CHAPTER TWO

UNITY OF THE LOGICAL AND HISTORICAL METHOD OF RESEARCH AND EXPOSITION

Reality is one in its infinite multiformity and, as such, it is reflected in thought which, for this reason, is also one in its infinite multiformity. And since reality develops continuously, the science which reflects it also develops continuously. Science considered as an incessantly developing reflection of reality is history in the broadest meaning of this term. That is why Marx said that actually there is only one science: history.

Science is historical in its very essence. This does not exhaust the problem, however. Every animal and plant, even the most insignificant one, and every particle of matter, have so many and so varied aspects, properties and relations and so complex a history, that should we decide to write the latter fully and strictly, the books in all the libraries and the energy of all the scientists in the world would not suffice.

Man does not and cannot act this way. He does something else: he studies specific aspects, properties and relations of things under specific conditions and at a specific time. Which ones precisely, how and why those and not others? Perhaps his choice is guided by purely theoretical considerations?

We have just seen that theory has its specificity and independence and that every method as a law of the internal motion (development) of the theory also has its specificity and its relative independence. From this it directly follows that every theory and every method of knowledge are, to a certain degree, independent of practice and that, therefore, both in selecting and in working out historical or any other data, we not only can but also must comply with certain requirements of theory and method as such, we must comply with the state, tasks, tendencies of theory and method, taken at a given stage of their development. Whoever forgets or denies this, actually rejects scientific

knowledge as such and lapses into narrow practicism. At the same time, however, we must not forget that theory and method, taken entirely in their development, cannot in the final count be a criterion by themselves.

Nothing in the world can be measured against itself, remaining absolutely equal to itself. If we want to measure and assess, we need a scale which, while having something in common with the thing to be measured, must also differ from it, must not be identical with it. That is why practice is and can be the last and supreme criterion of every theory and method.

This means that practice is the supreme criterion which enables us to choose the most valuable material (data, problems, etc.) of actual history, to eliminate what is the inessential and unimportant and to focuss our attention on what is essential and important. Without this 'selection' the writing of history is well-nigh impossible, as we would plunge into such an ocean of data and problems, that we would not know where to start, nor would we be able to arrive, within a specific time and under specific conditions, at any results which are of substantial importance for us as acting and concretely thinking beings. Actually, this would not be a scientific history but a passive, photographic recording of events in their chronological order.

It is clear that we cannot do without a selection, just as it is clear that the criterion of this selection cannot be purely subjective, fantastic, mystical. Because in that case our history would not have an objective character and significance, it would not be a reflection of the actual development of things. It follows that no scientific value can be attached to the various 'absolute values-criteria' of Rickert, Windelband and others.

The criterion here too can be only one: practice. This is precisely what Engels says in his famous review of Marx's work *A Contribution to the Critique of Political Economy:* "...But since we do not examine here an abstract process of thinking, taking place in our heads, but an actual process which has really taken place or is still taking place, then these contradictions, too, have developed in practice and have probably found their solution."*

Lenin also said that practice defines not only the aim of knowledge and not only its criterion, but also what precisely we want to know in a given object, to which of its aspects we shall

* *Das Volk* April 20, 1859

pay attention in each concrete case, how far our analysis will go, etc. This is why not only scientific theory, but scientific history as well, are impossible without practice, scientific knowledge in general is impossible without it.

One might object: Does this not restrict scientific thinking? Is this not a substantial shortcoming of this thinking? Our answer is: yes, and no.

Here we do have a certain restriction of scientific thinking. However, man is not an unlimited and all-powerful being. Man, the concrete and real historical individual, is always given under certain conditions and with certain capacities. But what today is impossible for me, tomorrow will become possible for others, and in this way, in the process of the eternal approximation of thought to objective things, the latter will be ever more exactly, more thoroughly and more comprehensively attained. However, every society, epoch and individual have their certain limits and possibilities which, in the final analysis, are also determined by practice. And this is no longer a weakness, it is the force of scientific thinking.

First, it is precisely this that makes objective (though not exhaustive) knowledge possible. And second, this is no less important for us in this particular case - it renders possible every act of scientific thinking in general. If man was not a historical, material and restricted being, but an all-powerful and all-embracing spirit, he would have directly and completely fused with reality and multiformity itself and would have ceased to be a thinking human being. It is because his practical needs, capacities and tendencies in every given society and time are restricted and determined and not boundless and indeterminate that scientific thinking, without losing its objective character, acquires the form of human thinking, the character, role and significance of a powerful human weapon, enabling him not only to interpret the world, but also to change it.

This renders possible a major fact, viz., that only the practice of the most progressive, most viable social forces (classes), developing in harmony with the objective course of human society itself, while remaining a class practice to the highest degree, conditions the strictest possible (for a given society and epoch) objectivity of our theoretical and historical knowledge.

In the literature of dialectical materialism this question has

taken the form of a question on the party-mindedness of philosophy and of theory in general; it goes without saying that this party-mindedness is also discussed dialectically and concretely (as party-mindedness of the reactionary, declining, doomed socio-historical classes, and as party-mindedness of the progressive, ascending classes, whose interests coincide with those of human society and culture as a whole). This question is more fully elucidated in Lenin's *Materialism and Empiriocriticism.* Reverting to the question of the relation between practice and the form of knowledge, we may say:

Human practice determines not only the objective scientific value of the content of human thinking, but also its concrete form (differing according to the conditions and epochs). In other words, neither the objective content, nor the objective form of scientific thinking are possible without practice or, to be more exact, neither the historical, nor the logical form (or method) of scientific exposition and research are possible without practice.

What is the difference between these two forms (or methods) of exposition and research?

Engels as well as Lenin wrote that in *Das Kapital* Marx applied the logical method, and Engels particularly emphasized that in that case the logical method proved to be 'the only appropriate one'. He called logic 'history in its abstract form'.

What does this mean? In the above mentioned review Engels pointed out that the advantage of the logical method over the historical one consisted in the fact that the former made it possible to study a phenomenon at the highest stage of its development, at its mature state of perfection; moreover, by applying this method, one intentionally discards all the accidental materials of minor value which are encountered in the actual history of things and often interrupt the proper course of thinking.

In that review Engels stressed that Marx could not have waited for the history of capitalist society to be written before submitting it to his scientific analysis, as this would have made his work endless because in this sphere no satisfactory sources were available at that time.

Naturally, Marx did personally work on that history, as is apparent from vol.4 of *Das Kapital: Theories of Surplus Value.* Still, Marx made his analysis of capital not in a historical, but in

a logical form which Engels called, we repeat, 'the only appropriate one' in that case.

Marx himself, in his posthumously published *Introduction to a Contribution to the Critique of Political Economy,* stressed this advantage of the logical method over the historical one. There he developed on several occasions the above thought, viz. that knowledge proceeding from the direct, sense perceptions of reality, which is 'the concrete' i.e.'unity in diversity', to the abstract definitions and laws (relations) of things, again reverts to concrete reality which, however, this time is not 'a chaotic notion of the whole, but a rich aggregate of many conceptions and relations.'*

Thus scientific thought does not create reality out of its own (as in Hegel), but only reproduces it in our mind in such a way that it becomes explained and determined for us in its essence, in its laws, in its essential relations, forms, and properties, due to which we can change it in accordance with man's needs and views (Marx).

In this connection Marx advanced a no less interesting and important idea, viz., that when contemporary (modern) scientific political economy proceeds to its research, it does not begin with the starting point (the chaotic sensations and perceptions of things), but with the deductions, concepts, categories, laws, etc., at which scientific thinking has already arrived, treating them critically and further developing them.

Finally, again in this connection, Marx, analysing the essence of money, arrived at a very interesting and deep thought. He pointed out that the less developed the relations of production and exchange, the more difficult it is to grasp the real, innermost essence of money, of commodity, of exchange value, etc. Money has existed in history before, but only under the capitalist mode of production and exchange did it fully reveal its essence which earlier could be perceived only as a tendency. In its classical form it manifests itself especially forcefully now, and precisely this fact enables us more properly to understand its tendencies, which in the past were only apparent.

In this connection Marx formulated a highly original and profound idea, viz., that 'the anatomy of the human being is the

* K.Marx: A. Contribution to the Critique of Political Economy (in Russian) in Gospolitizdat, 1938, p.148

key to the anatomy of the ape', and not *vice versa*. Occasionally this thought has been misinterpreted in the spirit of anti-historicism and anti-evolutionism. Actually, it does not and cannot contain anything of the kind. With it, however, Marx, in the brilliant form characteristic to him, actually underlined the profound historical character of content in the logical form of exposition and research, the advantage of the logical form over the historical one as well as their dialectical unity.

When we logically study phenomena in their comparatively pure and classical form, divested of all non-essential and accidental elements, we do not thereby destroy their historic character but only make possible the very scientific history of things, because we orient it towards the proper search for, discovery and understanding of the trends in the evolution of given phenomena in the past, thereby preventing it from 'groping about' in the labyrinth of non-essential, accidental elements of little value. Actually, every theory (logical study) is a historical product and originates in the primary, chaotic, sensations and perceptions and ideas, i.e. it is essentially historical in content and must remain such. But it is also a theory and not a history of things; it is, as Lenin used to say of *Das Kapital,* logic applied to a particular scientific field, i.e., it is and must be logical in the form of its exposition and research.

This thought of Marx's also casts a bright light on the fact that it is precisely the analysis of consciousness as the supreme and most complex form of reflection which enables us better to understand the lower forms of reflection, without lapsing into anthropomorphism and hylozoism.

We already know that consciousness is the result of the dialectical evolution of the lower forms of reflection, i.e. of reflection taken as a property of all matter, which is akin to but not identical with sensation. We also know why and wherein consciousness qualitatively differs from the lower forms of reflection. But just because consciousness is the supreme form of reflection, the properties and tendencies which otherwise would have been perceived with difficulty in the lower forms of reflection, appear in it most clearly.

An analysis of conscious reflection reveals the actual, real connection between the object and the subject, as well as between the external responsive reaction and the internal state-

reflection. As we have already seen, practice enables us to understand why the subject and the object form a dialectical unity, why the image (reflection) determined by the interaction between the subject and the object, has an objective significance in its capacity as an internal state of the subject; finally, why as an image it possesses its own specificity, relative independence and a reverse force (a capacity to act upon the object).

In the case of inorganic matter (see Book One) we do not speak of a subject or of image-ideas, but we nevertheless have a reflecting body and reflection. This reflection is conditioned by the interaction between reflecting body and reflection, but it does not boil down to an external responsive reaction. While it is determined by it, but it loses its topicality and continues to exist a 'trace' or 'predisposition'. Under certain conditions it regains its topicality and this finds its expression in the fact that the body reacts externally not only in accordance with the new external conditions but also in accordance with its inner nature, determined by the 'traces' and 'predispositions' acquired in the past. Thus, for example , every good mechanic, engineer or musician knows that there is a difference between a used tool or instrument and a new tool or instrument , and that every tool or instrument passes through a certain period of 'adaptation' until it is best 'adjusted to a specific job ; thereafter, when it breaks,wears out, etc., it 'ages' and is no longer usable as a specific tool or instrument. Of course, in this case, we have no memory, or will, or any such psycho-physiological property, and yet this phenomenon is a fact which cannot be adequately explained unless we take into consideration the influence of past 'experience' which, though to an extremely limited degree (in comparison with the experience of organic and living bodies), accumulates precisely in the form of reflection, taken as a property of all matter.

On the other hand, we also know that the similarity between image and object actually implies a process of coincidence between them, i. e. that the image is not the object itself, but is given in a process of coincidence with the object, process of interpenetration between the two. This means, among other things, that knowledge is not a mechanical likening of the subject to the object, nor a mechanical 'imprint' of the object on the subject,

nor a metaphysical transformation of the reflecting subject into the reflected object.

As we think of the mountain and as we get to know it, we do not become a mountain ourselves. The mountain remains a mountain, i.e. a particular part of the inorganic nature or reality which surrounds us. However, in the very process of cognition of the mountain, when cognition is real cognition and not a purely subjective imagination or dream, we ourselves considerably change in one form or another and to one or another degree. When we come into direct and effective contact with the mountain (the object), our consciousness 'encompasses' it; it becomes internally much 'more kindred', 'closer', 'our own' to us and we conceive ourselves as one of the forms of manifestation or a particular case of the multiform natural whole, which is aware of itself precisely in us and through us.

The mountain remains such as it is, i.e. part of the inorganic, unfeeling, unthinking reality of Nature and has its own objective material form, size, weight, colour, etc. It neither becomes a thought,idea or consciousness, nor does it 'penetrate us' in the spatial and physical meaning of this term.

And yet we 'embrace','encompass', realize' both the mountain and ourselves, while the former, remaining objective and real, i.e. existing outside and irrespective of our consciousness, is nevertheless not 'alien' to us; there is no principled, impassable chasm between us; we discover things which deeply link us with it and which render impossible the absolute and metaphysical difference or dissimilarity between us.

If knowledge were only an external action, i.e. a responsive reaction (or reflex), and if the relation between our thoughts and the object were merely the relation of a consequence to its external cause, then one could speak of no cognitive images and we would end up in agnosticism, relativism and, in the final analysis, in mysticism.

On the other hand, if knowledge were only an act of inner and absolutely passive contemplation or, in other words, an act of 'intentional' possession of the form of the object alone (Aristotle and others), then we would have never known the mountain in its objective reality, i.e. in its material essence and its material properties and manifestations. If this knowledge is possible only in material practice (which, as we know, is a form of manifestation of the united interaction of Nature) we, without mechanically and externally assimilating ourselves with the mountain, bear in ourselves its objective, concrete and effective reflection, i.e. the cognitive image.

In short, we know the mountain as part or a particular case of the universe, characterized by unity in diversity, of which we ourselves are only a part or a particular case.

This is how dialectical materialism understands the cognitive image and its difference and similarity with the object. It considers the cognitive similarity not as physical copying or external assimilation, i.e. it conceives it not mechanically nor as mystical acts of 'intentional possession' or of subjective 'shaping' of the object.

In the case of the lower and lowest forms of reflection we can no longer speak of awareness of the one whole in the reflecting body. But here, too, reflection is neither a passive reflection, nor a mechanical assimilation of reflection with the reflecting object. Here, too, the inner connection, the mutual internal transactions, the 'merging' into one another are inevitable, since reflecting body and reflection are only two parts or two particular cases of the natural whole, united in its diversity and continuously developing. Here, too, the similarity is internal; here, too, it is a dialectical process of coincidence between different things; here, too, it is possible only in and through the interaction of these different and externally 'not coinciding' things.

Many entomologists,'after experimenting with caterpillars, established that insects (with the exception of crickets and cicadas) have tactile perceptions of vibrations (of the air and vibrating objects) rather than actual sound sensations. The insects' reactions during sound excitations are compared to the harmonious vibration of a glass or a musical instrument in response to the corresponding air waves. In any case, it is not denied that insects have sensations but a well-grounded doubt is expressed in the existence of acoustic sensastions in most insects.

If we go down the ladder of evolution below the insects and pass from them to the lowest forms of plants and animal organisms, we shall not even find elementary biological 'sensitivity'. Still all organisms 'harmoniously vibrate' in response to corresponding external excitations and in all cases there is a different rhythm of reaction. The rhythm, the character in

general, the duration, force, recurrence, etc., of the 'echoes' (reflexes, reflections) are determined not only by the nature of the excitant but also by the nature of the subject of the excitation, of the 'harmoniously vibrating' object. This law applies not only to reflections in the case of organisms but also to reflections in the case of inorganic bodies: glass, string and steel membrane react differently to the same sound.

All these 'harmonious vibrations' (echoes) have always something in common, which is determined by the nature of the acting body (say, the tuning fork), which enables the experimentalist or the experienced craftsman to establish from the 'responsive vibrations' when they are a response to the sound of the tuning fork and when they result from some other sound. At the same time, the 'responses' of the glass, the string and the membrane are so different, so peculiar, that we seldom confuse them and in each of them we can discover properties (timbre, for instance), which are determined by the very nature of the glass, the string and the membrane.

In other words, here, too, the echo is neither a mechanical copy, nor a 'pure inner state' of the reflecting body, isolated from the external interaction between things. For this very reason when, say, the tuning fork has ceased, while the string continues to ring, or, to be even more precise, when the string has already 'adapted itself' to a given sort of harmonious vibration and must vibrate in response either to a very similar or to a very different sound impact, every more or less experienced musician is able to grasp the character of the 'harmony' and to assess the musical value of the instrument.

It is clear that there can be no question of any 'subjectivity' in this case. It is also clear, however, that the external (responsive) reaction and the internal reaction (reflection, taken as a property of all matter) are profoundly and dialectically mutually conditioned and, while differing, they also merge into one another, i.e. emerge, evolve and disappear as particular cases or forms of manifestation of the universal interaction which is one in its diversity.

To Lenin goes the merit for revealing (by means of his 'logical assumption' of reflection as a property of all matter) the logical possibility to proceed to an analysis of this property on the basis of the analysis of conscious reflection, without,

however, denying or underestimating the latter's qualitative peculiartiy and supreme complexity. As we have just seen, it is to Marx, however, that goes the merit for having been the first to give the classical definition of the dialectical logical method which in content is and should remain historical. Let us now go back to our original thought.

In order to better grasp the essence of the logical form (or method) of exposition and research, we must recall here that Marx and Engels, as they themselves said, partially borrowed their 'logical' method from Hegel, putting it, however, on its feet, i.e. on a materialistic basis and radically transforming it. What were the individual logical concepts, categories and laws according to Hegel? They were degrees in the development of the 'Absolute Idea', while for dialectical materialism they are generalizations, deductions, results of the history of knowledge taken as a process of the reflection of the development of objective real things. The ideas or concepts of matter, life, man, society, etc., are precisely such historical results, deductions, generalizations, in which the whole positive knowledge of the past has been preserved, condensed and further developed, while all that is negative and purely subjective has been rejected.

Thus, insofar as the general concepts, categories and laws, with which the logical form (or method) of exposition and research operates, are the result of the history of the knowledge of things (Lenin), and insofar as they are formed, ascertained and further developed in an organic connection with practice, obviously only practice can answer the question: when precisely a given logical exposition or research is objectively true, i.e. when it is in conformity with the general historical results of knowledge, and when not. And whenever and insofar as it is objectively true, the result of the logical method does not contradict the method of the history of knowledge but coincides with it.

Precisely in this sense the logical form of exposition and research proves to be and should always be historical in its content, in its very essence. The historical character of the logical exposition and research does not lie therefore in its form, which does not coincide with the historical form, but in its scientific content, its scientific essence, its innermost scientific trends and significance.

It follows that if, in accordance with Engels and with Lenin, we define the logical method as a 'historical' one, but in an

'abstract and theoretically consistent form'* , then we must define the historical method as a 'logical method in a concrete form'. In other words, to write in a historical form does not simply mean to string together chronological events, but to follow the manifestation of a specific social law in historical developments abounding in accidents and deviations.

The strict observance of chronology is not mandatory for the logical method, nor is the listing of concepts in the order in which they actually took shape in history (Marx, Lenin). On the other hand, the general foundations and the general deductions must be in conformity with the historical results of the evolution of knowledge and, in the final count, with the evolution of practice.

There are quite a few authors who consider that they have written the history of a nation or that of the economic development of a country as long as the general theoretical propositions and arguments in their books are accompanied by and illustrated with abundant historical data, examples, quotations, etc. And vice versa, authors are still to be found who are deeply convinced that they offer us the history of those things as long as the simple chronological *exposition* is somewhat embellished with general theoretical reasoning, arguments, quotations.

Both are utterly wrong. History is neither a theory profusely studded with illustrations and examples, nor a simple chronology to which various 'theoretical' ideas and deductions are clumsily grafted. We repeat, the observance of chronology is a law for history, just as it is a law for it to follow developments in their actual and rich development; however, both in its basis and its deduction, history whould not contradict theory.

Theory is historical in content and non-historical in form. History is historical in form but theoretical in content. Science in general, of which Marx spoke, is historical both in form and in content and, as such, it is history in its finished form. Its form is a form which has absorbed the entire scientific content, while its content is already completely formed. But as such science is only a supreme scientific ideal, while every real science is usually elaborated both as a history and a theory of a subject matter.

The opponents of every historicism, which they confuse with crude empiricism, subjectivism and relativism, destroy the historic character not only of the form, but also of the content.

* K.Marx and F.Engels, Selected Works, Vol. 1. 1948, p.332

Their concepts acquire a supra-temporal, superempiric, abstract and objectivistic character. There can be no question of any connection with practice, of any concreteness, of any human determination. The concepts become mystical 'essences'. 'foundations', 'forms', 'values', etc. Logical thinking is divested of its logical character and is replaced by scholastic 'logic' or by religious and aesthetical 'intuition', 'insight', 'mystical communion with God', and the like. Such is the case of all objective idealists and all mystics, beginning with Plato and Plotinus and ending with Hegel and Bergson.

This is one of the extremes. The other finds its expression in the underestimation or complete rejection of the logical method and in the endeavour to give a historical form to every general theoretical (logical) exposition and research.

One forgets the fact that not only Marx's *Das Kapital* but also the works of Engels and Lenin are models of the application of the logical method which, we repeat, far from rejecting, presupposes a deeply historical content of the logical notions, categories, theories,syntheses, etc. One forgets, for example, that at the time when Lenin wrote his *Development of Capitalism in Russia, Materialism and Empiriocriticism, State and Revolution,* the scientific histories of the state and of proletarian revolution, of the crisis in contemporary physics or of capitalism in Russia had not yet been written. Not only did not Lenin wait for these histories to be written in order to draw from them 'in the form of a purely inductive generalization' the fundamental theses of his works; on the contrary, in writing his books he greatly contributed to the proper working out of the problems of scientific history itself in these and in other fields.

Although and precisely because they were deeply logical in form (and in method), these three books played a first-rate part in the development of scientific history.

We believe that these few examples will suffice to finally make it clear how wrong are the would-be dialectical materialists who in actual fact underrate the logical form of exposition and research and who, afraid lest they lapse into scholasticism, insist on the theoretical *exposition* being always and at all cost vested in a historical form or overburdened with historical 'illustrations' and 'examples'.

Forgetting the profoundly logical meaning of Lenin's

reproach addressed to Plekhanov for the latter's failing to understand the importance of the fundamental law of dialectical logic (the law on the unity and the struggle of opposites) and hence reducing the *exposition* of dialectical logic to a simple 'aggregate of examples', some dialectical materialist philosophers still fail to understand that it is high time for the logical method to fully regain its rightful place in our research and popularization work. Why give an opportunity to our opponents to accuse us of underestimating the logical form of thinking, so highly assessed by the three classics of dialectical materialism and used by them with such unparallelled skill?

This is not always sufficiently understood. It is frequently forgotten, for example, that the misfortune of the Menshevik idealists did not consist in their attempting to use the logical form (while also writing historical works), but in divorcing thought from social practice. Precisely this, and not the logical form by itself transformed their propositions into idealistic and anti-historical scholasticism. It is, however, quite unjustified and highly dangerous to draw therefrom the conclusion that every logical form (or method) of thinking is scholastic, idealistic and anti-historical. In this particular case one should rather draw the conclusion that, strictly speaking, the Menshevik idealists did not apply a logical method but merely a scholastic logic.

Unfortunately, some philosophers obviously misuse the profoundly true ideas of Engels and Lenin about the need of 'historical illustrations' and of 'the elaboration of the history of thinking' and simply 'organically cannot tolerate' any logical (general theoretical) thinking, even when it is undoubtedly linked with practice and is therefore historical in its very scientific content.

We repeat: when Engels in his famous review of Marx's work *A Contribution to the Critique of Political Economy* wrote that a wealth of 'historical illustrations'(precisely: illustrations) was given in *Das Kapital*, he did not abandon his own thesis that the method used in *Das Kapital* was a logical one and that the latter had proved 'the only appropriate one' in that case. When Lenin, on his part bequeathed us with good grounds the idea of the necessity of elaborating the history of thinking (needed for the proper further evolution of the logic of dialectical materialism), in so doing he did not in the least refute the high assessment he had personally made of the logical method. This is

no accident because he himself applied in his major works, and with a skill equal to that of Marx, precisely the logical method (or form) of exposition and research; this did not contradict the unusually profound, all-embracing and concrete historical character of their content, but, on the contrary, was in full harmony with it.

In my report on the historical and logical elements in *Materialism and Empiriocriticism*, presented to the All-Union Conference of Philosophy in Moscow on the occasion of the 25th anniversary of Lenin's classical work, after expounding Lenin's definition of concepts as generalizations or deductions (results) of the whole history of human thought, I also attempted to expound another and no less important theses of Lenin's.I have in mind his thesis that it is man's practice, taken as a criterion in assessing the 'insignificance' or 'great value' of historical material, which enables us to understand the fact that while it is true that the correct deductions (results) of the whole history of the knowledge of the world acquire a theoretical (logical) value because they are based on practice, it is also true that the properly based logical studies and theories are always confirmed by the evolving social practice, thereby revealing the historical character of their content. Only by proceeding from life, from concrete social practice, can we learn not only properly to interpret the already available 'deductions' (concepts), but also properly to operate with them and correctly to develop them further. Therein lies the deepest epistemological meaning of Lenin's teaching on party-mindedness in history, philosophy, political economy, etc.

There are still authors, even dialectical materialists, who see the historical character of scientific thinking only or chiefly in the historical form, and only or chiefly in the abundance of historical digressions and of examples, taken from the natural sciences or elsewhere. They seek and find the concreteness of thinking only or chiefly in these historical digressions, in illustrations and examples, failing to see or to grasp that illustrations and examples by themselves are far from being evidence of the logical concreteness of thinking.

Actually you can write only with examples and illustrations, yet your thought will remain logically non-concrete. It is well known that in the hands of the classics of dialectical materialism examples are an invaluable means of analysis, clarification, pop-

ularization, persuasion, enlivening, inspiration, etc. However, to seek and to find the incomparable force of their logical concreteness only or chiefly in the examples and illustrations would mean to completely fail to grasp the above-mentioned reproach addressed by Lenin to Plekhanov. It would mean utterly to fail to understand the meaning of the whole teaching of dialectical materialism on concrete logical thinking and concrete scientific truth.

Some, especially in Bulgaria, may consider that this is going too far. But we consciously weigh our words and carefully choose more tolerable expressions, though the error which has been made and is still made by some people with regard to the assessment and use of the logical method has long since become intolerable, whichever side you view it from.

In this connection we shall point out that the solution of these questions would enable us correctly to solve yet another interesting and important question. What we have in mind is this:

We know that theory, as a generalization of man's practical experience, has its criterion and final goal in human practice. As a rule, the conclusion is drawn that theory, in its very socio-historical essence, can and should be practically suitable, usable on a large scale and therefore universally accessible, i.e. popular.

We must, however, point out that both the creation of science and its popularization are complex, dialectically contradictory processes, and that theory has its own specificity, relative independence and effectiveness, which not only enable it to guide practice to a certain degree and under certain conditions, but also give it a certain right to claims on practice itself (and hence on the general ideological development of the masses) for higher qualitative and quantitative standards.

In other words, the demand to bring science closer to the masses with their rich practical experience should always and most closely be linked with the demand to raise the masses from the depths of current practice to the ever higher summits of theoretical thinking. We repeat, both these are extremely complex and difficult tasks, which mankind has yet to raise and fully to solve. One thing is certain, however: if we do not want the 'bringing of science closer to the masses' to imply its vulgarization, and the 'raising' of the masses to the theoretical heights of thinking to imply their divorce from practice, the whole process

of scientific popularization should always be indissolubly linked with the process of raising the theoretical standards of the masses.

Thus, for example, the Stakhanovite movement was, among other things, a necessary fruit of the democratization of science and culture in the USSR. In this respect real miracles have been and are being made there, the leaders of science and all-round socialist building giving themselves examples of scientific and most accessible expositions, studies, articles, etc.

At the same time, however, Stakhanovites, shock-workers and activists are being sent to academies and schools. Why? Because they must study those aspects and achievements of theory which in no case can or should be simplified, but must purely and simply be grasped and mastered, i.e. which require that they themselves raise their political, theoretical and general cultural level. It is indeed ridiculous to demand, for example, that analytical geometry, differential calculus, the laws of quantum mechanics, etc., be worked out in the language of the unlearned and the illiterate.

Actually, there is only one way out: while making everything possible to popularize theory, everything possible should also be made to raise the theoretical level of the masses. It goes without saying that this is true of philosophy, too. Insofar as philosophy is a science with its own history, its own specific achievements, problems and methods, it calls not only for bringing theory closer to the masses, but also for raising the theoretical level of the masses to the level, already attained by philosophical scientific thinking, or the level philosophical knowledge must reach in a given country and at a given time.

In this respect the experience of the three classics of the philosophy of dialectical materialism and of their best followers is interesting.

All three of them, as well as Plekhanov in Russia, Kautsky during his first period, 'while he was still a Marxist', Dimiter Blagoev in Bulgaria, Paul Lafargue in France and others have bequeathed us models of popular works, which among other things have always aimed at 'raising the theoretical level' of the masses. The *Communist Manifesto, Wage Labour and Capital, Ludwig Feuerbach, State and Revolution,* Plekhanov's *Monistic Outlook,* D. Blagoev's *Contribution,* etc. - all these and a score

of other similar books, pamphlets, articles and reports of the classics and of the best representatives of dialectical materialism have been and will remain models of popularly written, yet strictly scientific works. And all these works have played and have yet to play not only the part of a means of political agitation, organization and guidance of the struggles. They are all popular works which, without losing their scientific value, have also served and continue to serve as a powerful means of raising the theoretical level of the masses, so that the latter may themselves start to seek and to study works like *Das Kapital, Anti-Dühring* and *Materialism and Empiriocriticism.*

It is no less interesting to note that, with a few exceptions, all the attempts made hitherto to make a complete yet strictly popular *exposition* of works like *Das Kapital, Anti-Dühring* and *Materialism and Empiriocriticism* have been unsuccessful. Why is that so?

First of all, because the purely research or critical and polemical character of these works often compels the authors to raise problems, quote other opinions and objections and use means and forms of exposition and research (purely logical, mathematical, statistical, etc.) which cannot be easily assimilated by the ordinary reader without any education.

What ought to be done? Perhaps Marx and Lenin ought not to have written their fundamental scientific works at all? It is well known, however, that when the First International was dissolved, Marx started with particular joy and inspiration to work on *Das Kapital;* and when Stolypin's reaction set in in Russia after 1905, Lenin buried himself for two whole years in the libraries of London and Switzerland and wrote his immortal work *Materialism and Empiriocriticism.*

All these works *(Das Kapital, Anti-Dühring, Development of Capitalism in Russia* and *Materialism and Empiriocriticism)* need commentaries, bibliographical elucidations, etc. They call not only for the authors' getting closer to the level of the masses but also for raising the latter's theoretical level to that of the authors.

This is precisely what is actually happening in the Soviet Union and should also happen in Bulgaria and everywhere. The majority of the books and brochures of Marx, Engels and Lenin,

while on the highest theoretical level, are classical examples of a popular exposition.

* * *

After all we said about the opposition and unity of theory and practice, let us draw a general conclusion about this problem. It can be formulated as follows:

Man's material (productive and other) practice and his cognitive activity can be only conventionally and relatively separated and opposed to each other. Actually, they are but two facets or two manifestations of man's life, which is one in its diversity; if they are separated and mutually opposed at certain moments and under certain conditions, under other conditions and at other moments they inevitably come closer and interpenetrate one another, and may even become (to a certain degree) identical.

We know that, according to Marx and Engels, men acted before starting to think theoretically; acting, they were able to master certain objects of the outside world in order to meet their needs (consequently, they started with production). Of course, Marx and Engels did not mean to say that men originally acted and mastered the objects of the outside world without having any sensation, memory or thought. Marx and Engels stressed that this only referred to theoretical thinking, i.e. to thinking in abstract concepts, categories, laws, etc. Men arrived at theoretical thinking precisely on the basis of their production practice; it emerged at a comparatively later date in human consciousness and, moreover, it was qualitatively so different from the original human thinking that Lenin defined it as the second phase or second stage in a three-stage process: 'From contemplation to abstract thinking, and from the latter to practice: such is the dialectical path of the knowledge of truth, of the knowledge of objective reality.'* Of course, Lenin did not mean thereby that abstract thinking did not stem from practice or that, generally speaking, it could be absolutely and metaphysically divorced from it; but relatively and conventionally it can be separated from it precisely because of its quality of abstract thinking by means of logical concepts, categories, laws, etc.

* V.I.Lenin, Philosophical Notebooks, Gospolitizdat, 1947, pp.146-7

However, in order to prevent this conventional and relative separation from turning into an absolute and metaphysical one, abstract thinking must have contact with practice and consider it as its criterion. final goal, etc. Precisely in this sense we can say that at the start of this process man acts and perceives things but does not yet think logically; during the second phase he thinks logically, but does not yet act; during the third phase, checking his theoretical and logical conclusion against practice, he simultaneously acts, perceives and logically thinks. And while during the first phase of man's activity the sense perceptions and ideas show a tendency to turn into abstract logical thinking, during the third phase the tendency is towards a return from abstract subjective concepts and categories to concrete sense perceptions connected with practice but already, as Marx puts it, illuminated, systematized and explained by man's theoretico-logical thought. This three-phase process then resumes, but now on a new and higher basis, etc.

However, while, when going from the first phase to the second phase, we have a process of transformation of the material being into an ideal one, i.e. into ideas; in other words, while we have, if we may say so, a 'dematerialization' of the material being, during the third phase, on the contrary, we have a materialization of the idea and its verification through material practice itself, which, as Lenin says, 'has the merits not only of universality, but of immediate reality as well.'

And whenever and insofar as this has happened or is happening, the cognitive subjective activity merges with the practical objective activity. The practical human deed which has given birth to logical thinking now in turn reabsorbs it and becomes itself something different, it starts a new life on a qualitatively new and higher basis.

If Goethe was quite right in saying that at the beginning was the deed, it is no less true that at the end it is also the deed, only now reborn, illuminated, animated by the 'logos' i.e. the thought.

Born of matter, thought again merges with it, rids itself of all subjectivism and relativism, and establishes its objective and absolute sway over natural and social necessity.

Born of necessity by material existence, at the highest stage of its evolution, human thought masters this necessity and begins to dominate over the material world, becoming itself a new law

of this world and giving it new 'humanized' forms of existence and development.

But this is no longer a mere thought, pure thought, naked thought. This is a thought-deed and a deed-thought. This is a man-Nature and a Nature-man. This is an objectivity, which has passed through the furnace of man's subjectivity and has reappeared, but already as a scientifically known and man-shaped objectivity. This is an objective knowledge and humanization of the world which, having once given birth to man and to man's thought, achieves in them and through them (Engels) its self-consciousness which, of course, has nothing in common with the 'absolute self-consciousness' of the idealists and mystics.

It is precisely at this higher stage in the evolution of the world and of man that the power of logic with the true son and representative of the most progressive social class necessarily turns into a logic of creative human power.

The deed of logic becomes a logic of the deed, as this is already practically happening in our times. And then the 'miracle' occurs:

'The weapon of criticism' turns into a 'criticism of the weapon', because the ideas which have captivated the masses acquire great material force. The great historical leap from the realm of necessity to the realm of genuine human freedom occurs, a transition from man's pre-history to man's real history; the dethronement of all mystical 'forces' and 'gods' is completed, so that man may arrive at the supreme human power, truth and beauty.

This sounds like a fairy tale, like a veritable miracle, indeed. But it is neither a miracle nor a tale, but merely the only possible and logically necessary deduction from the dialectical materialistic conception of the unity of theory and practice and, in general, from the conception of knowledge as reflection.

What kind of idealism could bring us to the doors of this miraculous realm of human freedom, beauty and truth, and can idealism do it at all? And could these doors be opened with slanders like this one that materialism in general, including dialectical materialism, denied, underestimated and degraded the spiritual principle for the benefit of 'dead, blind and soulless matter'?

The truth-deed is stronger than any slander-word. Precisely for this reason we conclude here with our logical argumentation in order to let the arguments of our great deed speak for themselves.

Their cogent word has already been uttered with sufficient clarity for anyone who has ears to hear it. And, of course, also a heart, so that one should not remain aloof from the greatest, the most wonderful deed in the history of mankind.

EXCERPTS FROM BOOK FIVE

DEFINITION OF TRUTH