

## MATERIALISM

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### I

The evolution of Marxism to its present stage can be understood only in connection with the social and political developments of the period in which it arose. With the coming of capitalism in Germany there developed simultaneously a growing opposition to the existing aristocratic absolutism. The ascending bourgeois class needed freedom of trade and commerce, favorable legislation, a government sympathetic to its interests, freedom of press and assembly in order to fight unhindered for its needs and desires. But the bourgeoisie found itself confronted instead with a hostile regime, an omnipotent police, and press censorship which suppressed every criticism of the reactionary government. The struggle between these forces, which led to the revolution of 1848, was first conducted on a theoretical level, as a struggle of ideas and a criticism of the prevailing ideology. The criticism of the young bourgeois intelligentsia was directed mainly against religion and Hegelian philosophy.

Hegelian philosophy in which the self-development of the *Absolute Idea* creates the world and then, as the developing world, enters the consciousness of men, was the philosophical guise suited to the Christianity of the Restoration after 1815. Religion, handed down by past generations, served as always as the theoretical basis and justification for the perpetuation of old class relations. Since an open political struggle was still impossible, the fight against the feudal oligarchy had to be conducted in a veiled form, as an attack on religion. This was the task of the group of young intellectuals of 1840 among whom Marx grew up and rose to a leading position.

While still a student Marx submitted, although reluctantly, to the force of the Hegelian method of thought and made it his own. That he chose for his doctoral dissertation the comparison of two great materialist philosophies of ancient Greece, Democritus and Epicurus, seems to indicate, however, that in the deep recesses of his consciousness Marx inclined towards materialism. Shortly thereafter he was called upon to assume the editorship of a new paper founded by the oppositional Rhenish bourgeoisie in Cologne. Here he was drawn into the practical problems of the political and social struggles. So well did he conduct the fight that after one year of publication the paper was banned by the state. It was during this period that Feuerbach made his final step towards materialism. Feuerbach brushed aside Hegel's fantastic system, turned to the simple experiences of every day life, and arrived at the conclusion that religion was a man-made product. Forty years later Engels still spoke fervently of the liberating effect that Feuerbach's work had on his contemporaries, and of the enthusiasm with which Marx embraced the new ideas despite some critical reservations. To Marx this meant a new turn in the social struggle : from attacking a heavenly image to coming to grips openly with earthly realities. Thus in 1843 in his essay "*A Criticism of the Hegelian Philosophy of Right*" he wrote :

"As far as Germany is concerned the criticism of religion is practically completed, and the criticism of religion is the basis of all criticism . . . The struggle against religion is the struggle against that world whose spiritual aroma is religion . . . Religion is the moan of the oppressed creature, the sentiment of a heartless world, as it is the spirit of spiritless conditions. It is the opium of the people. The abolition of religion, as the illusory happiness of the people, is the demand for their real happiness. The demand to abandon the illusions about their conditions is a demand to abandon a condition which requires illusions. The criticism of religion therefore contains potentially the criticism of the Vale of Tears whose aureole is religion. Criticism has plucked the imaginary flowers which adorned the chain, not that man should wear his fetters denuded of fanciful embellishment, but

that he should throw off the chain, and break the living flower . . . Thus the criticism of heaven transforms itself into the criticism of earth, the criticism of religion into the criticism of right, and the criticism of theology into the criticism of politics."

The task confronting Marx was to inquire into the realities of social life. His study of the French Revolution and French socialism as well as English economy and the English working class movement, in collaboration with Engels during their stay in Paris and Brussels, led towards further elaboration of the doctrine known as *Historical Materialism*. As the doctrine of social development by way of class struggles we find the theory expounded in "*Poverty of Philosophy*" ( in French 1846 ), the "*Communist Manifesto*" ( 1847 ), and in the preface to "*A Contribution to the Critique of Political Economy*" ( 1859 ).

Marx and Engels themselves refer to this system of thought as materialism in opposition to the idealism of Hegel and the neo-Hegelians. What do they understand by materialism ? Engels, discussing the fundamental theoretical problems of historical materialism in his *Anti-Dühring* and in his booklet on Feuerbach, states in the latter publication :

"The great basic question of all philosophy, especially of modern philosophy, is that concerning the relation of thinking and being ... Those who asserted the primacy of the spirit to nature and, therefore, in the last instance, assumed world creation in some form or other -- comprised the camp of idealism. The others, who regarded nature as primary, belong to the various schools of materialism :"

That not only the human mind is bound up with the brain, but also that man with his brain and mind is part and parcel of the rest of the animal kingdom and the unorganic world, was a self-evident truth to Marx and Engels. This conception is common to all "schools of materialism." What distinguishes Marxism materialism from other schools must be learned from its various polemical works dealing with practical questions of politics and society. To Marx materialistic thought was a working method. In his writing he does not deal with philosophy nor does he formulate materialism into a system of philosophy; he is utilizing it as a method for the study of the world and thus demonstrates its validity. In the essay quoted above, for example, Marx does not demolish the Hegelian philosophy of right by philosophical disputations, but through an annihilating criticism of the real conditions existing in Germany.

The materialist method replaces philosophical sophistry and disputations around abstract concepts with the study of the real material world. Feuerbach preceded Marx in this respect in so far as he was the first to point out that religious concepts and ideas are derived from material conditions. Let us take a few examples to elucidate this point. The statement "Man proposes, God disposes" the theologian interprets from the point of view of the omnipotence of God. The materialist on the other hand searches for the cause of the discrepancy between expectations and results and finds it in the social effects of commodity exchange and competition. The politician debates the desirability of freedom and socialism; the materialist asks : from what individuals or classes do these demands spring, what specific content do they have, and to what social need do they correspond ? The philosopher, in abstract speculations about the essence of time, seeks to establish whether or not absolute time exists. The materialist compares the clocks to see whether it can be established unreservedly that two phenomena occur simultaneously, or follow one another.

Feuerbach, too, utilized the materialist method. He saw in living man the source of all religious ideas and concepts. The validity of his materialism, however, depended on whether he was successful in presenting a clear and comprehensive interpretation of religion. A materialism that leaves the problem obscure is insufficient and will lead back to idealism. Marx pointed out that the mere principle of taking living man as the starting point for investigation is not enough to lead to clarity. In his theses on Feuerbach in 1845 he formulated the essential difference between his materialist method and that of Feuerbach. We quote :

"Feuerbach resolves the religious essence into the human. But the human essence is no abstraction inherent in each single individual. In its reality it is the ensemble of the social relations." ( Thesis 6 )

"His work consists in the dissolution of the religious world into its secular basis. He overlooks the fact that after completing this work, the chief thing still remains to be done. For the fact that the secular foundation lifts itself above itself and establishes itself in the clouds as an independent realm is only to be explained by the self-cleavage and self-contradictions of this secular basis. The latter must itself, therefore, first be understood in its contradiction and then, by the removal of the contradiction, revolutionised in practice." ( Thesis 4 )

Briefly, man can be understood only as a social being. From the individual one must proceed to society and dissolve the social contradictions out of which religion has evolved. The real world, that is the sensual and material world, where all ideology and consciousness have their origin, is human society -- with nature in the background, of course, as the basis on which society rests and of which it is a part altered by man.

A presentation of these ideas is to be found in the book "*The German Ideology*", written in 1845-46. The part that deals with Feuerbach, however, was first published in 1925 by Rjazanoff, then head of the Marx-Engels Institute in Moscow. The complete work was not published until 1932. Here the theses on Feuerbach are worked out in greater length. Although it is apparent that Marx wrote quite hurriedly, he nevertheless gave a brilliant presentation of all essential ideas concerning the evolution of society which, later, found further illumination in the propaganda pamphlet "*The Communist Manifesto*" and in the preface to "*The Critique of Political Economy*."

The *German Ideology* is directed first of all against the theoretical view which regarded creative consciousness and ideas developing from ideas as the only factors that determine human history. Marx has nothing but contempt for this point of view, "The phantoms formed in the human brain," he says on page 14, "are necessary sublimates of their material, empirically-verifiable life process bound to material premises". It was essential to put emphasis on the real world, the material and empirically-given world as the source of all ideology. But it was also necessary to criticise the materialist theories that culminated in Feuerbach. As a protest against ideology the return to biological man and his physical needs is correct, but taking the individual as an abstract being does not offer a solution to the question of how and why religious ideas originate. Human society in its historical evolution is the only reality controlling human life. Only out of society can the spiritual life of man be explained. Feuerbach, in attempting to find an explanation of religion by a return to the "real" man did not find the real man, because he searched for him in the individual, in the human being generally. From this approach the world of ideas cannot be explained. Thus he was forced to fall back on the ideology of universal human love. "Insofar as Feuerbach is a materialist," Marx said, " he does not deal with history, and insofar as he considers history, he is not a materialist." ( *The German Ideology*, pp. 37-38 ).

What Feuerbach did not accomplish was accomplished by the historical Materialism of Marx : an explanation of the development of man's ideas out of the material world. The historical development of society is brilliantly rendered in the following sentence : " . . . Men, developing their material production and their material intercourse, alter, along with this their real existence, their thinking and the products of their thinking." ( *German Ideology*, p. 14 ). We know reality only through experience which, as the external world, comes to us through the medium of our senses. A philosophical theory of knowledge will then be based on this principle : the material, empirically given world is the reality which determines thought.

The basic epistemological problem was always what truth can be attributed to thinking. The term "critique of knowledge," used by the professional philosophers for "theory of knowledge," already implies a view point of doubt. In his second and fifth theses on Feuerbach Marx refers to this problem and again points out that the practical activity of man is the essential content of his life.

"The question whether objective truth can be attributed to human thinking is not a question of theory but is a *practical* question. In practice man must prove the truth, i. e., the reality and power, the "this-sidedness" of his thinking : " ( Thesis 2 ) . . . "Feuerbach, not satisfied with *abstract thinking*, appeals

to *sensuous contemplation*, but he does not conceive sensuousness as a practical, human-sensuous activity." ( Thesis 5 ).

Why practical ? Because man in the first place must live. His biological organism, his faculties and his abilities and all his activity are adapted to this very end. With these he must adapt himself to and assert himself in the external world, i. e. nature, and as an individual in society, as well as with his faculty of thinking, the activity of the organ of thought, the brain, and with thought itself. Thinking is a bodily faculty. In every phase of life man uses his power of thought to draw conclusions from his experiences on which expectations and hopes are built and which regulate his mode of living and his actions. The correctness of his conclusions, a condition for his survival, is determined by the very fact of his being. Thinking is a purposeful adaptation to life, and therefore truth can be attributed to it though not truth in an absolute sense. But on the basis of his experiences, man derives generalizations and laws on which his expectations are based. They are generally correct as is witnessed by his survival. In particular instances, however, false conclusions may be derived and hence failure and destruction. Life is a continuous process of learning, adaptation, development. Practice alone is the unsparing test of the correctness of thinking.

Let us first consider this in relation to natural science. Here thought finds in practice its purest and most abstract form. This is why philosophers of nature accept this form as the subject for their observations and pay no attention to its similarity to the thought of every individual in his every day activity. Yet thinking in the study of nature is only a highly developed special field of the entire social labor process. This labor process demands an accurate knowledge of natural phenomena and its integration into laws, in order to be able to utilize them successfully in the field of technics. The determination of these laws through observation of special phenomena is the task of specialists. In the study of nature it is generally accepted that practice, in this instance experiment, is the test of truth. Here, too, it is accepted that observed regularities, known as "natural laws," are generally fairly dependable guides to human practice, and although they are frequently not altogether correct and even disappointing, they are improved constantly and elaborated upon through the progress of science. If at times man is referred to as the "lawmaker of nature," it must be added that nature very often disregards these laws and summons man to make better ones.

The practice of life, however, comprises much more than the scientific study of nature. The relation of the natural scientist to the world, despite his experimentation, remains sensuous-observational. To him the world is an external thing. But in reality people deal with nature in their practical activities by acting upon her and making her part of their existence : Through his labor man does not oppose nature as an external or alien world. On the contrary, by the toil of his hands he transforms the external world to such an extent that the original natural substance is no longer discernable, and while this process goes on, man changes, too. Thus, man creates his own world : human society in a nature changed by him. What meaning, then, has the question of whether his thinking leads to truth ? The object of his thinking is that which he himself produces by his physical and mental activities and which he controls through his brain. This is not a question of partial truths such as, for instance, those of which Engels wrote in his book on Feuerbach that the artificial production of the natural dye *alizarin* would prove the validity of the chemical formula employed. [1] This is not, to repeat, a question of partial truths in a specific field of knowledge, where the practical consequence either affirms or refutes them. Rather the point in question here is a philosophical one, namely, whether human thought is capable of encompassing the real, the deepest truth of the world. That the philosopher, in his secluded study, who is concerned exclusively with abstract philosophical concepts, which are derived in turn from abstract scientific concepts also formulated outside of practical life experiences, should have his doubts in the midst of this world of shadows is easily understood. But for human beings who live and act in the real every day world the question has no meaning. The truth of thought, says Marx, is nothing other than power and mastery over the real world.

Of course this statement embodies a contradiction : Thinking cannot be said to be true where the human mind does not master the world. Whenever -- as Marx pointed out in *Capital* -- the products of man's hand grows beyond his intellectual power, which he no longer controls and which confronts him in the form of commodity production and capital as an independent social entity, mastering man and even threatening to destroy him, then his mental activity submits to the mysticism of a supernatural being and he begins to doubt his ability to distinguish truth from falsehood. Thus, in the course of many centuries the myth of supernatural deity overshadowed the daily materialistic experiences of man. Not until society has evolved to a point where man will be able to comprehend all social forces and will have learned to master his environment -- not until a communist society prevails, in short -- will his ideas be in full accord with the realities of the world. Only after the nature of social production as a fundamental basis of all life and therefore of future development has become clear to man, only when the mind -- be it only theoretically at first -- actually masters the world, only then will our thinking be fully correct. And only then will materialism, the science of society as formulated by Marx, gain permanent mastery and become the only applicable philosophy. The Marxian theory of society in principle means the renewal of philosophy.

Marx, however, was not concerned with pure philosophy. "Philosophers have only interpreted the world differently, but the point is to change it," he says in the theses on Feuerbach. The world situation pressed for practical action. At first inspired by the bourgeois opposition to feudal absolutism, later strengthened by the new forces that emanated from the struggle of the English and French proletariat against the bourgeoisie, Marx and Engels, thanks to their careful study of social realities, arrived at the conclusion that the proletarian revolution following on the heels of the bourgeois revolution would bring the real liberation of humanity. Their activity was devoted to this revolution, and in the *Communist Manifesto* they laid down the first directions for the workers' class struggle.

Marxism has since been inseparably connected with the class struggle of the proletariat. If we ask what Marxism is, we must first of all understand that it does not mean everything Marx ever thought and wrote. The views of his earlier years, for instance, are representative only in part; they are developmental phases leading toward Marxism. While the role of the proletarian class struggle and the aim of communism is already outlined in the *Communist Manifesto*, the theory of surplus value is developed much later. All of Marx's developing ideas are determined by the social relation, the character of the revolution, the part played by the state. And all these ideas had a different content in 1848 when the proletariat had only begun to develop than they had later or have today. Of vital importance, however, are Marx's original scientific contributions. There is first of all the theory of historical materialism, according to which the development of society is determined by its productive forces that make for a certain mode of production, especially through the productive force of class struggles. There is the theory of the determination of all political and ideological phenomena of intellectual life in general by the productive forces and relations. And there is the presentation of capitalism as a historical phenomena, the analysis of its structure by the theory of value and surplus value, and the explanation of capitalism's evolutionary tendencies through the proletarian revolution towards communism. With these theories Marx has enriched the knowledge of humanity permanently. They constitute the solid fundament of Marxism. From these premises further conclusions can be derived under new and changed circumstances. Because of this scientific basis Marxism is a new way of looking at the past and the future, at the meaning of life, the world and thought; it is a spiritual revolution, a new view of the world. As a view of life, however, Marxism is real only through the class that adheres to it. The workers who are imbued with this new outlook become aware of themselves as the class of the future, growing in number and strength and consciousness, striving to take production into their own hands and through the revolution to become masters of their own fate. Thus Marxism as the theory of the proletarian revolution is a reality, and at the same time a living power, only in the minds and hearts of the revolutionary proletariat.

Yet Marxism is not an inflexible doctrine or a sterile dogma. Society changes, the proletariat grows, science develops. New forms and phenomena arise in capitalism, in politics, in science, which Marx and Engels could not have foreseen or surmised. But the method of research which they formed remains to this day an excellent guide and tool towards the understanding and interpretation of new events. The proletariat, enormously increased under capitalism, today stands only at the threshold of its revolution and Marxist development; Marxism only now begins to play its role as a living power in the proletariat. Thus Marxism itself is a living theory which grows with the increase of the proletariat and with the tasks and aims of the class struggle.

### **Notes**

[1] This formula did not prove -- as Engels believed -- the validity of materialism as against Kant's "Thing in itself." The "Thing in itself" results from the incapacity of bourgeois philosophy to explain the earthly origin of moral law. The "Thing in itself" has thus not been contradicted and proven false by the chemical industry but by historical materialism. It was the latter that enabled Engels to see the fallacy in the "Thing in itself," although he offered other arguments.

## II

To return to the political scene out of which Marxism emerged, it must be noted that the revolution of 1848 did not yield full political power to the bourgeoisie. But after 1850 capitalism developed strongly in France and Germany. In Prussia, the Progressive Party began its fight for a state constitution, whose inner weakness became evident later when the government, in the interest of militarism, met the demands of the bourgeoisie for a strong national state. Movements for national unity dominated the political scene of Central Europe. Everywhere, with the exception of England, where it already held power, the rising bourgeoisie struggled against the feudal-absolutistic conditions.

The struggle of a new class for power in state and society is simultaneously in its conceptional form always a struggle for a new world view. The old powers can be defeated only when the masses rise up against them or, at least, do not obey them any longer. Therefore it was necessary for the bourgeoisie to secure for itself the adherence of the proletariat to the capitalist society. For this purpose the old ideas of the peasants and of the petit-bourgeoisie had to be destroyed and supplanted with new bourgeois ideologies. Capitalism itself furnished the means to this end.

The natural sciences are the spiritual base of capitalism. On the development of these sciences depends the technical progress that drives capitalism forward. Science, therefore, was held in high esteem by the young bourgeois class. At the same time, this science freed them from the conventional dogmas incorporated in the rule of feudalism. The conclusion drawn from scientific investigations stimulated a new outlook on life and the world and supplied the bourgeoisie with the necessary arguments to defy the old feudal powers. The new world outlook was disseminated by the bourgeoisie among the masses. To the peasantry and the petit-bourgeois artisan belongs the inherited biblical faith. But as soon as the sons of the peasants or proletarianized artisans become industrial workers they easily accept the ideas of capitalist development; even those who remain in pre-capitalistic enterprises are lured by the more liberal outlook of the bourgeoisie.

The intellectual struggle was primarily a struggle against religion. The religious creed is the ideology of past conditions; it is the inherited tradition which keeps the masses in submission to the old powers and which had to be defeated. The struggle against religion was a social necessity. It had to take on varying forms with varying conditions. In those countries where the bourgeoisie had already attained full power, as for instance in England, the struggle was no longer necessary and the bourgeoisie paid homage to the established church. Only among the lower middle classes and among the workers did the radical movement find some adherence. But where industry and the bourgeoisie had to fight for emancipation they proclaimed a liberal, ethical Christianity in opposition to the orthodox faith. Where the struggle against a still powerful royal and aristocratic class was difficult and required the utmost exertion and strength the new world outlook had to assume extreme forms of radicalism and gave rise to bourgeois materialism. This was so to a large degree in Central Europe. It is no accident that the most popular propaganda for materialism ( von Moleschot, Vogt, Buechner ) originated here. It also found an echo in other countries as well. In addition to these radical pamphlets a rich literature of enlightenment and popularization of modern scientific discoveries appeared, all intended as weapons in the struggle to free the urban masses, the workers and the peasantry from the spiritual fetters of tradition and to make them into followers of the progressive bourgeoisie. The bourgeois intelligentsia, professors, engineers, doctors, etc., were the most zealous propagandists of the new enlightenment.

The essence of natural science was the discovery of laws operating in nature. A careful study of natural phenomena disclosed recurring regularities which allowed for scientific predictions. The 17th century had already known the Galilean law of falling bodies and the new law of gravity, Kepler's laws of the planetary movements, Snell's law of light refraction and Boyle's law of the density of gas. Finally, towards the end of the century, came the discovery of the law of gravitation by Newton which to a far greater extent than all preceding discoveries, exerted a tremendous influence on the

philosophical thought of the 18th and 19th centuries. While the others were rules that were not always absolutely correct, Newton's law of gravitation proved to be the first real, universally applicable natural law which made possible correct measurements of cosmic bodies despite all their irregularities. From this the conception developed that all natural phenomena follow definite, fixed laws. In nature causality rules: gravity is the cause of falling bodies, gravitation causes the movements of planets. All occurring phenomena are effects totally determined by their causes, allowing for neither free will, accident nor caprice.

This fixed order of natural science was in direct contrast to the traditional religious doctrines in which God as a despotic sovereign arbitrarily rules the world and disposes fortune and misfortune as he sees fit, strikes his enemies with thunderbolts and pestilence, rewards others with miracles. Miracles are contradictory to the fixed order of nature; miracles are impossible, and all reports about them in the Bible are fables. The biblical and religious interpretations of nature belong to an epoch in which a primitive agricultural mode of production prevailed under the overlordship of an absolute despot. The natural philosophy of the rising bourgeoisie with its natural laws controlling all phenomena belongs to a new order of state and society where the arbitrary rule of the despot is replaced by laws valid for all.

The natural philosophy of the Bible which asserts theology to be absolute, divine truth is the natural philosophy of ignorance that has been deceived by outward appearances, that saw the immovable earth as the center of the universe and held that all created matter was also perishable. Scientific experiment showed, on the contrary, that matter which apparently disappeared (as for instance in burning) actually changes into gaseous, invisible forms. Lavoisier demonstrated that a reduction in the total weight did not occur in this process and that therefore no matter disappeared. This discovery was generalized into a new principle: matter cannot be destroyed, its quantity always remains constant, only its form and combinations undergo a change. This holds good for each chemical element; its atoms constitute the immutable building stones of all bodies. Thus natural science with its theory of the conservation of matter, of the eternity of nature, opposed the theological dogma of the creation of the world 6000 years ago.

Matter is not the only substance science found to be imperishable. Since the middle of the 19th century, the law known as the conservation of energy came to be regarded as the fundamental axiom of modern physics. Here, too, a fixed and far reaching order of nature was observed; in all occurrences changes of the form of energy take place: heat and motion, tension and attraction, electrical energy; but the total quantity never changes. This principle led to an understanding of the development of cosmic bodies, the sun and the earth, in the light of which all the assertions of theology appeared like the talk of a stuttering child.

Of even greater consequence were the scientific discoveries concerning man's position in the world. The Darwinian theory of the origin of species, which showed the evolution of man from the animal kingdom, was in complete contradiction to all religious doctrines. But even before Darwin, discoveries in biology and chemistry revealed the organic identity of all human and living creatures with non-organic nature. The protoplasm, the albuminous substance of which the cells of all living beings are composed and on which all life is dependent, consists of the same atoms as all other matter. The human intellect, which was elevated by the theological doctrine of the immortal soul to divinity, is closely bound up with the physical properties of the brain; all spiritual phenomena are the accompaniment to or effect of material occurrences in the brain cells.

Bourgeois materialism drew the most radical conclusions from these scientific discoveries. Everything spiritual is merely the product of material processes; ideas are the secretion of the brain, just as bile is the secretion of the liver. Let religion -- said Buchner -- go on talking about the perishability of matter and the immortality of the mind; in reality it is the other way around. With the least change in or injury to the brain everything spiritual disappears, nothing at all remains of the spirit when the brain is destroyed, while matter, of which it is composed, is eternal and indestructible. All living phenomena, including human ideas, have their origin in the chemical and



physical processes of the cellular substance; they differ from non-living matter only in their greater complexity. Ultimately, one must go back to the dynamics and movements of atoms, that is, explain everything on the basis of atoms.

Having reached these conclusions, natural materialism was of course no longer able to maintain itself. After all, ideas are different from bile and similar bodily secretions; mind cannot simply be put into the same category with force or energy. If mind is the product of the brain, which differs only in degree from other tissues and cells, then, it must be concluded, something of a mind must -- as a matter of principle -- also be found in every animal cell. And because the cellular substance is only an aggregate of atoms, more complex but fundamentally not different from other matter, the conclusion must be that something of that which we call mind is already present in the atom: in every minute particle of matter there must be a trace of the spiritual substance. This theory of the "atom-soul" we find in the works of Ernst Haeckel, energetic propagandist of Darwin and courageous combatter of religious dogmatism, who was hated and despised by his reactionary contemporaries. Haeckel no longer considered his philosophical view as materialism but called it monism -- strangely enough, for his philosophy sees the dual existence of mind and matter in even the smallest elements of the world.

Materialism dominated the ideology of the bourgeois class for only a very short time. Only so long as the bourgeoisie could believe that its society with its private property rights, its personal liberty, and free competition, through the development of industry, science and technique, could solve the life problems of every citizen -- only that long could the bourgeoisie assume that its theoretical problems could be solved by the natural sciences without the need to resort to any supernatural and spiritual powers. As soon, however, as it became evident that capitalism could not solve the life problems of the masses, as was shown by the sharpening of the proletarian class struggles, the confident materialist philosophy disappeared. The world was again full of insoluble contradictions and uncertainties, of sinister forces threatening social stability. The bourgeoisie resorted once more to all kinds of religious creeds and superstitions. Bourgeois intellectuals and natural scientists submitted to the influence of mystical tendencies. They were quick to discover the various weaknesses and shortcomings of the materialist philosophy and made speeches about the "limitations of natural science" and the insoluble "mystery of life".

Only a small minority of the more radical members of the lower middle class still clung to the old political solutions of early capitalism and continued to hold natural scientific materialism in respect. Among the rising working class too, materialism found a fertile ground. The anarchists have long been its most convinced followers. Social-democratic workers received the interpretation of Marxism and the conclusions of natural materialism with equal interest. Capitalistic practices, daily experiences and theoretical discourses on the nature of society contributed greatly towards undermining traditional religion. The need for scientific enlightenment grew and the workers became the most zealous readers of the works of Büchner and Haeckel. While Marxist doctrine determined the practical, political and social ideology of the workers, a wider understanding asserted itself only gradually; few became aware of the fact that bourgeois materialism had long since been outdated and surpassed by historical materialism. This, by the way, accords with the fact that the working class movement had not reached a position enabling it to destroy capitalism, but that its class struggle only served to secure a better place for it within the capitalist society. Thus, the democratic solutions offered by the early bourgeois movement were still considered valid for the working class also. The full comprehension of revolutionary Marxist theory is possible only in connection with revolutionary practice.

Wherein lies the contradiction between bourgeois materialism and historical materialism?

Both concepts agree in so far as they are materialist philosophies, that is, both recognize the reality of nature, and the primacy of the external world; both recognize that spiritual phenomena, sensation, consciousness and ideas, are derived from the former. Their opposition rests on this: bourgeois materialism bases itself on natural science, historical materialism is primarily the science of society.

Bourgeois natural scientists observe man only as an object of nature -- the highest of the animals --, determined by natural laws. For an explanation of man's life and action they employ general biological laws and, in a wider sense, the laws of chemistry, physics and mechanics. With these means little can be accomplished in the way of understanding social phenomena and ideas. Historical materialism, on the other hand, lays bare the specific evolutionary laws of human society and shows the interconnection between ideas and society.

The axiom of materialism, that the mental is determined by the material world, has therefore entirely different meanings for the two doctrines. For bourgeois materialism it means that ideas are products of the brain, of the structure and composition of the brain substance, in the last instance, of the dynamics of the atoms of the brain. For historical materialism it means that the ideas of man are determined by his social environment. Society is his environment which acts upon him through his sense organs. This postulates an entirely different approach to the problem and a different direction of thought; consequently, also a different theory of knowledge. For bourgeois materialism the question of the meaning of knowledge is a question of the relationship of spiritual phenomena to the physico-chemical-biological phenomena in the brain matter. For historical materialism it is a question of the relationship of the ideas in our mind to the phenomena which we view as the external world.

However, man's position in society is not purely that of an observing being but that of a dynamic force which reacts on his environment and changes it. Society is nature transformed through labor. To the natural scientist nature is the objectively given reality which he observes and which acts on him through the medium of his senses. To him the external world is the active and dynamic element, while the mind is the receptive element. Thus it is emphasized that the mind is only a reflection, an image of the external world, as Engels expressed it when he pointed out the contradiction between the materialist and idealist philosophies. But the science of the naturalist is only a part of the whole of human activity, only a means to a much greater end. It is the preceding, passive part of his activity which is followed by the active part : the technical elaboration, production and transformation of the world by man.

Man is in the first place an active being. In the labor process he utilizes his organs and aptitudes in order to constantly build and remake his environment.

For this reason he not only invented the artificial organs we call tools, but also trained his physical and mental aptitudes so that they might serve him as effective aids in the preservation of his life and in reacting effectively to his natural environment. His main organ is the brain whose task, thinking, is as good a physical activity as any other. The most important product of thought activity, the effective action of the mind upon the world, is science which, as a mental instrument, stands next to the material instruments and, itself a productive power, constitutes, as the basis of technology, an essential part of the productive apparatus.

Historical materialism sees the results of science, concepts, substances, natural laws and forces, although formed by nature, as first of all the products of the mental work of humanity. Bourgeois materialism, on the other hand, from the point of view of natural science sees all this as belonging to nature which has been discovered and brought to light only by science. Natural scientists consider the immutable substances, matter, energy, electricity, gravity, ether, the law of gravitation, the law of entropy, etc., as the basic elements of the world itself, as reality, that which has to be discovered. From the viewpoint of historical materialism, however, these are products which creative mental activity forms out of the substance of natural phenomena.

Another difference lies in the dialectic which historical materialism inherited from Hegel. Engels has pointed out that the materialist philosophy of the 18th century disregarded evolution; yet evolution makes dialectical thinking indispensable. Historical materialism and dialectics have since become synonymous. It is assumed that the dialectical character of historical materialism is best described when it is referred to as the theory of development. However, the process of evolution was also known to the natural science of the 19th century. Scientists were well acquainted with the growth of

the cell into a complex organism, the evolution of animal species as expressed in the origin of species, and the theory of the evolution of the physical world known as the law of entropy. But their method of reasoning was undialectical. They believed their concepts were concrete objects and considered their identities and opposites as absolutes. Consequently, the evolution of the universe as well as the continued progress of knowledge brought out contradictions in the theory of knowledge of which many examples have been quoted by Engels in his *"Anti-Dühring."* Understanding in general and science in particular segregate and systematise into definite concepts and laws what in the real world of phenomena occurs in continuous flux and transition. By means of names, through which language separates and defines the sequel of events, all occurrences falling into a particular group are considered similar and unchangeable. As abstract concepts they differ sharply, but in reality they converge and fuse. The colors blue and green are distinct from each other but in the intermediary nuances no one can say definitely where one color ends and the other begins. It cannot be stated at which point during its life cycle a flower begins or ceases to be a flower. That in practical life good and evil are not absolute opposites and that the greatest justice may become the greatest injustice is acknowledged everyday, just as juridical freedom may be transformed into its opposite. Dialectical thinking corresponds to reality inasmuch as it takes into consideration that the finite cannot explain the infinite, nor the static the dynamic world; that every concept has to develop into new concepts, or even into its opposite. Metaphysical thinking, on the other hand, leads to dogmatic assertions and contradictions because it views conceptions as fixed entities. Metaphysical, that is undialectical, thinking considers concepts formulated by thought as independent concepts that make up the reality of the world. Natural science proper does not suffer much from this shortcoming. It surmounts difficulties and contradictions in practice insofar as the very process of development compels it to continually revise its formulations and concepts, to amplify them by breaking them up in greater detail, to further modify its formulations to account for the new changes and to find new formulas for additions and corrections, thereby bringing the picture ever closer to the original model, the phenomenal world. The lack in dialectic reasoning becomes disturbing only when the naturalist passes from his special field of knowledge towards general philosophy and theory, as is the case with bourgeois materialism.

Thus, for instance, the theory of the origin of species very often led to the notion that the human mind, having evolved from the animal mentality, is qualitatively identical with the latter and differs from it only quantitatively. On the other hand, the actually-experienced qualitative difference between the human and the animal mind was raised by theological doctrine, in preaching immortality of the soul, to the level of an absolute antithesis. In both cases there is no dialectical thinking according to which substances of similar origin and property become differentiated in the process of growth and acquire new properties commanding new definitions and exhibiting entirely new characteristics, though the original property does not completely disappear, nor are they transformed into the complete antithesis of the original pattern.

It is metaphysical and non-dialectical to identify thought because it is the product of brain processes with the products of other organs, or to assume that mind, because it is a quality of material substance, is a characteristic quality of all matter. It is also false to think that because mind is something other than matter, it must absolutely and totally differ from it, that there is no transition to and connection with both so that a dualism of mind and matter, reaching down to the atoms, remains sharp and unbridgeable. From the standpoint of dialectics, mind incorporates all those phenomena we call mental which, however, cannot be carried beyond their actual existence in the lowest living animals. There the term mind becomes questionable, because the spiritual phenomena disappear gradually into mere sense perception, into the simple forms of life. The characteristic quality "spirit", which is or is not there, does not exist in nature; spirit is just a name we attach to a number of definite phenomena, some of which we understand clearly, others only partly.

Here life itself offers a close analogy. Proceeding from the smallest microscopic organism to still smaller invisible bacteria, we finally come to very complicated albuminous molecules that fall within

the sphere of chemistry. Where living matter ceases to exist and dead matter begins cannot be determined; phenomena change gradually, become simplified, are still analogous and are yet already different. This does not mean that we are unable to ascertain demarcation lines; it is simply a fact that nature knows no borders. The phenomenon life, which is or is not, does not exist in nature; again life is merely a name, a concept we form in order to comprehend the many different aspects of reality. Because bourgeois materialism deals with life, death, and mind as if they were independent realities it is compelled to work with insurmountable opposites, whereas nature consists of uncountable transitional processes.

The difference between bourgeois and historical materialism reaches down to basic philosophical views. Bourgeois materialism, in contradistinction to the comprehensive and completely realistic historical materialism, is illusionary and incomplete, just as the bourgeois class movement whose theory was bourgeois materialism, represented a limited and illusionary emancipation in contrast to complete and real liberation by way of the proletarian class struggle. The difference between the two concepts shows itself practically in their position towards religion. Bourgeois materialism intended to overcome religion. However, a particular view cannot be ended by mere argumentation; each argument finds a counter-argument. Only when it is shown why, and under what conditions a certain view was necessary can this view be defeated. It must be shown that its basis was merely historical. Thus the struggle of natural science against religion had sense only insofar as primitive religious beliefs were concerned, as for instance, the breaking down of ignorance and superstition towards such natural phenomena as thunder and lightning. The theory of bourgeois society could destroy the theories of primitive agricultural economy. But religion in bourgeois society is anchored in its unknown and uncontrollable social forces. Bourgeois materialism is unable to deal with these forces. Historical materialism, on the other hand, explains and shows why religion was for certain times and classes a necessary and indispensable way of thought. It lays bare the social basis of religion. Only thus may its power be broken. Historical materialism does not struggle directly against religion; from its higher position it understands and explains religion as a natural phenomenon within definite social forms. It weakens religious thinking through this insight, and is able to predict that, with the formation of a new society, religion will disappear. In the same way historical materialism, too, explains the temporary appearance of materialism within bourgeois society, as well as the retrogression of this bourgeois class into mysticism and religious trends. These trends, to be sure, do not disturb the bourgeois aptitude for thinking in terms of sharp opposites, but they replace the former atmosphere of hope and assurance with a skepticism and pessimism that speaks of the insolvability of world problems. Historical materialism also explains its own growth among the working class as being due not to its anti-religious arguments, but to the developing recognition of the real powers in society. Thus the influence of religion is weakened and will disappear with the proletarian revolution, the theoretical expression of which is historical materialism.

*J. Harper*