sensations and concepts are ideal copies of material things and processes. However, in contrast to metaphysical materialism, which interpreted the process of cognition as an immediate and

---

[367] *I. V. Stalin, Problems of Leninism, 1952, p. 582.*
[368] *V. I. Lenin, Works, vol. 14, 4th ed., p. 3.*

simple act of direct mirror-like reflection by man of surrounding objects, without understanding the historical character of cognition, its complexity, and contradictoriness, Marxist philosophical materialism considers human cognition as a complex, contradictory, and historically developing process, going from ignorance to knowledge, from incomplete knowledge to fuller knowledge, from the knowledge of phenomena of the objective world to the knowledge of essence, to the knowledge of internal lawful connections and relations of objects and phenomena.

The dialectical-materialist theory of knowledge, created in the 19th century by Marx and Engels, was concrete-ized and developed in the works of Lenin and Stalin on the basis of their creative generalization of new scientific data, on the basis of new experience in the revolutionary struggle of the proletariat for the transformation of capitalist society into a socialist one. The elaboration by Lenin and Stalin of the Marxist theory of knowledge was conditioned not only by the necessity of decisively exposing neo-Kantians, Machists, and other reactionary idealists who concentrated their struggle against Marxism in the field of gnoseology, but also by the historical needs of the new era, the tasks of the revolutionary practice of the proletariat and its party. In the era of practical revolutionary renewal of the world, the collapse of the old capitalist world and the emergence of the new communist world, during a period of the greatest successes of science in knowing the deepest secrets of nature, the theory of knowledge acquired exceptional importance, especially since "bourgeois philosophy specialized in gnoseology..." (*Lenin*).

The task of exposing the subjective-idealistic gnoseology of bourgeois philosophers, their newest artifices in the struggle against Marxist philosophical materialism, required the further development of the Marxist, uniquely scientific theory of knowledge. The development of the theory of knowledge of dialectical materialism was historically necessary not only for exposing the Machists and other preachers of reactionary bourgeois philosophy, but also for theoretical generalization of new data in science and the revolutionary practice of the proletariat and its party, for the scientific knowledge of the laws of social development, and for the development of Bolshevik strategy and tactics. Developed by Lenin and Stalin, the Marxist theory of knowledge armed the cadres of the Bolshevik party and Soviet scientists with a powerful theoretical weapon in the matter of scientific knowledge of the laws of nature and society, and in applying them in accordance with the interests and historical tasks of communist construction.

Sensory Cognition

(sensation, perception, representation)

The first step of complex and historically developing human cognition is direct, living contemplation of the surrounding reality, sensory cognition, which includes sensations, perceptions, and representations. Being a form of direct reflection of concrete objects and phenomena of the material world, sensory cognition serves as a direct or indirect source of all our knowledge. "Otherwise than through sensations," wrote

Lenin, "we cannot learn anything about any forms of matter or any forms of motion..."[369]

All cognition begins with sensations, with perceptions, with observation, comparison, differentiation, and processing of the material received by the senses. The entire subsequent process of human cognition is ultimately based on sensory cognition. Sensory cognition historically and logically forms the initial stage of the cognitive process. This is true both regarding the reflection of the material world in the consciousness of an individual person and regarding the historical development of human knowledge.

Sensory cognition of material reality by man occurs in the process of his practical activity, in the process of production. The classics of Marxism-Leninism noted that people do not begin with theory, but with practical activity, with the production of means for their existence. In the process of labor and practical production activity, people act upon the objects and phenomena of the surrounding material world and receive definite sensations and perceptions.

In his immortal work *Materialism and Empirio-Criticism*, Lenin elaborated in detail the materialist doctrine of sensation. "Sensation," wrote Lenin, "is a result of the action of an objectively existing thing-in-itself external to us upon our sense organs..."[370] Through sensations, people obtain definite information about the properties and qualities of individual objects and phenomena. When the activity of the sense organs

---

369 *V. I. Lenin, Works, vol. 14, 4th ed., p. 288.*

370 *V. I. Lenin, Works, vol. 14, 4th ed., p. 106.*

is impaired, the connection of consciousness with the external world is inevitably disrupted as well. V. I. Lenin pointed out that "sensation is indeed the direct connection of consciousness with the external world; it is the transformation of the energy of external excitation into a fact of consciousness"[371].

The mechanism of this transformation—the transformation of physical excitation into a corresponding physiological process, and then into a mental process—has been largely revealed by Soviet science through its various branches: physics, biology, physiology, and psychology.

Modern Soviet physiology, based on I. P. Pavlov's teaching on higher nervous activity, establishes the material, physiological bases of the processes of sensation and the actions of sense organs. Sensation is viewed as a result of the joint work of the sense organs and the cerebral cortex. The anatomical-physiological apparatus of sensation, named an *analyzer* by I. P. Pavlov, consists of three parts: 1) a set of peripheral receptors (eyes, ears, nose, etc.); 2) pathways for the propagation of nervous excitation (nerve fibers); and 3) corresponding (visual, auditory, olfactory, etc.) areas of the cerebral cortex. The cerebral cortex is the organ of higher analysis and synthesis of external excitations; it also directs the work of the nerve analyzers.

Soviet science has established that the transformation of external excitation into a nerve process (into physiological excitation and a mental act) occurring in the process of sensation takes place leap-like, as a transition of physico-

[371] *Ibid., p. 39.*

chemical energy into a qualitatively different, organic form of motion of matter.

"...Every peripheral apparatus," wrote I. P. Pavlov, "is a special transformer of a given external energy into a nerve process"[372]. The action of light energy on our eye causes definite photochemical and electrical phenomena in its retina, which in turn cause a change in the concentration of ions in the peripheral endings of the optic nerves. This excitation process, having begun in light-sensitive nerves—rods and cones—is transmitted via optic fibers to the corresponding (visual) centers of the cerebral cortex, where it is transformed into a definite mental process. I. P. Pavlov revealed the dialectic of the transformation process of physiological excitation into a mental act. He showed that the formation of a conditioned reflex is simultaneously a process of origin of an elementary mental act—sensation.

The physiological system of neural, conditioned-reflex connections formed in the brain, reinforced by a corresponding material structure (excitations and their traces in the cerebral hemispheres), being a system of direct reflection of reality in the form of sensations, perceptions, and representations, was named by I. P. Pavlov the *first signal system*. "For an animal," he wrote, "reality is signaled almost exclusively only by excitations and their traces in the cerebral hemispheres, coming directly to special cells of visual, auditory, and other receptors of the organism. This is what we also have in ourselves as impressions, sensations, and representations from the

[372] *I. P. Pavlov, Complete Works, vol. III, bk. 1, ed. Academy of Sciences USSR, M. –L. 1951, p. 122.*

surrounding external environment, both general-natural and our social environment, excluding the word, heard and seen. This is the first signal system of reality, common to us and animals"[373].

However, in man, the first signal system acquired qualitatively new features, since it developed under the influence of the already formed second signal system, under the influence of labor, material production, and socio-historical practice as a whole. Insofar as the biological laws that determined the development of animals were replaced in man by social laws, his sense organs lost their former animal acuity and biological limitation, but acquired a new quality—they became human organs. Under the influence of labor and practical impact on the surrounding world, human sense organs and their functional activity were perfected and developed; their ability to perceive a vast variety of qualities and properties of the objective world increased.

The ability of sense organs to adequately perceive various properties and qualities of the objective world was perfected in the course of the biological evolution of organisms, as a result of the growing complexity of forms of their interaction with the environment. Soviet physiology established, for instance, that the color sensitivity of the eye is a product of relatively late development of the organic world. At early stages of phylogenesis, the vision of animal organisms was achromatic. In many highly developed animals, color sensitivity is either absent or very weakly developed (for example, in dogs). Even anthropoid apes distinguish only a few colors. Only in man, in

[373] *I. P. Pavlov, Complete Works, vol. III, bk. 2, 1951, pp. 335–336.*

the process of labor and deeper interaction with the surrounding world, did a physiological apparatus take shape that possesses a rich ability to adequately perceive various colors. The eye of modern man is capable of distinguishing up to 180 color tones, and as for different colors (gradations in saturation and brightness), it distinguishes up to 10 thousand and more[374].

Subjecting objects of nature to practical processing, and even more so creating new ones, people altered the surrounding object-sensory world and, together with that, altered the character of their own sensory contemplation. Their sensory perceptions reflected objects and phenomena of reality that were, for the most part, already altered and transformed in the process of labor and material-production activity.

The entire surrounding "sensory world," Marx and Engels noted, is not some unchangeable thing, "always equal to itself," but the product of industry and the state of society, and that in the sense that it is a historical product, the result of the activity of a whole series of generations, each of which stood on the shoulders of the preceding one...[375]

Therefore, human sense organs and their functional activity are a product not only of the entire preceding evolution of their animal ancestors, but also of the socio-historical development of man himself. "The formation of the five senses," wrote Marx, "is a product of all world history"[376].

---

[374] *See S. V. Kravkov, Color Vision, 1951, pp. 15–16.*
[375] *K. Marx and F. Engels, Works, vol. IV, 1938, p. 33.*
[376] *K. Marx and F. Engels, Works, vol. III, 1929, p. 627.*

The human eye, capable of perceiving a wealth of forms and colors, was brought to life by human practical needs and socio-historical practice. With the development of labor activity and the production-based creation of new types of dyes, people learned to distinguish ever finer shades of color. A musical ear could take shape only as a result of the creation of music. In even greater dependence on production activity are human taste perceptions, which became human only in the process of developing the production of foodstuffs and the art of cooking.

"Just as," wrote Engels, "the gradual development of speech is inevitably accompanied by a corresponding refinement of the organ of hearing, so the development of the brain as a whole is accompanied by a refinement of all senses in their totality. The eagle sees much further than man, but the human eye notices significantly more in things than the eye of an eagle. A dog has a significantly finer sense of smell than man, but it does not distinguish a hundredth part of those odors that are definite indicators of various things for man.

And the sense of touch, which an ape barely possesses in the coarsest, rudimentary form, developed only together with the development of the human hand itself, thanks to labor"[377].

* * *

Human sensation is a complex process occurring in his sensory apparatus under the influence of external excitations. The peculiarity of sensations consists in the fact that a person feels, perceives, and sensorially reflects in consciousness not the

[377] *F. Engels, Dialectics of Nature, 1952, pp. 135–136.*

physical-chemical and physiological neural processes themselves, but the objects and phenomena that cause these processes.

The question arises: are objects of the material world reflected correctly in human sensations and perceptions? Representatives of agnosticism, philosophical and physiological idealism, argued and continue to argue that there supposedly exists an inborn inability of the sense organs to correctly reflect the external world. "There is no similarity whatsoever," wrote the 19th-century German physiologist Helmholtz, "between the quality of sensory sensations and the quality of external agents that evoke our sensory sensations and are transmitted through them."

Agnostics, philosophical idealists, and physiological idealists declared sensations and perceptions to be conventional signs, symbols, hieroglyphs having allegedly no similarity to the external objects they represent.

In *Materialism and Empirio-Criticism*, V. I. Lenin subjected the theory of symbols, or hieroglyphs, to devastating criticism. Lenin showed that this theory is unscientific, false, and pours water on the mill of agnosticism and idealism.

Criticizing Helmholtz, Lenin wrote: "If sensations are not images of things, but only signs or symbols having 'no similarity' to them, then Helmholtz's initial materialist premise is undermined; the existence of external objects is called into some doubt, for signs or symbols are entirely possible in

relation to imaginary objects, and everyone knows examples of *such signs or symbols*"[378].

Lenin also subjected Plekhanov to severe criticism, who, making concessions to Kantianism, wrote that "our sensations are a kind of hieroglyph that bring to our attention what takes place in reality."

In a decisive struggle against various idealistic schools, Lenin, with exceptional depth and consistency, developed the dialectical-materialist doctrine of sensation as an image of objective reality. "Our sensations, our consciousness," he wrote, "are only an image of the external world, and it is self-evident that the copy cannot exist without the original, but the original exists independently of the copy"[379].

Lenin's exposure of Machism, physiological idealism, and the theory of hieroglyphs in *Materialism and Empirio-Criticism* is of immense significance; it arms us in the struggle against modern reactionary American-British philosophy. This philosophy revives time and again old idealistic notions about the impossibility of an adequate reflection of the external world in human sensations. Denying the correctness of reflection in human sensations of the objective world, they reduce all the richness of the latter to a subjective world, to a "complex of sensations," to the "specific energy" of sense organs, etc.

Widespread in bourgeois philosophy, the theory of the subjectivity of secondary qualities (color, sound, smell, taste, etc.) was used in the past and is used at present by various

---

[378] *V. I. Lenin, Works, vol. 14, 4th ed., p. 222.*
[379] *Ibid., p. 57.*

idealists in the struggle against materialism in general and the Marxist-Leninist theory of reflection in particular.

American and English idealists (Bradley, McTaggart, Royce, Drake, Santayana, Broad, Pratt, Strong, and others) by various means "prove" the subjectivity of secondary qualities. "A thing," they assert, "possesses a secondary quality only in relation to an organ... since we can have sensations without an object... Therefore secondary qualities are an illusion."

For all idealists, the denial of the objectivity of secondary qualities was merely logical preparation for denying the objectivity of primary qualities and the objectivity of the world in general. Proceeding from the denial of the objectivity of secondary qualities, Russell, Moore, Wittgenstein, and others justify "logical positivism." Having disposed of the objectivity of secondary qualities, they then reduce the external world to a subjective world, to a sum of "sense data" (sensations), declaring the latter to be "elements of the world," and asserting that the entire existing world consists "simply of certain series and combinations of sense data." The American pragmatist J. Dewey asserts that our sensory perceptions are merely a "stream of consciousness," tools of our practical activity and our needs, but have no relation to external objects.

Dialectical materialism, in full agreement with experience, practice, and science, proves that sensation is a reflection in human consciousness of the various properties and qualities of objects and phenomena of the material world (extension, motion, form, color, sound, smell, etc.). The Leninist theory of reflection decisively rejects the denial by subjectivists and mechanists of the objective existence of color, smell, sound,

etc. It is not our sense organs that generate color, sounds, odors, etc., in our consciousness, but the objective existence of color (pigmentation) of objects and phenomena of the material world, their sounding, and their odoriferousness are perceived by our sense organs and generate in us the sensation of color, sound, smell, etc.

Advanced Soviet science, through the data of natural science, substantiates the Leninist teaching on sensation as an image of the objective world and completely refutes various idealistic theories. Our sense organs possess the capacity to adequately reflect the properties, qualities, inherent to the objects of the material world themselves. For example, with the help of the eye, we reflect the color properties of the objective world. The surfaces of objects in the material world have a certain coloration (color), i.e., they possess the property of emitting or reflecting electromagnetic waves of a specific wavelength. The color (coloration) of a given object is the result of its interaction with specific light rays falling on its surface. Color depends both on the length of light (electromagnetic) waves falling on the object, and on the composition of the substance, on the properties of atoms and molecules located on its surface. "Both the sun and all objects illuminated by it," wrote the well-known Soviet scientist Kravkov, "send out a multitude of rays of the most diverse wavelengths. The sum of radiation of various wavelengths emitted or reflected by each body gives radiation or reflection spectra characterizing the color properties of this body"[380].

[380] *S. V. Kravkov, Color Vision, 1951, p. 18.*

Consequently, various colors (red, blue, green, etc.) are specific objective properties, qualities of material objects that exist independently of the perceiving subject and are reflected by them.

But if color is an objective property of an object existing outside the subject, its sensation depends on the perceiving subject. Sensation is a subjective reflection in the human mind of the objective reality of the external world. "Sensation," says Lenin, "is a subjective image of the objective world..."[381] Sensation is a subjective image because it occurs in the nervous system of a concrete historical personality and does not exist outside the acting subject. Therefore, sensation to a certain extent depends on the state of the subject, on the state and development of both the organism as a whole and its sense organs, nervous system, and brain.

It is known that a change in the state of the organism, sense organs, and nervous system influences the process of sensation, causes either an increased or decreased ability of the nervous system to react to external stimuli. Sensation is a subjective image not in the sense of a distortion of reality in human consciousness, but in the sense that it is a mental, ideal process representing the processing of the material in the human head. The image that arises in a person's head is only an approximately true snapshot, a copy of a real object; but this image is not identical to the object, is not an absolutely exact and comprehensive reflection of it. If our sensations immediately and completely reflected all the complexity of

[381] *V. I. Lenin, Works, vol. 14, 4th ed., p. 106.*

material processes, then science would not be necessary. "Man," Lenin points out, "cannot embrace = reflect = express nature in its entirety, its 'immediate wholeness', he can *only endlessly approach* this..."[382]

Sensation is subjective in its form, for it is a function of the brain, the nervous system, a specifically organized matter. But the content of sensation is determined not by the nervous process occurring in the subject, but by the nature of the objective reality that invoked it. Sensation, being subjective in its form, is objective in its content, in its source. Human sensation contains in an ideal form that which is really outside sensation, that which is its object, the source of its existence. "If I look at a tree and see it," says Comrade Stalin, "this means only that even before a representation of a tree was born in my head, the tree itself existed, which caused in me the corresponding representation..."[383]

Sensation, being an image of objective reality, provides at its core a correct, true, adequate reflection of objective reality, which is confirmed by daily life experience and the practical activity of people.

All the tremendous successes achieved by human practice became possible as a result of a person's true reflection of the surrounding material world. If sensory perceptions gave an incorrect, distorted mapping of objects, then a correct relationship of man with the surrounding world would be impossible, orientation in this world would be impossible, and

---

[382] *V. I. Lenin, Philosophical Notebooks, 1947, p. 157.*
[383] *J. V. Stalin, Works, vol. 1, p. 319.*

even more impossible would be the subject-practical activity of man.

"Mastery over nature," wrote Lenin, "manifesting itself in the practice of humanity, is the result of an objectively correct reflection in the human head of the phenomena and processes of nature, is proof of the fact that this reflection (within the limits of what practice shows us) is an objective, absolute, eternal truth"[384].

Through sensations, a person reflects various properties and qualities of objects of the external world (*hardness, roughness, softness, shape, color, sound, smell, etc.*). But in reality, there are no "pure" qualities and properties isolated from objects; rather, there exist holistic objects that possess certain qualities and properties. We become convinced of the integrity of objects in the process of practical activity by acting upon them and changing them. As a result of this, our sensory cognition has historically developed as an ability for the subject-based reflection of the material world. Individual sensations delivered by various sense organs and reflecting various properties and qualities of objects, synthesizing in the cortex of the cerebral hemispheres and linking with the data of past experience, turn into perceptions that yield holistic images of objects.

Sensation and perception are two moments, two phases of a single sensory cognition. Being a more complex mental act than sensation, perception, however, is impossible without sensations. It arises and develops *only on the basis of sensations*, as an ability to synthesize and generalize them.

---

[384] *V. I. Lenin, Works, vol. 14, 4th ed., p. 177.*

This process of transforming individual sensations into perception is conditioned by the unity of nature of the perceived object itself (the objective integrity of objects) and the subject-practical activity of the perceiving subject.

Sensory perception is a living contemplation, a form of direct reflection in human consciousness of objects and phenomena of surrounding reality. But the directness of perceptions at one degree or another of historical human development always grows out of the mediation of all preceding socio-historical practice, the development of material production, scientific knowledge, and thinking. The development of material production and science reveals the relative limitation of human sensory perceptions and prompts one to apply all kinds of methods of mediated perception, **to invent various instruments and devices that infinitely expand the boundaries of sensory capability, the domain of perceived phenomena**.

Arming human sense organs with appropriate equipment (magnifying glass, telescope, microscope, spectroscope, etc.) allowed man to endlessly expand the boundaries of sensory cognition and penetrate not only into the depths of the distant stellar world, but also into the microscopic world, into the world of the smallest bacteria, into the world of molecules, atoms, and electrons. Thanks to technically improved means of physical research, man was able to penetrate into the world of intra-atomic processes, understand their laws, and discover new inexhaustible sources of energy (intra-atomic energy) within them, which can be put to the service of humanity. What is inaccessible to sensory cognition at one stage of historical

human development becomes accessible at another stage thanks to the development of social production and technology. Therefore, the natural limitation of human sense organs cannot serve as a limit to cognitive capabilities.

On the basis of sensations and perceptions, **representations** arise in humans as a more complex form of reflection of reality. Representations arise on the basis of practical human action upon the objects of the material world and are a more generalized form of visual, sensory reflection of these objects. Reproducing a previously perceived object, a representation does not reflect all its concrete sensory details (like a perception does), but only the most characteristic features, sides, and traits. Representation is, thus, a generalized form of reflection of reality. But representation is only the initial stage of generalization; it still retains some features of concrete visual clarity and singularity. The interpenetration of the visual and the generalized in representations constitutes their feature as a link of dialectical transition from sensory perceptions to concepts, to theoretical thinking.

Abstract Thinking

Abstract thinking, i.e., the ability to form concepts and operate with them in the form of judgments and inferences, is based on sensory data and is a more complex process of human cognition.

Sensory human cognition reflects only the external sides and connections of individual objects and phenomena of objective reality. Sensations and perceptions are unable to grasp universal connections and regular relationships of the objective

world, which is why they are only the first step of human cognition. Conversely, abstract thinking allows penetration into the essence of objects and phenomena, allowing the discovery of their general laws. But the very transition from sensory cognition to abstract thinking would be impossible if the possibilities and prerequisites for such a transition were not laid down in the very sensibility of man. They are conditioned by the fact that the general, existing in objective reality itself, manifests only in the particular, through the particular, the individual. "The general," Lenin noted, "exists only in the individual, through the individual. Every individual is (in one way or another) a general"[385].

In sensory perceptions of individual things and phenomena, elements of the general and particular are already present, but they are merged with the individual, not abstracted from it, not realized. Therefore, in the sensory cognition of individual objects, the possibility of knowing the general, the possibility of forming abstract concepts, is inherent.

The first step toward generalizing the individual in the form of **representations** arises on the basis of perceptions and takes place within the framework of sensory cognition. Any attempts by idealists to sever rational (thought) cognition from its sensory foundation distort the understanding of the essence of the actual process, for in reality there is no gap between sensory and rational cognition, since both reflect one and the same material reality. Sensory cognition grows into logical cognition, and logical cognition grows out of sensory cognition

[385] *V. I. Lenin, Philosophical Notebooks, 1947, p. 329.*

and is its further development. This dialectical unity of sensory and rational (thought) moments in the process of cognition remained misunderstood by philosophers of the pre-Marxist period. If representatives of sensationalism limited human cognition only to sensory perception of individual objects, underestimating the role of theoretical thinking, then rationalists, on the contrary, severed abstract thinking from sensibility, treating it as an independent process.

The fundamental error of representatives of rationalism in the past (Descartes, Leibniz, Spinoza, etc.) lay in their underestimation of the importance of sensory cognition, which led many of them to idealism. Idealists either completely ignore sensory cognition, considering it unreliable (Plato, Hegel), or deny its objective content (Berkeley, Hume, Machists, etc.).

The idealistic severance of the **general** from the **individual**, of abstract thinking from its sensory foundation, is widely practiced by modern reactionary bourgeois philosophy. The American mystic Santayana, severing the general, the abstract from the individual, the concrete, turns his proposed mystical "pure being" of ideal entities into an extra-temporal "divine" nature, elevating it above the world of concrete, individual things. He attempts to "prove" that the "realm of entities forms an infinite basis of all things," that "all things are abstractions from the realm of entities". A similar severance of the general from the individual, of abstract thinking from sensibility, and contrasting them with each other is performed by many other bourgeois philosophers and scientists.

In contrast to metaphysicians and idealists, Marxism-Leninism considers the existence of abstract thinking without a sensory foundation to be impossible. This is especially clearly seen in the example of the thinking of deaf-mute people who do not possess spoken language, whose thoughts are devoid of a sound shell. "The thoughts of deaf-mutes," points out Comrade Stalin, "arise and can exist only on the basis of those images, perceptions, representations that take shape in their daily lives about objects of the external world and their relationships among themselves thanks to the senses of sight, touch, taste, and smell. Outside these images, perceptions, representations, thought is empty, devoid of any content whatsoever, i.e., it does not exist"[386].

The transition from sensory cognition of things and phenomena to theoretical thinking, to the knowledge of internal connections and lawful relations between them, occurs on the basis of the development of socio-historical practice. The practical activity of people forms their cognitive abilities; on its basis, the process of forming concepts from sensory data and the development of abstract logical thinking takes place; "...human practice," says Lenin, "repeating billions of times, is fixed in human consciousness by figures of logic"[387].

In the process of the historical formation of man himself and his labor activity, a physiological apparatus was formed for the mediated, generalized reflection of essential connections and lawful relations of objects of the real world, inextricably linked

---

[386] *J. V. Stalin, Marxism and Problems of Linguistics, p. 47.*
[387] *V. I. Lenin, Philosophical Notebooks, 1947, p. 188.*

with speech, with language, and termed by I. P. Pavlov as the second signal system.

The second signal system formed on the basis of the first in the process of brain development in the direction of complication and differentiation of its cortical connections and analyzers, the formation of inter-analyzer areas, and the powerful development of the parietal-occipital and frontal lobes. "If our sensations and representations," written by I. P. Pavlov, "pertaining to the surrounding world are for us the first signals of reality, concrete signals, then speech, specifically primarily kinesthetic irritations coming to the cortex from the speech organs, are second signals, signals of signals. They represent an abstraction from reality and allow generalization, which constitutes our extra, specifically human, higher thinking, creating first common-human empiricism and finally science—an instrument of man's higher orientation in the surrounding world and in himself"[388].

The rudiments of thinking exist in animals, but they are limited to the framework of the first signal system. The second signal system, operating with the word as a stimulus, allowed man through abstraction, generalizing away from concrete, sensory objects, to develop theoretical thinking. Human thinking, capable of forming concepts and operating with them, formed only in connection with the emergence of language as a powerful and necessary tool of thought abstraction. Concepts formed by people were clothed in specific words as their

[388] *I. P. Pavlov, Complete Works, vol. III, book 2, 1951, pp. 232–233.*

material form. The word consolidated abstraction from the sensory form of concrete, individual things and the generalization of their most common and essential features and properties. "Sensations," noted V. I. Lenin, "show reality; thought and word are the general"[389]. Without the emergence of language in verbal form, it would be impossible to transition from sensory cognition to abstract thinking, and the formation and development of concepts would be impossible.

From the time of man's separation from the animal kingdom, the successes of his cognitive and thought activity have been fixed, consolidated, and deposited in language, allowing one not only to master and preserve them, but also to pass them on to future generations. "Being directly connected with thinking," writes J. V. Stalin, "language registers and fixes in words and in the combination of words in sentences the results of thought work, the successes of man's cognitive work, and thus makes possible the exchange of thoughts in human society"[390].

This complex process of transition of human cognition from sensory perceptions to abstract thinking can be traced in the process of a child's intellectual development (taking into account, of course, a whole series of features and the influence of the social environment). Data from Soviet physiology testify that a physiological system of direct reflection of reality in the form of conditioned-reflex activity (reactions to sensory stimuli) is formed first in a child. And only in the second year of life, in connection with the rapid development of speech activity, does the second signal system form as the material

---

389 *V. I. Lenin, Philosophical Notebooks, 1947, p. 256.*

390 *J. V. Stalin, Marxism and Problems of Linguistics, p. 22.*

basis of children's thinking in the form of verbal abstraction and generalization, operating with concepts.

Having separated from the animal kingdom, primitive people were initially capable of forming only the most elementary general concepts, which were still long closely tied to individual sensory perceptions and visual representations. Then gradually, over many millennia, in the process of daily repeating labor and practical activity, humans developed the capacity for mental abstraction and generalization; they rose to the ability to form more complex and general concepts, which underwent further improvement and development as cognitive and practical human activity expanded and developed.

The development of the ability for abstract thinking was fixed and consolidated in grammatical and logical categories. Thus, in the process of labor activity, the development of language, and the capacity for abstract thinking, certain stable forms of logical thinking were developed.

J. V. Stalin, in his works on problems of linguistics, completely exposed the anti-scientific theory of Marr concerning the alleged existence of a pre-vocal language and pre-logical thinking among primitive people of the pre-clan period, and scientifically proved that "vocal language or spoken language was always the only language of human society..."[391], that the emergence of language was tied to the emergence of human thinking, since "the reality of thought manifests in language"[392]. Marr's anti-scientific fabrications about the inability of

---

391 *J. V. Stalin, Marxism and Problems of Linguistics, p. 46.*

392 *Ibid., p. 39.*

primitive people to form concepts and mentally operate with them were borrowed from reactionary bourgeois researchers (Cassirer, Lévy-Bruhl, etc.), who, to please imperialist colonizers, sought to prove the inability of primitive people and modern backward peoples to engage in the human mode of thinking, limiting their intellectual activity only to the sphere of sensibility, reducing them to the level of animals.

Bourgeois historians of primitive culture, followed by Marr, depict the thinking of primitive people as mystical, illusory, allegedly incapable of a correct reflection of real things and phenomena. This bourgeois lie has long been exposed by the classics of Marxism-Leninism and confirmed by data from many sciences (the teachings of I. P. Pavlov, anthropology, linguistics, history, etc.), testifying to the fact that human thinking, formed in the process of becoming human through labor activity and social life, was inevitably clothed in a material linguistic (verbal) shell and logical form.

If primitive people were incapable of correctly reflecting surrounding reality, if their concepts and thoughts were mystical and illusory, then their labor, practical activity would not be successful; they would not only be unable to produce tools of labor and use them, nor catch fish, hunt, etc., but would not even be in a position to orient themselves in surrounding nature and would inevitably perish in harsh conditions and difficult struggles against the forces of nature.

****

One of the main forms of logical thinking is the *concept*. Concepts are necessarily clothed in a "material linguistic shell,"

outside of which they do not exist. At the heart of concept formation lies the process of abstraction and generalization, i.e., mental abstraction from everything external, individual, and accidental, and the combining of general properties of objects and phenomena of reality. Initially, generalization was closely tied to practical action. Into one group were combined those objects and phenomena that were not only similar in their objective properties, but also performed the same function in practical activity. Concepts were formed as a result of generalizing many practically important traits and abstracting away from traits unessential for practical activity. For example, the concept "axe" was a generalization of many concrete tools of labor performing the same practical function.

At first, concepts were closely tied to concrete, visual representations and developed in the direction of greater abstraction and generalization.

The emergence of abstracted, abstract concepts meant a fuller and deeper reflection of material reality, facilitating the disclosure of the most essential aspects, internal connections, and lawful relations of the objective world. Lenin noted that *"the very simplest generalization, the first and simplest formation of concepts (judgments, inferences, etc.) means human knowledge of an ever deeper objective connection of the world"*[393].

Bourgeois philosophers and scientists view the process of forming scientific abstractions as an impoverishment of thought, a departure from real reality. For example, the

---

393 *V. I. Lenin, Philosophical Notebooks, 1947, p. 153.*

physicist W. Heisenberg depicts the history of physics as a process of its increasing departure from reality and the impoverishment of human knowledge. He argues that all concepts of modern physics (atom, space, time, etc.) allegedly no longer contain anything real within themselves, being merely forms of our thinking. In the same idealistic spirit, A. Einstein interprets the process of scientific abstraction. He, for instance, treats geometry as a purely formal science devoid of subject content, asserting that geometric axioms are "free creations of the human spirit".

In contrast to idealism, dialectical materialism views scientific abstraction as a specific way of reflecting material reality. Abstraction, like all human thought operations, arises primarily in the process of practical activity. Abstraction in action, preceding mental abstraction, consisted of people highlighting first and foremost in their practical actions those properties and qualities of objects that had the most important and direct significance for their needs, abstracting from a number of less important, unnecessary, or secondary features.

Thinking is capable of analyzing and breaking down the investigated reality into its constituent parts, properties, and aspects, studying them in sequential order, isolating the necessary while abstracting from the secondary and accidental, for the purpose of a fuller and deeper cognition of reality.

With the help of scientific abstraction, human cognition transitions from perceptions of the individual to the generalization of masses of phenomena, creates concepts, categories, and laws in which deeper connections and regularities of the material world are reflected. Comrade Stalin

revealed with exceptional depth the role of scientific abstraction in the development of geometry and grammar. "Grammar," he wrote, "is the result of prolonged, abstracting work of human thought, an indicator of the tremendous successes of thought.

In this respect, grammar resembles geometry, which gives its laws by abstracting from concrete objects, considering objects as bodies devoid of concreteness, and defining relations between them not as concrete relations of specific concrete objects, but as relations of bodies in general, devoid of any concreteness"[394].

Scientific abstraction not only does not impoverish human cognition, as idealists attempt to prove, but, on the contrary, enriches it; it is a fuller, deeper, and more comprehensive form of reflection of material reality than sensory cognition. "Thinking," noted V. I. Lenin, "ascending from the concrete to the abstract, does not depart—if it is *correct*—from the truth, but approaches it. *The abstraction of matter, of a law of nature, the abstraction of value*, etc., in a word *all* scientific (correct, serious, non-absurd) abstractions reflect nature deeper, truer, *more completely*. *From living contemplation to abstract thinking, and from it to practice—such is the dialectical path of cognizing truth, of cognizing objective reality*"[395].

***

[394] *J. V. Stalin, Marxism and Problems of Linguistics, 1952, p. 24.*
[395] *V. I. Lenin, Philosophical Notebooks, 1947, pp. 146–147.*

The formation of concepts and operating with them in the form of judgments and inferences represent key thought processes.

All scientific knowledge takes shape in a specific judgment, which either asserts something (affirmative judgment) or denies something (negative judgment). From the standpoint of the progressive movement of human cognition, Engels **classified** judgments as follows: 1) judgment of singularity (for example, the judgment: *"friction is a source of heat"*); 2) judgment of particularity (for example, the judgment: *"every mechanical movement is capable of turning into heat through friction"*); 3) judgment of universality (for example, the judgment: *"any form of movement is capable and forced, under conditions specific to each case, to turn directly or indirectly into any other form of movement"*). This last judgment expresses a universal law of nature.

Inference has enormous cognitive significance. Inference is the logical process of deriving conclusions from given judgments. Certain judgments (premises) always lie at the foundation of an inference, but its conclusion can and does yield new knowledge compared to that contained in the premises.

For an inference to be correct and fruitful, at least two conditions are necessary: 1) the judgments (premises) upon which the inference is based must be true, matching reality itself; 2) the conclusion, i.e., the combination and synthesis of ideas contained in the judgments, must be drawn correctly, without violating the rules of logical thinking. The correctness of inferences must be verified by practice as the criterion of their truth. A correct, scientific inference, like a judgment,

reflects real processes, connections, and relationships between things and phenomena in material reality itself.

Concepts, judgments, and inferences can be true only when they correctly reflect objective reality, when they link, combine, and separate only that which is linked, combined, and separated in reality itself.

In contrast to this single correct understanding of logical processes, modern reactionary bourgeois obscurantist philosophers attempt to prove the independence of forms of thinking from real reality. For example, representatives of "logical positivism" view science as a "system of propositions," and propositions, they claim, must agree only with propositions. Russell declared that philosophy deals not with the objective world, but only with logical formulas, and that therefore "logic is the essence of philosophy." And a representative of semantic philosophy, Carnap, went even further, declaring that the subject of philosophy is merely combinations of words and sentences devoid of any content.

Deduction (a method of reasoning from the general to the particular) and induction (a method of reasoning from the particular to the general) are of immense cognitive importance. In bourgeois philosophy, induction and deduction were opposed to each other as two independent methods. Empiricists (Bacon and others) attached universal significance to the inductive method. Representatives of rationalism (Descartes, Spinoza, and others), on the other hand, elevated deduction into an absolute method. Marxism-Leninism views induction and deduction as two different techniques of a single, dialectical method of scientific research that complement (and do not

exclude) each other. Engels noted that every scientific deduction is the result of preliminary induction, without which no scientific knowledge is possible. But in turn, induction is scientific only when it makes use of general conclusions, when the study of individual particular phenomena is based on knowledge of general principles or laws. "Induction and deduction," Engels noted, "are as necessary bound up with one another as synthesis and analysis. Instead of one-sidedly exalting one of them to the skies at the expense of the other, one should try to apply each in its place, and this can be achieved only if one does not lose sight of their interconnection, their mutual completion of each other."[396]

In contrast to the metaphysical opposition of analysis and synthesis as two independent methods, materialist dialectics views Gnoseology in bourgeois philosophy failed to acquire a scientific character mainly because it did not uncover the role of practice in the process of cognition. All representatives of metaphysical materialism failed to see, failed to understand the active, effective-practical role of man in relation to nature; all the more so, they failed to understand socio-historical and revolutionary practice and its role in the process of knowing the world, in the development of science, and human thought. If they occasionally attempted to connect the process of cognition with practice, they understood the latter very narrowly and restrictively, reducing it to experiment and laboratory practice. Therefore, they saw the driving force of human knowledge not in socio-historical practice, but in the "curiosity" and "thirst for knowledge" of the scientist, in the

[396] F. Engels, Dialectics of Nature, 1952, pp. 180–181.

striving of people toward the perfection of intellect. This narrowness and limitation in the understanding of practice and its role in the theory of knowledge was conditioned by the narrowness and limitation of the practical and cognitive tasks of the bourgeoisie as an exploiting class.

Representatives of idealism, interpreting human practice as the activity of an abstract idea, the activity of pure spirit, restricted and continue to restrict the sphere of practical activity to the domain of theoretical activity.

In contrast to various mystical and reactionary fabrications of contemporary bourgeois philosophers, Marxism-Leninism recognizes the decisive role of practice, of people's practical activity, as the starting point, the foundation of knowledge, and as the criterion of the truth of theory. "The standpoint of life, of practice," Lenin teaches, "should be first and fundamental in the theory of knowledge. And it inevitably leads to materialism, sweeping aside at the very outset the endless fabrications of professorial scholasticism."[397]

Practice in its Marxist-Leninist understanding is above all labor, material-productive activity of people, including all forms of productive activity, both in the sphere of industry and in agriculture. Furthermore, practice is the social, world-historical, and revolutionary-critical activity of people aimed at transforming not only nature, but also social life. Under the conditions of a class society, practice also includes the class struggle, which is the driving force of the entire historical process.

---

[397] V. I. Lenin, Works, vol. 14, 4th ed., p. 130.

The concept of practice must necessarily also include laboratory experience, experiment, and observation. In the cognition of natural processes inaccessible to human influence (cosmic, astronomical, etc.), practice takes the form of observations using appropriate equipment, which is again the product of human material-productive activity. Therefore, Lenin points out that "into practice, which serves us as a criterion in the theory of knowledge, must also be included the practice of astronomical observations, discoveries, etc."[398] In such a broad sense, practice is the basis of human knowledge and the criterion of its truth at all stages of its development.

Only in the process of active, labor-based, productive impact on the surrounding material world do people receive definite sensations, perceptions, and representations. By practically processing the objects of nature, people obtain through their sense organs definite information about the properties and qualities of these objects and come to know them. Practical operations with material objects lie at the foundation of the formation and development of concepts and all mental operations: judgment and inference, deduction and induction, analysis and synthesis. "All these moments (steps, stages, processes) of cognition," Lenin noted, "go from the subject to the object, being tested by practice and coming through this test to the truth..."[399]

The significance of practice lies not only in the fact that without it all forms of mental activity would be impossible, but also in the fact that without it, it would be impossible to reveal

---

[398] V. I. Lenin, Works, vol. 14, 4th ed., p. 127.

[399] V. I. Lenin, Philosophical Notebooks, 1947, p. 215.

the internal connections and laws of objective reality by means of abstract concepts, categories, and laws. Socio-historical practice is the foundation of the whole complex process of scientific cognition, the foundation of the emergence and development of science.

Engels noted that the origin and development of astronomy, mathematics, and mechanics were conditioned by the practical needs of ancient peoples. "Thus, right from the beginning," he wrote, "the origin and development of sciences were conditioned by production."[400]

The practical needs of people conditioned the emergence of mathematics. The necessity of counting, measuring areas, distances, etc., brought arithmetic and geometry into existence. Initially, all mathematical operations were connected with practical operations. People counted by nothing other than setting one object against another. The first figures and units of measurement were linked to the organs of the human body — hands, fingers, palm, foot, etc.

"Like all other sciences," Engels wrote, "mathematics arose out of the practical needs of men: from the measurement of land areas and container capacities, from the calculation of time, and from mechanics."[401]

The emergence and development of biology was conditioned by practical needs for improving farming, gardening, and animal husbandry. Practical activity in the field of agriculture preceded theory and conditioned its development. Centuries of

---

[400] F. Engels, Dialectics of Nature, 1952, p. 145.

[401] F. Engels, Anti-Dühring, 1952, p. 37.

practical experience were generalized into the corresponding theoretical principles of biological science.

"In its content, the doctrine of selection is the centuries-old practice of farmers and livestock breeders taken in the most general form, created empirically long before Darwin plants and animal breeds... Agricultural practice served Darwin as the material basis upon which he developed his evolutionary theory, explaining the natural causes of the expediency of the organization of the organic world."[402]

The creation of socialist agriculture in our country and the development of collective-farm and state-farm practice conditioned the development of a new, Soviet biological science — Michurinist biology.

"Socialist agriculture and the collective and state-farm system gave birth to a fundamentally new, native Michurinist Soviet biological science, which develops in close unity with agronomical practice as agronomical biology."[403]

Only on the basis of socio-historical practice is the ever-deeper penetration of human knowledge, the discovery of new aspects, connections, and relations of material objects and phenomena, and the cognition of their internal laws possible.

Divorced from practice, no scientific resolution of theoretical questions is possible, nor is the cognition of the laws of living nature. Only the solution of practically important questions — questions of weed control in agriculture, selecting components

---

[402] T. D. Lysenko, Agrobiology, 4th ed., 1948, p. 608.

[403] Ibid., p. 614.

for sowing grass mixtures, rapid and wide afforestation in steppe regions, and many others — enabled Michurinists to solve a whole series of fundamental theoretical issues of biological science. "The scientific solution of practical tasks," notes Academician Lysenko, "is the most reliable path to a deep knowledge of the laws of the development of living nature."[404]

The practice of communist construction that has unfolded in our country is the decisive driving force in the development of advanced Soviet science.

Participating in the struggle of the entire Soviet people for the fulfillment of the Fourth Five-Year Plan, in the struggle for further technical progress, Soviet scientists, as pointed out at the 19th Congress of the Communist Party by Comrade Malenkov, "successfully solved many scientific problems of great national economic significance."[405]

Comrade Malenkov noted as a major achievement of Soviet science the discovery of methods for the production of atomic energy, which dealt a serious blow to American warmongers and eliminated their monopoly position in this field. The efforts of Soviet scientists are aimed at finding ways and methods to use this new form of energy "for peaceful purposes, for the benefit of the people, because such use of atomic energy infinitely expands human power over the elemental forces of nature, opening before humanity colossal opportunities for the

---

[404] Ibid., p. 640.

[405] G. Malenkov, Report to the 19th Party Congress on the Work of the Central Committee of the C.P.S.U.(B.), p. 41.

growth of productive forces, technical and cultural progress, and the increase of social wealth."[406]

Socio-historical practice is the foundation of the knowledge not only of the laws of nature, but also of the laws of social development.

The emergence and development of the theory of Marxism-Leninism was conditioned by the practical needs of the class struggle of the proletariat. Only when capitalism reached a certain maturity, when the class struggle of the proletarians against the capitalists unfolded, were the necessary conditions created for the emergence of a revolutionary theory reflecting the class interests of the proletariat. Expressing these historical needs, Marx and Engels created a scientific theory that served as a powerful weapon in the hands of the proletariat in its struggle for its liberation. The concretization and further development of Marxism by Lenin and Stalin were bound up with new practical requirements of the revolutionary movement in the epoch of imperialism and proletarian revolutions, in the epoch of constructing socialism in the USSR. Summarizing the new experience of the proletarian revolutionary struggle, Lenin and Stalin elevated the theory of Marxism to a new, highest level, developing and concretizing it.

The theory of Marxism-Leninism develops in inseverable connection with the practice of the revolutionary working-class movement.

---

406 Ibid., p. 42.

Lenin, in his brilliant work The State and Revolution, showed the decisive role of revolutionary practice in the formulation by Marx and Engels of the doctrine of the dictatorship of the proletariat.

In 1848, in the Manifesto of the Communist Party, Marx and Engels, putting forward the idea of the dictatorship of the proletariat for the first time, indicated only in a general form the tasks of the proletariat in transforming itself into the ruling class. At that time, history had not yet provided material for a concrete solution to this question, and only the living, revolutionary-practical experience of the events of 1848–1851 allowed Marx to draw a concrete, precise, and "practically tangible" conclusion: all previous revolutions only perfected the state machine, whereas the task of the proletariat is to smash, to break it. "Not logical reasoning," Lenin wrote, "but the actual development of events, the living experience of 1848 –1851, led to such a formulation of the task. To what extent Marx adhered strictly to the factual basis of historical experience is evident from the fact that in 1852 he did not yet pose the concrete question as to what should replace this state machine subject to destruction. Experience had not yet provided material for such a question, posed by history on the agenda later, in 1871."[407]

Lenin showed that Marx did not indulge in utopia or invent abstract treatises on the forms of the future state, but awaited the answer to this fundamental question of Marxist theory from the practical experience of the mass revolutionary struggle of

[407] V. I. Lenin, Works, vol. 25, 4th ed., p. 381.

the proletariat. And only the experience of the practical struggle of the Paris Communards, their attempt to replace the bureaucratic state machine with a new type of state — a proletarian state — enabled Marx, who carefully studied the experience of the Commune, to see in it the state form of the dictatorship of the proletariat.

The Marxist doctrine of the dictatorship of the proletariat, of the state, was further concretized and developed by Lenin and Stalin on the basis of the practical experience of three Russian revolutions and on the basis of the practical activity of the Soviet state. Lenin discovered Soviet power as the best state form of the dictatorship of the proletariat, unveiled the formula of the dictatorship of the proletariat from the perspective of the problem of the proletariat's allies, and proved that the dictatorship of the proletariat is a special class alliance of the proletariat and the peasantry, the highest type of democracy, a proletarian democracy.

The Marxist-Leninist doctrine of the state and the dictatorship of the proletariat was further concretized and developed by Comrade Stalin. Creatively generalizing the revolutionary experience of the Communist Party and the working masses of our country in creating and strengthening the new state, Comrade Stalin revealed the essence of the dictatorship of the proletariat, created the doctrine of its three aspects, of the system of the dictatorship of the proletariat and the leading role of the Communist Party within it. On the basis of a creative generalization of the practical experience of building socialism in the USSR under conditions of hostile, capitalist encirclement, Comrade Stalin developed the doctrine of the

main functions and phases in the development of the socialist state and provided a theoretical solution to the question of the fate of the state not only during the period of socialism, but also during the period of communism.

The brilliant works of I. V. Stalin are organically tied to the revolutionary-practical activity of the Communist Party. G. M. Malenkov noted at the 19th Party Congress that at the center of Comrade Stalin's theoretical activity throughout the entire recent period stood the elaboration of problems of world-historical significance — on the development of the socialist economy, on the gradual transition to communism. Creatively enriching and developing Marxist-Leninist science, Comrade Stalin ideologically armed the party and the Soviet people in the struggle for the triumph of our cause.

Of the greatest importance both for Marxist-Leninist theory and for world revolutionary practice is Comrade Stalin's work Economic Problems of Socialism in the USSR.

The theoretical discoveries of Comrade Stalin mark a new epoch in the development of Marxist-Leninist science. These discoveries "have world-historical significance, arming all peoples with the knowledge of the paths for the revolutionary transformation of society and the richest experience of our party's struggle for communism."[408]

****

[408] G. Malenkov, Report to the 19th Party Congress on the Work of the Central Committee of the C.P.S.U.(B.), p. 107.

Marxism-Leninism views practice not only as the starting point and basis of human knowledge, but also as the criterion of the truth of knowledge. The classics of Marxism-Leninism considered as scholasticism all attempts to resolve the questions of the truth or falsity of a given theory outside of practice.

Practice not only exposes agnosticism, proving the complete knowability of the material world, but also refutes all anti-scientific concepts, ideas, and theories, confirming only that which is correct and scientific. V. I. Lenin wrote: "Human practice proves the correctness of the materialist theory of knowledge," while Marx and Engels declared as "scholasticism" and "philosophical tricks" any attempts to resolve the fundamental gnoseological question apart from practice[409].

The rogue attempts of American pragmatists to substitute subjective "experience," "success," "utility," etc., for real human practice are in reality a form of idealist denial of objective truth and the reality of the external world. Among pragmatists, the concept of "practice" is deprived of objective-real meaning and lacks any connection with the real material world; therefore, it takes on a subjectivist-idealist character and, from their point of view, supposedly can confirm any anti-scientific fabrications, provided they are profitable and useful to imperialism.

[409] V. I. Lenin, Works, vol. 14, 4th ed., p. 126.

In contrast to all agnostics and subjective idealists, Lenin showed that "the practice of mankind has... objective-real significance."[410]

Practice serves as the criterion of truth because it, as it were, brings theory face-to-face with material reality, bringing theoretical formulas out from the realm of ideas into the realm of real reality, thereby revealing their truth or falsity. As long as people merely contemplate the phenomena of nature without intervening in their natural course, they can only hypothesize about the truth or falsity of their concepts and ideas. But as soon as they move from passive contemplation of reality to practical action upon it, they gain the opportunity to test whether their ideas correspond to reality. By practically acting upon the objects of the material world and processing them, people test the truth of their ideas and representations, as well as their correspondence to the reflected objects. Lenin pointed out that it is precisely "by his practice that man proves the objective correctness of his ideas, concepts, knowledge, and science."[411]

In the development of natural sciences, the role of practice as a criterion of truth manifests itself time and again in the form of scientifically conducted observations, experiments, and tests. For example, in astronomy, the criterion of practice, retaining its full force, appears in the form of the coincidence of theoretical conclusions with factual data from astronomical observations.

---

410 V. I. Lenin, Works, vol. 14, 4th ed., p. 94.

411 V. I. Lenin, Philosophical Notebooks, 1947, p. 164.

I. P. Pavlov, developing his doctrine of higher nervous activity based on experimental data, thoroughly and comprehensively tested every new proposition and conclusion of his theory through numerous specifically designed experiments.

Providing a scientific basis for his proposition on the identity of sleep with inhibition, I. P. Pavlov stated: "With this conclusion, all those numerous observations that accumulated over our twenty years of work on conditioned reflexes agreed very well, and this conclusion was confirmed by those new experiments that we deliberately set up proceeding from this conclusion."[412]

O. B. Lepeshinskaya, through scientifically set-up experiments during 1933–1945, completely refuted Virchowian tenets in cytology and proved the existence of non-cellular life, showing that the cell originates not only from another cell, but also from matter of non-cellular structure.

Practice is the universal criterion of the truth of theory for both the social and the natural sciences. "The data of science," says Comrade Stalin, "have always been tested by practice, by experience. Science that has severed its ties with practice, with experience — what kind of science is that? If science were such as some of our conservative comrades portray it, it would have perished for humanity long ago. Science is called science precisely because it recognizes no fetishes, does not fear to raise its hand against what is obsolete and old, and listens attentively to the voice of experience and practice."[413]

---

412 I. P. Pavlov, Complete Works, vol. III, bk. 1, 1951, p. 375.

413 I. V. Stalin, Problems of Leninism, 1952, p. 540.

Practice is the foundation of knowledge and the criterion of the truth of theory. Practice is primary in relation to theory; it determines its development. Practice possesses the virtue of universality, containing within itself the multifaceted connections and relationships of man with material reality, which are only one-sidedly grasped by theory. Practice, in comparison with theory (which is merely an ideal reflection of reality), possesses the virtue of immediate reality, since it is the objective, real relationship of man with material reality. "PRACTICE," noted Lenin, "IS HIGHER THAN (THEORETICAL) KNOWLEDGE, FOR IT HAS NOT ONLY THE VIRTUE OF UNIVERSALITY, BUT ALSO OF IMMEDIATE REALITY."[414]

The role of practice must also be approached dialectically, not metaphysically or dogmatically. The criterion of practice has an absolute character because it provides a test of the truth of knowledge, confirming everything true and scientific, and refuting everything unscientific and false. But at the same time, the criterion of practice contains an element of relativity, as it proves the truth of a given law or proposition only under specific conditions, not everywhere and not for all time. Every law of science reflects in an abstract form one aspect or moment of the universal connection and interdependence of objective reality, but not all existing connections in reality. The objective truth of a law is tested and confirmed by practice. But no test can transform a given law into an absolute, since practice confirms the truth of a law only within the limits in which it manifests itself.

---

[414] V. I. Lenin, Philosophical Notebooks, 1947, p. 185.

"...We must not forget," Lenin wrote, "that the criterion of practice can never, in the nature of things, confirm or refute completely any human representation. This criterion is also sufficiently 'indefinite' not to allow human knowledge to turn into an 'absolute,' and at the same time sufficiently definite to wage a ruthless struggle against all varieties of idealism and agnosticism. If what our practice confirms is the sole, ultimate, objective truth, then from this follows the recognition of the sole path to this truth: the path of science standing on the materialist viewpoint."[415]

Practice itself is not something frozen or given once and for all, but improves, enriches, and develops. For example, practice confirmed for a time the assertion of chemists regarding the impossibility of creating organic substances from inorganic ones (until people acquired such a skill). But the subsequent development of science and practice led to the artificial creation of many organic compounds, thereby refuting the old truth and replacing it with a new one corresponding to the new level of practical development.

The development of world-historical revolutionary practice of the proletariat and its party makes certain propositions of Marxist theory tied to specific historical conditions obsolete, requiring their replacement with new ones. Lenin and Stalin, creatively generalizing the new experience of revolutionary practice, concretized and developed Marxism further, applying it to new conditions and new needs of the proletariat and its

[415] V. I. Lenin, Works, vol. 14, 4th ed., p. 130.

party, replacing obsolete propositions of Marxism with new ones.

Thus, socio-historical practice, being the basis of knowledge and the criterion of its truth, moves science forward to new conquests of human thought.

Dialectical Materialism on Objective, Absolute, and Relative Truth

Only the founders of Marxism-Leninism, having created a genuinely scientific philosophy — dialectical and historical materialism — provided a correct, scientific solution to the question of objective, absolute, and relative truth, and exposed the metaphysical and idealist interpretation of truth. Lenin, in his work Materialism and Empirio-Criticism, showed that the doctrine of objective truth is inseverably linked to the materialist solution to the fundamental question of philosophy, that philosophical materialism is bound up with the recognition of objective truth, and that denial of the latter inevitably leads to agnosticism and subjective idealism. "To be a materialist," Lenin wrote, "means to recognize objective truth revealed to us by our sense organs."[416]

Denying the objective reality of the external world, Machists inevitably denied the existence of objective truth as well; they interpreted truth in a subjectivist-idealist spirit, reducing it to a form of subjective human experience, to the collective thinking of people. The Machist Bogdanov claimed that "truth is an ideological form — an organizing form of human experience."

[416] V. I. Lenin, Works, vol. 14, 4th ed., p. 120.

Decisively exposing this subjectivist understanding of truth, Lenin showed its reactionary meaning, showing that such an understanding of truth justifies the existence of not only all anti-scientific ideas, but also religious dogmas and superstitions. "If truth," he wrote, "is not objective truth, if truth (including scientific truth) is merely an organizing form of human experience, then by this very fact the main premise of priestcraft is recognized, the door is opened for it, and room is cleared for the 'organizing forms' of religious experience."[417]

In contrast to the Machist subjectivist-idealist interpretation of truth, Lenin, having deeply elaborated the question of objective truth, gave a scientific dialectical-materialist definition of this crucial concept of the theory of knowledge.

Into the concept of objective truth, Lenin included the objective content of human knowledge — that is, content given to man from without, which depends solely on the external world, on objective reality, and not on the cognitive abilities of an individual person or humanity as a whole. Objective truth is the correct reflection of objective reality in human sensations, representations, and concepts. Exposing Bogdanovist Machism, Lenin posed the question: "...Is there such a thing as objective truth, that is, can human representations have a content that does not depend on a subject, that does not depend either on a human being or on humanity?"[418]

---

417 V. I. Lenin, Works, vol. 14, 4th ed., p. 113.

418 Ibid., p. 110.

V. I. Lenin provided a thorough justification for the existence of objective truth and illustrated this proposition with data from science and facts of everyday life.

The Leninist theory of reflection proceeds from the recognition of the objective reality of the external world and the approximately correct reflection of it in the human mind. Since human knowledge correctly reflects existing objective reality, it contains objective truth.

Every scientific theory or law, if it correctly reflects objective reality and is tested by experience and the practice of humanity, constitutes objective truth. Thus, for example, the heliocentric doctrine of Copernicus is objective truth, whereas the theory of Ptolemy is not objective truth, since it does not correspond to objective reality. Michurinist doctrine is objective truth, whereas the theory of Weismannism-Morganism is a false, anti-scientific theory refuted by the practice of developing Soviet socialist agriculture.

Marxism-Leninism is objective truth because it correctly reveals the laws of development of nature and society, correctly pointing out the paths for transforming capitalist society into socialist society, and the paths for building communism. Its truth has been confirmed by the revolutionary practice of the Soviet people and the Communist Party of the Soviet Union, and is repeatedly reconfirmed by the practice of socialist construction in the countries of people's democracy, as well as by the experience of the working people's struggle in all countries against capitalist slavery.

Since objective truth is that content of human knowledge that depends neither on an individual nor on humanity, its existence does not depend on whether it is recognized by everyone or not. The bourgeoisie and its ideologists, of course, do not recognize the truth of Marxist-Leninist theory; however, Marxism-Leninism, as a true theory, not only continues to exist, but also develops, spreading its influence ever wider and taking hold of the consciousness of the working masses.

Contemporary bourgeois idealist philosophers (pragmatists, logical positivists, neorealists, semanticists, etc.) in the field of gnoseology have made the concept of objective truth the primary target of their reactionary attacks. Denial of objective truth serves them as a means of fighting against science and scientific cognition, a means of defending priestcraft. For these very purposes, representatives of logical positivism banish objective truth from science, "proving" that science allegedly deals not with the objective world, but merely with subjective experience content. Attempting to divert science from the path of knowing material reality onto the path of pure formalism, they demand that science contain only logically consistent formulas. Back at the beginning of the 20th century, a representative of pragmatism — this philosophy of American businessmen — W. James declared that true is everything that is "useful" and secures "practical success." "If," he cynically stated, "religious ideas fulfill these conditions, and if, in particular, it turns out that the concept of God satisfies them, on what ground will pragmatism deny the existence of God? For it, it would simply be nonsense to consider 'untrue' a concept so fruitful in a pragmatic sense."

This "philosophy," declaring as true everything profitable to predatory American imperialism, was continued by its contemporary ideologist — J. Dewey.

J. Dewey views the real world as a "crude existence." Reality allegedly does not exist by itself, but is conditioned and created by our knowledge. The whole process of human cognition is considered by him not from the point of view of reflecting objective reality, but solely through the lens of "results of success." Interpreting science in a subjectivist spirit, J. Dewey expels objective content and objective truth from it, declaring it a "practical art," a "highly specialized form of practice." Dewey reduces science to simple instructions for "action," and views its laws as a "method of conducting affairs efficiently." This pragmatist interpretation of science reflects the actual state of science in the USA, where it has been turned into a servant of imperialist monopolies and military departments.

Under the conditions of a class society, social sciences — tied as they are to the political ideals of struggling classes — inevitably and completely take on a class character. Objective truths of natural sciences, having no direct relation to the political ideals of classes, assume an all-human character and exist for millennia, passing from epoch to epoch, from nation to nation. It is known that the fundamentals of Euclidean geometry, classical mechanics, electrodynamics, and chemistry, being objective truths, are recognized by all classes and are used by them in practice. However, even these fundamental bases of science, which are objective truths, are clothed in specific worldview and ideological forms possessing a class, party character. Therefore, every science contains

within itself not only fundamental bases and immutable objective truths, but also their specific worldview interpretation.

Bourgeois scholarly apologists clothe scientific truths in a reactionary, idealist form, attempting to reconcile science with priestcraft. Monopoly capitalism in the USA has placed fetters on the development of science, subordinating scientific research to the narrow, selfish goals of imperialists and their struggle for world domination.

American imperialists, aiming to destroy most of humanity through atomic and bacteriological weapons to achieve world domination, force science to serve their vile ends.

"Scientists" who entered the service of American imperialism are working on creating bacteriological and atomic weapons, developing methods for the mass spread of epidemics and ways to infect soil with harmful microbes, striving to turn the Earth itself into a barren desert. Under the direct impact of the reactionary policy of American imperialism, the development of many branches of science and scientific research receives a perverted direction; it serves not the development, but the destruction of productive forces — not the improvement of human life, but the extermination of humanity. Science in the hands of American imperialists becomes a destructive force, a tool for destroying cities and cultural-industrial centers, an instrument for exterminating humanity. Only the destruction of capitalism and the transition to socialism can save science from imperialist fetters and complete degradation. The victory of the Great October Socialist Revolution in our country liberated science from capitalist fetters and opened the path for its free

and creative development. Under the conditions of victorious socialism in the USSR, science received a full flourishing; objective truths acquired by science are clothed in a genuinely scientific form of socialist ideology, the unshakable foundation of which is Marxism-Leninism.

Soviet science, placed at the service of the people, socialist society, and the state, has taken on a popular character. The national character of Soviet science is expressed not only in the fact that the Soviet people love, respect, and support science, but also in that they take an active part in scientific research and in the practical resolution of the most important scientific problems. An army of Soviet scientists 150,000 strong, acting as the scientific vanguard, is bound up with millions of innovators in industry, transport, and agriculture — rationalizers, inventors, Stakhanovites. This is evidenced by the fact that Stalin Prize laureates in our country are not only scientists and engineers, but also front-line workers in production, both in industry and agriculture. A similar liberation of science from capitalism is currently taking place in the countries of people's democracy, where the working masses have cast off the capitalist yoke and stepped onto the path of socialist construction.

However, since the country of socialism emerged from the depths of capitalism and exists surrounded by capitalist countries, it is entirely natural that remnants of bourgeois ideology still remain in our country, inevitably penetrating various branches of science. "As a result of the intervention of the Party Central Committee in many fields of science," noted G. M. Malenkov, "customs and traditions alien to Soviet

people were exposed, facts of caste-like insularity and an intolerant attitude toward criticism were revealed, and various manifestations of bourgeois ideology and all kinds of vulgarizing distortions were exposed and shattered. Famous discussions on philosophy, biology, physiology, linguistics, and political economy exposed serious ideological flaws in various branches of science, provided impetus to the deployment of criticism and struggle of opinions, and played an important role in the development of science."[419]

* *

*

The question of relative and absolute truth is a question of whether "human concepts, expressing objective truth, can express it all at once, as a whole, unconditionally, absolutely, or only approximately, relatively?"[420]

In opposition to the metaphysical, dogmatic understanding of the process of cognition as the discovery of eternal, unchangeable, and once-and-for-all established truths, dialectical materialism views human cognition as a historically developing process, moving from ignorance to knowledge, from less complete knowledge to more complete. Every stage of human cognition is limited by historical boundaries, which renders acquired knowledge incomplete, approximate, and relative. Therefore, truth is not something established once and for all and finalized, but represents a process of the deepening

---

[419] G. Malenkov, Report to the 19th Party Congress on the Work of the Central Committee of the C.P.S.U.(B.), pp. 95–96.

[420] *V. I. Lenin, Works, vol. 14, 4th ed., p. 110.*

of human cognition into the surrounding objective world. "Truth,—noted Lenin,—is a process. From the subjective idea, man goes to objective truth *through "practice" (and technology)*"[421].

Human cognition as a whole possesses boundless possibilities, the capacity for full, absolute cognition of the material world, but at each stage of its historical development, it is inevitably limited by the level of development of science, technology, and socio-historical conditions. The boundless capacity of human cognition in its historical development is embodied in the thinking of a series of generations of people, each of which in its cognition is limited by the historical conditions of its era, the level of development of science, and socio-historical practice.

"In this sense,—wrote Engels,—human thought is just as sovereign as it is non-sovereign, and its capacity for cognition is just as unlimited as it is limited.

Sovereign and unlimited by its nature, vocation, capacity, and historical ultimate goal; non-sovereign and limited by its separate realization, according to the reality of a given time."[422]

The cognition of people at each historical stage of their development is limited not only by the level of development of material production, technology, and science, but also by the character of social, socio-economic relations. Historically, this was manifested in the class orientation of the process of

---

421 *V. I. Lenin, Philosophical Notebooks, 1947, p. 174.*

422 *F. Engels, Anti-Dühring, 1952, pp. 81–82.*

cognition, in the influence on the development of science by the prevailing ideology of the exploiting classes.

Thus, in the era of the Middle Ages, feudal relations and the dominant religious ideology hindered the development of scientific knowledge, made philosophy and science of that time dependent on religion, and turned them into the handmaidens of theology. Capitalism in its imperialist stage also places shackles on the process of scientific cognition and the development of science. Only the victory of the socialist revolution destroys those barriers that antagonistic social relations of an exploiting society place before human cognition, and creates boundless opportunities for the free and comprehensive development of science.

Consequently, at each stage of the development of human cognition, truth, while being scientific and objective, inevitably assumes a relative character and appears in the form of relative truth. The relativity of truth must be understood not in the sense of the conventionality of its reflection of a material object, but in the sense of the completeness of this reflection, in the sense of the completeness of knowledge achieved at a given stage of historical development. The relativity of truth consists in the fact that every scientific proposition, being an objective truth, accurately reflecting this or that process of nature, cannot yet encompass all its aspects and facets, connections and laws, and requires clarification, addition, deepening, and concretization, which can only be achieved as a result of the further development of human cognition.

"Thus,—wrote Lenin,—human thought by its nature is capable of giving, and does give us, absolute truth, which is composed

of the sum of relative truths. Every stage in the development of science adds new grains to this sum of absolute truth, but the limits of the truth of each scientific proposition are relative, being either expanded or narrowed by the further growth of knowledge"[423].

Thus, truth is relative if it does not yet give full, comprehensive knowledge or reflection of a material object or law of reality; but when cognition reaches completeness and comprehensiveness of coverage, when it no longer needs further clarification and addition, then truth acquires an absolute character.

A one-sided recognition of human knowledge as only relative, and the denial of objectivity and absoluteness in it, inevitably leads to relativism, and ultimately to idealism. This happened with many bourgeois physicists in the 20th century, who elevated the relativity of scientific knowledge to an absolute, declared scientific knowledge devoid of objectivity and absoluteness, which led them to physical idealism.

"All old truths of physics, up to those considered indisputable and unshakable,—wrote Lenin,—turn out to be relative truths, —*which means* that no objective truth, independent of humanity, can exist. This is how not only all Machism, but all 'physical' idealism in general reasons. That absolute truth is composed of the sum of relative truths in their development,—that relative truths represent relatively correct reflections of an object independent of humanity,—that these reflections become more and more correct,—that in every scientific truth,

[423] *V. I. Lenin, Works, vol. 14, 4th ed., p. 122.*

despite its relativity, there is an element of absolute truth,—all these propositions... represent a book sealed with seven seals for 'modern' theory of knowledge".[424]

In these words of Lenin, the dialectical unity of absolute and relative truth in the development of scientific cognition is vividly shown. Every scientific truth (if it is indeed a scientific truth) is an objective truth; it is not only relative, but also contains within itself elements of absolute knowledge. That is why a materialist cannot limit himself to the recognition of only relative truths; he is obligated to see in them an objective content, which is a relatively correct reflection of objective reality. Moreover, he must go even further and recognize that every relative truth contains within itself certain particles, grains of absolute truth.

"To recognize objective truth, i.e., truth independent of man and humanity,—wrote Lenin,—means in one way or another to recognize absolute truth"[425].

The relationship between objective, absolute, and relative truth in the process of cognition can be illustrated by the example of the development of scientific concepts of the atom. It is known that until the end of the 19th century, the atom was viewed in science as the ultimate material particle, considered absolutely indivisible, solid, impenetrable, and inert. But this concept of the atom, which was a relative truth, contained within itself not only objective truth (i.e., was a reflection of objective reality to the extent of its cognizability), but also elements of absolute

---

424 *Ibid., pp. 295–296.*

425 *V. I. Lenin, Works, vol. 14, 4th ed., p. 120.*

truth, since it contained undeniable knowledge about the atom as the smallest particle of a chemical element, about its ability to combine with other atoms and form molecules, about atomic weight, atomic size, etc.

The discovery of radioactivity of elements and subatomic particles—electrons and protons—radically changed the concept of the atom. Generalizing these discoveries, physicists, initially likening the atom to a planetary system, created a mechanical model of it, which expressed a new stage in the cognition of nature and added new grains of absolute truth to the concept of the atom.

Later, physicists discovered new particles of the atom—the neutron, positron, etc. On the basis of these new discoveries, Soviet physicists (D. D. Ivanenko and others) created a new neutron-proton theory of the nucleus and developed a model of the interaction of intranuclear forces. These new discoveries significantly deepened our knowledge about the atom and brought new grains of absolute truth into the scientific understanding of the atom. But even this concept of the atom is not yet final; it will be clarified, supplemented, and developed with the further growth of knowledge about the structure of matter.

"The 'essence' of things or 'substance',—wrote Lenin,—are also relative; they express only the deepening of human knowledge of objects, and if yesterday this deepening went no further than the atom, today—no further than the electron and ether, dialectical materialism insists on the temporary, relative, approximate character of all these *milestones* in the knowledge of nature by progressing human science. The electron is as

inexhaustible as the atom, nature is infinite, but it infinitely *exists...*"[426]

Every relative truth is a stage in cognition, an expression of absolute truth, and therefore it necessarily contains within itself particles, grains of the latter. Marxism-Leninism by no means denies the existence of absolute, eternal truths. Thus, for example, the fundamentals of Euclidean geometry, classical mechanics, physics, chemistry, etc., are, to a certain extent, eternal truths. Engels wrote that *"certain results of these sciences represent eternal truths, final truths in the ultimate instance, which is why these sciences were called exact"*[427]. Such absolute truths also include many propositions of dialectical materialism, which reflect the general, unresolvable, and eternal laws of objective reality. An absolute truth is, for example, the philosophical concept of matter.

"Therefore, to talk about how,—wrote Lenin,—such a concept can become 'outdated', is *childish babble*, is senseless repetition of the arguments of *fashionable reactionary philosophy*".[428]

Truths of fact (for example, the dates of certain historical events, geographic location, etc.) are also eternal truths. Regarding them, Lenin noted that they serve as an example of *"truths that are eternal, absolute, which to doubt is permissible only for madmen..."*[429]

---

426 *V. I. Lenin, Works, vol. 14, 4th ed., p. 249.*
427 *F. Engels, Anti-Dühring, 1952, p. 82.*
428 *V. I. Lenin, Works, vol. 14, 4th ed., p. 117.*
429 *Ibid., p. 120.*

But all scientific truths are always manifested concretely, in connection with the concrete-historical conditions of material reality itself. Therefore, Marxism-Leninism does not recognize abstract truths, but recognizes only concrete truths, dependent on concrete-historical conditions, place, and time. "...There is no abstract truth,—wrote Lenin,—truth is always concrete..."[430]

For example, the conclusions of Marxism on the inevitability of the simultaneous victory of socialism in the principal countries of Europe were true under the concrete-historical conditions of pre-monopoly capitalism. For the era of imperialism, for new historical conditions, the teaching of Lenin—Stalin on the possibility of the victory of socialism in a single, separate country became true.

In resolving all theoretical and practical questions, the leaders of the Communist Party, Lenin and Stalin, always proceeded from the premise that there is no abstract truth, truth is always concrete. Applying the proposition of the concreteness of truth to the solution of the national question, Comrade Stalin points out:

"A nation has the right freely to determine its destiny. It has the right to arrange its life as it pleases, without infringing, of course, upon the rights of other nations. This is indisputable.

But how exactly should it arrange its life, what forms should its future constitution take, if we take into account the interests of the majority of the nation and, above all, of the proletariat?

---

430 *V. I. Lenin, Works, vol. 7, 4th ed., p. 380.*

...what solution is most compatible with the interests of the working masses? Autonomy, federation, or separation?

All these are questions, the solution of which depends on concrete historical conditions surrounding the given nation.

Moreover. Conditions, like everything else, change, and a solution that is correct for a given moment may turn out to be completely unacceptable for another moment"[431].

The teaching of Marxism-Leninism on the concreteness of truth is inextricably linked with revolutionary-practical activity; it is an expression of the unity of revolutionary theory and practice. Lenin and Stalin always linked the solution of theoretical questions with the revolutionary-practical activity of the proletariat and its party, which is why the theoretical truths established by them have a concrete, militant, and purposeful character.

Marxism-Leninism on the Significance of Scientific Cognition for the Practical Activity of People

The Marxist-Leninist theory of knowledge is not limited to revealing the general laws of human cognition; it clarifies the role and significance of scientific cognition (scientific theory) for the practical activity of people, for their impact on the surrounding world.

Marxism-Leninism teaches that any scientific cognition (if it is indeed scientific) is of immense importance for the practical activity of people, because, by revealing the internal connections and lawful relationships of material reality, it

[431] *J. V. Stalin, Works, vol. 2, pp. 312–313.*

shows people the paths and methods of their practical impact on reality and changing it in accordance with the goals and needs of society.

In the work *"On Dialectical and Historical Materialism"*, Comrade Stalin showed the tremendous methodological importance of the proposition on the cognizability of the world for science and practice. The power of scientific cognition lies precisely in the fact that it is not limited to knowing the external, but reveals deep internal connections and lawful relationships of phenomena and processes of the material world, giving the opportunity to use the laws governing these phenomena, to see the perspective of the development of phenomena, and to practically act upon them based on the utilization of these laws.

In the work *"Economic Problems of Socialism in the USSR"*, J. V. Stalin, with exceptional depth, demonstrated the importance of scientific cognition for the practical activity of man, for his impact on nature and society. With the exception of astronomical, geological, and certain other analogous processes, teaches Comrade Stalin, people "are far from powerless in terms of the possibility of their impact on the processes of nature. In all such cases, people, having learned the laws of nature, taking them into account and relying upon them, skillfully applying and utilizing them, can limit the sphere of their action, give the destructive forces of nature a different direction, and turn the destructive forces of nature to the benefit of society"[432].

---

[432] *J. V. Stalin, Economic Problems of Socialism in the USSR, p. 4.*

But this practical impact of people on nature does not mean the abolition of its natural laws or the establishment of new laws; no, it is always accomplished on the basis of taking into account the laws of nature, the laws of science, for the slightest violation of these laws inevitably leads to the disruption of affairs, to the failure of the whole procedure for transforming nature.

Only scientific cognition of the laws of nature opens up the possibility for their utilization by people in their practical activity. Of course, practical knowledge and utilization by people of certain laws of nature is possible to one degree or another long before their scientific discovery. It is known that for many millennia before Galileo and Newton, people in their practical activity utilized certain aspects of the action of the law of gravity and falling bodies, although they were still far from its scientific understanding. Engels noted that back in deep antiquity, prehistoric people knew in practice that friction generates heat, and practically obtained fire by friction. But many millennia passed after this before the discovery that friction is a source of heat, and even more so before the discovery of the law of conservation and transformation of energy. Of course, these possibilities of practical utilization of various laws of nature prior to their discovery and scientific cognition were very limited. Therefore, for the full practical utilization of various laws of nature, the discovery and scientific cognition of their action are required. J. V. Stalin points out that the forces and laws of nature act blindly and destructively, and people remain powerless against them until

these forces and laws are cognized, until people learn to harness their destructive actions.

The entire history of human society is a history of the progressively increasing practical impact of people on various phenomena and processes of surrounding nature, and their utilization for specific vital goals and needs. This impact of people expanded and intensified with the growth of scientific cognition of nature and its laws, with the improvement of instruments of production and means of practical impact on nature.

In the process of the entire centuries-long history of humanity, starting from the primitive state and ending with modern machine production, man has left an indelible imprint on surrounding nature; he has altered the Earth's surface, the land relief, the flow of rivers, the climate, and the plant and animal worlds beyond recognition. Nature in the form in which it existed before the appearance of man almost no longer exists anywhere in our time. The modern state of surrounding nature is to a significant degree the product of those changes that were brought about by the practical activity of man.

But the character of the practical impact of people on nature, and man's changes to it, the utilization of its forces and resources, is determined not only by the level of development of productive forces and scientific cognition, but also by the type of prevailing relations of production, by the character of the socio-political system. The impact of people on certain natural processes began in deep antiquity. But under the conditions of the dominance of exploiting classes, this impact

inevitably assumed a spontaneous and predatory character, accompanied by the devastation of lands and natural wealth.

The plundering of natural wealth has reached unprecedented proportions under modern capitalism, where the extraction of maximum profit is the sole stimulus for the development of production. The predatory economic policy pursued by imperialist rulers inevitably leads to the complete exhaustion and depletion of fertile lands, the destruction of forests, the plundering of mineral resources, the extermination of valuable animals, etc.—in short, to turning our inhabited planet into a desert. The only way to stop this plundering of natural wealth by capitalists is the destruction of the capitalist mode of production.

Fundamentally different is the socialist impact of people on nature. This qualitatively different impact began from the first years of the existence of the Soviet state and acquired a grandiose scale during the period of gradual transition from socialism to communism. Under socialism, the impact of people on nature inevitably assumes a planned character and is carried out with the help of the latest technical means and advanced Soviet science. The character of socialist impact is directly opposed to capitalist impact: it does not lead to the plundering of natural wealth, but puts it at the service of all society; it finds its embodiment in the afforestation and irrigation of arid lands, drainage of swamps, construction of ponds and reservoirs, joining of rivers and seas, and in a number of other measures which, in their totality, lead to a fundamental transformation of nature and its subordination to the needs of society.

Such measures are a striking example of the socialist impact of people on nature. Acting upon nature, Soviet people rely on the achievements of science and take into account its powerful force. Advanced Soviet science, standing on the theoretical foundation of Marxist-Leninist philosophy, as I. V. Michurin correctly noted, "teaches to actively act upon this nature and change it, but consistently and actively to act upon and change nature is within the power of only the proletariat..."[433]

Modern bourgeois philosophers and sociologists attempt to prove that social phenomena are supposedly completely inaccessible to human cognition and practical impact, that they are subordinated to some mysterious force, world fate, or divine will. In opposition to these reactionary assertions, the Marxist-Leninist theory of knowledge teaches that "social life, the development of society—is also cognizable, and the data of sciences on the laws of societal development are reliable data having the significance of objective truths".

Consequently, the science of the history of society, despite all the complexity of social life phenomena, can become just as exact a science as, say, biology, capable of utilizing the laws of societal development for practical application[434].

In the work *"Economic Problems of Socialism in the USSR"*, Comrade Stalin decisively emphasized the objective character of the laws of economic development of society; he showed that people cannot change, let alone abolish, these laws, which operate independently of the will and consciousness of people.

---

433 *I. V. Michurin, Works, vol. 1, M. 1948, p. 623.*

434 *J. V. Stalin, Questions of Leninism, 1952, pp. 583–584.*

But people, teaches Comrade Stalin, can cognize the economic laws of society and, relying on them, utilize them in their practical activity, give a different direction to the destructive actions of certain laws, limit the sphere of action of some, and give leeway to the action of other laws. "It has been proven,—writes Comrade Stalin,—that society is not powerless in the face of laws, that society, having cognized economic laws and relying on them, can limit the sphere of their action, utilize them in the interests of society and 'harness' them..."[435]

The utilization of economic laws by people to one degree or another occurs in all socio-economic formations, but the ways and possibilities of this utilization are far from identical. In antagonistic socio-economic formations, this utilization of economic laws assumes a class character. "The utilization of economic laws,—notes Comrade Stalin,—always and everywhere in a class society has a class background..."[436]

It is known that the practical utilization by exploiting classes of these or those economic laws was always limited by their narrow class interests. They used certain economic laws then and to the extent that they did not contradict their class interests. As long as the bourgeoisie was a progressive class and fought against feudalism, it utilized the law of obligatory correspondence of production relations to the character of the productive forces. It overthrew the old, feudal production relations, created new, bourgeois relations, and brought them into correspondence with the productive forces that had grown within the womb of feudalism. But when the bourgeoisie

---

435 *J. V. Stalin, Economic Problems of Socialism in the USSR, p. 6.*

436 *J. V. Stalin, Economic Problems of Socialism in the USSR, p. 49.*

turned into a reactionary class, and bourgeois production relations became shackles to the further development of the productive forces, it began to resist the action of the law of obligatory correspondence of production relations to the character of the productive forces. The bourgeoisie practically utilizes certain laws of capitalist production and exchange only in its narrow class interests, uses them to strengthen its dominance, to increase its profit, and to intensify the exploitation of the working masses. This was manifested particularly clearly in the era of modern capitalism, when the class interests of the bourgeoisie came into conflict with the interests of the majority of society, when they were directed at delaying further economic, political, and cultural progress of humanity.

At present, only the proletariat, expressing the interests of all humanity, turns out to be capable of scientific cognition of the economic laws of society and practical utilization of them in the interests of the majority of society.

Being the most revolutionary class, the proletariat is the standard-bearer of comprehensive scientific cognition of the laws of social development and their utilization in the interests of all society. The difference between the proletariat and all other classes lies in the fact that its class interests coincide with the interests of the overwhelming majority of society, since the proletariat fights for the abolition of all exploitation.

The leaders of the world proletariat, Marx and Engels, discovered the laws of economic development of society and created a truly scientific political economy, while Lenin and Stalin developed it further as applied to the new era, to the new

needs of the revolutionary practice of the proletariat and its party, as applied to the tasks of socialist construction in the USSR.

The scientifically cognized (discovered) laws of social development by the founders of Marxism-Leninism were used in the interests of all society by the proletariat of Russia and its party in their revolutionary-practical activity aimed at the revolutionary transformation of the world. The ideological and tactical principles of the Communist Party, as well as all its practical activity, are based on knowledge of the laws of development of society. "Consequently,—writes Comrade Stalin,—in order not to err in policy, the party of the proletariat must proceed, both in constructing its program and in its practical activity, primarily from the laws of development of production, from the laws of economic development of society"[437].

The Marxist-Leninist theory, as the result of genuine scientific cognition of the laws of social development and the paths of revolutionary transformation of the world, is of the greatest importance for the revolutionary-practical activity of the proletariat and its party. Marxism-Leninism, as a science of the laws of development of society, of the laws of the proletarian revolution, of the laws of socialist construction, of the victory of communism, has served as a powerful theoretical weapon in the world-historic struggle of the Communist Party for the revolutionary-practical transformation of capitalist society into a socialist one.

---

[437] *J. V. Stalin, Questions of Leninism, 1952, p. 591.*

Practically embodying the revolutionary theory of Marxism into life and developing it further on the basis of the new experience of the class struggle of the proletariat, Lenin and Stalin comprehensively substantiated and developed the question of the role of scientific cognition in the practical activity of people, of the greatest importance of socialist theory for the revolutionary practice of the proletariat and its party. "Without revolutionary theory,—wrote Lenin,—there can be no revolutionary movement"[438]. "It is known,—noted Comrade Stalin,—that theory, if it is indeed theory, gives practitioners the power of orientation, clarity of perspective, confidence in work, and faith in the victory of our cause"[439].

The world-historic victory of socialism in the USSR and the successes of socialist construction in the countries of people's democracy bear witness to the fact that Marxist-Leninist theory is, for the working class and its party, a powerful theoretical weapon in the cause of the revolutionary transformation of capitalist society into a communist one.

Under the leadership of Lenin and Stalin, the Communist Party of the Soviet Union embodied into life the Marxist thesis that "materialist theory cannot limit itself to explaining the world, that it must also change it"[440]. Guided by the most advanced theory in the world—Marxism-Leninism—the Communist Party carried out truly gigantic transformations in the USSR, as a result of which the Soviet country was transformed from a backward, agrarian state into an advanced, industrial socialist

---

438 *V. I. Lenin, Works, vol. 5, 4th ed., p. 341.*

439 *J. V. Stalin, Works, vol. 12, p. 142.*

440 *J. V. Stalin, Works, vol. 6, p. 92.*

power, and became at the head of all democratic forces in their struggle for peace, for democracy, for socialism.

Under the conditions of socialist society in the USSR, the Communist Party and the Soviet state, expressing the will and aspirations of the entire Soviet people, are consciously guided by the cognized laws of economic development of society, consciously using these laws in the practical struggle of the Soviet people for the building of communism.

DIALECTICAL AND HISTORICAL MATERIALISM — THE THEORETICAL FOUNDATION OF COMMUNISM

★

M. A. LEONOV

Dialectical materialism — a philosophical system, from which scientific socialism stems

Dialectical and historical materialism J. V. Stalin characterizes as the worldview of the Marxist-Leninist party, the theoretical foundation of communism, the theoretical bases of the Marxist party. Dialectical materialism he views as the philosophical-theoretical basis of Marxism, and historical materialism — as its scientific-historical basis.

In this characterization is expressed the great significance of Marxist-Leninist philosophy: its class nature, its role in the struggle of the proletariat for the dictatorship of the working class, its place and significance in Soviet society building communism, its role as the scientific basis of the practical activity of the Marxist-Leninist party. This characterization points to the deep qualitative differences of Marxist-Leninist philosophy from all preceding philosophy. Never in the past has any philosophical theory had such practical-political significance as dialectical and historical materialism possesses.

Marxism-Leninism is a monolithic, integral doctrine, all constituent parts of which — scientific communism, political economy, and philosophy — are organically bound together.

“Marxism”,— wrote J. V. Stalin in the work "Anarchism or Socialism?",— “is not only a theory of socialism, this is a whole worldview, a philosophical system, from which of itself stems the proletarian socialism of Marx. This philosophical system is called dialectical materialism”[441]. In this work J. V. Stalin shows that proletarian socialism is a direct conclusion from dialectical materialism[442], that “*he theoretical basis of scientific socialism is the materialist theory of Marx — Engels”*[443].

Marxist philosophy is distinguished by monolithicity, integrity, and harmony. Characterizing dialectical materialism, Lenin wrote: “In this philosophy of Marxism, cast from a single block of steel, one cannot take out a single basic premise, a single essential part, without departing from objective truth, without falling into the embrace of bourgeois-reactionary falsehood”[444].

The worldview of the Marxist-Leninist party is intrinsically and inseparably bound with the ultimate goal of the proletariat — communism. The theory of scientific communism, created by Marx and Engels and developed by Lenin and Stalin, is based on the granite foundation of dialectical and historical materialism. By creating dialectical and historical materialism, Marxism transformed socialism from a utopia into a science. This philosophical doctrine scientifically substantiates the fundamental class interests and tasks of the proletariat.

---

441 *J. V. Stalin, Works, vol. 1, p. 297.*
442 *See ibid., p. 331.*
443 *Ibid., p. 352.*
444 *V. I. Lenin, Works, vol. 14, 4th ed., p. 312.*

Marx and Engels comprehensively revealed the inseparable connection of scientific communism with dialectical and historical materialism. They showed that dialectical and historical materialism is the theoretical weapon of the proletariat in the struggle for liberation from capitalist exploitation. In *The Holy Family* Marx and Engels wrote that materialism is the logical basis of communism. Communism they called practical materialism.

Proceeding from a dialectical-materialist worldview, Marx and Engels uncovered the objective laws of capitalism, inevitably leading to the necessity of replacing the capitalist system with a communist one. Thanks to the materialist understanding of history, the objective inevitability of communism as the highest stage of social development was scientifically proven. The founders of scientific communism, having uncovered the laws of the origin and development of the capitalist mode of production, showed that capitalist relations of production at a certain stage of their development enter into an irreconcilable contradiction with the productive forces grown under conditions of capitalism, which makes absolutely inevitable the revolutionary replacement of the capitalist mode of production by the socialist one. “Marx and Engels discovered the laws of development of capitalist society and scientifically proved that the development of capitalist society and the class struggle within it must inevitably lead to the fall of capitalism, to the victory of the proletariat, to the *dictatorship of the proletariat”*[445].

[445] *"History of the C.P.S.U.(B.). Short Course", p. 11.*

Lenin and Stalin concretized the proposition of Marxism on dialectical materialism as a philosophical doctrine from which scientific socialism stems. They raised to a new, higher level the doctrine of Marx and Engels on the historical necessity of socialism. In the struggle with various bourgeois scribblers and their lackeys from the camp of opportunists, who denied the "possibility of scientifically substantiating socialism and proving, from the point of view of the materialist understanding of history, its necessity and inevitability", Lenin and Stalin comprehensively substantiated the Marxist proposition that proletarian socialism is not a invention of dreamers, but a science based on the knowledge of the laws of social development and economic laws of bourgeois society.

Studying the era of imperialism, Lenin and Stalin established that the capitalist economic system had outlived its era and must yield its place to another, higher — socialist economic system.

On the basis of a deep study of the era of imperialism Lenin established that imperialism represents a stage of mature and overripe capitalism, standing on the eve of its collapse and replacement by socialism. Having discovered that unevenness of economic and political development is an objective law inherent in imperialism, Lenin drew the conclusion that the simultaneous victory of socialism in all countries is impossible, that the victory of socialism is possible initially in a few or even in one, individually taken, capitalist country. Having revealed the main contradictions of imperialism, J. V. Stalin

showed that the proletarian revolution had become a "practical inevitability"[446].

In the work *Economic Problems of Socialism in the USSR* comrade Stalin gave a deep analysis of the current state of the world capitalist system, showed the growing deepening of the general crisis of capitalism, and characterized the stages of its development.

Comrade Stalin showed that the general, i.e., encompassing both economy and politics, crisis of the world capitalist system began during the First World War, especially as a result of the breakaway of the USSR from the capitalist system. During the Second World War, especially after the breakaway of the people's democratic countries in Europe and Asia from the capitalist system, the general crisis of capitalism entered the second stage of its development. J. V. Stalin teaches that at the foundation of the general crisis of capitalism "lies the ever-deepening decay of the world economic system of capitalism, on the one hand, and the growing economic power of the countries that broke away from capitalism — the USSR, China, and other people's democratic countries, on the other hand"[447].

The most important feature of the second stage of the general crisis of the world capitalist system is the disintegration of a single world market and the formation of two parallel world markets, opposing each other.

Comrade Stalin points out that "the sphere of application of forces of the main capitalist countries (USA, England, France)

---

446 *J. V. Stalin, Works, vol. 6, p. 74.*

447 *J. V. Stalin, Economic Problems of Socialism in the USSR, p. 57.*

to world resources will not expand, but shrink, that conditions of the world market for sales for these countries will worsen, and underutilization of enterprises in these countries will increase. In this, strictly speaking, consists the deepening of the general crisis of the world capitalist system in connection with the disintegration of the world market"[448].

In the address at the XIX Party Congress J. V. Stalin indicated that now the bourgeoisie has seriously changed, has become more reactionary, lost connection with the people, and thereby weakened itself. It has discarded even limited bourgeois-democratic freedoms, thrown overboard the principle of equal rights of people and nations, and trampled the principle of defending the independence of its nation.

These changes reflect the political crisis of the world capitalist system.

All these circumstances weaken and cannot fail to weaken the positions of the bourgeoisie, easing the struggle of the popular masses against capitalism.

In the work *On Dialectical and Historical Materialism* J. V. Stalin develops and deepens the Marxist proposition on dialectical and historical materialism as the theoretical foundation of communism, as the worldview of the Marxist-Leninist party.

J. V. Stalin shows that all propositions of dialectical and historical materialism and conclusions from these propositions serve the cause of scientifically substantiating the inevitability

[448] *J. V. Stalin, Economic Problems of Socialism in the USSR, pp. 31–32.*

of replacing the capitalist system with a communist one and give proletarian revolutionaries a powerful weapon in their practical activity.

In the theoretical foundation of scientific communism, great importance belongs to the proposition of Marxist dialectics, according to which no phenomenon can be understood if considered in isolation, outside connection with surrounding conditions.

In contrast to utopians, whose ideas about socialism were built on fantasy and not on accounting for the material conditions of social life, Marxism established that socialism is a necessary necessary result of social development, conditioned not simply by the "good will" of people, but by all preceding development. Lenin indicated that "the inevitability of the transformation of capitalist society into socialist Marx derives entirely and exclusively from the economic law of movement of modern society"[449].

Engels wrote that scientific socialism is the ideal reflection in the heads of the working class of that conflict which is engendered by the bourgeois mode of production. And the further this mode of production develops, the more sharply appears the incompatibility of social production with bourgeois appropriation[450]. Thus, from the consideration of social phenomena in their interconnection with concrete historical conditions, the necessity and inevitability of replacing the capitalist system with a socialist one become obvious.

---

449 *V. I. Lenin, Works, vol. 21, 4th ed., p. 54.*

450 *See F. Engels, Anti-Dühring, 1952, pp. 252, 255.*

In the highest degree revolutionary conclusions follow from the general law of movement and development. As early as 1895 Lenin wrote: "If everything develops, if some institutions are replaced by others, why then will the autocracy of the Prussian king or the Russian tsar, the enrichment of an insignificant minority at the expense of the huge majority, the dominance of the bourgeoisie over the people, continue forever?"[451] This conclusion received further development in the work of J. V. Stalin *On Dialectical and Historical Materialism*. Comrade Stalin showed that if the world is in continuous movement and development, and the dying away of the old and growth of the new is a law of development, then from this immutable law it follows that there are not and cannot be "eternal principles" of private property, subordination of peasants to landowners, workers to capitalists.

"Hence, the capitalist system can be replaced by the socialist system, just as the capitalist system replaced in its time the feudal system"[452].

This conclusion on the inevitability of the demise of capitalism equips the working people in the struggle against the imperialist bourgeoisie, resorting to the most foul means to save the rotten capitalist system.

The inevitability of communism Marxism substantiates proceeding from the objective law of development as a forward movement from simple to complex, from lower to higher. The

---

451 *V. I. Lenin, Works, vol. 2, 4th ed., p. 7.*

452 *J. V. Stalin, Problems of Leninism, 1952, p. 579.*

main thing for the victory of every new social system, for the transition from one stage of social development to another — higher — is labor productivity. Capitalism defeated feudalism because it created higher labor productivity. Socialism defeats capitalism because it creates far higher labor productivity than capitalism. This social regularity receives its visual expression in the growth of labor productivity in the USSR, as well as in the countries of people's democracy.

Increasing labor productivity is the most important source of growth of socialist production. Thus, directives of the XIX Party Congress for the fifth five-year plan envision a growth of labor productivity over the five years in industry by approximately 50%, in construction — by 55, in agriculture — by 40%. Accounted for by growth of labor productivity in the fifth five-year plan will be received about three quarters of the entire growth of industrial production, which means that in the main, industrial production will be increased precisely through raising labor productivity.

Proceeding from the objective law of the invincible nature of that which arises and develops, Marxist dialectics scientifically substantiated the proposition of the invincibility of communism as a new, mighty social system to which the future belongs. "Communists must know,— wrote Lenin,— that the future in any case belongs to them, and therefore we can (and must) combine the greatest passion in the great revolutionary struggle with the most cool-headed and sober accounting of the furious thrashings of the bourgeoisie"[453].

[453] *V. I. Lenin, Works, vol. 31, 4th ed., p. 81.*

Dialectical and historical materialism serves as the scientific substantiation of the class struggle of the proletariat and the regularity of revolutionary upheavals. "If the transition of slow quantitative changes into rapid and sudden qualitative changes constitutes a law of development, then it is clear that revolutionary upheavals, accomplished by oppressed classes, represent a completely natural and inevitable phenomenon.

Hence, the transition from capitalism to socialism and liberation of the working class from capitalist oppression can be accomplished not by way of slow changes, not by way of reforms, but only by way of qualitative change of the capitalist system, by way of revolution"[454].

This conclusion ideologically armed the working class to storm capitalism and now equips all working people of capitalist countries in the struggle against adherents of reformist ideology — leaders of right-wing socialists, who persistently propagate the idea of growing of capitalist society into socialist.

Right-socialist theorists, reasoning about modern capitalism, strive to present black as white, capitalism — as socialism.

For example, Williams, former advisor to Attlee, in his book *The Triple Challenge* depicted the activity of the Labour government aimed at strengthening monopoly capitalism as "genuine revolution", allegedly having created a "new socialism" in England. Another Labour leader, C. Young, wrote: "Much of what Europeans would call socialism has been

[454] *J. V. Stalin, Problems of Leninism, 1952, p. 580.*

accomplished in the United States". Echoing him is the leader of Belgian right-wing socialists, Spaak, asserting that allegedly in America "millionaires are gradually disappearing", "American capitalism is attaining socialist goals". So say right-wing socialists about a country overflowing with unemployed, about a country where racism has become state ideology, about a country whose army surpassed in Korea the atrocities of Hitlerites, about a country whose monopolists brutally exploit the peoples of colonial and other enslaved countries.

Marxism-Leninism teaches proletarians of capitalist countries not to fear clashes of classes and to bring to completion, through revolutionary means, the resolution of contradictions of bourgeois society. Dialectical materialism fosters in working people the awareness of the irreconcilable opposition of their interests to the interests of the bourgeoisie and to the entire bourgeois system.

As a mighty call to revolutionary action sound the words of J. V. Stalin: "If development occurs by way of revealing internal contradictions, by way of clashes of opposing forces on the basis of these contradictions so as to overcome these contradictions, then it is clear that the class struggle of the proletariat is a completely natural and inevitable phenomenon.

Hence, one must not gloss over the contradictions of capitalist order, but uncover them and unspool them, not extinguish class struggle, but bring it to completion.

Hence, so as not to err in policy, one must conduct an irreconcilable class proletarian policy, and not a reformist policy of harmony of interests of the proletariat and

bourgeoisie, and not a conciliatory policy of "growing" of capitalism into socialism"[455]. This conclusion fosters in fighters for communism boldness, steadfastness, revolutionary courage and adherence to principle in the struggle against the imperialist bourgeoisie and all its defenders. It exposes right-wing socialists, who attempt to hush up class struggle and whom Maurice Thorez accurately characterized as people of "synthesis", "reconciliation", "black-and-white" resolutions, smoothing over disagreements and "hiding an awl in a sack".

Marxist-Leninist philosophy equips the working class and all working people with a clear perspective. Scientifically proving the inevitability of the demise of capitalism, it simultaneously teaches that capitalism does not perish automatically, it will not "fall" itself if it is not "dropped"[456]. Giving a correct understanding of the entire world surrounding us, Marxist-Leninist philosophy serves as the theoretical basis of the practical activity of millions of proletarian masses directed at the revolutionary transformation of capitalist society into a socialist one.

Dialectical and historical materialism is unthinkable without connection with the practice of the class struggle of the proletariat, without the revolutionary tactics of this struggle; "...without *this* side of materialism Marx rightly considered it half-baked, one-sided, dead"[457].

---

455 *J. V. Stalin, Problems of Leninism, 1952, p. 580.*

456 *V. I. Lenin, Works, vol. 21, 4th ed., p. 190.*

457 *V. I. Lenin, Works, vol. 21, 4th ed., p. 58.*

Marxism-Leninism proceeds from the recognition of objective historical regularity, from the recognition of the action of objective sociological and economic laws existing in all socio-economic formations. In the work *Economic Problems of Socialism in the USSR* J. V. Stalin subjected to severe critique those who denied the objective regularity of economic development of socialist society, and showed that under socialism, as in all other social formations, objective economic laws operate independently of the will and desire of people.

Marxism-Leninism teaches that although objective historical regularity determines human activity, this regularity does not act by itself, but presupposes their active activity.

Exposing the idealist, voluntarist view on social regularities, comrade Stalin together with that refuted also the fetishistic view on laws of economic development of society and showed that people should by no means slavishly bow before the action of economic laws. They can cognize them, study their action, and on the basis of this utilize them in their interests, giving leeway to the action of some laws, restricting the action of others, etc.

Objective necessity in the development of society does not exclude, but on the contrary, presupposes creative participation of people. "People,— wrote Lenin,— make their own history..."[458] And the more active human activity is, the faster and more fully this objective historical necessity is accomplished. The tasks of the socialist revolution, tasks of building socialism and communism, can be accomplished only

[458] *V. I. Lenin, Works, vol. 21, 4th ed., p. 40.*

when the entire revolutionary army of the working class and broad working masses are brought into active action. Deep social transformations require the participation of broad popular masses, the participation of tens and hundreds of millions. This law of historical development was formulated by Lenin: "...the deeper the transformation we wish to carry out, the more we must arouse interest in it and a conscious attitude, convince new millions and tens of millions of this necessity"[459].

The Communist Party considered and considers one of its main tasks to be equipping the broad masses of working people with a Marxist worldview. V. I. Lenin in the work *What Is to Be Done?*, comrade Stalin in the work *Briefly About Party Disagreements* developed the ideological foundations of the Marxist party and substantiated the Marxist proposition on combining the labor movement with socialism, on bringing socialist consciousness into the labor movement.

In the proletariat, due to its position in society, a attraction to socialism is born of itself. By virtue of this attraction to socialism, the proletariat easily assimilates socialist ideas.

But the elaboration of scientific socialism cannot be the task of the workers themselves, as under conditions of capitalism they do not possess the required means and leisure for this. The history of all countries, said Lenin, testifies to the fact that exclusively by its own efforts the working class is capable of elaborating only trade-unionist consciousness, reducing the tasks of the labor movement only to defending the particular, narrowly professional interests of workers.

---

459 *V. I. Lenin, Works, vol. 31, 4th ed., p. 467.*

Developing this proposition further, J. V. Stalin says: "To elaborate scientific socialism, one must stand at the head of science, one must be armed with scientific knowledge and be able to deeply investigate the laws of historical development"[460].

The Marxist worldview, which is based on the conclusions of all sciences, on the knowledge of laws of social development, is elaborated by ideologists of the working class, theorists, scholars, who have mastered all data of science. Socialist ideology, a scientific worldview, is brought into the consciousness of working masses by the vanguard of the working class — its party. With this worldview the Communist Party equipped and equips the working people of our Motherland.

Only Marxism, noted Lenin, indicated to the proletariat the way out of spiritual slavery, in which hitherto oppressed classes languished.

Even in the work *What the "Friends of the People" Are and How They Fight Against the Social-Democrats?* Lenin indicated that this "theory directly sets as its goal uncovering all forms of antagonism and exploitation in modern society, tracing their evolution, proving their transient character, the inevitability of their transformation into another form, *and serving thereby the proletariat so that it can as quickly as possible and as easily as possible finish with all exploitation*"[461]. Only the interests of the proletariat require the

---

460 *J. V. Stalin, Works, vol. 1, p. 99.*

461 *V. I. Lenin, Works, vol. 1, 4th ed., p. 308.*

destruction of all exploitation. Therefore, Marxists do not stop at explaining the world, but change it. The fundamental difference of dialectical materialism as a proletarian worldview from all other philosophical systems consists in the fact that, giving a correct understanding of the entire world surrounding us, it simultaneously points out the path for remaking this world, serving as the theoretical basis for practical activity directed at the revolutionary transformation of capitalist society into a communist one.

Being the theoretical expression of the needs of the labor movement, Marxist philosophy plays the role of a mighty weapon for the practical transformation of the world. Only dialectical and historical materialism points out the path to mastering the laws of development of nature and society, to the practical restructuring of the world in the interests of working people. By this are determined such distinctive features of Marxist philosophy as proletarian effectiveness, a revolutionary-critical attitude toward reality, unquenchable, all-overcoming revolutionary energy, excluding any drift, fatalism, any passivity and contemplation.

To Marxism was always inherent revolutionary effectiveness and organic hostility to a fatalistic understanding of social development, a fetishistic attitude toward the laws of social development.

Even Marx and Engels fought against fatalists, who abstractly understood objective necessity and asserted that man cannot act in any way other than he acts. Everything that people undertake, asserted the fatalists, is thus conditioned by the general course of development that the will turns out to be

predetermined, powerless. In a letter to L. Kugelmann Marx ridiculed fatalists and substantiated the idea of active revolutionary activity. Making world history, wrote Marx, would be, of course, very convenient if the struggle were undertaken only under condition of infallibly favorable chances. Engels also ridiculed the fatalistic view on necessity as predetermination of everything happening. Marx and Engels gave a "deepest understanding of the *fundamental transformative goals* of the proletariat..."[462]

In the period of imperialism the question of the role of revolutionary activity of the proletariat and its party acquired especially serious significance. The new epoch in a new way posed the question of the role of the subjective factor in the struggle for socialist revolution and transformation of the world.

Marx and Engels theoretically solved the problem of the relationship of objective and subjective moments in social development. But due to a number of historical circumstances Marx and Engels turned their main attention to clarifying the role of objective, material conditions of social development. Before Marx and Engels first of all stood the task of proving that objective internal contradictions of capitalism inevitably lead this system to demise and to the establishment of the dictatorship of the proletariat. The epoch of imperialism and proletarian revolutions extremely sharply posed the second task — the task of comprehensive development of the question of the role of the revolutionary struggle of the proletariat as the

462 *V. I. Lenin, Works, vol. 19, 4th ed., p. 503.*

decisive historical force on which depends the acceleration of the demise of capitalism.

Therefore Lenin and Stalin, alongside studying objective processes of economic and political development of society and discovering new laws, devoted immense attention to researching the role of revolutionary ideas and the significance of the activity of revolutionary classes and parties and the conditions for its success.

Lenin and Stalin, relying on the needs of the revolutionary struggle of the proletariat in the new epoch — the epoch of imperialism and proletarian revolutions, comprehensively developed the question of the role of the subjective factor, i.e., the question of the role of advanced ideas, the role of proletarian consciousness and organization, the role of the party of the proletariat. They showed how in the epoch of proletarian revolutions exceptional significance was acquired by the consciousness and organization, will and steadfastness of the proletariat and its vanguard — the Communist Party.

Lenin and Stalin devoted so much attention to the question of the role of revolutionary effectiveness also because it was necessary to oppose militant revolutionary Marxism to the opportunism of the Second International. Being agents of the bourgeoisie in the labor movement, opportunists excelled in attempts to deprive the proletariat of the will to struggle, to deaden in the working class and its party revolutionary effectiveness, unyielding resolve and steadfastness in the struggle for communism. Opportunism was ready to "take from Marxism all that is acceptable for the liberal bourgeoisie, up to the struggle for reforms, up to class struggle (without the

dictatorship of the proletariat), up to "general" recognition of "socialist ideals" and replacement of capitalism by a "new system", and discard "only" the living soul of Marxism, "only" its revolutionary nature"[463].

Instead of revolutionary effectiveness, decisive class struggle, opportunists preach fatalism, contemplation, inaction, a passive attitude toward the surrounding world. Ideologists of the Second International monstrously falsified the proposition of Marx and Engels that no social formation perishes before the necessary productive forces develop within it. This proposition of Marx they interpreted in the spirit of fatalism. The fatalism of the Second International meant abandonment of the struggle for socialist revolution and dictatorship of the proletariat. The fatalism preached by opportunists became especially dangerous when a decisive clash between capitalism and socialism unfolded and when the significance of the activity of the proletariat and the leading role of its party especially grew.

Developing Marxist doctrine, Lenin and Stalin stubbornly fought against opportunism in the labor movement.

J. V. Stalin showed that the "theory" of spontaneity is the logical basis of opportunism. The historical necessity of the demise of capitalism is conditioned by two internally bound sides — the objective (presence of certain socio-economic conditions) and the subjective (resolve of the working class to fight against the bourgeoisie). Opportunism metaphysically interprets the objective factor and ignores the active, effective

463 *V. I. Lenin, Works, vol. 21, 4th ed., pp. 197–198.*

role of the subjective factor, viewing "historical necessity" outside active revolutionary action of classes and parties.

Lenin and Stalin subjected to devastating critique the distortion by opportunists of Marxist theory. In the struggle with Mensheviks, Lenin showed that "they belittle the materialist understanding of history by their ignoring of the effective, leading, and directing role which can and must be played in history by parties, conscious material conditions of upheaval and standing at the head of advanced classes"[464]. Exposing revisionism, its attempts to substitute the revolutionary effectiveness of dialectical materialism with contemplation, J. V. Stalin wrote: "Marx said that materialist theory cannot limit itself to explaining the world, that it must still change it. But Kautsky and Co. have no concern for this, they prefer to remain with the first part of Marx's formula"[465].

Modern leaders of right-wing socialist parties strive to hold back working masses from active actions in defense of peace, democracy and national independence, from a decisive struggle for social and political rights of working people, for improving their material position. Under conditions of deepening contradictions of imperialism and sharpening of the general crisis of the world capitalist system, they strive to blunt the sharpness of contradictions between working people and monopolists, between oppressed peoples of colonial countries and imperialists, between adherents of peace and reactionary forces striving to unleash a new war. Shackling thereby revolutionary energy and initiative of the masses, they inflict

---

464 *V. I. Lenin, Works, vol. 9, 4th ed., p. 28.*

465 *J. V. Stalin, Works, vol. 6, p. 92.*

immense harm on the liberation movement of working people, their struggle for a better future, for socialism.

Opposing revolutionary Marxism to opportunism, Lenin and Stalin put forward as one of the most important features of Marxism-Leninism the revolutionary-critical, transformative activity of the proletariat and its party. Lenin and Stalin raised to a new stage the doctrine of Marx and Engels on historical regularity, on the paths, methods and forms of its implementation. Marxism-Leninism not only asserts the presence of objective laws of social development, but also recognizes the necessity of their utilization in the practical revolutionary-transformative activity of the proletariat.

Dialectical Materialism — The Scientific Basis of the Practical Activity of the Marxist-Leninist Party

The Marxist-Leninist party is, above all, an active party. The Statute of the Communist Party adopted at the 19th Congress obliges every party member "to be an active fighter for the fulfillment of party decisions". The Communist Party struggles both against a great evil—a formal attitude toward party decisions—and against passivity in putting the party's policy into practice; it enhances in every way the activity and fighting capacity of party organizations.

In its practical activity, the Communist Party relies on the theory of Marxism, which studies objective processes in their development; on the program of Marxism, which is based on the conclusions of theory and determines the ultimate goal of the working-class movement; and on strategy and tactics, which constitute the science of guiding the class struggle of the

proletariat. No other party has had or has such a scientific foundation.

The practical activity of the party is based on accurate knowledge of the laws of development of nature and society, and as a result of this, it is distinguished by an invincible power that "knows no obstacles and recognizes none, which with its businesslike persistence sweeps away all and any obstacles, which cannot fail to carry through to the end a task once begun...". The Marxist-Leninist worldview gives the party the opportunity to go "boldly forward, fearing no hidden rocks," gives it a "clear program and firm tactics..." *(Stalin)*.

Marx and Engels, generalizing the experience of the class struggle and guiding the working-class movement, in their time put forward a number of brilliant ideas regarding the revolutionary tactics of the proletariat, based on the dialectical-materialist worldview. "...Marx forged a single tactic of the proletarian struggle of the working class in various countries"[466].

Engels, characterizing the scientific foundations of Marxist tactics, wrote: "For me, the historical theory of Marx is the primary condition of any coherent and consistent revolutionary tactics; to find these tactics, one need only apply the theory to the economic and political conditions of a given country"[467].

The philosophical basis of the strategy and tactics of the class struggle of the proletariat is dialectical and historical

---

466 *V. I. Lenin, Works, vol. 21, 4th ed., p. 33.*

467 *"Correspondence of K. Marx and F. Engels with Russian Political Figures", 1951, p. 309.*

materialism. Lenin noted that "Marx defined the fundamental task of proletarian tactics in strict accordance with all the premises of his materialist-dialectical worldview"[468].

The revolutionary tactics of the proletariat are an integral part of Marxism-Leninism. Therefore, "Marx throughout his life, along with theoretical works, devoted unflagging attention to questions of the tactics of the class struggle of the proletariat"[469].

The brilliant ideas of Marx and Engels on tactics and strategy were buried by the opportunists of the Second International. The parties of the Second International, operating in a period of more or less peaceful development of capitalism, in a period of parliamentarism as the predominant form of class struggle, had neither an integral strategy nor well-developed tactics. "Only in the subsequent period," indicates J. V. Stalin, "the period of open action by the proletariat, the period of proletarian revolution, when the question of overthrowing the bourgeoisie became a question of direct practice, when the question of proletarian reserves (strategy) became one of the most vital questions, when all forms of struggle and organization—parliamentary and extra-parliamentary (tactics)—revealed themselves with complete clarity—only in this period could an integral strategy and well-developed tactics for the struggle of the proletariat be worked out"[470].

---

468 *V. I. Lenin, Works, vol. 21, 4th ed., p. 58.*

469 *Ibid.*

470 *J. V. Stalin, Works, vol. 6, p. 151.*

This integral strategy and well-developed tactics of the revolutionary struggle of the proletariat were created by the great continuers of the cause and teachings of Marx and Engels —Lenin and Stalin. The works of Lenin and Stalin, which comprehensively and deeply generalize the rich experience of the Party, the experience of the entire liberation struggle of the proletariat in capitalist countries and the national liberation struggle of oppressed peoples in the colonies, and the greatest experience of building socialism, represent an inexhaustible source of profound ideas and guiding principles on questions of strategy and tactics.

The strategy and tactics, the entire activity of the Communist Party, rest upon the unshakable foundation of dialectical and historical materialism, upon knowledge of the laws of social development, a dialectical approach to historical events, a strictly objective accounting of the driving forces of revolution, the correlation of classes, etc.

J. V. Stalin teaches that the working-class movement consists of two sides: objective (or spontaneous) and subjective (or conscious). "*The objective side*—those processes of development that take place outside and around the proletariat independently of the will of the latter and its party, processes that ultimately determine the development of all society. *The subjective side*—those processes that take place within the proletariat as a reflection in the consciousness of the proletariat of objective processes, processes that accelerate or slow down the course of the latter, but by no means determine them"[471].

[471] *J. V. Stalin, Works, vol. 5, p. 62.*

If the party cannot repeal or change the objective side (for example, the laws of economic development), the subjective side, unlike the objective side, is entirely under the influence of the party. The acceleration or deceleration of the movement, the easing or complication of the objective course of development depends on the strategy and tactics of the party. A vivid example of the party's influential role in the course of the revolutionary struggle of the proletariat is its strategic slogans reflecting the deployment of revolutionary forces on the front of the class struggle, facilitating the bringing of the masses to the front of the struggle for the victory of the revolution.

Dealing with the main forces of the revolution and their reserves, the strategy of the Bolshevik Party played a crucial role at all stages of the revolution: 1905—February 1917, when the struggle was underway for the victory of the bourgeois-democratic revolution; February 1917—October 1917, when the struggle was underway for the victory of the socialist revolution; and later.

The strategy of the party of the proletariat takes into account changes in the course of the class struggle; it changes depending on historical turns and transitions from one stage of revolutionary struggle to another. It is based on an analysis of objective conditions of the class struggle of the proletariat and a sober assessment of the contending forces.

The policy of the Marxist-Leninist party, having dialectical materialism as its theoretical foundation, fundamentally differs from the policy of all other parties.

Regarding the distinguishing feature of the policy of bourgeois parties, Lenin wrote that "the cleverest people of the bourgeoisie got tangled up and cannot help making irremediable foolish errors. On this, the bourgeoisie will perish"[472]. The policy of the exploiting classes cannot be based on a scientific foundation; this policy is called upon to gloss over the crying contradictions of an antagonistic society, to hide the diseases generated by such a social system. In the report to the 17th Party Congress, J. V. Stalin said: "Look at the surrounding countries: how many ruling parties with a correct line can you find that put it into practice? Strictly speaking, there are no such parties in the world now, for they all live without perspective, wander in a chaos of crisis, and see no ways to get out of the quagmire"[473]. This evaluation of bourgeois parties, given about 20 years ago, retains all its force today, whether talking about the Labour and Conservative parties in England, the Democratic and Republican parties in the USA, etc.

The policy of these parties is based on demagogy and adventurism, blackmail and violence, lies and deception.

The proletariat, whose class interests do not contradict, but rather correspond to the progressive course of social development, is interested in scientific policy. Proletarian policy based on science is implemented by the Marxist-Leninist party. Therefore, it successfully solved and solves the tasks facing it. "Only our party," said J. V. Stalin, "knows where to lead the cause and leads it forward with success. To

---

[472] *V. I. Lenin, Works, vol. 31, 4th ed., p. 63.*

[473] *J. V. Stalin, Works, vol. 13, p. 377.*

what does our party owe this advantage of ours? To the fact that it is a Marxist party, a Leninist party. It owes this to the fact that it is guided in its work by the teachings of Marx, Engels, Lenin. There can be no doubt that as long as we remain true to these teachings, as long as we possess this compass—we will have success in our work"[474].

The vital test of the correctness of the party's policy is its long and glorious history. The history of the Communist Party of the Soviet Union shows that all its multifaceted activity rests on the granite foundation of the Marxist-Leninist worldview. All programmatic, strategic, and tactical tasks were solved and are solved by the party in full accordance with these teachings. The history of the party is dialectical and historical materialism in action, a classic model of the unity of theory and practice.

With unsurpassed power, J. V. Stalin reveals in the *"Short Course on the History of the C.P.S.U.(B.)"* the inner connection existing between the philosophy of Marxism-Leninism and the practical revolutionary activity of the party, the role of dialectical and historical materialism as an instrument for transforming the world, and its significance in the proletariat's struggle to win the dictatorship of the proletariat and build communism.

J. V. Stalin showed that throughout its history, the proletarian party, in solving all political questions, proceeded from the propositions of Marxist-Leninist science, applying them to the solution of the most complex strategic and tactical tasks. The conclusions formulated by J. V. Stalin characterize the

---

[474] *J. V. Stalin, Works, vol. 13, p. 377.*

inseparable link between Marxist-Leninist philosophy and policy, serving as a brilliant model of the creative application of the propositions of dialectical and historical materialism to the practical activity of the party of the proletariat.

One of the scientific foundations of the practical activity of the party and its policy is materialist dialectics, which Lenin and Stalin call the soul of Marxism. J. V. Stalin, characterizing the power and strength of Marxist dialectics, stated that it "enables the Bolsheviks to capture the most impregnable fortresses..."[475]

In the work *"History of the C.P.S.U.(B.): Short Course"* and its constituent part *"On Dialectical and Historical Materialism,"* a comprehensive examination of the role of the Marxist dialectical method in the practical activity of the proletarian party is given. In generalized form, the role of dialectics as the scientific basis of party policy is expressed in a number of remarkable formulas and conclusions.

J. V. Stalin teaches: "Everything depends on conditions, place, and time". By this principle of dialectics, the party is guided in its approach to all phenomena, considering them in a concrete-historical manner. Any social phenomenon, economic fact, political demand, or slogan can be correctly understood theoretically and evaluated politically only if taken in connection with concrete historical conditions.

The party in its activity is also guided by another conclusion from dialectics, formulated by Comrade Stalin: "...in order not to err in policy, one must look forward, not backward". The

---

[475] *J. V. Stalin, Works, vol. 12, p. 370.*

party stands ahead of the working class, looks forward, penetrates into the future, and builds perspectives on a scientific basis. "We cannot be satisfied with our tactical slogans limping along behind events, adapting to them after they happen.

We must strive to ensure that these slogans lead us forward, illuminate our further path, raising us above the immediate tasks of the moment"[476]. Marxist dialectics, turned toward the present and the future, enables the party to look far ahead, penetrate the depths of the future, and arm the working class and all working people with a clear goal for the movement and deep confidence in the success of the revolutionary cause.

Based on knowledge of the laws of social development and deep analysis of the causes of historical events, the Marxist-Leninist party builds its scientific foresight.

It is sufficient to recall, for example, J. V. Stalin's foresight that Russia specifically would be the country blazing the path to socialism; or J. V. Stalin's foresight that world revolution would develop through the falling away of more and more countries from the system of imperialist states, while "the process of falling away from imperialism will occur the faster and more thoroughly, the more thoroughly socialism is consolidated in the first victorious country..."[477]; there is no doubt that the foresight expressed by Comrade Stalin at the 19th Party Congress that "there is every reason to count on the

---

476 *V. I. Lenin, Works, vol. 9, 4th ed., p. 132.*

477 *J. V. Stalin, Works, vol. 6, p. 399.*

success and victory of fraternal parties in countries under the rule of capital"[478] will surely come true.

In the work *"On Dialectical and Historical Materialism,"* J. V. Stalin formulates a number of other conclusions from Marxist dialectics that are highly important for the practical activity of the party. J. V. Stalin teaches: "...in order not to err in policy, one must be a revolutionary, not a reformist... in order not to err in policy, one must conduct an uncompromising class proletarian policy..."[479]

To be a revolutionary means to conduct a decisive, consistent proletarian class line, demonstrate firmness in struggle, and uphold Marxist-Leninist party allegiance, principledness, and definiteness, and firmness: "Revolutionary tactics must be clear, sharp, and definite..."[480]

The party in its activity is guided by conclusions drawn from the Marxist dialectical concept of development. Guided by dialectics, the party discerns the new and the old in development, fosters in all workers a feeling for the new, the ability to recognize the sprouts of the new and progressive, and renders them support.

The steadfast basis of the practical activity of the party and its policy is Marxist philosophical materialism. "The power and vitality of Marxism-Leninism," teaches J. V. Stalin, "consists in the fact that it relies in its practical activity precisely on the

---

478 *J. V. Stalin, Speech at the 19th Party Congress, Gospolitizdat, 1952, p. 13.*

479 *J. V. Stalin, Questions of Leninism, 1952, p. 580.*

480 *J. V. Stalin, Works, vol. 1, p. 210.*

needs of the development of the material life of society, never detaching itself from the real life of society"[481].

This conclusion in a generalized form shows the significance of Marxist philosophical materialism for the practical activity of the party.

The party in its activity is guided by the unshakable principle of the materialist worldview: just as the interconnection and mutual conditioning of natural phenomena represent objective laws, the interconnection of social life phenomena and their mutual conditioning also represent objective laws, not a accumulation of "accidents".

From this premise, J. V. Stalin formulates a crucial conclusion for the practical activity of the party: "Hence, the practical activity of the party of the proletariat must be based not on the good wishes of 'outstanding individuals,' not on the demands of 'reason,' 'universal morality,' etc., but on the laws of development of society, on the study of these laws"[482].

The Marxist-Leninist party in its practical activity uses the objective laws of social development and relies on them.

Guided by the principles of dialectical and historical materialism, J. V. Stalin in the work *"Economic Problems of Socialism in the USSR"* revealed the economic laws inherent in Soviet socialist society and pointed out to the party the paths and methods of utilizing the laws of social development.

---

481 *J. V. Stalin, Questions of Leninism, 1952, p. 585.*

482 *Ibid., p. 583.*

J. V. Stalin showed that the laws inherent in Soviet socialist society differ qualitatively from the laws characteristic of capitalist society. The basis of the bourgeois system is private capitalist ownership of the means of production. The basic economic law of the bourgeois mode of production is the pursuit of high capitalist profit, and in the period of imperialism—the pursuit of maximum profit. The basic economic law of modern capitalism determines the inevitability of disproportion between production and consumption, between industry and agriculture, between various branches of industry, uneven economic and political development of capitalist countries, and the inevitability of predatory, imperialist wars. Under bourgeois society, consumption is determined by the capitalist character of distribution; the consumption of the working masses is restricted by their low purchasing power. J. V. Stalin indicates that under capitalism "the growth of consumption of the masses (purchasing power) never keeps pace with the growth of production and continually lags behind it, dooming production to crises"[483].

Crises of overproduction are the only possible means under capitalism to restore a degree of "proportionality" between various branches of the economy, which is immediately violated and leads to a new disproportion due to the anarchy of capitalist production.

Such are the laws of the capitalist mode of production. "If capitalism could adapt production not to obtaining maximum

[483] *J. V. Stalin, Works, vol. 12, pp. 322–323.*

profit, but to the systematic improvement of the material position of the popular masses, if it could direct profit not to satisfying the whims of parasitic classes, not to perfecting methods of exploitation, not to the export of capital, but to the systematic elevation of the material condition of workers and peasants, then there would be no crises. But then capitalism would not be capitalism"[484].

The party in its practical activity proceeds from the consideration that fundamentally different laws are inherent in the socialist mode of production. The socialist system is based on public ownership of the means of production. "The feature of contemporary Soviet society, unlike any capitalist society, consists in the fact that there are no longer antagonistic, hostile classes in it; exploiting classes have been eliminated, while workers, peasants, and intelligentsia, constituting Soviet society, live and work on the principles of friendly cooperation"[485].

Analyzing the laws governing the emergence and development of the socialist system, J. V. Stalin points out that the successes of Soviet power are due to the fact that it relied on the economic law of mandatory correspondence of relations of production to the character of the productive forces. Having socialized the means of production, Soviet power made them the property of the whole people, destroyed the system of exploitation, and created socialist forms of economy.

---

484 *J. V. Stalin, Works, vol. 12, pp. 244–245.*

485 *J. V. Stalin, Questions of Leninism, 1952, p. 629.*

The party and Soviet power in their activity took and take into account that "productive forces can develop in full measure only if production relations correspond to the state of the productive forces and give free scope to the development of productive forces"[486]. Therefore, Soviet society brings lagging production relations into conformity with the character of productive forces in a timely manner, without letting matters reach a conflict.

The Communist Party in its practical activity relies on the basic economic law of socialism, the essential features of which, as J. V. Stalin teaches, are the securing of maximum satisfaction of the constantly growing material and cultural requirements of all society through continuous growth and perfection of socialist production based on higher technology.

The party in its activity takes into account the law of dialectical interconnection between production and consumption under socialism, uses this law in the interests of Soviet society, and promotes the maximum realization of the rich opportunities and great advantages of the socialist system. The party teaches Soviet people that by developing and perfecting production, people create opportunities for the continuous satisfaction of newly emerging needs. In the USSR, "the growth of consumption (purchasing power) of the masses constantly overtakes the growth of production, pushing it forward..."[487]

---

[486] *Ibid., p. 592.*

[487] *J. V. Stalin, Works, vol. 12, p. 322.*

The party and Soviet power take into account other objective laws inherent in socialism and use them in the interests of Soviet society.

Replacing the law of competition and anarchy of production operating under capitalism, the law of planned (balanced) development of the national economy arose under socialism on the basis of socialized means of production. The law of planned (balanced) development of the national economy gives the planning bodies of the Soviet state the opportunity to correctly plan social production. Cognizing this law and reflecting its demands in five-year plans, the party and the Soviet state achieve planned, balanced, and accelerated development of the entire national economy.

In its practical activity, the party is guided by the principles of Marxist philosophical materialism, by the materialist solution to the fundamental gnoseological question. If being is primary and consciousness is secondary; if, correspondingly, social being and material life are primary, and social consciousness is secondary, then proceeding from this, J. V. Stalin formulates a conclusion for the party's activity:

"Hence, in order not to err in policy and not fall into the position of empty dreamers, the party of the proletariat must proceed in its activity not from abstract 'principles of human reason,' but from concrete conditions of the material life of society as the decisive force of social development; not from the good wishes of 'great men,' but from the real needs of the development of the material life of society"[488].

[488] *J. V. Stalin, Questions of Leninism, 1952, p. 585.*

Marxism-Leninism teaches that the necessity of nature is primary, while the consciousness and will of humans are secondary. The latter, says Lenin, must adapt to the former.

In the work *"Economic Problems of Socialism in the USSR,"* Comrade Stalin shows that just as the laws of nature are objective, so are the laws of the economic development of society objective and primary, and human activity must be built on the basis of taking objective economic necessity into account. Thus, for example, the planning bodies of the Soviet state must draw up plans that fully reflect the demands of the objective law of planned, balanced development of the national economy.

Disregard for the study of objective economic laws, idealism, and subjectivism in economic theory lead in practice to adventurism and the inability "to manage even the most elementary economic leadership".

Pointing out this danger, Comrade Stalin says: "Ultimately, we would find ourselves at the mercy of 'economic' adventurists ready to 'destroy' the laws of economic development and 'create' new laws without understanding or considering objective regularities"[489].

Where ignoring the primary role of the material life of society leads was demonstrated by the shameful fate of anarchists, SRs, Trotskyites, and other hostile political groups that built their activity on adventurism.

---

[489] *J. V. Stalin, Economic Problems of Socialism in the USSR, p. 85.*

In solving concrete practical-political tasks, the Communist Party proceeds from an analysis of objective conditions and takes into account the real needs of social development. Ignoring objective conditions is condemned by the party as an expression of scheme-making and adventurism. For example, in the matter of collective farm construction, the party condemned left-wing attempts to bypass the agricultural artel and go straight to the commune. Proceeding from taking into account the objective level of development of productive forces achieved by Soviet society, the party pointed out that the main link in the collective farm movement at the present stage is the agricultural artel. Under modern conditions, it most successfully combines the public and personal interests of collective farmers. Therefore, strengthening and consolidating the agricultural artel is the main task at this stage. The agricultural artel is a necessary condition for the transition to the future agricultural commune. J. V. Stalin teaches that "the future commune will grow out of a developed and prosperous artel"[490].

The party condemned vulgarizing arguments of some economists and philosophers regarding the paths of transition from socialism to communism. It pointed out to simplifiers that putting distribution problems to the forefront—rather than issues of developing productive forces and relations of production—is a vulgarization of Marxism and a distortion of historical materialism.

---

[490] *J. V. Stalin, Works, vol. 13, p. 353.*

In the work *"Economic Problems of Socialism in the USSR,"* Comrade Stalin gave a detailed answer to the question regarding the paths and conditions of transition from socialism to communism, thereby putting an end to the confusion and disarray on this most crucial practical and theoretical issue.

The Marxist-Leninist approach to understanding social regularities is organically bound up with the fundamental tenets of the Marxist dialectical method and Marxist philosophical materialism, following directly from these philosophical tenets.

If the world is knowable, and consequently the laws of development of society are knowable, and the data of the sciences of the laws of social development have the validity of objective truths, then it follows that "in its practical activity the party of the proletariat should be guided not by any casual motives, but by the laws of development of society, and by practical deductions from these laws"[491].

The greatness of the Communist Party lies in the fact that in its activity it proceeds from the objective laws of nature and society and is guided by practical deductions from these laws. The laws of nature and society exist objectively, independently of human consciousness and will. Recognition of objective regularity, says Lenin, is bound up inseparably for materialists with the recognition of the objective reality of the external world reflected by our consciousness. Not to reckon with the objective laws of nature and society means in theory to go over to the position of idealism, and in politics—to slide into voluntarism and adventurism.

---

[491] *J. V. Stalin, Problems of Leninism, 1952, p. 584.*

Recognition of the objective character of the laws of nature and society does not mean that human beings are at the mercy of these laws. On the contrary, recognition of objective regularity implies mastering it, implies the mastery of human beings over the laws of the external world. The same applies to the laws of society. "Social forces, like natural forces, act blindly, forcibly, destructively, so long as we do not know them and do not reckon with them. But when once we have come to know them, to understand their action, their direction and their effects, it depends only upon ourselves to subject them more and more to our own will, and by means of them to reach our ends"[492].

Mastery over nature is based on knowledge of its laws. Otherwise, the laws of nature act destructively. But, having comprehended them, man can give the destructive forces of nature a different direction. Electricity is a destructive force in the form of lightning from a thundercloud, but this force can be used in the telegraph apparatus or in an arc lamp. Such is the difference, says Engels, between a fire and fire serving man[493]. Engels pointed out that once the nature of laws is understood, they are converted from demonic masters into submissive servants.

Substantiating these propositions of Engels, Lenin wrote in *"Materialism and Empirio-criticism"*: "...until we know a law of nature, it, acting and operating (as Marx repeated thousands of times) *independently* of our mind, makes us slaves of 'blind necessity.' As soon as we come to know this law, which acts (as Marx repeated a thousand times) *independently* of our will

---

[492] *F. Engels, Socialism: Utopian and Scientific, 1952, p. 73.*

[493] *See F. Engels, Socialism: Utopian and Scientific, 1952, p. 73.*

and our mind, we become the masters of nature"[494]. In this work, Lenin further notes that the highest task of humanity is to comprehend the objective logic of development, "to adapt to it... one's social consciousness..."[495] and thereby act consciously, with knowledge of the matter.

The same idea is developed by J. V. Stalin in his work *"Economic Problems of Socialism in the USSR."* "If," says J. V. Stalin, "we exclude astronomical, geological and certain other similar processes, where men, even if they have come to know the laws of their development, are really powerless to influence them, in many other instances men are by no means helpless in the matter of influencing natural processes. In all such instances, men, having come to know the laws of nature, reckoning with them and relying on them, skillfully applying and utilizing them, can restrict their sphere of action, give the destructive forces of nature a different direction, and turn the destructive forces of nature to the benefit of society"[496].

Consequently, mastery over the laws of nature lies not in imagined independence from them, but in the knowledge of these laws and in the possibility, therefore, of systematically utilizing them for the achievement of definite goals.

A striking example of utilizing the laws of nature in the interests of society are such measures of the Communist Party and the Soviet Government as the construction of the V. I. Lenin Volga-Don Canal and the erection of giant hydroelectric

---

494 *V. I. Lenin, Works, vol. 14, 4th ed., p. 177.*

495 *Ibid., p. 311.*

496 *J. V. Stalin, Economic Problems of Socialism in the USSR, p. 4.*

power stations on the Volga, the Don, the Dnieper, and the Amu Darya. These immense construction projects, being built on the basis of the most advanced Soviet technology, are new evidence of the creative, transforming power of the Soviet social system.

J. V. Stalin deeply and comprehensively worked out the question of utilizing the laws of development of society. People can influence the conditions of the material life of society and accelerate their development, accelerate their improvement. Mastering the knowledge of the objective laws of social development makes it possible to accelerate the rate of its development and facilitate society's forward movement.

J. V. Stalin teaches that the socialist system is capable of making maximum use, in the interests of society, of laws favorable to the development of society, giving full scope to such laws and at the same time giving a different direction to the destructive actions of certain laws, restricting their sphere of action. Under capitalism, objective laws operate spontaneously and blindly. Under socialism, people master objective laws and rule over them.

Taking into account that laws "are restricted or strengthened in their operation depending on changing conditions..." *(Stalin)*, people can create conditions that preclude the possibility of the action of such laws as give rise to economic crises, the destruction of productive forces, the impoverishment of the working masses, unemployment, etc. With the socialization of the means of production in the USSR, the law of anarchy of production and competition ceased its action and the law of planned development of the national economy began to

operate. "...Socialist production in the USSR is not subject to periodic crises of overproduction and the absurdities attendant on them"[497]. People can create the conditions necessary to give full scope to such laws as, for example, the law of complete conformity of relations of production to the character of the productive forces. In the USSR, such objective conditions have been created under which productive forces develop at an "accelerated rate, because the relations of production corresponding to them give them full scope for such development"[498].

The Communist Party solved and continues to solve its tasks in full conformity with the teachings of dialectical and historical materialism, that is, with that worldview which represents the unity of the dialectical method and materialist theory. The Party has always been and remains true to the materialist understanding and interpretation of phenomena and to the dialectical approach to them. The Party of the Bolsheviks in its policy proceeds from a materialist analysis of the given historical situation, from a sober assessment of real forces and possibilities, with reality itself being investigated from the point of view of the development of tendencies and possibilities maturing within it. Therefore, the Party in its activity has always been free both from voluntarism, which inevitably opens the door to political adventurism, and from a fatalistically contemplative attitude to reality, which inevitably leads to politics dragging at the tail-end of events. In the ideological wealth of Marxism-Leninism, the granite

---

497 *J. V. Stalin, Problems of Leninism, 1952, p. 597.*

498 *Ibid.*

foundation is the scientific worldview of the Party—dialectical materialism, which represents an indispensable weapon for scientific cognition and revolutionary action.

Dialectical Materialism — An Ideological Weapon in the Struggle for the Building of Communism

With the victory of socialism in the USSR, new tasks arose before Marxist-Leninist philosophy in connection with the new needs of the material life of Soviet society.

The Marxist-Leninist worldview, as a component part of the superstructure of Soviet society, is called upon to actively contribute to the strengthening and development of the basis of socialist society. It cements the driving forces of Soviet society: moral and political unity, friendship of peoples, and Soviet patriotism.

The active, creative role of Marxist-Leninist philosophy and the superstructure as a whole consists in contributing to the maximum extent to the basis in its movement forward toward communism. The entire ideological superstructure of Soviet society serves one goal—the building of communism. However, in their service functions, the component parts of the superstructure differ among themselves and have their own specific features. The special role of Marxist-Leninist philosophy consists in creating the ideological prerequisites for the transition to communism.

Under the conditions of socialism, Marxist-Leninist ideology is called upon to arm Soviet people with the knowledge of the laws of building communism. The Marxist-Leninist worldview is the basis for the development of the entire spiritual life of

Soviet society. Marxism-Leninism arms the Communist Party of the Soviet Union and the Soviet state in solving the task set by Comrade Stalin to "prepare our cadres in all branches of work ideologically and temper them politically to such an extent that they can orient themselves freely in internal and international situations..."[499]

The 19th Congress of the Party again stressed with all its force the necessity of strengthening the ideological and political preparation of cadres and strengthening the work on the communist education of working people.

The great attention that the Party pays to the matter of the ideological and political preparation of cadres and the communist education of working people is not accidental. Marxism-Leninism gives the opportunity to act correctly in everyday political, economic, and cultural life, and to participate fruitfully in governing the country. The Communist Party and its policy are the guiding and directing force in the development of Soviet society. Therefore, an understanding of the policy of the Communist Party, the study of its scientific foundations, and the ability to be guided by Marxist-Leninist theory and Party policy in practical work are the most important conditions for the successful activity of Soviet people.

The principles of dialectical and historical materialism are guiding for all Soviet people. Marxism-Leninism arms Soviet people with knowledge of the laws of social development, teaches them to apply these laws in practice, and obliges them

[499] *J. V. Stalin, Problems of Leninism, 1952, p. 638.*

in their practical activity to rely on advanced social theory and "to utilize to the full its mobilizing, organizing, and transforming power" *(Stalin)*.

The significance of the ideological and political preparation of Soviet people has grown in view of those new great tasks that face the Soviet people in the period of completing the construction of socialist society and the gradual transition from socialism to communism.

In the work *"Economic Problems of Socialism in the USSR,"* Comrade Stalin points out that one of the main preliminary conditions for the transition to communism is such cultural growth of the members of society as would ensure the comprehensive development of their physical and mental abilities. An essential element of the cultural growth of the members of Soviet society is the mastery of a scientific worldview, liberation from the vestiges of capitalism, religion, idealism, etc.

One of the main contradictions in the USSR at the present stage is expressed in the struggle of the advanced part of socialist society against the vestiges of capitalism in the consciousness of a certain portion of Soviet people. J. V. Stalin teaches that the vestiges of capitalism in the consciousness of people—habits and routine, traditions and prejudices inherited from bourgeois society and reflecting hostile influences—"are the most dangerous enemy of socialism." From this arises the full task of communist education in all its stature.

Communist consciousness of Soviet people, engendered by socialist relations in production and fostered by the Communist

Party, is a essential factor in accelerating the movement of Soviet society toward communism.

Hence the task of an unflagging struggle against all vestiges of bourgeois ideology. And in our day, the Leninist words spoken 50 years ago have not lost their relevance: "...the only choice is —either bourgeois or socialist ideology. There is no middle course... Hence, to belittle the socialist ideology in any way, to turn away from it in the slightest degree means to strengthen bourgeois ideology"[500].

In the report to the 19th Party Congress, G. M. Malenkov pointed out that despite the dominance in Soviet society of socialist ideology based on Marxism-Leninism, we still retain remnants of bourgeois ideology, vestiges of private-ownership psychology and morality. The struggle against these vestiges, which are stoked and fanned by enemies of the Soviet state, is one of the most important tasks of the Party.

In the matter of the communist education of Soviet people, in overcoming harmful, corrupting vestiges of capitalism in their consciousness, a paramount role is played by the Marxist-Leninist worldview. The historic decisions of the Central Committee of the Party on ideological questions are a classic example of the application of the principles of the Marxist-Leninist worldview in the struggle against the remnants of the influence of bourgeois ideology in the field of literature and art, in exposing apolitical attitude, pessimism, rootless cosmopolitanism, and servility toward corrupt bourgeois culture.

---

500 *V. I. Lenin, Works, vol. 5, 4th ed., pp. 355–356.*

The philosophical discussion held in 1947 on the initiative of the Central Committee of the Party was a brilliant model of the application of communist party-mindedness (*partiinost*) in the struggle against bourgeois objectivism. In the discussions on biology, physiology, linguistics, political economy, and in the statements of the Party press against cosmopolitanism and others, various manifestations of bourgeois ideology and various anti-Marxist views and "points of view" that attempted to nest in Soviet science and culture were exposed and smashed.

The ideas of the Marxist-Leninist worldview play a guiding and directing role in exposing and defeating the remnants of idealistic, metaphysical, and other erroneous concepts in all fields of science and art.

In the epoch of the struggle for communism, special tasks face Marxist-Leninist philosophy in exposing the robber philosophy of the imperialist bourgeoisie. Contemporary bourgeois philosophy most sharply reflects the marasmus and decay of bourgeois culture. The service function of this, so to speak, philosophy consists in trying to save capitalist orders doomed by history to destruction, to retard the development of society, and to turn it back. The service role of bourgeois philosophers consists in acting as ideological armor-bearers for warmongers and as trumpeters for American pretenders to world domination.

Idealistic philosophy has always been distinguished by its anti-popular character. The anti-popular character of contemporary bourgeois philosophy reaches extreme limits. From beginning to end, it serves the exploiters, being a tool for the spiritual

enslavement of the masses. In order to spiritually disarm the masses, modern bourgeois philosophy conducts an unbridled preaching of pessimism and agnosticism. Modern obscurantists assure that bourgeois philosophy is called upon to bring people comfort. (In an American dictionary by D. Runes, philosophy is even defined as "consolation.")

With foam at the mouth, modern philosophizing obscurantists wage war against science and shamelessly vilify it. The slogan of the ideologists of imperialism has become: "Chaim the Prometheus of science." Dewey, Santayana, Russell, and others openly preach fideism and sow disbelief in the powers of science. One of the ideologists of warmongers—Russell—calls for the creation of a "science on how to get rid of science." Rabidly attacking science, falsifying not only deductions from facts but the very facts themselves, the ideologists of the imperialist bourgeoisie spout babble to the effect that a "considerable part of accumulated world wisdom was obtained not as a result of the application of scientific methods of research, but thanks to skillful intuitive imagination of philosophers, prophets, statesmen, artists, painters, and scientists"[501].

In capitalist countries, various reactionary, fascist organizations and institutions are created, such as the "Service of Cosmopolitan Science and Art" in the USA, which has set as its goal to "strengthen the American spirit."

---

[501] *Quoted from the book "Bourgeois Geography in the Service of American Imperialism", USSR Academy of Sciences Publishing, M.–L. 1951, p. 104.*

By such means, bourgeois reactionary philosophy strives to befuddle the consciousness of peoples and prolong the existence of the obsolete capitalist system. The Marxist-Leninist teaching ideologically arms all progressive humanity in the struggle against reaction and obscurantism, against the policy and ideology of warmongers. Marxism-Leninism is becoming the worldview of broader and broader masses of working people across the globe.

The triumph of dialectical materialism in the USSR is also expressed in the fact that the philosophical teaching of Marx—Engels—Lenin—Stalin is the theoretical foundation of Soviet science.

Science has never before had such favorable social conditions for development as under socialism. The October Revolution eliminated the causes giving rise to the crisis of theoretical natural science, and created in the USSR conditions unprecedented in history for the development of science; "...only socialism," said Lenin, "will free science from its bourgeois fetters, from its enslavement to capital, from its slavery to the interests of dirty capitalist greed"[502].

Only under socialism did dialectical materialism, as a method of scientific research and a guide to practical action, gain the opportunity to penetrate deeply into the consciousness of scientists. In the Soviet epoch, when dialectical materialism turned into the dominant worldview, the question of the relationship between philosophy and natural science, of the guiding role of the Marxist worldview in scientific research,

---

[502] *V. I. Lenin, Works, vol. 27, 4th ed., p. 375.*

arose in a new way. In the Soviet epoch, Marxist-Leninist philosophy plays a directing role in the development of natural science.

Lenin and Stalin armed Soviet science with a powerful ideological weapon—dialectical materialism, transforming it into the unshakable foundation of Soviet natural science and social sciences. The theory of knowledge of dialectical materialism revealed before Soviet science boundless prospects for development. In *"Materialism and Empirio-criticism"* Lenin wrote: "If world is moving matter, it can and must be infinitely studied in the infinitely complex and detailed manifestations and ramifications of this movement..."[503]. There too, Lenin noted that the external world and the laws of external nature are "fully knowable for man, but can never be known to the end"[504].

These propositions became guiding principles for Soviet science. Dialectical materialism is a reliable guide in scientific research; it expands the horizons of scientific activity, helps to find urgent problems, and arms one with the skill to solve the most complex questions of modernity. In this lies one of the matchless advantages of Soviet science over bourgeois science.

The mighty growth of Soviet science, its flourish, and its growing achievements became possible thanks to the directing role of the Marxist-Leninist worldview. Soviet science in all branches of knowledge is guided by the only scientific, Marxist-Leninist worldview.

---

503 *V. I. Lenin, Works, vol. 14, 4th ed., p. 329.*

504 *Ibid., p. 177.*

Characterizing in the report to the 18th Party Congress the relationship of Marxist-Leninist theory with special sciences in new historical conditions, J. V. Stalin noted the immense role of the Marxist-Leninist worldview and the role of the principle of party-mindedness (*partiinost*) for all branches of knowledge.

J. V. Stalin, speaking about the connection between science and practical activity, teaches that the connection between theory and practice, their unity, is the guiding star of the party of the proletariat[505]. This Marxist principle of the unity of theory and practice is a guiding principle for advanced Soviet science as well.

In his immortal work *"Materialism and Empirio-criticism"*, Lenin castigated representatives of bourgeois "pure science," which does not allow itself a "leap" from theory to practice. Bourgeois scientists, Lenin pointed out, have one thing for the theory of knowledge and an entirely different thing for practice. On the contrary, the fundamental law of the development of Soviet science is its connection with life, the unity of theory and practice.

Soviet science serves the cause of communism and actively contributes to the building of communism. Soviet society condemned with indignation the notorious experiments of Morganist-Weismannists in genetics with the fruit fly *Drosophila*, as well as the worthless experiments of Academician Beritashvili on researching the question of how a frog placed in a water pipe behaves, condemning them as a departure into the past and an avoidance of major urgent

[505] *See J. V. Stalin, Problems of Leninism, 1952, p. 584.*

practical tasks. On the essence of Marxist-Leninist party-mindedness in Soviet science, O. B. Lepeshinskaya expressed it well: "Bolshevik party-mindedness in science requires militant orientation in the studied questions, requires a struggle against idealism and metaphysics in science, and bringing to the fore those questions that are connected with the development of new fields of knowledge capable of illuminating questions related to practice in a new way"[506].

Armed with the powerful and fruitful method of dialectical materialism, Soviet science boldly and decisively discards obsolete concepts, breaks old traditions and norms, and discovers more and more new laws of nature. The great transformer of nature I. V. Michurin thus characterizes the directing role of Marxist philosophy: "Only on the basis of the teachings of Marx, Engels, Lenin, and Stalin can science be fully reconstructed. The objective world—nature—is primary, man is a part of nature, but he must not merely contemplate this nature externally; as Karl Marx said, he can change it. The philosophy of dialectical materialism is a tool for changing this objective world; it teaches active influence upon this nature and changing it, but consistently and actively influencing and changing nature is within the power of the proletariat alone—so teaches the doctrine of Marx, Engels, Lenin, and Stalin—unexcelled minds-giants"[507].

In Soviet socialist society, biology has transformed from a contemplative science that describes the development of living

---

506 *"Conference on the Problem of Living Matter and Cell Development. Verbatim Report", USSR Academy of Sciences Publishing, 1951, p. 9.*

507 *I. V. Michurin, Works, vol. I, 1948, p. 623.*

nature into a creative science that transforms nature in accordance with the material needs of socialist society. The words of I. V. Michurin that "man can and must do better than nature"[508] express a revolutionary, creative attitude toward nature. "...With human intervention," said I. V. Michurin, "it is possible to force every form of animal or plant to change more rapidly and, moreover, in a direction desirable to man. For man, a vast field of the most useful activity opens up..."[509]

Michurinist teaching is Soviet creative Darwinism. The greatness of Michurinist teaching lies in the fact that it arms practitioners with scientifically grounded methods for the planned alteration of the nature of plants and animals.

Armed with the ideas of Marxist-Leninist philosophy, advanced Soviet science smashes idealism and metaphysics. V. R. Williams related how the philosophy of Marxism helped advanced Soviet soil scientists to expose and overthrow the bourgeois theory of diminishing soil fertility. "We understood perfectly well from these classic works of the founders of scientific communism the class nature of this bourgeois law, its highly relative character, its connection with stagnation in modes of production, and the one-sided nature of investments of labor and capital; we understood that, essentially, there can be no talk of any cardinal 'law' of agriculture. Relying on the works of Marx, Engels, Lenin, and Stalin, we managed to prove that all these experiments of bourgeois naturalists were merely an illustration of an incorrect approach to explaining complex processes, and that the revelation of regularities in

508 *I. V. Michurin, Works, vol. IV, 1948, p. 245.*
509 *Ibid., p. 158.*

these processes can be accomplished only as a result of applying dialectical analysis, not metaphysical analysis"[510].

Marxist-Leninist critique of idealism and metaphysics played an immense role in defeating reactionary Weismannism, which proceeds from the assumption that man is allegedly unable to know the causes that evoke and direct changes in heredity. These changes Weismannist-Morganists consider purely accidental.

Having defeated Weismannism-Morganism, Michurinists defended the effective, transforming role of science, the possibility of the conscious, planned modification of plants, animals, and soil microorganisms, the possibility of modifying the soils themselves, and the transformation of nature over vast territories.

Soviet physiologists, armed with the Marxist-Leninist worldview, dealt a crushing blow to various attempts at an eclectic combination of the teachings of I. P. Pavlov with the idealistic ideas of West European physiologists.

Consistent materialism is the theoretical philosophical basis of Pavlov's teaching and Michurinist biology. In turn, Pavlovian teaching and Michurinist biology represent the cornerstones of the natural-scientific foundation of dialectical materialism.

The further Soviet society advances on the path toward communism, the greater the significance dialectical materialism acquires for science.

---

[510] *V. R. Williams, Fertility of Soviet Soils, "Soviet Science" No. 12, 1939, p. 101.*

Dialectical materialism serves as a powerful instrument contributing to a deep investigation of the subject and opening broad prospects for development before science.

For the development of social sciences, alongside dialectical materialism, immense significance is possessed by historical materialism and Marxist political economy. Revealing the regularities of historical development and the laws of economic development of society, historical materialism and political economy arm one with the skill to consistently carry out the materialist point of view in studying various aspects of social life.

Important significance for the development of science is possessed by criticism and self-criticism.

A struggle of opinions, freedom of criticism, and creative discussions overcome stagnation in science, help discard the obsolete, break petrified and dead views, contribute to clearing the path for the new and advanced, and accelerate the development of science and theoretical thought as a whole. Under the banner of the comprehensive development of scientific criticism passed the discussions on philosophy, biology, physiology, linguistics, and political economy.

The method of creative scientific discussions expresses the critical and revolutionary spirit of Marxist dialectics, which considers subjects and phenomena in movement, development, change, and renewal. "For the dialectical method," teaches Comrade Stalin, "that which is paramount is not that which at the given moment seems durable, but is already beginning to die away, but that which arises and develops, even if at the

given moment it appears fragile, for only that which arises and develops is invincible"[511].

The role of science in the USSR is immense and grows from year to year as our country moves forward toward communism.

Soviet science helps the Soviet people to minimize the role of contingencies, to give the destructive forces of nature a different direction, and to use both the laws of nature and economic laws in the interests of society.

G. M. Malenkov, in the report to the 19th Party Congress, noted the role of Soviet science in the struggle for further technical progress. G. M. Malenkov indicated that Soviet scientists through their discoveries help the Soviet people to utilize the wealth and forces of nature, and that in the post-war period they solved many scientific problems of major national economic importance, the most vital of which is the discovery of methods for the production of atomic energy.

G. M. Malenkov indicated that "The Soviet state is deeply interested in having this new form of energy utilized for peaceful purposes, for the good of the people, because such utilization of atomic energy infinitely expands man's power over the elemental forces of nature, opens up before humanity colossal possibilities for the growth of productive forces, technical and cultural progress, and the increase of social wealth"[512].

---

[511] *J. V. Stalin, Problems of Leninism, 1952, p. 576.*

[512] *G. Malenkov, Report on the Work of the Central Committee of the All-Union Communist Party (Bolsheviks) to the 19th Party Congress, p. 42.*

Soviet science works tirelessly on solving important national economic tasks aimed at a new upsurge of industry and agriculture. Workers in Soviet science, like all the Soviet people, strive to ensure that our industry develops steadily, becoming ever more powerful and technically equipped, and that agriculture achieves new successes, providing the country with an abundance of food products and a full supply of raw materials for industry.

The socialist system of economy gives full scope to science, allowing for the rapid introduction of scientific achievements into production and agricultural practice, making them the property of all industrial enterprises, transport, collective farms, state farms, and Machine and Tractor Stations (MTS).

Soviet scientists render daily assistance to workers and collective farmers in improving work methods, production technology in industry, and agrotechnics in agriculture. The creative cooperation of scientists and production innovators contributes to technical progress, the rapid fulfillment of national economic plans, and the acceleration of the rates of development of industry and agriculture.

Soviet science is currently experiencing a new upsurge. In the fifth five-year plan, Soviet science, playing an important role in ensuring technical progress and the upsurge of socialist culture, receives major state support. The graduation of specialists from higher educational institutions and the training of scientific and pedagogical cadres through postgraduate studies at higher educational institutions and scientific research institutes is almost doubling compared to 1950. Large capital investments

are provided for the construction of scientific research institutes and higher educational institutions.

The Directives of the 19th Party Congress on the fifth five-year plan obligate:

"To improve the work of scientific research institutes and the scientific work of higher educational institutions, to utilize scientific forces more fully for solving the most important questions of national economic development, generalizing advanced experience, and ensuring the broad practical application of scientific discoveries. To foster in every way the assistance of scientists in working out theoretical problems in all fields of knowledge and to strengthen the link between science and production"[513].

Comrade Stalin and the 19th Party Congress posed a serious task before Soviet science—to take first place in world science. Soviet scientists, armed with the most advanced, scientific worldview, inspired by the ideas of Marxism-Leninism, will honorably fulfill this task.

The Creative Character of Marxist-Leninist Philosophy

Marxism-Leninism and its philosophical theory—dialectical and historical materialism—is a creative doctrine that develops and enriches itself along with the development of the class struggle of the proletariat and all social life. While giving scientific answers to questions arising in the course of the revolutionary struggle of the proletariat, Marxism-Leninism at

513 *"Directives of the 19th Party Congress on the Fifth Five-Year Plan for the Development of the USSR for 1951–1955", Gospolitizdat, 1952, p. 28.*

the same time develops and enriches its own theory. Characterizing the creative nature of this doctrine, J. V. Stalin said: “Marxism as a science cannot stand in one place—it develops and improves. In its development, Marxism cannot fail to enrich itself with new experience, new knowledge—consequently, its individual formulas and conclusions cannot fail to change over time, cannot fail to be replaced by new formulas and conclusions corresponding to new historical tasks”[514].

The creative character of Marxism-Leninism is a sign of the greatest strength of this theory. This theory is the only one capable of quickly and deeply reflecting changes in the conditions of social life, noticing the new in its development, giving a scientific explanation to new phenomena, and thus serving as a guide to practical activity. Creative Marxism is inextricably linked with a sense of the new. That is precisely why Marxism is not something frozen, but is constantly developing and enriching itself.

Distinctive features of creative Marxism are revealed with exhaustive completeness by J. V. Stalin. A creative attitude toward Marxism presupposes, *firstly*, not an external recognition of Marxism, but its implementation in life; *secondly*, concreteness in determining the paths and means of implementing Marxism, choosing paths and means corresponding to the real situation; *thirdly*, building one's conclusions not on historical analogies and parallels, but on the

[514] *J. V. Stalin*, Marxism and Problems of Linguistics, p. 55.

study of surrounding conditions; *fourthly*, checking one's activity in practice[515].

On the basis of accounting for new historical experience and new regularities, Marxism-Leninism replaces outdated propositions with new ones corresponding to new historical conditions. Lenin's formula on the possibility of the victory of socialism in a single, individually taken country replaced the old formula of Marx and Engels on the simultaneous victory of the socialist revolution in a number of countries. Comrade Stalin's formula on the preservation of the state under socialism in the presence of capitalist encirclement clarified Engels' formula on the fates of the socialist state, etc.

In the work *Economic Problems of Socialism in the USSR*, Comrade Stalin points out that in view of new conditions that arose in connection with the Second World War, the thesis of the relative stability of markets during the period of the general crisis of capitalism lost its force, as did the thesis that, despite the decay of capitalism, "on the whole capitalism grows immeasurably faster than before".

The Party, Comrade Stalin points out, would wander in the dark, and Marxist theory would wither away, if old formulas were not replaced by new ones corresponding to the new historical situation.

Thus, the creative nature of Marxism consists in the fact that this doctrine does not recognize immutable conclusions and formulas.

---

[515] *See J. V. Stalin*, Soch. [Works], vol. 4, p. 306.

But this feature, as Comrade Stalin notes, does not exhaust the creative character of Marxism. In the development of Marxism, formulas and conclusions do not simply change. Comrade Stalin points out that "*Marxism requires the improvement and enrichment of old formulas on the basis of accounting for new experience while preserving the point of view of Marxism...*"[516]

The initial, fundamental principles of Marxism are unshakable. Thus, conclusions about the primacy of matter and the secondariness of consciousness or about the inevitability of replacing capitalist society with communist—these are such propositions of Marxism that cannot be replaced by any others. As for individual formulas reflecting concrete, developing ideas of science about individual properties of matter and motion, or about methods for the victory of socialism (whether in all countries at once or first in one country), these formulas are not absolute, but transient, and cannot fail to change with the development of science and the change of historical conditions. *Consequently, individual formulas of Marxism change while preserving the essence of Marxism, its fundamental principles*.

What does it mean to master Marxist-Leninist theory? It means knowing how to be guided by the principles of this doctrine in practical activity, knowing how to apply them to concrete conditions.

"To master Marxist-Leninist theory by no means means learning all its formulas and conclusions by heart and clinging to every letter of these formulas and conclusions. To master

---

[516] *J. V. Stalin*, Soch. [Works], vol. 9, p. 99.

Marxist-Leninist theory, one must, first of all, learn to distinguish between its letter and essence.

To master Marxist-Leninist theory means to assimilate the essence of this theory and learn to use this theory in solving practical questions of the revolutionary movement under various conditions of the class struggle of the proletariat.

To master Marxist-Leninist theory means to be able to enrich this theory with new experience of the revolutionary movement, to be able to enrich it with new propositions and conclusions, *to be able to develop it and move it forward*, not stopping at replacing, based on the essence of the theory, some of its propositions and conclusions that have already become outdated with new propositions and conclusions corresponding to the new historical situation"[517].

Forgetting these instructions inevitably leads to dogmatism. Dogmatization of Marxism is an attempt to deaden its revolutionary soul, to turn militant, revolutionary principles of Marxism into dead, dry dogmas, to emasculate Marxism of its living content.

A distinctive feature of dogmatism is the detachment of theory from practice, departure into the realm of scholastic theorizing. The dogmatist, talmudist, text-cite reader proceeds only from quotes, but not from living experience, not from practice, not from reality. Without delving into the essence of the matter, the text-cite reader, dogmatist, and talmudist mechanically applies statements of the classics of Marxism-Leninism, which relate

[517] *History of the CPSU(b). Short Course*, pp. 339–340.

to specific, concrete historical conditions, to all times and epochs. The dogmatist is an enemy of Marxist dialectics. Misunderstanding and denial of the idea of development, anti-historicism in approaching questions—these are typical traits of dogmatism. At the same time, dogmatism also adheres to idealism. Instead of proceeding from the phenomena of objective reality, the dogmatist proceeds from dead schemes, which he attempts to impose on living reality.

Marxism is an enemy of dogmatism. Marxism arose, developed, and was tempered in the struggle against all dogmatism. It is no coincidence that in the era of imperialism, the enemies of Marxism chose dogmatism as one of the means of their vile struggle against Marxist doctrine. Lenin and Stalin exposed and defeated attempts to substitute creative Marxism with dogmatism. The great luminaries of Marxism, Lenin and Stalin, advanced the creative development of Marxist theory far forward.

In the work *Marxism and Problems of Linguistics*, Comrade Stalin notes the urgent importance of creative mastery of Marxism and the decisive struggle against dogmatism. The transition from socialism to communism requires from Soviet people a creative approach to solving tasks, the ability to find new paths in solving questions of theory and practice. Meanwhile, people who fall into dogmatism think that if they learn conclusions and formulas of Marxism by heart, like the multiplication table, and "begin quoting them right and left," they will be able to solve any questions, counting on the fact

that memorized conclusions and formulas will serve them for all times and countries, for all cases in life[518].

In the country of victorious socialism, dogmatism has as its source a weak mastery of the fundamentals of Marxism-Leninism, an inability to apply the guiding ideas of this doctrine in practical activity.

Comrade Stalin teaches that the most decisive means against dogmatism is mastering Marxist-Leninist theory and actively applying it in the practice of building communism. Thus, a deep understanding of Marxism is impossible without a creative attitude toward it. To creatively use the weapon of Marxism-Leninism means to constantly hone and perfect it.

Over the hundred years of the existence and development of Marxist philosophy, its great effective force has been confirmed in practice. The strength and vitality of dialectical materialism have been tested by the entire course of modern history, on the experience of life and the revolutionary struggle of millions of working people. No single doctrine in the history of mankind has received such brilliant confirmation by life itself as the great doctrine of Marx—Engels—Lenin—Stalin.

In the article "The Historical Fates of the Doctrine of Karl Marx," Lenin wrote: "After the appearance of Marxism, each of the three great epochs of world history brought it new confirmations and new triumphs. But an even greater triumph will be brought to Marxism, as the doctrine of the proletariat, by the coming historical epoch"[519].

---

518 *J. V. Stalin*, Marxism and Problems of Linguistics, p. 54.

519 *V. I. Lenin*, Soch. [Works], vol. 18, 4th ed., p. 547.

Under the banner of the Marxist-Leninist worldview, socialism in the USSR achieved complete victory, and our country entered the path of a gradual transition from socialism to communism.

The victory of socialism in the USSR, the construction of socialism in the countries of people's democracy, the victory of the Chinese people over the forces of reaction—all are remarkable evidence of the power of Marxism-Leninism and its philosophical doctrine.

Marxism-Leninism is a guiding star for all peoples of the world, an unextinguishable beacon illuminating humanity's path to communism.

The ideas of Marxism-Leninism, the ideas of Marx, Engels, Lenin, and Stalin, illuminate the path to a better future for the working people of all countries. Marxist-Leninist theory is a powerful force mobilizing the masses and transforming the world.

Armed with the all-conquering Marxist-Leninist worldview, communist parties across the globe lead progressive humanity along the path to communism.

Editor *G. Kurbatova*

Title and Cover Artist *I. Avrinsky*

Technical Editor *N. Troyanovskaya*

Proofreaders in Charge: *E. Nikolaeva, Z. Paterevskaya, and V. Zurov*

Signed for printing April 27, 1953.

Print run 500,000 (250,001–500,000) copies. A00067.

Paper 84*108 1/32. 7 7/8 paper sheets, 24.19 printed sheets, 23.55 publisher-issued sheets.

Order № 38.

Price 7 rubles.

First Exemplary Printing House named after A. A. Zhdanov of Soyuzpoligrafprom Glavizdat of the Ministry of Culture of the USSR. Moscow, Valovaya, 28.