# Dialectics: Conception and Method

In ancient Greece, the word dialectic expressed a specific manner of argumentation which consisted of discovering the contradictions which were contained in the reasoning of the opponent, thus denying the validity of his argument and surpassing it by another synthesis.

Socrates (479–399 B.C.) was considered to be the greatest dialectician of ancient Greece. Using systematic and methodical doubt, he proceded by analysis and synthesis, elucidating the terms of the questions in dispute, enabling truth to be born as if it were a birth in which he—the master—were just an instigator and provoker, and the disciple were the true discoverer and creator.

However, dialectics precedes Socrates.

Lao Tsé, author of the famous book *Tao tö King* (The Book of Tao), who lived seven centuries before Christ, is considered to be the precursor of dialectics, not because he elaborated his own laws, but because he incorporated them into his doctrine. In the form that it has reached our own days—as the logic inherent in nature, men,

knowledge, and society logic began with Zenon of Elea (340–263 B.C.) who was well-known for his numerous paradoxes as well as his belief in dialectics as a philosophy of appearances.

Another pre-Socratic philosopher who started dialectics is Heraclitus of Ephesus (535–463 B.C.) He believed that reality was a constant future, in which the struggle of opposites is prevalent—cold-heat, life-death, good-bad, health-illness, each one transforming into the other. He said that everything changes so quickly that it is never possible to bathe twice in the same river. The second time, the river will not be the same, and we ourselves will have changed.

In contrast to Heraclitus, Parmenides of Elea believed that movement was an illusion and that everything was immutable.

As we can see, the question from which dialectics originated is that of the *explanation of the movement* and of the transformation of things. In the metaphysical vision of things—to which dialectics is opposed—the universe is presented as an "agglomeration of distinct things or entities, and though they are related to each other each has its own exclusive individuality, which is independent of all other things or entities." (Prado, Jr. 1952, 1:11) Dialectics considers that all things are in motion, and all things are related to each other.

For Plato (420–348 B.C.), dialectics were the manner in which one ascended to the intelligible, a method of the rational deduction of things. This dialectic movement first allowed one to pass from multiplicity to unity and, second, to discriminate between various ideas and not confuse them. Plato used dialectics as a research technique which was applied through the collaboration of two or more people, who would proceed through questions and replies. Knowledge should grow from this encounter as well as from collective reflection and the dispute, but not from isolation. This process would have two key moments. The first consists of uniting disperse things into a single idea, clarifying them and making them communicable. The second consists in newly dividing the idea into its parts.

For Aristotle (385–322 B.C.)—whom Marx (1980 1:465) called "the greatest thinker of ancient times"—dialectics were merely an auxiliary to philosophy. He reduced it to a critical activity. It was not, however, a method through which one would reach the truth. It was just an appearance of the philosophy, a logic of the probable. For Aristotle, the dialectic method did not lead to knowledge, but to dispute, probability, and opinion.

Aristotle managed to conciliate Heraclitus and Parmenides with his theory on the act and the potency. According to this theory, changes exist, but they are just updatings of potentialities which al-

ready existed but were not yet released. The pupil would be potentially educated. The education of mankind would be the process through which individuals release all their potentialities.

In the third century after Christ, with the reemergence of Platonism, the debate surrounding dialectics was also renewed. Plotinus (203–259) considered it to be part of philosophy and not just a method. However, the sense of dialectics as a method predominated in the Middle Ages as it was classified beside *rhetoric* and *grammar* as a liberal art—that is, a means of discerning the true from the false.

The philosophy considered to be a slave of theology by the Church had a low opinion of dialectics, and pejoratively compared it to sophism. In the words of Leandro Konder,

The metaphysical conception prevailed throughout history because it corresponded, in societies divided into classes, to the interests of the dominating classes, who were always interested in making what was working now last forever. They are always interested in tying up values and concepts, like existing institutions, to prevent people from giving in to the temptation of wanting to change the existing social regime. (1981, 9)

At the beginning of the Modern Age, dialectics was considered to be useless as it was believed that Aristotle had said all that there is to say about about logic, and that there was nothing to add. Dialectics would be limited to the syllogism of one kind of logic, a logic of appearances, and there would be nothing to add. This was the opinion of Immanuel Kant (1724–1804).

However, René Descartes (1596–1650) made his contribution to the dialectical method. In order to reach the truth, he said, in his Discourse of the Method, that it is necessary to proceed by analyses and syntheses—analysis, to reach each element of the object or phenomenon studied, and synthesis for the reconstitution of the whole. As we shall see, Karl Marx (1818–1883) also suggested, in his dialectic method, that we should proceed through analysis and synthesis, respectively calling them "method of research" and a "method of exposition."

The dialectic conception of history, as opposed to the metaphysical conception of the Middle Ages, began to take shape with the Swiss social philosopher Jean-Jacques Rousseau (1712–1779). For Rousseau, all people are born free, and only a democratic organization of society will allow individual human beings to develop fully. The individual is conditioned by society.

However, it is only with Friedrich Hegel (1770–1831) that dialectics returned to be a central theme of philosophy. Hegel conceived it as "a scientific application of conformity to the laws, which are inherent to nature and to thought, the natural way of the determinations of knowledge, things, and, in general terms, of all which is finite." (Lalande 1960, 227) Dialectics, according to him, is the negative moment of all reality, that which has the possibility of not being, of denying itself. However, for Hegel, reason is not just the understanding of reality as Kant wanted, but reality itself. The rational is real, and the real is rational. The idea—the reason—is the world itself in evolution. The change of the world of ideas is the actual change in history and in the world. Because of this, universal history is, at the same time, the domain of the mutable, and the manifestation of reason.

Hegel arrived at the real starting from the abstract. Reason dominated the world, and has, as its function, unification, conciliation, and the maintenance of the order of the whole. This reason is dialectics—that is, it proceeds through unity and opposition of opposites. Thus, Hegel takes up, again, Heraclitus's concept of unity of opposites.

Hegel conceived the rational process as a dialectic process in which contradiction is not considered to be illogical and paradoxical, but is considered to be the real engine of thought, and, at the same time, the engine of history, as history is no more than the manifestation of ideas. Thought is not considered to be a static entity. It evolved through contradictions which have been surpassed, from that of the thesis (affirmation) to that of the antithesis (negation), and thence to synthesis (conciliation). A proposition (thesis) cannot exist without opposition to another proposition (antithesis). The first proposition will be modified in this process, and a new proposition will come about. The antithesis is contained in the thesis itself, which is, therefore, contradictory. The conciliation existing in the synthesis is provisional, as it, in itself, will be transformed into a new thesis.

With Ludwig Feuerbach (1804–1872), dialectics gained a new defender. For Feuerbach, mankind projects into heaven the dream of justice that he can never make happen on earth—that is, the poor man has a rich God. Therefore, God is an imaginary projection of humanity which believes it has been deprived of something, thus becoming alienated. Therefore, to deny the existence of God is to affirm oneself as a human being.

### MARXIST DIALECTICS

However, it was just with Marx and Friedrich Engels (1820–1895) that dialectics acquired a philosophical (material dialectics) and scientific (historical materialism) status.

Marx renewed Hegel's idealism with materialistic realism.

In the social production of their lives, men contract determined necessary relationships independent of their will. These are the relationships of production which correspond to a determined phase of the development of their productive material force. The whole of these relationships of production form the economic structure of society, the real base on which the legal and political superstructure will be built and which will have determined corresponding forms of social consciousness. The means of production of material life conditions the general process of social, political and spiritual life. It is not the consciousness of man that determines his being, but, on the contrary, it is his social being that determines his consciousness. (Marx and Engels 1977a, 1:301)

Hegel's dialectics were limited to the world of the spirit. Marx inverted this, introducing it into the material. For Marx, dialectics explained the evolution of the material, of nature, and of mankind itself. It is the science of the general laws of movement, both in the external world and in human thought. This Hegelian origin of Marxist thought is recognised by Lenin when he affirms in his *Philosophic Notebooks* (Lenin 1973, 1700), the *Capital* cannot be understood without first having read and understood all of Hegel's *Logic*.

For Marx and Engels, the principles of Hegelian dialectics are pure laws of thought. Leonardo Konder states, "It was necessary to avoid the dialectics of human history being analysed as if they had absolutely nothing to do with nature, as if man did not have an irreducibly natural dimension and had not begun his trajectory in nature." (1981, 9)

Marx's dialectics is not merely a method to arrive at the truth. It is a conception of man, society, and the realtionship between man and the world.

In opposition to the idealistic philosophers, Marx doesn't start off from a conceptual scheme, which is theoretically made up a priori, trying to identify the essence. Neither does he take, as a starting

point, phenomena which are isolated in themselves, as the empiricists did. He criticises both of these positions and takes a new path.

This is particularly seen in *Capital*. Marx is worried about understanding the process of the historical formation of the capitalist mode of production, not as if it were a finished form of the relationship between man and society, but rather as a *fieri*, on a becoming. For Marx, facts in themselves do not exist differently to empiricism, which wants to make us believe in the existence of facts which can be examined neutrally and disconnected from the historicoeconomic, psychological, and political contexts of humanity. It is not the human consciousness, as idealism believes, nor pure reality, as empiricism believes, but mankind itself which acts as beings in producing itself, through its own activity and its own way of life—that is, through the means of production of mankind's material life. The condition for mankind to become individuals—because each person is not an adult but becomes one—is that of work. Mediation between mankind and the world is made though material activity.

To Hegel, the life-process of the human brain, i.e., the process of thinking, which, under the name "the Idea," he even transforms into an independent subject, is the demiurgos of the real world, and the real world is only the external, phenomenal form of "the Idea" with me, on the contrary, the ideal is nothing else than the material world reflected by the human mind, and translated into the forms of thought. (Marx 1906, 25)

What distinguished Marx and Hegel in this point is the explanation of movement. Both argue the point that movement takes place through the opposition of contrary elements—that is, through contradiction. However, while Hegel localizes contradictory movement in logic, Marx places it right inside the thing itself, in the phenomenon, material, or thought. Mao Tse-tung (1893–1976) summarized Marx's thinking in this respect.

The material-dialectic conception understands that, in the study of the development of a phenomenon, one should start from its internal content and its relationships with other phenomena, that is, one should consider the development of phenomena as being their own necessary and internal movement. Each phenomenon will find itself in its movement, in connection and interaction with other phenomena which surround it. The fundamental cause of the development of phenomena is

not external but internal: it is to be found in the contradiction which is inside the phenomena. Inside all phenomena there are contradictions, thus their movement and development. (Tsetung 1979, 32)

This, however, has nothing to do with knowing just how dialectics of knowledge takes place and even less to do with reducing the dialectics of nature to pure knowledge, as Hegel, for whom the world was no more than a succession of ideas, thought. Hegel, as Marx said, imagined that the world was world "through the movement of thought, but in reality he does no more than systematically reconstruct and, in relation to the absolute method, use the thoughts which have nested in the head of all men." (Marx 1965, 104)

Here, Marx doesn't want to deny the value and the necessity of subjectivity in knowledge. The world is always a vision of the world, the world reflected. However, it doesn't have an existence just in the idea. Its existence is real, material, and independent of the knowledge of this or that man. Dialectics is not a spiritual movement that operates inside human understanding. There is a reciprocal determination between the ideas of the human mind and the real conditions of man's existence.

What is essential is that dialectic analysis understands the manner in which the conditions of social existence and the different modalities of consciousness are reciprocally related, linked and determined. There is no question of giving autonomy to one or another dimension of social reality. It is clear that the modalities of consciousness are a part of the conditions of social existence. (Marx 1979, 23)

Marx did not just turn Hegelian logic "upside down" (1980, 1:12). He made profound innovations, thereby proving its veracity, and applied it to social, economic and political reality. As Henri Lefèbvre said, "the Marxist method insists, much more clearly than previous methodologies, on an essential fact: the reality to be reached through analysis, to be reconstituted through the exposition (synthesis), is always a reality in movement." (Lefébvre 1974, 36). Dialectics considers each object with its own characteristics, its own future, its own contradictions. As far as dialectics is concerned, there are no universal rules more mathematico, as Descartes (1971) wanted, which guarantee that, after their application, we will obtain dialectic products.

From the Marxist point of view, dialectics focuses on "the things and their conceptual images in their connections, chains, dynamics and their process of genesis and aging" (Engels 1980, 58). Dialectics considers things and phenomena not statically, but in their continuous movement, and in the struggle between their contrary qualities.

Dialectic materialism doesn't believe that material and thinking are isolated, unconnected principles, but rather as aspects of a same indivisible nature. It considers that the form of ideas is as concrete as the form of nature and studies the more general laws of the universe, laws which are common to all aspects of reality, from physical nature to thought, passing through living nature and society. Materialism presupposes that the world is a material reality—nature and society—in which man is present, and that he can get to know it and transform it.

While sciences have, as an objective, a limited aspect of the real, dialectic materialism has as its objective the conception of the world as a whole. However, dialectic materialism doesn't separate itself from science as it is thanks to science that it can develop and renew itself.

As a dialectic conception, Marxism does not separate theory (knowledge) from practice (action). "Theory is not a dogma but a guide for action." (Lenin in Politzer 1970, 23) Practice is the real criterion of the theory, as knowledge starts from practice and returns to it dialectically. Marx expressed himself in the following way in his Second Thesis on Feuerbach: "The question of knowing whether human thought can have an objective truth or not is not a theoretical but rather a practical question. It is in the praxis that man should demonstrate the truth, that is, the reality and power, the earthly characteristics of his thinking. The dispute on the reality or nonreality of his thinking isolated from praxis is a purely scholastic question." (Marx-Engels 1977, 12)

Because dialectics considers things and phenomena as a unity of contraries, in a chain of relationships, modifications, and continuous movement, it oppose metaphysics. Dialectics admits rest and the separation between the diverse aspects of the real as relative. Only movement is absolute, as it is constant in all processes.

Starting from the simplest element of production, which is that of goods, Marx is able to postulate general hypotheses on the dialectics of man and nature, thereby accomplishing his proposal of "man's reflections on the forms of social life." (Marx 1906, 1:87) However, as Kosik observes, "the structure of Capital is not a structure of logical categories to which the reality investigated and its elaboration may be submitted. The scientific reality analysed is that which is

adequately expressed in the dialectic pronouncement, guided and possible to fulfill in a determined corresponding logical structure (Kosik 1969, 162). Going through the contradictions of the capitalist system of production in his massive study, the categories which form the framework of his method come to light. These categories are understood as a unity and opposition of contraries, and they are exhaustively exemplified: the simple versus the complex, the homogenuous versus the heterogenuous, the concrete versus the abstract, the quantitative versus the qualitative, form vesus content, essence versus phenomenon, the particular versus the general, the individual versus the social, necessity versus freedom, possibility versus reality, and more.

In Marx, these categories are not reduced to fixed laws of thought but are made up by fundamental elements of the explanation of the transformation of things.

Engels, in the *Dialectics of Nature* (1976), formulated three general laws of nature: the first law of the conversion of quantity into quality and vice versa; the second law of the interpenetration of opposites (the law of unity and of the strugggle of opposites); and the third law of the negation of negation.

Through the first law, it can be understood that, in nature, qualitative variations can be obtained through quantitive variations. The second law guarantees the unity and continuity of incessant change in nature and in phenomena. The third law guarantees that each synthesis is, in turn, the thesis of a new antithesis which indefinitely reproduces the process.

Taking examples from the natural sciences, Engels tried to demonstrate these general laws. However, criticisms of these classifications soon came as the laws tried to reduce a philosophy of change to fixed codes. Was Engels betrayed by Hegel's idealistic system, or did he fall into the trap of scientific positivism? Whatever was the case, it is not these laws but some general principles or characteristics of dialectics that are accepted today as a starting point by many authors who, after Marx and Engels, took on the difficult task of making more explicit what was found in them in embryonic form (Cheptulin 1982).

### THE PRINCIPLES OF DIALECTICS

I would like to talk about principles rather than about laws, as they have much more to do with philosophical presuppositions than with scientific laws.

### The First Principle

With the principle of *totality*, everything is related.

For dialectics, nature is presented as a coherent whole in which objects and phenomena are related to each other, reciprocally conditioning each other. The dialectic method takes this reciprocal action into account and examines objects and phenomena in an attempt to understand them in a concrete totality. "The dialectic comprehension of the totality means not just that the parts are in a relationship of internal interaction and connection with each other and with the whole, but also that the whole cannot be petrified in the abstraction which is situated over the parts, seen that the whole creates itself in the interaction of the parts." (Kosik 1969, 42)

The basic presupposition of dialectics is that the sense of things is not obtained from their individuality but, rather, from the totality, which is, according to Kosik, first the reply to the question of "What is reality?" (Kosik 1969, 34). This is what Engels calls "the law of the interpenetration of opposites," in which everything has something to do with everything else, the law of the interaction or universal connection—"the law of the reciprocal action of the universal connection," as it is called by Politzer (1970, 35)

Engels included in this law the unity and struggle of opposites. "Nothing is isolated. Isolating is a fact, a phenomenon, and to preserve it by understanding in this isolation, and to deprive it of sense, explanation and content is to artificially immobilize it, to kill it. This is to transform nature, through metaphysical understanding, into an accumulation of objects where some are exterior to others, into a chaos of phenomena." (Engels in Lefèbvre 1975, 238)

# The Second Principle

This is principle of *movement in* which everything is transformed. Dialectics considers everything in its future. Movement is a quality inherent to everything. Nature and society are not understood as fixed entities, but in continuous transformation, never definitively established, and always unfinished. The cause of this struggle is the internal struggle. "Dialectics cannot understand totality as a whole which is already made and formalized." (Kosik 1969, 49) This is what Engels calls the "law of negation of negation," and what Politzer calls "the law of universal transformation and incessant development," which is also called "the law of negation or surpassing."

This is the law of universal movement. As Leandro Konder observes,

It takes into account the fact that the general movement of reality makes sense, that is to say, it is not an absurdity, it is not exhausted in irrational, unintelligible contradictions, nor is it lost in the eternal repetition of the conflict between theses and antitheses, between affirmations and negations. An affirmation necessarily engenders its negation, but the negation is not prevalent as such: both the affirmation and the negation are renewed and what finally prevails is a synthesis, a negation of the negation. (Konder 1981, 59)

Life produces death; heat can be understood only in function of cold; and the new is born from the old.

### The Third Principle

This one is that of qualitative change.

The transformation of things does not take place in a circular process of eternal repetition, or a repetition of the old. Qualitative changes can operate through an accumulation of quantitative elements. "The classic example is that of water: when it is being heated, the temperature goes up progressively, an elevation which constitutes a quantitative variation. But the moment comes when the temperature is constant and a qualitatively different phenomenon will take place, that of boiling." (Foulquié 1974, 62)

This is what Engels calls "the law of the conversion of the quality into qualitity or vice versa" or, according to others, "the law of leaps." Starting from a certain threshold of quantitative changes, a passing from quantity to quality takes place. For example, a small village can gradually transform into a big city.

# The Fourth Principle

This is about *contradiction* and the unity and struggle of opposites.

The transformation of things is possible only because opposing forces coexist in their own interior and simultaneously move toward unity and opposition. It is this which is called "contradiction," and which is universal and inherent to all material and spiritual things. Contradiction is the essence or the fundamental law of dialectics.

It is this fourth principle which has interested so many researchers into dialectics in the twentieth century, developing what Engels had just started. The contradictory elements coexist in a structured reality, one not being able to exist without the other. The

existence of the opposites is not a logical absurdity. It is founded on reality.

Through the dynamics of the contradictions which exist in each phenomenon or thing, each of the two contradictory aspects tends to transform itself into its opposite, under certain conditions. "Unity (coincidence, identity, equivalence) of the opposites is conditional, temporal, transitory, relative. The struggle of opposites which exclude each other mutually is absolute, like development and movement." (Lenin 1973, 344)

These principles can be applied to material elements, to human society, and to our own knowledge. This is why dialectics can be subdivided into three levels, as Ernest Mandel shows.

- 1. Dialectics of nature, which is entirely objective, that is, independent of the existence of man's projects, intentions, or motivations;
- 2. Dialectics of history, generally objective as a starting point, but in which men can intervene with a new project for society, the concrete fulfillment of which is connected to objective, preexisting material conditions which are independent of the will of men; and
- 3. Dialectics of knowledge, the result of a constant interaction between the objects to be known and the action of the subjects who are trying to understand them. (Mandel 1978, 116)

What are the consequences that dialectics brings for logic—that is, for the structure and functioning of mental processes?

It seems that this question has resulted in considerable errors in the history of Marxism, especially in the period of Stalinism, which attempted to make a mechanical epistemological break between it calls "bourgeois science" and "proletarian science" and between formal logic and dialectic logic.

It is necessary to recognize, together with the eminent Brazilian philosopher, Alvaro Vieira Pinto (1969, 72), that "formal logic is the logic of metaphysics, as dialectic logic is the logic of dialectics," and it is from this that we understand both the distinctions and the complementarity of the two kinds of logic.

The principle which fundamentally distinguishes them is that of contradiction. While dialectic logic starts from the principle of contradiction, formal logic starts from its opposite—that is, non-contradiction. This is because the first conceives objects and phenomena in movement, and the second conceives of them as static.

Starting from the principle that things and phenomena are static, a thing will always remain equal to itself (the law of identity); a thing cannot be equal to another (the law of non-contradiction); and it is either one thing or another (the law of the excluded third).

This type of logic is certainly valid and true—if, methodologically, we put the movement between parentheses, and if we study the phemonena in an entirely isolated way.

If it is taken to a deeper level, formal logic doesn't forbid dialectic thinking. On the contrary, it shows its possibility, it opens up to its demands, its sphere, its trajectory: it establishes a foundation for the necessity of this thought. Formal logic defers to dialectics, through the mediation of logic. Then, this movement is inverted, and formal logic appears just as a reduction of content, an elaborated abstraction, a neutral (empty, transparent) element in every investigation. (Lefèbvre 1975, 24)

Nevertheless, formal logic shows that it is capable of classifying and distinguishing objects, but it is insufficent to understand these very objects in their real, incessant movement. Because of this, dialectics does not refuse formal logic, but includes it as an essential part of dialectic logic.

Dialectic contradiction is a (full, concrete) inclusion of the contradictory elements in each other, and, at the same time, an active exclusion. And the dialectic method is not content just to say that contradictions exist, as sophistry, eclectiscism and skepticism are able to say the same thing. The dialectic method attempts to capture the connection, unity and movement that engender, oppose and make the contradictory elements clash, that break them or surpass them. (Lefèbvre 1975, 238)

Marx and Engels, exemplifying the *law of contradiction* in social history, show the contradiction that exists between the productive forces and the relationships of production, the contradiction between the exploiting classes and the exploited classes, the contradiction between the economic base and the superstructure, between politics and ideology.

On reaching a determined phase of development, the material productive forces of society will clash with the existing relationships of production or, if not with their legal representatives,

with the property relationships in which they have developed up until that moment. From being forms of development of the productive forces, these relationships will develop into obstacles to them, and a period of social revolution will thus begin. On changing the economic base, more or less quickly, the whole superstructure which has been built on it will find itself in a state of revolution. (Marx-Engels 1977a, 1:301)

Marx, studying the economic structure of capitalist society, concludes that the basic contradiction of this society is the basic contradiction between the social character of production and the private character of property.

In addition to this general characteristic of contradiction, its universality and the existence of a main contradiction, specific, or particular contradictions exist inside each stage of the process of development of each thing or phenomenon.

As Mao Tse-tung (1979, 30) points out in his study On Contradiction, in order to make the essence of each process appear, it is necessary to bring to light the specific character of two aspects of each one of the contradictions of this process—the main aspect and the secondary aspect of each contradiction—in order to verify the reciprocal action of the opposite poles of contradiction and the action of the whole of the contradictions which involve each contradiction or thing.

In every process of development of a phenomenon or thing there will always exist a main contradiction, whose existence determines the existence of others. It is also in this main contradiction that there exists one main aspect and one aspect that is necessarily secondary. It is the main aspect that plays the dominant role in the contradiction.

### THE DIALECTIC METHOD

These principles of dialectics did not come about a priori. They are the result of a slow maturing of the development of modern sciences. In Marx's work, they came about only after an exhaustive analysis of the capitalist means of production, and as the consequence of a scientific analysis, as he himself states (Marx 1980, 1:84). It was only after he finished his work, that Marx could see these principles and categories, and demonstrate the path or method that he had followed, and could announce and demonstrate his natural, concrete. nonabstract method.

His total lack of scorn for the traditional academic way of thinking can be seen when he didn't announce in the preface to the first German edition of *Capital* the way in which he would treat the theme of the process of the production of capital. It was only in the postface of the second German edition (1873), after being called by some Comtist critics the greatest idealist philosopher, that he succinctly presents the dialectic fundamentals of his method.

Of course the method of presentation must differ in form from that of inquiry. The latter has to appropriate the material in detail, to analyze its different forms of development, to trace out their inner connection. Only after this work is done can the actual movement be adequately described. If this is done successfully, if the life of the subject matter is ideally reflected as in a mirror, then it may appear as if we had before us a mere a priori construction. (Marx 1906, 1:25)

Marx formally distinguishes the method of exposition from the method of research. The exposition is the consequence of a previous piece of research of the forms of development and of the existing connections between them.

Marx is the first researcher to adopt the dialectic method formally.

On studying a determined objective reality, he methodically analyses the contradictory aspects and elements of this reality and considers all the antagonic notions that are at play, but whose tenor no one is still able to discern. After having distinguished the contradictory aspects or elements, not neglecting their connections, and without forgetting that he is working with a reality, Marx finds the reality again in its unity, that is, in the whole of its movement. (Lefèbvre 1974, 34)

By research method, Marx means a detailed appropriation of the studied reality. It is the analysis that will bring the internal relationships into evidence, with each element in itself.

Each object of analysis requires a specific approach which is determined by the object itself. Each historical period has its own laws. Because of this, the analysis that is made in philosophy cannot be automatically employed in all the other sciences. The detailed analysis of a thing or phenomenon will show the particular laws that rule the beginning, development, and end of each thing or phenomenon.

By method of exposition, Marx understands the reconstitution, or the synthesis of the object or phenomenon under study, as an inverse process, opposed to the first in such a way that the reader will imagine that the author constructed it a priori. In the exposition, the object gradually reveals itself, according to its own peculiarities.

In relation to the form of exposition of the capitalist process of production, Marx observes in chapter 1 of book 3 of *Capital:* "The various forms of capital, as evolved in this book, thus step by step approach the form which they assume on the surface of society, in the action of different capitals upon one another, in competition, and in the ordinary consciousness of the agents of production themselves." (Marx 1906, 3:25)

It is through the dialectic method that the phenomenon or thing under study presents itself to the reader in such a way that he or she will learn about it in its totality. For this, it is necessary to successively make more wide-ranging approximations. This will make it accessible.

In a letter that Karl Marx wrote from London on 18 March 1873 to the Frenchman Maurice La Châtre, he insisted that making his work "accessible to the working class" was, for him, "the greatest motive of all." However, he warned, immediately afterword that his method of analysis and exposition—"a method that I used and one that had still not been applied to economic problems"—did not prevent the reading from being "rather tough." He concluded: "There is nothing I can do about this disadvantage, unless I warn and caution those readers who are anxious for the truth. There is no royal road to to science, and only those who are not afraid of confronting exhaustion to climb up the steep paths might reach their shining peaks." (Marx in Althusser 1979, 1:7)

As Henri Lefèbvre (1974, 35–36) has observed, before Marx, many philosophers had already made a decisive contribution to the formulation of the dialectic method. Among them were Descartes, Kant, and Auguste Comte. However, none of them had realized the importance of the contradiction that is inherent to all phenomena, facts, and things—that is, the positive and the negative, the proletariat and the bourgeoisie, and the being and nonbeing. Hegel discovered this and Marx extended it.

The difference in this particular fact between Hegel and Marx is that Hegel abstractly defines the general contradiction of history and of nature, considering movement as merely a logical transformation of ideas. Marx, on the other hand,

... states that the general idea, the method, doesn't dispense with the apprehension, in one's own self, of the object. The method provides just a guide and orientation for the knowledge of reality. In each reality, we need to learn its peculiar contradictions, its own peculiar internal movement, its qualities and its rapid transformations. The logical form of the method should then be subordinate to the content, to the object, to the material studied. It allows us to efficiently tackle its study, capturing the most general aspect of this reality, but never substitutes scientific research by an abstract construction. (Lefèbvre 1974, 38)

At the same time as he moves on from his critique of Hegel. Marx is opposed to vulgar or metaphysical materialism, mainly in the antidialectic form of the philosophizing of Ludwig Feuerbach, who is unable to consider the world as a process, as material involved in incessant development. The thinking of Feuerbach—which Marx in his well-known Theses on Feuerbach considers to be vulgar and mechanistic—is still present today in the dogmatic conception of dialectics which leads to a kind of sectarianism. Dogmatism makes do with general ideas and mystified slogans in function of which it schematizes all of reality. Any discussion, debate, and criticism becomes impossible. Mystified dialectics becomes metaphysical. As Politzer (1970, 56) says, "The sectarian reasons as if he himself had learned everything at a single sitting. He forgets that we weren't born revolutionaries; we became revolutionaries. This being so, shouldn't he get much more angry with himself than with other people? The true revolutionary is he who, as a dialectician, sets up favorable conditions for the coming of the new." (1970, 56) Note that Politzer first wrote this in 1935.

In our days, dialectics and the dialectic method have often been enthroned in the capitalist world, and reduced to consumer products, with small groups praising their revolutionary virtues. Dialectic materialism when reduced to ready-make formulas and manuals, will only end up by becoming empty of interest, and generating expectations which fail to correspond to what it really is. As Leonardo Konder states, "the principles of dialectics hardly lend themselves to any kind of codification." (1981, 60)

Presenting what can be called "the practical rules of dialectic materialism" always represents a risk of simplification. However, following the didactic pattern of this study, I would like to take this risk and present a summary of these rules as they appear in Henri

Lefèbvre's Formal Logic, Dialectic Logic (1975), reminding the reader that this is much more of an orientation than rigid and definitive norms.

These "practical rules" are as follows:

- 1. Direct oneself to the thing itself. As a consequence, there will be an objective analysis.
- 2. Learn the whole of the internal connections of the thing, its various aspects and its development and movement.
- 3. Learn the contradictory aspects and moments, the thing as a whole and the unity of the contradictory elements.
- 4. Analyze the struggle and the internal conflict of the contradictions, the movement, the tendency, what tends to be and what tends to fall into nothingness.
- 5. Do not forget that everything is connected to everything else, and that an insignificant, negligible interaction, as it is not essential at a given moment, may become essential at another moment or in another aspect.
- 6. Do not forget to be alive to the transitions, the transitions of the aspects and contradictions, the way they pass from one to another, and the future transitions.
- 7. Do not forget that the process of deepening knowledge—which goes from the phenomenon to the essence and from the less profound essence to the more profound essence—is infinite. One should never be satisfied with what has been obtained.
- 8. Get deeper than the simple observed existence, always get deep into the richness of the content, learn about connections and movement.
- 9. In certain phases of one's own thinking, this thinking should transform, surpass itself, modify or reject its form, remanage its content, take up again the moments that have passed and look at them again, resee them, repeat them, but just apparently, with the intention of deepening them through taking a step backward toward the previous stages and, sometimes, toward the starting point. (Lefèbvre 1975, 241)

Henri Lefèbvre ends by saying that "dialectic materialism, in this way, will turn out to be at the same time rigorous, as it is connected to universal principles, and more fertile, able to detect all the aspects of things, including the aspects through which things are vulnerable to action." (1975, 241)

### DIALECTICS AND TRUTH

When dialectics becomes the fashion—and its defenders present it as the solution for all problems, mystifying it, and ignoring all the concrete conditions of each thing or philosophy—then sectarianism takes over and dialectics loses its sense.

In its mystified form, dialectics became the fashion in Germany because it seemed to transfigure and glorify the existing state of things. In its rational form it is a scandal and abomination to bourgeoisdom and its doctrinaire professors, because it includes in its comprehension and affirmative recognition of the state of things, at the same time also, the recognition of the negation of that state, of its inevitable breaking up, because it regards every historically developed social form as in fluid movement, and therefore takes into account its transient nature not less than its momentary existence, because it lets nothing impose upon it, and is in its essence critical and revolutionary." (Marx 1906, 1:25–126)

Marx tells us that his critique of political economics presents the point of view of the proletariat in the same way that classical economics presents the point of view of the bourgeoisie. Marx never hid the class perspective that oriented his research. He "believes that his science is revolutionary and proletarian, and, as such, is opposed and superior to the bourgeois and conservative science of the classical economists. The break between Marx and his predecessors is for him a break of classes inside history and economic science." (Löwy 1978, 21)

Gramsci, like Marx, warned of a new mystification of dialectics reduced to a "process of reformist evolution." (Gramsci 1968, 253) He was referring to the attempt to weaken dialectics as a theory of contradictions. Marx's philosophy was never an attempt to pacifically solve the existing contradictions in history and society.

Would dialectics be a particular theory of science and of knowledge which was aimed just at sustaining the socialist process, and, with its success or failure, would tend to disappear? Or would it be a valid instrument, above any ideology, which would reach the truth?

These questions have been widely discussed inside Marxism. The objection which is made is always the same: if dialectics represents the point of view of the proleteriat which asks: How can we then avoid relativism? How can we reconcile this partisan characteristic

with the objective knowledge of truth? How can we avoid that which Michael Löwy calls "relativistic night," (1978, 31) in which all the cats are dark, and we end up by denying the possibility of objective knowledge? Löwy asks:

Why did Marx, Lenin, Gramsci, Mao Tse-tung and others choose the viewpoint of the proletariat? And it is he himself who replies: "Because the proletariat, the universal class whose interest coincides with that of the great majority and whose aim is the abolition of all kinds of class domination, is not obliged to hide the historical content of its struggle; it is, as a consequence, the first revolutionary class whose ideology has the possibility of being transparent." (Löwy 1978, 34)

Two pages later, Löwy concludes that

The point of view of the proletariat is not a sufficent condition for the knowledge of objective truth but it is what offers the greatest possibility of access to this truth. This is because truth is for the proletariat a means of struggle, an indispensable weapon for the revolution. The dominant class, the bourgeoisie, and also the bureaucrats, in another context, need lies in order to maintain their power. The revolutionary proletariat needs the truth."

Mikhail Gorbachev would say later, in 1987, that the revolutionary proletariat also needs, "transparency."

The Brazilian philosopher, Caio Prado, Jr., warns the reader of *Dialectics of Knowledge* (1952) that, in order to understand dialectics, it is necessary to think dialectically.

On the other hand, another Brazilian philosopher, Gerd A. Bornheim, states that, "from the historical point of view, when one considers its genesis, dialectics is pertinent to metaphysics." (1977, 13) Bornheim demands the right to think dialectics metaphysically and criticizes Engels, who conceives dialectics through laws and diametrically opposes metaphysics to dialectics. Gramsci surpasses this argument by conceiving dialectics as a philosophy of praxis—a new way of thinking, and not an old rhetorical technique that "was just useful to create a cultural conformism and a language for conversation between erudites." (Gramsci 1968, 77)

The dialectic conception of Gramsci is emerging today in the Third World as a new weapon for the struggle, because it doesn't polemicize but rather serves the elaboration of the critical thought

and self-criticism, and also serves the questioning of the present reality. As the Yugoslav thinker Mihailo Markovic says, "dialectic thought is used to unmask everything that attempts to stop development." (1968, 11)

Dialectics, as different from metaphysics, questions and contests. It constantly demands the reexamination of the theory and the critique of the practice. If it is true that theory is born from practice, and that it travels with it dialectically, trying to establish "the necessary relationship between the existing and the possible, between knowledge of the present and the vision of the future" (Markovic 1968, 13), the dialectic way of thinking will find, among the thinkers who support the point of view of the oppressed, a considerable chance to develop and to place itself more and more at the service of all of humanity.

To dialectically conceive the world does not guarantee revolutionary nor progressive behavior. We can differentiate one conception of the left from a type of behavior of the left—even recognizing all the reservations that these expressions have today in a complex world which cannot be divided into two parts.

Inside Marxist thinking, this distinction seems to be clear. Certain distortions make Marxism, not a revolutionary instrument, but, rather, a conservative instrument. Among these distortions is the so-called academic Marxism, which is mechanistic and vulgar, which has no revolutionary sense, and is often of use just to show off learning.

This bias can be seen particularly in the thinking of certain Marxist economists, who exclude all social and educational vision from Marx's work, reducing it to technical economics. These economists who—as the Brazilian educator and politician Wagner Rossi says, "separate their economics from the social whole" (1978, 1:126)—believe that "educators should concentrate on the development of educational methodologies."

On the contrary, Marx and Engels never denied the importance of the social whole, and, even during their period, they recognized that some of their followers gave more importance to economics than they themselves had done. Moved by the discussion that they had to maintain with their opponents, they needed to state the fundamental points against bourgeois ideology, and did not have time to make other dimensions clear—such as the role of the superstructures, which would later be the main worry of Gramsci.

Dialectics is, necessarily, opposed to dogmatism and reductionism. It is always open and unfinished, and will always surpass itself. All dogmatic thinking is antidialectic. Academic Marxism—reducing

Marx to a code, and transforming his thinking into a law, without adding anything to him—is, therefore, antidialectic. Criticism and self-criticism, on the other hand, are revolutionary. It is, in this manner, that we should understand the Lenin's warning that Marxism is a guide to action, and not a dogma.

With the transformations that took place in Eastern Europe at the end of the 1980s, many beliefs in socialism were destroyed, and socialism suffered a hard blow. Many Marxist intellectuals changed creed because Marxism was really no more than a creed for them. However, those who perused the research developed by Marx found nourishment for their hopes, and were not stunned by the end of socialism. Ideas are just the provisional clothing of the truth. What matters is the truth itself. The political and economic failure of a concrete fulfillment of Marxist thought doesn't invalidate its anthropological perspective for the construction of a society of solidarity.