

AN INTRODUCTION
TO
DIALECTICAL
MATERIALISM

By EDWARD CONZE
(Author of "The Scientific Method of Thinking," etc.)

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FOREWORD

ONE of the things for which the Russian Revolution is responsible is the noticeable increase in the interest taken in Marxism. It has to be admitted that the professors of orthodox social theory have not yet been substantially affected. Some of them have absorbed scraps of Marxism, but they have not become exponents of Marxism as a whole. That, of course, is as one would expect, because to become a Marxist is to agree that the most essential task to-day is the destruction of the capitalist system. One cannot expect the intellectual defenders of the existing order to go very far in that direction.

As a result of the growing interest in Marxism, there have been published, in the last few years, many articles and quite a number of books on that mouthful—Dialectical Materialism. The books have had a pretty wide circulation amongst the socialist intelligentsia, who in many cases have realised only recently that such a thing as dialectical materialism exists. The Labour College Movement, however, in the course of its educational work done by workers among workers, has interested itself in dialectical materialism for a quarter of a century. Up till comparatively recently one of the few books available on the subject in English was Dietzgen's *Positive Outcome of Philosophy*.¹ This, however, is not only a large book, but a decidedly difficult book. Fred Casey in *Thinking*² and also in *Method in Thinking*³ succeeded in putting Dialectical Materialism in a form in which it could be more easily absorbed by the average worker-student.

In the following pages, Dr. Conze has endeavoured to provide another introduction on somewhat different lines. His book is intended to do two things. First, to give some indication of what dialectical materialism is, and to do it in language that the ordinary worker-student can

¹ 8/6, or 9/- post free, from the N.C.L.C.

² *Thinking*. Out of print.

³ *Method in Thinking*, 1/3, or 1/5 post free.

understand. Second, to apply the theory to certain current social problems and by so doing demonstrate the value of the theory to the student of social questions.

The book itself arose mainly out of a series of articles which Dr. Conze wrote for *Plebs*, and the author and publishers of the book will welcome any suggestions from readers which might tend to simplify any passages which still provide difficulties for the worker-student.

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INTRODUCTION

DIALECTICAL materialism is surrounded by the glamour of being something specially strange, mysterious and startling. To the extent to which this new method of thinking becomes better known, the charm of the unknown will vanish. It will be seen that it is not a nice piece of decoration, but a very prosaic and practical tool. It has more the functions of an axe than of a Chinese vase.

Some persons have used dialectical materialism to build a castle in the clouds, ensconced in which they remain superior to a world which now and then they honour by occasional oracular statements. They will complain that my exposition of the laws of scientific method cannot be correct because it is too simple. They obviously look upon scientific method as something like the sanctuary which was hidden in the temple of Jerusalem and to which only the high priests had access. When the Roman soldiers drew back the curtain of the sanctuary, they saw nothing more mysterious behind it than a loaf of bread and a jug of water! Similarly, if the veil of cumbersome terms, ponderous phrases and philosophical disquisitions, which has covered the dialectical method, is once torn, we see that it is nothing but a codification of commonsense.

Perhaps the main bulwark of the mystery-mongers is the very term "dialectical materialism." The spread of Marxism among the workers has sometimes suffered from the fact that the Marxist theories were originated by a German doctor of philosophy with all his enthusiasm for long and learned Greek and Latin terms. Nowhere has this passion for clumsy and far-fetched terms done more harm than in Marxist philosophy. When ordinary students or average workers hear of "dialectical materialism"—for this is the name of Marxist philosophy—they are apt

to decide that this thing can have nothing to do with the difficulties of daily life. The name has all the disadvantages that a name can possibly have. It is cumbersome and unwieldy, unintelligible to the average person and extremely vague for the expert.

A long experience of teaching and discussing Marxist philosophy has convinced me that these and similar terms are useless for the understanding of what is really of importance for the working class. They also often prevent people from getting a really living knowledge of the "dialectical" method. In this booklet I shall, therefore, avoid these terms. Since the Marxist scientific method is the correct and the only scientific one and since it is, as we shall see, not restricted to Marxists, we will simply speak of "scientific method" instead of "dialectical materialism."

What We All Know

There is at least one thing everybody knows about Marxist philosophy. Nobody can fail to see that it is often the cause of considerable bewilderment, confusion and uneasiness. Before we deal with the scientific approach itself, we must therefore first clear away some of the current misconceptions about it.

The Communists honestly believe that the scientific method in the Marxist sense can be clearly understood only by such persons as prove to be clear-minded enough to join the communist parties—if only temporarily. In actual fact, however, according to the classics of Marxist philosophy, the scientific or "dialectical" way of thinking is no special privilege of the communist parties. The classics of Marxism always insisted that everybody uses the scientific or "dialectical" method who is able to control things and events on the basis of his insight into their laws. Some people use the method more; these are those who are more capable of controlling things. Some use it less; these are those who are less capable of control. The use of scientific method is as old as is mankind. It grew with the control of mankind over nature and society. Modern science and the success of technique extended considerably

its application to nature, and Marx, Engels and Lenin perfected it as an instrument for the study and control of society.

The Real Purpose

Not the mere understanding, but an increased control of the world, is the ultimate purpose of scientific method. We study it in order to master the practical problems that confront the working-class movement. People who have obviously lost all touch with reality and who are, therefore, regularly defeated in their actions, like the communist parties outside Russia, have little understanding of scientific method, although they may proudly call themselves "dialectical materialists." Capacity for control and for scientific method always go together. The bourgeois science of nature has led to many successes in the control of nature and, correspondingly, it employs the scientific method fairly correctly. It applies it most in mathematics, physics and chemistry. For its correct understanding of the laws of inorganic matter bourgeois science is rewarded by machines which run smoothly and by poison gas which kills effectively. Practical success is the consequence and the test of correct theoretical results.¹ Traditional science is less successful in its study of organic matter or of living things. Biology and medicine have been unable to reach the perfection of mathematics, physics and chemistry. In these fields, the gaps of scientific knowledge are still filled with mystical and religious speculations. The prediction and cure of diseases have not reached the accuracy and efficiency which we associate with the building of a bridge or of a cotton loom. People, struck by the inadequacy of traditional medicine, still attempt to heal diseases by faith. Nobody would any longer dream of building an aeroplane by faith or prayer.

It is, however, most of all in its attitude to society and the problems of social life, that the governing class

¹ The unity of theory and practice is one of the aspects of the third rule of scientific method. See Chapter III.

combines practical impotence with theoretical bewilderment. The fact that the capitalists are unable to control and master their own economic system and that they are unable to find a permanent solution for its difficulties, is reflected in the unscientific futilities which are offered as orthodox economic science. At the present time, the social sciences have come into the foreground of interest. Conditions are compelling us to see that we must learn to control through society the instruments by which we have learned to control nature.

The Only Way

There exists also much confusion as to the way in which scientific method should be taught. A Christian or a Mohammedan may perhaps show you by quotations how to find the salvation of your soul. The explanation of scientific method can, however, never consist in the mere interpretation of quotations from texts which are treated by some "Marxists" in very much the same fashion as Saint Arnobius and Saint Chrysostom treated the Bible. The Marxist classics are a great help as guides. Most of the ideas in this pamphlet are drawn from them. But ultimately, by interpreting passages from Marx and Engels, we can see only that we are orthodox and not that we are right. The analysis of facts is the only way to expound scientific method and to grasp its meaning and significance.

To apply a method of approach and to be conscious of it are, of course, two different things. You can digest your food without any knowledge. But this does not mean that the medical and physiological study of the digestive track is without importance. You can control your own mental activities and those of others to a certain degree without psychology; but that does not mean that the science of psychology is useless. Human beings can understand and control the world to a certain degree without being aware of the method which gave them the necessary understanding and control. But a knowledge of the scientific method is of great use if the workers want to think for themselves and it makes understanding and

control easier. The emancipation of the workers has been considerably delayed by their ingrained habit of letting others do their thinking.

Not Ready-Made

Scientific method is not a body of ready-made statements which can be learned by heart. It gives us no mystical formulae from which we can easily deduce reality without the trouble of examining the facts. Scientific method is a way of looking at things. This habit can be acquired only by continual practice and not by a reverential pondering over quotations.

Scientific method is not like a heap of tins of food which you can store up in your larder in the belief that you've got all you need. It is rather like a *tin-opener*, the tins being the things of the world in which we live. It is a method of discovery and as such it was used by Marx, Engels and Lenin. We betray their spirit when we merely repeat their findings. Scientific method is an instrument which enables the ordinary worker to think better for himself than he did before. In this respect it is one of the most useful weapons of the working class in its struggle for emancipation. It is especially useful at the present time. Many old ideas have now collapsed in face of the new reality of fascism. Socialism is no longer a distant utopia but has become an immediate, a practical issue. Only the conscious effort of all workers can save the world from fascism and war by bringing about socialism.

— Among the many brilliant observations which Karl Marx has uttered, there is none more profound than the sentence in which he lays down that the emancipation of the working class can be the work only of the working class itself. *The International*—that famous workers' song—expresses the same idea by reminding us that the workers cannot expect to be dragged out of their misery by some divine being, by some king or by some popular leader. The workers can trust only in their own conscious effort to supersede the chaos, insecurity and injustice of capitalism by the more rational and just system of society

which we call socialism. It is, however, difficult to fight for one's own interests if one is not used to thinking for oneself about the circumstances in which the fight takes place. The study of scientific method will give to the worker some of the tools with which to gain the knowledge of the world which he needs for his conquest of that world.

Scientific method has the task of opening our eyes. It draws our attention to certain aspects of reality which we might overlook and which frequently furnish us with the key to its control. Scientific method can be summed up in four very general statements or laws. These laws, or rules, meaningless at first sight, will be a great help to those who wish to understand the puzzling world in which we live.

What are these Laws ?

They are :—

1. *Study things and events in their inter-relation with other things and events, past and present, and in relation to the purpose you have in view when studying them.*
2. *Everything is to be studied in its movement and development; for everything is in continual movement.*
3. *Wherever we find opposites, we must look for their unity, for opposites are always in a unity.*

Many important problems are problems of opposites. Opposites are, for instance, body and mind, truth and error, competition and monopoly, chance and necessity, class struggle and class harmony, progress and regress, quantity and quality, egoism and altruism, theory and practice, masses and leaders. Scientific method states that wherever one of two opposites is found, there also the other opposite is present. In other words, there is no mind without a body and no (living) body without some mental behaviour; no truth without error and no error without truth¹; events in nature and society are governed both by chance and by

¹ *Conze, The Scientific Method of Thinking*, chapter II.

necessity¹; society exhibits features both of class struggle and of class harmony²; each progress involves some regress³; quantitative changes are often accompanied by qualitative changes, as when water changes from 99.99 degrees C. to 100 degrees C. (quantity) it changes also from water into steam (quality)⁴; both egoism and altruism, both self-love and regard for others are parts of the make-up of our minds⁵; no theory can be called correct without being tested in practice and no practice can be regularly successful without being guided by theory; masses depend on leaders and leaders depend on masses. These are some of the innumerable instances of a "unity of opposites."

4. *We must look for the contradictions in the processes of nature and society; for everything is set into movement by contradictions.*

The best-known application of this law is the Marxian theory of the contradictions which move capitalist society and which produce imperialist expansion, depressions, wars and the other beauties of capitalist civilisation. We shall see how a discussion of scientific method throws light on this cardinal theory of modern socialism.

¹ Engels, *Feuerbach* 54, 55, 58.

² See Chapter III.

³ "The main thing is that each progress in organic evolution is at the same time a regress, by fixing a one-sided development and barring the possibility of development in a number of other directions. This is a fundamental law." Engels, *Naturdialektik*, 1925, p. 218.

⁴ Engels, *Anti Duhring*. Part I., chapter 12.

⁵ See Chapter II.

CHAPTER I

Things Must be Studied in Their
Inter-relations

SCIENTIFIC method demands that we should study things in their inter-relation with one another, and with the purpose we have in mind when studying them. Lenin called this the "spirit and essence of the dialectic," and few men have practised it better than he did. In itself, this demand is rather meaningless. It gains life only by being applied. The capacity to think adequately cannot be learned by heart. It is acquired only by much exercise and practice in tackling concrete problems. A knowledge of the scientific method is no substitute for this exercise, just as reading a book on golf will never in itself make a man a golfer.

Generally speaking, we understand something only by seeing it *in relation to or in connection with other things*. Take a chair, for example. As long as we merely repeat the word "chair," we learn nothing about it. Whatever we may know about the chair, we can express in sentences about it. In these sentences we relate this chair to other objects. We say: "This chair is hard or black or ugly." This means that our mind connects this chair with other hard (or soft), black (or not black), ugly (or beautiful) objects. Each thing stands in some relation to everything else in the world. It is thus fully understood only if all its relations are known. Therefore it has been said that to know one thing completely is to know everything.

In the case of this chair, the reader need strain his fancy only a little in order to see the point. Its temperature is influenced by a depression thousands of miles away. Its molecules are hit by radio waves from Milan and Tokio and continually broken up by cosmic rays from the stratosphere. Its weight depends on the earth and the latter's position among the stars. The light which falls upon it

connects it with the sun. We might go on indefinitely with this enumeration.

The philosopher sums up—Everything is inter-related with everything else. The poet expresses the same idea by saying:

"Thou canst not stir a flower
Without troubling of a star."

But actually, we never worry about all these properties of our chair. We are satisfied when we know those of its qualities which are of *practical importance* for us, like stability, size or beauty. We normally try to understand things, because we want to handle or control them better. There are, of course, people who want to know a lot of things which are of no conceivable use to anybody in the world. There are many theoreticians who imagine that their dignity is bound up with the uselessness of their results. The ruling class often deliberately feeds the minds of the working class with a knowledge which is entirely useless for the working people, in order to lead them away from the class struggle. But these exceptions show only that intelligence, like everything else, can be put to a wrong use.

Reason, rightly used, guides us in our practical control of things. Guided by the practical purpose we have in mind, we are satisfied with knowing *one section* out of the infinite number of relations, qualities and properties of an object. We know of something if our knowledge of that thing contains everything we need for our practical purposes. The owner of a bicycle knows his bicycle when he knows enough about it to be able to ride and occasionally repair it. The amount of things which the producer of bicycles must know about them, in order to have a successful knowledge, is of course much greater. The wealth of our knowledge of a subject is relative to our practical purposes.¹

Our knowledge reflects or copies reality. We have a correct idea of a thing if we know those of its properties

¹ Fred Casey made this point in his *Method in Thinking*. It is also useful to read H. Levy, *The Universe of Science*.

and relations which are important for our practical control of the thing.

Scientific method lays special stress upon this aspect of correct thinking, because it is so very common to look at things and events apart from their inter-relations with one another, and apart from our purpose.

A man would think quite wrongly if he considered the question of building a bridge or a road or a house without regard to the peculiar circumstances in which this bridge or road or house is to be built. Again, when a man is riding a bicycle, the peculiar circumstances are, for example, the state of the road, the other vehicles and the traffic signs on the road. A person would not ride a bicycle well if (being inattentive or drunk) he were to ignore all these special circumstances and overlook these important factors in the concrete situation. The result would be that he soon would be knocked down; practical defeat always follows wrong thinking.

The reader will think that there is nobody foolish enough to behave in such a way. And yet, in social questions people do behave in that way daily. We can distinguish three principal violations of the first law of scientific method.

Wrong Thinking

Our attitude to something is faulty if we do not look at the thing as we meet it in our practical life, but *in a general way*. We can, for example, discuss *democracy* as pure democracy, and dwell on its merits. But this is quite valueless, because in our everyday life and struggle we have nothing to do with pure democracy or the idea of democracy. "Democracy" is an empty word. The only thing which exists and can interest us practically is "parliamentary bourgeois democracy in contemporary Britain." We think inadequately about British democracy if we overlook the actual form that democracy takes and the actual social circumstances under which it operates and may cease to operate.¹ The practical consequence of speaking thus

¹ See E. Wilkinson and E. Conze, *Why Fascism?* pp. 171-181.

about democracy is to make a fetish of it and to sacrifice everything in order to keep it, even things which are far more valuable. The German social democrats conceded wage cuts between 1930 and 1933 in order to save democracy; they lost both wages and democracy, since the workers could scarcely be expected to fight very ardently for trade unions which had consented to numerous wage cuts "in the interest of democracy." The practical consequence of seeing democracy as it actually is—is to regard it as a special form of capitalist control which gives certain facilities to the working class, but only on condition that the workers behave, or are strong enough to compel the granting of these facilities.

When we think about democracy we should do so for the practical purpose of finding out what it means for the emancipation of the working class. Whenever we look at any social question, we must see it in its bearing upon the practical emancipation of the working class. The real function of British democracy in the class struggle is of supreme importance in this respect. To leave that out of consideration leads to theoretical error and practical impotence.

Generally speaking, thinking that violates the first law of scientific method neglects parts of a question or factors in a situation which are important for our practical attitude to this question or situation.

By remaining in the sphere of vague and merely verbal abstractions, and by stressing the similarities between all democracies, we take no notice of the fundamental differences between them. It is wrong to state that "*democracy* is—democracy." For all practical purposes, there is all the difference in the world between bourgeois parliamentary democracy and working class democracy. It is equally wrong to say that "*war* is—war" and to treat all wars alike. We then overlook just those differences between the different types of war which should be decisive in forming the attitude of members of the working class to those wars in which their ruling class involves them.¹

¹ See E. Wilkinson and E. Conze, *Why War?*

Lenin showed in 1920 how foolish it is to decide for or against *compromises* quite generally or in the abstract, without basing the decision in each case on "the concrete conditions of each compromise." His "*Left Wing*" *Communism—an Infantile Disorder* fully illustrates this point of the scientific method.

Many fascist and orthodox theoreticians regard *imperialism* as simply the vague desire to extend one's power and territory. Imperialism, as a historical reality, is always more than a policy of conquest in general. Imperialism, defined abstractly, is the "desire for expansion." But this abstract definition becomes a false definition, if it is used to explain some actually existing form of imperialism. In saying, for example, that Britain, like Rome, etc., is expanding its influence over the world because it is the natural desire of all societies to expand, the differences between Roman and British imperialism are glossed over. The economic circumstances in which this policy of expansion takes place are left out of account. A correct idea of imperialism must include them. Imperialism is the desire for expansion plus some economic motive for this expansion. This motive can be settlement of surplus population, trade, plunder, etc. The special form of imperialism will depend on the economic and class structure of the society which expands.

The peculiarities of modern imperialism—on which imperialism our practical interest naturally centres—are brought out only if we see its roots in the very structure of a developed capitalist country. Modern imperialism is the necessity for finance capital to expand, owing to the pressure not of some vague "will to power," but of its very real surplus products. This correct definition of imperialism is indispensable for all practical purposes, *e.g.* for an efficient fight against imperialism. We can thus abolish imperialism, which demands so many sacrifices from the workers all over the world, not by the moral reform of ambitious statesmen or by passing pious resolutions against it. We must destroy its roots by abolishing the economic system of capitalism which makes imperialist exploitation a necessity.

Things do not exist in "purity"

We never meet with pure social phenomena. Pure capitalist countries, for instance, do not exist. In Germany, to take an example, the capitalist system is blended with feudal elements (the Junkers and the military caste) and small producers (peasant farmers, artisans). The non-capitalist elements got a strong political influence in Nazism and partly account for the anti-capitalist character of the Nazi movement. Their influence gives to the anti-capitalist propaganda of the Nazis a reality which we never can understand if we regard Germany as a purely capitalist country.

But is Britain a pure capitalist country? The feudal lords have almost entirely merged into the business world. The military caste is small and enjoys little respect. Few peasants have survived the vicissitudes of the industrial revolution. The percentage of persons engaged in agriculture has steadily declined from 12.5% in 1881 to 5.6% in 1931. And yet, Britain can appear as an almost pure capitalist country only if we look at the geographical unit and not at the British economic system as a whole.

A pure capitalist country cannot exist. Capitalism needs as its complement vast non-capitalist agricultural districts.¹ Events in these agricultural districts deeply affect the industrial areas of the world. We shall never be able to understand what happens in Britain if we keep our eyes fixed on events at home. Since about 1900, we have entered into the stage of a world economy in which each capitalist country is inter-related with the rest of the world. The development of British capitalism depends entirely on what happens in the agricultural districts of the world. What happens, for instance, to the farmers in Asia is as important for us as what happens at home. A concrete study of British capitalism must give serious attention to the peasant revolt in Asia, which is far away geographically, but very near home economically. In Russia, the peasant revolt put the Bolsheviks into power and, in consequence,

¹ This is an aspect of the "unity of opposites" which Rosa Luxemburg has discovered.

a very large country ceased to be available for capitalist investment on a large scale. In China and India the hunger of the peasants undermines the power of British imperialism. The Lancashire worker goes hungry because the Indian peasant does. And last, but not least, the ruin of the Japanese peasant has brought about that frantic industrialisation of Japan which drives British goods from the markets of the Pacific, Southern Asia and Africa. Pure capitalism does not exist even in England, because the peasants that are scattered over the vast spaces of the world form a part of British capitalism.

Lenin, in 1921, gave a scientific analysis of the different economic systems which coexist under the dictatorship of the proletariat in Russia. He found five of them—(1) patriarchal peasant economy; (2) simple commodity production (majority of the peasants who sell corn); (3) private capitalism; (4) state capitalism; (5) socialism. This analysis has remained the key for the understanding of Soviet Russia. In the meantime, private capitalism has been destroyed almost completely, but bureaucratic state capitalism has grown immensely. It is very unscientific to talk about the “gigantic steps towards socialism” in the U.S.S.R. and to forget the other factors in the situation, especially factor (4).¹

Danger of Isolating Facts

In another way we think unscientifically if we isolate one fact or event from all other facts or events with which it is connected and which account for its changes.

Biology studies man not in isolation, but as one of a number of related species. In psychology we can study our “mind” only in its close connection with our bodily and social activities, which to a great extent build it up. Without constantly referring to them, we are unable to give a scientific explanation of what happens in our mind.

Each social fact or event must be considered in connection with the economic system on which it stands. We have already demonstrated this in the case of democracy.

¹ See Chapter III.

It is impossible to get the right view about fascism by looking only at fascist shirts, violence and spectacular nonsense. We must understand fascism as a manifestation of the economic system under which we live. No social events at which we may look at the present time in Europe will appear to us in the true light unless we see how they grow out of finance capitalism planning for war. All of them fulfil some function in this economic system. When seen in isolation, Nazism, wars and tariffs appear as the unintelligible outcome of sheer stupidity and madness.

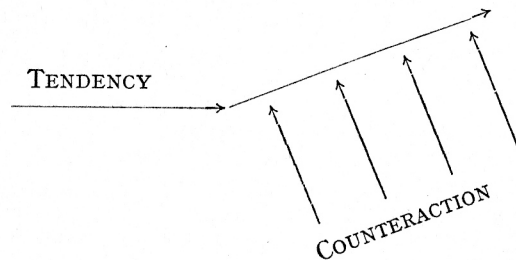
Looking Ahead

Scientific method is interested not only in the thing as it is now, but as it was yesterday. It is interested in the past history of the thing. Scientific method carefully studies the mistakes of the past, in order to avoid them in future, and from the past it takes the lessons for the present struggle. Science is especially interested in what the thing will be to-morrow, for science is greatly concerned with the “tendencies” of a thing’s movement and development. No scientific understanding is possible without the capacity for looking ahead. We regard an astronomer as a scientist, because he can foresee years ahead an eclipse of the sun. Lack of foresight is one of the main causes of the subjection of the working class. Because the ordinary person so often sees only what is directly before his eyes, he can be easily duped. Scientific method sees in peace the coming war and in war the coming peace. Most people “foresee” events only a fortnight after they have happened. Many people whose eyes are fixed on what just now is, will believe in the coming war only when they smell the poison gas in their nostrils. Scientific method foresees in prosperity the coming depression and expects in depressions the coming prosperity. The scientific mind saw in the rise of the British Empire the germs of its decay, as Napoleon did 120 years ago. It sees in the victory of German social democracy in 1918 the germ of its destruction through fascism. It sees in fascism already the forces which drive it to its own destruction in a new war.

Social events, however, can never be predicted with absolute certainty. Why could we be quite sure years ago that the sun would be partially eclipsed in 1935 on June 30th? Because this event depends only on three factors which we know well, that is the movements of the earth, sun and moon. These three bodies move in fairly regular paths. They form an almost isolated system in which new factors very rarely interfere. If another, now distant, star suddenly moved into the neighbourhood of sun, moon or earth, our prediction, of course, would break down.

Why could nobody be sure, years ahead, that in 1934, on June 30th, Hitler would murder his pals? Because this event depended on thousands and thousands of factors, factors so numerous that it was impossible to survey them all.

Apart from that, it is a fundamental rule of scientific method that we can foresee only "tendencies." What do we mean by this word "tendency"? Marx defined a "tendency" as a "law, the operation of which is checked, retarded or weakened by counteracting influences."¹



In the social sciences, the emergence of new, unforeseen circumstances is rather frequent. To take an example: Ricardo assumed that agricultural rents in Britain would rise with the growth of the population. His reasoning was quite correct. But later on a new factor arose. The

¹ *Capital* III., 275.

virgin land of America was thrown open to agriculture and the cheap wheat from America drove agricultural rents down. Ricardo correctly foresaw the "tendency" for agricultural rents to rise; but a counteracting force checked this tendency.

Marx in 1867 predicted that the growth of capitalism would be accompanied by the increasing misery of the working class and increasing unemployment.¹ In actual fact, the situation of the working class improved in the capitalist countries during the following 50 years, the real wages went up and unemployment did not grow perceptibly. The revisionists and reformists regarded Marx as refuted and based their case mainly on this rise in the standard of the working class.

Marx, however, had only maintained that the growth of capitalism created a "tendency" to impoverish the masses more and more. He says of the law of the increasing misery of the masses: "Like all other laws, it is modified in its actual working by numerous considerations, with the analysis of which we are not here concerned."²

What was the counteracting force in this case? Two factors need special emphasis: (1) Emigration to America and Australia absorbed a great part of the European surplus population, at the rate of about one million a year; (2) Imperialist expansion opened up markets which for a long time appeared inexhaustible.

Labour is more and more displaced by machines and consequently more and more workers will be unemployed, but emigration and imperialism as counteracting forces reduce the number of unemployed for a time. In other words, the new factors delay the operation of Marx's law. But in the long run their counteraction exhausted itself. Emigration has practically ceased and the colonial markets are shrinking steadily. Mass unemployment is therefore visible to everybody.

Our political activities will gain in precision if we see that we can *predict tendencies only* and keep in mind that

¹ *Capital* I., 708-716.

² *Capital* I., 712.

something new may happen of which we did not think beforehand. Whenever capitalism was in difficulty, Marxists predicted its speedy collapse. The futility of these prophecies should warn us that scientific method does not furnish us with the omniscience theologians attribute to God.

To sum up the first law of scientific method. Whenever we think or have thought about a question, we should ask ourselves—(1) Did I, in studying it, consider everything relevant for the purpose which the working class and I should pursue? (2) Did I see it in the context in which it stands? (3) Did I consider its tendencies? Nobody who repeatedly and consistently applies these tests to the results of his thinking can fail to experience a widening of his understanding of the world.

CHAPTER II

Things Must be Studied in Their Movements

THAT everything should be studied in its development and changing forms is the demand of the second rule of scientific method. This is a simple consequence of the first law. For we cannot form an adequate picture of things as they are unless we take notice of their continual change and development. We have an intimate understanding of a house or a road when we know how it is built, of a tree or plant when we understand its growth, of the weather if we know how it was yesterday and how it will be to-morrow. When we confine or narrow down our attention to the condition in which things are at present, we see no more than a thin vertical section or slice of their full and complete history.

It would be like judging a whole film story by one "still" photograph outside the door of the picture-house, if we judged a thing merely by what it is at the moment. It may be possible so to judge a film if it is a specially stupid one. But the events of nature and society are far less stereotyped than are many of our films, so that when we study something, we must not ignore, for example, its past, which contains the causes of its present condition. We must also not ignore the trends inherent in it which drive it beyond its present state and which are the springs of its future development.

Everything in this world is subject to perpetual change. Religious believers and idealistic philosophers, while admitting that many things change, cling to certain exceptions from this law. They cherish the belief in an immutable God and his unchanging revelation, in an immortal soul, in eternal moral commands, and in the alleged eternal truth of scientific ideas. The craving for something stable, unchanging and eternal seems to be inherent in the very

make-up of our minds.¹ We love to think that those things will not perish which we like, cherish and value highly. There is nothing, however, in the world round us to justify this belief. There is nothing final. Everything in the world once had a beginning; and there is no part of the universe that will not perish.

Development is more than a monotonous movement that for ever repeats the same results, like a metal stamp which invariably cuts the same pattern. Development is a historically changing movement which goes through continually different stages.

Scientific Method and Nature

The habit of studying things in their development has transformed all branches of science during the last two centuries and has thrown floods of light on the most bewildering problems of nature. Scientific method demands that the world should be studied as a complex of *processes* and *events* and not as a complex of *ready-made things*. All students of nature would now regard this statement as a commonplace. We are to-day so much accustomed to the startling results produced by this point of view that it has become difficult to realise fully the great revolution it brought about in modern science. But just because the results themselves are so familiar, it will be easy to appreciate the part which scientific method played in obtaining them.

Everything—the universe, the stars, the earth, the organisms, mind and the elements of matter—is now regarded as in development. We all know now that the world was not always the same as it is to-day. The heavens, credited for so long with being eternal and immutable, have revealed some of their history to us. The stars are not changeless, as our ancestors thought. They pass through different stages. They are first gaseous nebulae, continually changing their structure and shape. They then gradually condense into detached masses. Thus the stars we see are born. Once born, they are not “fixed,” but

¹ See *Plebs Outline of Psychology* (2/6).

are in movement. They do not remain the same, but continually lose mass or weight, which melts away in radiation. Once, when a second star came near the sun, our solar system came into being. Astronomy has found that everything has a beginning in time, an end in time and a history in between. And yet, this idea, now a commonplace, first dawned only 150 years ago.

The same is true of the earth. The present condition of its surface is only one short stage in a long and varying history. The science of geology has explained the formation of rocks and mountains, of valleys and coal fields, by assigning to them a definite place in this history.

The evolution of animals and plants is one of the most brilliant discoveries of modern science. Until about 1800 the different species of animals and plants were supposed to be invariable, definitely patterned for ever, permanent and immutable. The idea that they gradually change, merge into one another and evolve from one another revolutionised the science of living things. As a matter of course, organisms are now studied in their changing individual and generic history (embryology and palaeontology¹).

The problems of our mind can be understood and solved only by studying our mind's development and growth, especially the experiences of early childhood, which are so decisive for our character, for our mental make-up, equipment and behaviour. We must even trace back the history of our mind beyond the beginnings of mankind, to the mind of the animals, which is fundamentally the same and from which our mind has developed. Experiments on infusoria, rats and chimpanzees and careful observations of children now begin to furnish us with some solutions to the riddles of our mind.

Not long ago the chemical elements were supposed to be immutable and permanent. Now we begin to obtain a first glimpse of their changing history. Of the 92 elements, at least the eight elements with the highest atomic weight

¹ Embryology—the study of the organism from germ to birth. Palaeontology—the study of the early forms of life in the geological ages.

are not permanent. They continually transform themselves into simpler atoms and into radiation. The best known of these are uranium and radium. Chemistry is just now on the way to transform elements.

Scientific Method and the Social Sciences

In the social sciences, however, the conservative mentality of the ruling classes has retarded the application of this law of scientific method. The ruling class naturally is inclined to believe and to teach that the present condition of the political and economic system is the natural state of affairs. It is naturally disinclined to contemplate a radical change of things, by which it can only lose. By applying the second law of scientific method to economics, Marx broke the spell of conservative ideas. This has been one of his biggest contributions to the scientific foundation of socialism, the real question of socialism being: How are we to control the changes in society?

Marx realised that *capitalism* was only one particular and transient stage in the incessant flow of historical change. This discovery was possible because Marx had a more adequate conception of capitalism than anybody before him. The view that capitalism has always existed, as the natural and only possible form of human society, is based on a wrong conception of what capital is. For illustration I take a particularly inadequate, though not uncommon, definition of capital.

Capital, according to some capitalist economists, consists of goods which are put back for future use instead of being consumed at once. Where people save, there we have capital. From the very beginning, society was divided into persons who saved a part of their income and others who consumed their entire income at once. The first are the capitalists, the others are the workers. This division always existed, and always will exist. Always the far-seeing ants in the fable will be better off than the short-sighted crickets of the same fable. That will never change. One famous professor even went so far as to declare that there is no point in abolishing capitalism, since

even our animal ancestors, the apes, enjoy a capitalist economy. For, do the apes immediately consume everything they have? No, they store up reserves, that is to say, capital. And our professor concludes triumphantly that no society can dispense with its reserves .e., its capital.

Explanations of this kind tend to render the unthinking more willing to submit obediently to the capitalist system, as the necessary and inevitable arrangement of things. That is why they recur again and again in bourgeois economics, in different and, recently, less obvious and more sophisticated forms.

Marx's Explanation

Things look somewhat different when we substitute for this superficial definition the scientific definition of capital which Marx gives. Capital, according to Marx, is wealth used to produce more wealth by the exploitation of "free" wage workers with the aim of making profits for the capitalist. The "free" wage worker who is indispensable for capitalism is defined by Marx as a person who sells his only property, his capacity to work, to an owner of the means of production. By this means the owner is able to obtain surplus value.

The nature of capitalism is seen when we apply the first and second laws of scientific thinking, viz., "Think of things in their inter-relations with other things," and "Think of everything in its movement and development, for everything changes." Capitalism as it actually is, is obviously a transient stage in the history of mankind. In some countries—in Italy, France, England and Germany—it began slowly to grow about the year 1400 A.D. It reached a certain maturity only about the year 1800. For a long time capitalism was confined to some few countries of Western Europe. It is easy to imagine that a system of production which, in the long history of mankind, has held sway for a mere 150 years and on only a small part of the globe, may conceivably disappear again. Further investigations have shown that trends **within capitalism itself will probably one day destroy it.**

At the same time capitalism, while it exists, is not always the same. As the features of human beings are altered as time goes on, so the face of capitalism is perpetually modified. Capitalism passes through a number of different stages.

We must be alive to all the new changes which continually go on in the system and in the circumstances of capitalist production. When capitalism alters, our fight against it must be altered. The example of Lenin reveals the strategical advantage which results from being alive to the changes in the structure of capitalism. In 1916 he was the only one to give full significance to the new features¹ which capitalism had developed by that time. He was also the only one to take advantage successfully of the temporary weakening of capitalism after the war. The Socialists in their fight against fascism have repeatedly suffered from a failure to appreciate that changing capitalism has changing needs.

The Most Recent Change

I cannot show here in detail how capitalism went through the different stages of mercantilism, free competitive capitalism and monopoly capitalism.² Something should, however, be said about the most recent change in capitalism. Under our own eyes, capitalism is developing in such a way that to many observers it seems to be developing itself out of existence. In the years between 1890 and 1914, the big monopolies were built up, the banks grew in size and influence and industrial capital fused with banking capital into what we call "finance capital"³; effective economic power was concentrated into fewer and fewer hands. In this way, it gradually became possible to place the control of the economic system more and more into the hands of one institution—the State.

¹ Monopolies, the export of capital, militarism, etc.

² See *Plebs Outline of Economics*, Chaps. V. and IX., for the economic and E. Wilkinson and E. Conze's, *Why Fascism?* for the corresponding political changes.

³ See Lenin on *Imperialism*.

The big industrial countries are rapidly moving towards *State-capitalism*.

The drive towards state-capitalism is reinforced by the conditions under which a modern war will be conducted. Already the experience of 1914 to 1918 has demonstrated that private initiative, left alone, breaks down under the strain of a modern war. In all countries, the state interfered with industry, in order to obtain the munitions, food, coal and uniforms necessary for getting on with the war. In those countries which are now most intensely preparing for war—Italy, Germany and Japan—state control of industry and agriculture has gone farthest. In Britain, the marketing and other boards seek to do a spot of planning with the food supply of the nation. The state will take over more and more economic control, the nearer we move towards the next war.

Many workers everywhere are taken in by this new change. While building up state-capitalism the capitalist wolves put on the skin of the socialist lamb. In Germany state-capitalism passes as "German socialism," in Japan as "State socialism." German social democrats hailed the nationalisation of economic life and the state control of production and distribution during the war as "war socialism." In Britain, few members even of the Labour movement clearly understand the difference between nationalisation and socialisation. The workers may thus easily be deceived by the mimicry which British capitalism will soon adopt.

The new change in the structure of capitalism must be met by a change in our strategy. We have no longer to fight for state interference against private initiative. The main question now is not: Should the state organise production, or should production be left to the free play of private initiative and profit? The main question is now: *Whose* state is to do the job, the workers' state or the capitalist state?

Human Nature

Similarly, *human nature* is frequently considered to be rigidly unchanging and unchangeable. It is one of the

main arguments against socialism that human nature has never tolerated socialism and therefore never will tolerate it. Many people who should know better are proud of reiterating that socialism can become a reality only after men have lost their nature and have become angels.

Here again it is an unscientific, a one-sided conception of human nature, which lies at the root of the anti-socialist's fallacy. He regards human nature as something very selfish, composed essentially of egoism, hatred, aggressiveness and similar inclinations. What we do, however, actually observe, is not any vague "human nature," but concrete human beings living in society. Our observation shows us that human beings exhibit partly egoistic, and partly social inclinations.¹ We can further observe that class society, and capitalist society in particular, does everything to foster and encourage the selfish, acquisitive and competitive instincts, so much so that they tend to overrun the social side of human nature. In spite of that, this opposite side of human nature is clearly visible in friendship, love, maternal affection, in solidarity, in the emotions of sympathy and pity and in all those sentiments which keep together the social units, like family, clan, village, tribe, nation and class. It is even exploited to the fullest by capitalist society. It makes possible that spirit of sacrifice which alone enables people to endure slums, intolerable exploitation and misery. Without the spirit of sacrifice no wars could be fought, even for a fortnight. Under socialism we shall be able to develop more fully the social side of our nature. Under the present system of society almost everybody thrives by the defeat of a competitor. The reckless, selfish, anti-social individual is favoured by the rules of the game.

Socialism, on the other hand, will alter the rules. In a socialist society life will be made very unpleasant for those who try to advance at the expense of their fellow-citizens. If once social standing and success have become bound up with a display of the social virtues, if it has become expedient in his own interest, for everybody to

¹ The attentive reader will observe that this is a case of "unity of opposites" and an application of the third law of scientific method.

display his social inclinations, there can be no doubt that all the reserves of the more noble social instincts will be set free—reserves which have, for so long, been suppressed by class society. The plasticity of "human nature" was manifested in the bank clerk who, at a month's notice, went to the trenches. It will be easy to induce "human nature" which has tolerated the misery of capitalism to tolerate a socialist society.

CHAPTER III

The Unity of Opposites

THE third law or rule of scientific method is that *opposites are always united*, that they are in "unity" or in "union," whichever word we may prefer. For some time this statement remains a puzzle, even for the most assiduous and intelligent student. He either fails to find any opposites at all, or he regards the attempt to state their unity as some kind of intellectual trickery. It is only quite gradually that he sees how fertile the idea is. It takes some practice to be able to discern the many opposites which we encounter in practically any event or process of the world which surrounds us.

The most important reason for this delay is the lack of a general definition of the word "opposites." The forms and manifestations of opposition are so many and so varied that it has so far been impossible to give a really satisfactory definition. All normally intelligent persons, however, recognise opposites when they meet them.

Everybody who tries to give a generally valid definition of a chair will meet with the same difficulties of definition. In spite of that, we generally recognise a chair as soon as we see it.

The "unity" of opposites has a positive and a negative significance. Negatively, we must not see opposites in a rigid, dead and unconnected opposition. The mere recognition of each of two opposites as *separate* things is insufficient for the understanding of concrete reality. We lay stress upon their being *connected*—of their belonging together.

Positively, the term "unity" or "union" can mean quite a number of relations between opposites. We cannot discuss all of them here. We shall restrict our discussion to the most important and frequent form of unity between opposites. In a general form it can be stated thus: A and B are two opposites. Therefore, when-

ever we find A we must also meet B in the same process or event. In other words, opposites are inseparably linked together.

This statement is the result of a great number of observations, or "inductions." I know of no general reason why opposites *always must* be united. The study of scientific method is not yet advanced enough to give us a proof of this kind. We can, however, say that opposites have always been found to be united in all those cases which have so far been studied. This law is only a guide for concrete investigations. The main point is that it works. But the reader must be warned against using the law as a mystical formula. It tells us something about reality only when its use is combined with an exact knowledge of the facts.

Mahomet and the Mountain

Science abounds in instances of a "unity of opposites." If they do not want to be regarded as victims of the state of mind which produced Madame Blavatsky and Mary Baker Eddy, dialectical materialists are faced with the urgent task of connecting their theories with the findings of science. Some of them have so long been absorbed in quoting their classical texts, that they have had but little time left to apply the dialectical method to researches into the laws and phenomena of nature. Nevertheless, they may rejoice that science, the more it proceeds, the more it stumbles across just that behaviour of things which dialectical materialism might lead us to expect. By the mere observation of facts, without any knowledge of the dialectical method, scientists in many cases discovered a "unity of opposites." In this case Mahomet did not come to the mountain. But the mountain actually came to the (dialectical) prophet.

Let us make that clear, first, by some simple examples. The most simple examples are the opposites which are called "polar" opposites. The *negative electrical pole*, for example, cannot exist without the simultaneous presence of the *positive electrical pole*. Where we have a positive

pole, we also must have a negative pole, and *vice versa*. The elements of matter, the atoms, consist each of positive nucleus and negative electrons; the mutual attraction between the opposing charges holds them together. This "unity of opposites" is therefore found in the core of all material things and events.

We should, however, be aware of the fact that, during recent years, things have been shown to be more complicated than was ever thought. Apart from the negatively charged electrons which revolve around a positively charged nucleus at the centre of the atom, physicists have discovered two more ultimate particles in the atom. In 1931, they discovered the "neutron" which has no electrical charge, which is electrically neutral. Somewhat later they found the "positive electron" or "positron." At the time when these lines are written the relationship between these four constituents of atomic structure is still being investigated.

I have had some "dialecticians" assure me that they did not know what the structure of the atom would turn out to be, but that they had not the shadow of a doubt that it would be found to be "dialectical." This is not the language of science, but of religion. The revelations of God are beyond correction by later scientific discoveries. We should beware of putting the dialectical method on the same level with the revelations of God. There is nothing ultimate about scientific theories, although so many people are inclined to become the dupes of the latest fashion. Science is changing, and it must be studied in its historical change. Too frequently do we petrify the science of yesterday into the dogma of to-morrow. Science demands an elastic and critical spirit.

Further Examples

Both *attraction* and *repulsion* are necessary properties of matter. Each attraction in one place is necessarily compensated for by a corresponding repulsion in another place. Movement is the interaction and matter is the union of both.

The sex differences in organic nature are not so clear-cut as they appear at first sight. An animal or a person appears to be either *male* or *female*. But the distinction between the two is not at all rigid. No organism can be male without having also female characteristics, and *vice versa*. Both are simultaneously present. Scientists speak of "bisexuality." Each individual is a union of male and female, although one of the two opposites is in most cases (except hermaphrodites) the more strongly developed. A "pure" male or a pure female exists only in our ideas. Reality knows of nothing but intermediate stages between them.

The anatomical study of the sex organs has revealed the fact that in each human being both genital systems, male and female, are always found together. But in most cases the one is developed, the other rudimentary and only in traces. The male sex organs show rudimentary vestiges of the female ones and *vice versa*.

Darwin remarks¹ that "in many, probably in all cases, the secondary characters of each sex lie dormant or latent in the opposite sex, ready to be evolved under peculiar circumstances." If the ovary of hens is extirpated or degenerates owing to tuberculosis or old age, the hens often develop into cocks and acquire a spur and male plumage. Recently, similar observations have been made concerning turkeys, pheasants, ducks, etc.

Some scientists, like Havelock Ellis,² use the facts of bisexuality to explain the homosexual behaviour of human beings. From the psychological angle, D. Bryan defines bisexuality as "the existence in every human being of two sexual attitudes, namely, a masculine one and a feminine one, and under certain conditions he or she can utilise either the one or the other attitude towards the sexual object."³ Commonsense recognises the possibility of male and female features being united in one person when we speak of an "effeminate man" or of a "masculine woman."

¹ *The Variation of Animals and Plants in Domestication*, II., p. 25.

² *Psychology of Sex*, II., 310 (3rd edition).

³ *International Journal of Psychoanalysis*, Vol. II., 1930, p. 150.

But commonsense recognises only the more striking cases, whereas science has found a general law and pays attention to all the various degrees of mixture and proportion between the two sex characters in the different individuals.

Some persons exhibit what one might call a “*superiority* complex.” They are happy only if they can boss somebody around—in reality or at least in their imaginations—or if they can find some point in which they are better than their companions or colleagues. The psychologist Adler has shown that this sort of attitude is the result of an “*inferiority* complex.” People who feel inferior in some respect try to compensate for this inferiority by their efforts to prove superiority in some other respect. Some physical deformity or disability, for instance, makes people feel inferior. So we find hunchbacks sometimes try to prove their superiority by indulging in biting comments on their fellows and by engaging in “wire-pulling” which gives them a sense of power. Parents, again, frequently create a sense of inferiority in children’s minds. If a father always tells his son that he is good for nothing except acting as a circus clown, the result in some cases may be that the son will do everything to prove the contrary—to his father and to himself.¹ If we observe a person behaving in a terribly superior and domineering manner, we know that in his heart of hearts he feels the opposite way, that he is still “chewing on” the inferiority he felt in his childhood or perhaps even in his early manhood.

Freud has shown that we can have no feeling of love towards any one without simultaneously having a more or less suppressed feeling of hatred for the same person, and *vice versa*. This phenomenon is called *ambivalence*. No *hatred* can exist without containing some *love*. Love is the regular companion of hatred, even if the quantity of love is sometimes microscopic.

In the light of the law of the unity of opposites we must also qualify law 2.

It is only a half-truth to say that everything is in movement. “Movement” is the opposite of “stillness.”

¹ See *Plébs Outline of Psychology*.

To use Fred Casey’s¹ favourite illustration: It is a fact that our houses remain still in their places, so that we know where to find them when we go home at night. We must also study things in their lack of movement and development, in their relative “stillness.” If we want to abolish capitalism, we have just as much to take into account its forces which make for no change, as the forces which make for its movement, development and change. The whole point of law 2 is not to exclude stillness from our picture of the world, but to draw special attention to those aspects of change and development which usually we are more apt to overlook than the more permanent features of a situation.

Feud and Help among Animals

We violate this law of scientific method when of two opposites, which in fact belong to each other, we take only one into consideration and overlook the presence of the other.

In his analysis of the causes of evolution, Darwin stresses the part which competition between the different animals plays in nature. He regards the “*struggle for life*” as the axis on which the wheel of evolution turns. He takes little notice of the opposite factor, of the *mutual help* between animals, which is of equal importance. In the *Descent of Man*, Darwin gave, in fact, as Kropotkin² says, “some powerful pages” which illustrate the facts of co-operation between animals. But Kropotkin adds that these remarks were “overshadowed by the masses of facts gathered for the purpose of illustrating the consequences of a real competition for life.” Even “on the very pages just mentioned, amidst data disproving the narrower Malthusian conception of struggle, the old Malthusian leaven reappeared.” The Darwinians accentuated Darwin’s oversight. By insisting on the facts of mutual struggle in nature, they pushed the facts of mutual help into the background, in this way arriving at an incomplete, one-sided and false view of life in nature.

¹ I have to thank Fred Casey for having put me on the right path in this respect.

² *Mutual Aid*, pp. 2 and 3.

What was it that blinded the Darwinians to the real facts of nature? The reason appears to be that the extent of their understanding, like that of everybody else, was limited by the range of understanding of which their class was capable, the class to which they belonged and for which they stood. Darwin, himself a stout Liberal, had received a strong impulse for his theory from Malthus. Malthus was one of the most shameless defenders of the capitalist system. Darwin read into nature the description which Malthus had given of capitalist society. In this description, the typical description of a member of the ruling class of the 19th century, be he Liberal or Conservative, only the element of ruthless competition in modern society found a place. The opposite element, the solidarity found especially among the members of the working class, always an unintelligible and disturbing thing to the bourgeois mind, was overlooked in society. Consequently it was also missing in the bourgeois picture of nature, which was understood after the model of capitalist society. It remained for a theoretician of the working class—the Russian anarchist, Peter Kropotkin¹—to give to solidarity and mutual help their place in the theory of nature and society.

Are Facts Enough?

Many well-meaning persons imagine themselves to be on a very safe and firm ground if they demand that scientific research and thought should be based exclusively upon facts. Among the opponents of an investigation into scientific method, among the opponents of dialectical materialism, we repeatedly find those who assert that the scientific method is superfluous, for science deals only with facts. They write big books against the philosophy of Marxism, in the interests of “empirical

¹ See his *Mutual Aid, a Factor in Evolution*, a book still worth reading carefully. Some English Marxists have vigorously attacked this section of my original articles as “unmarxist,” being happily unaware of the fact that it is based on remarks which Engels made in his *Dialectics of Nature*, pp. 62-64, published in German and not yet available in English.

scientific findings,” which, they claim, need no philosophy to be understood. But if you read their big books you will find that they never refer to any concrete “empirical scientific finding.” Actually these opponents of any philosophy merely repeat the slogans of a special branch of philosophy—a philosophy which was worked out by the English “empiricists,” such as Locke, Hume and other representatives of bourgeois thought. They forget that *theory* is the necessary complement of fact. They forget that facts are dumb before a theory makes them speak.¹

Socialists who talk about *monopoly capitalism* and *competitive capitalism* should be well aware of the union between them. Lenin has made that quite clear in his study of Imperialism. Some monopolies already existed under competitive capitalism. Competition was not the only fact, but was the *predominant* fact. Monopoly capitalism does not exclude competition. Under it a fierce competition is going on between the trusts and the outsiders, between the different monopoly trusts of one country for a greater share in the total purchasing power of the community and between the different nations for a greater share of the market and of the sources of raw material. Those who overlook the element of competition in monopoly capitalism easily underestimate the necessity of wars in this stage of capitalism and easily overestimate the possibility of avoiding depressions.

On the surface, we may imagine that *planning* and *anarchy* are rigidly opposed to one another. In actual fact, we find elements of planning in anarchic societies, and elements of anarchy in a planned society. In a planned Socialist society, not everything will go smoothly. Quite a number of factors will be beyond the capacity of human calculation. The variations of the weather, with their influence on the harvest, the miscalculations of sleepy and inefficient officials, the sudden changes in public taste

¹ This “union of opposites” is recognised also by theoreticians who usually are strong opponents of whatever Marx stood for. The famous economist Marshall, for instance, says in his *Principles* on page 773: “As surely as every deduction must rest on the basis of induction, so surely does every inductive process involve and include analysis and deduction.”

and in the demand for goods, and to a certain extent the rate of growth of the population, and the difference in ideals between the generations are some of the incalculable factors in a planned society. Anarchic society, on the other hand, is an anarchy of planned units. Planning in the factory, in the combine, in the monopoly trust, and recently in the entire nation, is at the basis of the anarchy of the world-wide capitalist system as a whole.

Class Struggle and Class Harmony¹

It is very useful, although unpopular, to study in this light the opposition between *class struggle* and *class harmony*. We have two trends of opinion with regard to it. The one denies the class struggle, the other denies the class harmony. Both are wrong and unscientific. The class struggle is a fact, is an event which is observed day by day in industry and in politics. It can be denied only by those for whom the denial of the class struggle is one of the strongest weapons in carrying on the class struggle, and by those elements of the intelligentsia who have lost contact with real life.

But the class struggle is not the only fact in present-day society. There are many aspects of real class harmony.

How is it possible that the class struggle should exist alongside a certain amount of peace and harmony between the classes? The unscientific mind sticks to the view that opposites, in this case class struggle and class harmony, are incompatible and cannot exist side by side. Nevertheless, in a family, man and wife may agree about the food, but at the same time they may quarrel about the temperature of the room or whether they should go to the Zoo or to the cinema. Family quarrels do not necessarily exclude a certain amount of family harmony.

The capitalists of the different countries compete internationally with each other and in that competition use weapons ranging from tariffs to battleships. When, however, the workers in any country rise against the capitalists in that country, *all* the capitalists (home and

¹ This section is the result of a discussion which took place in *Plebs*.

foreign) are in harmony—witness their attitude to Soviet Russia in the first years.

Class struggle and class harmony do not exclude one another, but exist side by side. Two classes struggle when they *disagree* on certain points. The main bone of contention between the two classes of our capitalist society is the division of the product of labour. Class harmony means that two classes *agree* on certain points. Now do the workers find certain points of agreement with the capitalists?

They obviously do. The Jubilee showed a point of agreement in the spontaneous response of the masses who surprised everybody by their loyalty to the same king whom the bankers and capitalists maintain in power. The last war, while it did not end the struggle for wages and profits, found the masses in fundamental agreement with their capitalists. If they had not considered this war to be their war, no power on earth could have got them into the trenches. Nationalism, the tribal instincts, bind the classes together and provide a common point of agreement.

The Saar gave us another formidable proof of the reality which class harmony can have in certain circumstances. In spite of the prospects of an all-round economic loss, in spite of the prospect of a reign of terror, 90% of the votes of this mainly industrial district were cast for Hitler and for its return to Germany.

Ardent revolutionaries, opposed to the Government's air-raid precautions, have assured me—strictly in private—that in air raids they should like to be protected. This desire at least they share with their worst enemies. A certain measure of agreement is also reached in the question of "collective security," of which both socialists and Tories have spoken with so much eloquence. According to some, however, these socialists are "reformists" and "traitors." Well, the proletariat of Russia finds certain points of agreement with the capitalists of France. Both desire that the *status quo* in Europe should be maintained. Both desire that the French capitalist and imperialist Government should re-arm. A Soviet Government communique issued on

May 16th, 1935, said: "In this connection Stalin understands and fully approves the national defence policy carried out by France to maintain her armed forces at the level necessary to her security."

In Britain one of the most important points of agreement is the common material interest of both classes in imperialist exploitation of the colonies, in the profits from which both classes take a share. Therefore it needs no special "treason" on the part of any leaders, but merely a "commonsense"—although short-sighted—view of their own immediate interests, to induce the majority of the working class to fight for the Empire if necessary. *This will go on, until we can show a practicable way to a high standard of life which is not based on the exploitation of natives, but on the socialist organisation of society.* The same fact is at the basis of the large Tory vote of the working class. If Lancashire has voted Tory, this cannot be explained by any special stupidity on the part of the Lancashire workers. The prosperity of the cotton trade is too obviously bound up with Britain's domination in India. We can sever this harmony between the classes in Lancashire only when we can show them a *practicable* way to a socialist society.

A socialist Britain will no longer protect the usurers and the foreign and native capitalists who have drained the Indian peasant of his resources and have ruined the Indian market. Its alliance with the Indian people will extend immensely the purchasing power of the Indian market. By raising the standard of life in this country, socialism will extend the British internal market to a considerable extent. Millions of workers will leave the Tories if we can show them a *practicable* way to this socialist society.

The rise of fascism also is based on an element of class harmony. When, in Italy and Germany, after repeated attacks, the working class proved itself unable, in the existing circumstances, to get control of and manage society by itself, the costs of the fierce class struggle became so great that many people wished it to end at any price. This gave fascism its opportunity.

The more intense the class struggle becomes, the more

clearly are the workers conscious of its existence. The views of the workers on political subjects are partly due to their education—and there is much scope for improvement in that direction. But the workers' views are not entirely due to wrong education. They also reflect—imperfectly and to a limited extent only—the facts as they are. Why do the workers sometimes "fall for" the swindle of capitalist propaganda, and why do they, at other times, not let the capitalists "get away with it"? Because the workers are sometimes more enlightened and sometimes less? What enlightens them? The realities of the situation. In fact, I think that the workers' views are not so entirely out of touch with reality as some enthusiastic supporters of the working class like to assume.

In accordance with the second law of our scientific method we must, of course, study the proportion between class harmony and class struggle in the process of movement and development. The proportion is varying continually. Sometimes the class struggle is more intense, sometimes less.

After 1900 the Labour Party was set up because socialist propaganda had had successes. Why did it become more successful at just that time? Because from that time onward the real wages of the British workers began to fall. The objective weight of the element of class struggle in English society increased and this new fact was reflected in a new consciousness.

Only under exceptional circumstances does the class struggle push the class harmony completely into the background. Then a revolution results. Only after the Russian workers and peasants felt that there was nothing more to hope for from the bourgeoisie and the aristocrats, only after these classes were completely bankrupt, did the workers and peasants listen to Bolshevik propaganda. The Russians' greater class consciousness was, therefore, in the first place due to changed objective circumstances, and not to Bolshevik propaganda, of which they took little notice before the circumstances had altered.

It is quite obvious that in our general propaganda we must stress again and again the element of class struggle

in our society. We must counteract the dope by which the capitalist press and orthodox education attempt to make the worker forget the class struggle. At the same time we should never lose sight of the aspects of class harmony in our present-day society. Some socialists are too much inclined to "explain" by declamations against "betrayal by leaders," facts which are only the reflection of a real and existing class harmony.

Centralisation and Decentralisation¹

In centralisation and decentralisation we have two opposites which are of supreme importance for all problems of social life. Where lies their unity?

In their forecast of events to come a number of otherwise perspicacious persons, especially in the Liberal camp, saw only the centralising forces in the economic system of the 20th century. They believed that the creation of a world market and the imperialist expansion of the big nations would eventually lead to an international and peaceful unification and order of world society. They are disappointed by the orgy of nationalism which is still spreading. They are inclined to regard it as an outcome of human stupidity rather than of economic necessity. What happened was that they overlooked the equally strong and even stronger decentralising forces operating in the economic system at the same time, in the opposite direction. High tariff walls more and more shut off the nations from one another. The rivalry for markets, colonies and spheres of influence bred antagonisms among the big nations. The last war was a consequence of the decentralising forces. So is the new war which all governments of the world are preparing for at enormous expense.

A similar problem appears in the domestic sphere. Socialist planning is the most urgent task of this generation. Successful planning cannot be done without an idea of how to achieve the unity of, or the balance between, centralisation and decentralisation.

¹ This section is to a large extent a reprint from *Plan* (March, 1935) and from *Comradeship and Wheatsheaf*, June, 1935. I want to thank the editors of these two papers for their kind permission to reprint substantial parts of my articles.

There exists a conception of planning according to which the control of banks, factories, land and mines is to be vested in one central authority. In the name of efficiency, both state capitalism and state socialism strive for this goal. Efficiency, however, comes into conflict with liberty. In a totally unified society, in a "totalitarian" state, the workers by hand and by brain are divested of effective power. They are crushed by the enormous power of the centralised state. Their minds are in danger of being degraded to mere gramophone records of the ideas of the men in central power. Liberty of thought and freedom of action must disappear. If, under the present system, you displease your employer, you may, in many cases, find another one. Rigid central control of the means of production leaves you with one employer only. The one employer can squeeze all dignity out of the life of his subjects. He can break any backbone that does not bend to him.

The dialectical law of the "unity of opposites" prepares us for a solution of this difficulty. While unifying and concentrating economic power, we must at the same time aim at doing the opposite, *i.e.* disperse and distribute it. The two opposite lines of action appear to exclude one another. They must be made to include each other if we want to get a satisfactory result. The central authority of the planned state needs a counterbalance. Mere parliamentary democracy offers no counterweight, for the formidable power of the central bureaucracy will render powerless an inchoate and scattered electorate. Decentralisation must be organised if it wants to prevail against the organisation of the State. Our conception of socialism would, I think, gain by an infiltration from syndicalism. Movements to this effect are familiar in England under the name of "Guild Socialism" and "Workers' Control." I personally think the term "Workers' Control" to be too vague and rather misleading.

The term "workers' control" *may* convey something definite to the expert politician. The average person will hesitate as to its exact meaning. Does the term mean a direct control by the workers or a control through their

representatives only? Is it full control by the workers or only partial control? Are the technicians included in the term "workers" or not? If not, the slogan "workers' control" is harmful. If they are included, why create misunderstandings in the minds of those who are not accustomed to thinking of the technicians as "workers"? Further, are the technicians to be regarded as equal partners with the workers, or as an element that needs subordination to the proletarians, as in Russia?

I would thus prefer to speak of "councils of technical and manual workers." These councils should be regarded as decentralised bodies operating in the places of production, powerful because elected on an occupational instead of a geographical basis. As much authority should be assigned to them as is just compatible with co-ordination and planning.

Britain in this respect presents the great advantage of having always enjoyed a healthier balance between centralisation and decentralisation than Germany, France and Russia, with their age-long bureaucracy. In 1859 John Stuart Mill wrote about the "melancholy condition of the Russian Empire. The Czar himself is powerless against the bureaucratic body; he can send any of them to Siberia, but he cannot govern without them, or against their will." Bureaucratism thus appears to be one of those handicaps with which the bolshevists started, and not a creation of their own.

What is Democratic Control of the Means of Production?

What do we mean when we speak of the "democratic control" of the means of production? Control by parliament alone does not solve the problems of the workers. In Britain the Post Office has made that clear to everybody. In Germany, Bismarck understood this point so well that he established parliamentary control of the Post Office, railways, and Central Bank, as a bulwark against socialism. Also, bureaucratic control cannot help the workers. If Civil Servants, instead of the present owners, run industry, there is no reason why they should take much notice of the claims of the workers.

The workers are now exploited for no other reason than that they are deprived of any effective share in the control of the factories. We are thus led to the conclusion—unpleasant perhaps to some persons—that the workers will stop being exploited only after they have themselves taken control of the management of industry. The question of greater income is inseparably linked up with the question of greater economic power, which can come only from the ownership and control of the means whereby we live. Ownership, however, involves responsibility. If the workers shun the responsibility, the ownership also will slip out of their hands. Their participation in the control and management of industry should be as direct as possible. "Workers' control" is, in fact, the very essence of socialism, as G. D. H. Cole has so frequently explained.

We can easily solve the hard problems of the future if we dare to release the enormous creative energies which slumber in the working class. In Russia we have been able to witness the creative drive of which the working-class people are capable.

The Labour Movement already possesses, as one of its most valuable assets, the experience in administrative work that its councillors have acquired in local government, that its co-operative members have obtained in the management of the co-operative societies, and that its trade union officials have got from their perpetual fight for the standard of living of the workers. And, what is more, the vast majority of these trained persons have remained members of the class from which they came. This movement must, I think, be broadened.

A growing section inside the Labour Party assumes that the initiative of the rank and file might be fostered, and effective workers' control might be prepared, by the organisation of "councils of manual and technical workers" in the places of production. I cannot discuss here the merits of this scheme. It seems to me to be, in the main, a step in the right direction, because it takes notice of the fact that never has a big change been effected in history

without the mass of the people themselves coming into motion.

Socialism will take a decisive step forward if the average worker learns to envisage the coming change as one in which he himself has to take a very active part. At present the workers are in the habit of assuming that "the other man will know." Many are prepared to do their job, but few like to shoulder the responsibility for it. Instead of the habit of obedience, and of looking for a lead, a greater confidence in their power and ability must be established in the minds of the ordinary "rank-and-file" workers. The great appear to us as great because we are on our knees. Why shouldn't we get up?

Dialectical materialism can help us to see problems of this kind more clearly than we should perhaps see them without it. Their solution can be effected in practice only by a delicate adjustment of "machinery." Theory, however, can guide practice and throw light on its path. If we fail to devote thought and active preparation to these problems, we may jump from the present anarchy into the slavery of a planned serf state. We must organise the democratic control of industry from below, if we do not want to tumble into a dictatorship.

CHAPTER IV

Contradiction as the Cause of Change

COMMONSENSE readily agrees to the first three laws of scientific method. In the fourth law, however, the commonsense basis is less manifest and perceptible. The recognition of contradictions goes against the grain of practically everything that passed as scientific tradition during the last five centuries. During practically the whole of that time science suffered from having a mechanistic outlook and on the basis of that outlook tried to represent the world as though there were no contradictions in it. It blamed the stupidity of our mind for all those contradictions which it could not fail to notice. It refused to regard contradictions as a normal element of reality. Through thousands of channels this adverse tradition has moulded the mind of everybody and imbued us with a resistance against the scientific conception of the movement of things.

Intellectual and Material Contradictions

Two different sorts of contradictions must be distinguished from the very outset, the one intellectual, *i.e.*, in our mind, and the other material, *i.e.*, in concrete reality.

Some ideas or statements are self-contradictory because they are ideas of things which are inherently impossible. Such is the idea of a Jewish Nazi, of a 6-carat diamond priced at 2d by a dealer, of a match which burns with a cold flame, of a sane employer who is prepared to pay wages to any amount. It is an intellectual contradiction to say that beefsteak is not meat, or wheat is not corn. If we say that, we deny to beefsteak and wheat one of their essential qualities and that is a contradiction. Intellectual contradictions should be avoided, being absurd and nonsensical. They are the result and the sign of false thinking.

We assume the presence of a *material* contradiction wherever we observe that something destroys itself, or

moves itself, or hinders itself, stands in its own way. A boy should come to dinner. But he remains upstairs, having an outburst of temper. His brother describes his behaviour as follows: "He wants to come downstairs, but he won't let himself." The angry boy is in a state of contradiction; is torn and shaken by contradictory desires.

A material contradiction means that one concrete process contains two mutually incompatible and exclusive, but nevertheless equally essential and indispensable parts or aspects. The reader who finds this definition rather involved should skip over it and hurry to the examples which will make the thing clear.

Contradiction in Nature

In some instances we can observe that a thing moves and destroys itself. This is the case with radium and uranium, which decompose themselves into other elements by a spontaneous radiation and disintegration. Since this disintegration is not due to external causes, but to the constitution of radium itself, we would assume the presence of a contradiction in radium. At the moment, however, we are incapable of pointing out what that contradiction is.¹

We find clearer examples in the life of organisms. Engels pointed out that a living being is at any given moment the same and yet another. He further drew attention to the fact that a living cell continually decomposes and disintegrates itself. Its life consists in that it simultaneously performs two contradictory processes, breaks down and builds itself up again. Recent research has further shown that the chemical products of decomposition are the natural stimulus which keeps life, and the process of building up, going.

Capitalism

It is, however, in society that the presence of contradictions is most marked. In all stages of history, con-

¹ The only thing scientists can say is that "for some reason one of the satellites circulating in a quantum orbit becomes unstable and escapes from the system" (*Encyclopædia Britannica*, 18,890). But as yet they do not know what that reason is.

traditions have been the ultimate cause of changes in society. We can understand nothing at all of what happens in present-day society without tracing events back to the basic contradiction in capitalism.

The correct explanation of the recurrent economic crises is one of the triumphs of the dialectical method.¹ Orthodox economists are as unable to explain the crisis as their employers are to avoid it. They cannot admit the presence of a contradiction which, periodically, tears capitalism to pieces. For this would imply the admission that something is fundamentally wrong with capitalism. In their frantic search for an inoffensive cause of the economic crises they have sometimes suggested sun spots, sometimes they even dare to blame the monetary system, but never the system of production as such.

Capitalism often stands in its own way. In the 19th century, for example, the British capitalists acted without a common plan. Everyone felt compelled to outrun his competitors in profit-making. The British capitalists therefore exported machines abroad. In this way, they destroyed the British monopoly of the world market for industrial goods, and equipped their own competitors. The "depressed areas" are the result of this self-destruction which, however, was inevitable under the system.

Every seven or ten years or so,² capitalism stands in its own way—it develops a crisis. In time of crisis, capitalist production is not impeded by any outside force, but by itself. The very development of production on capitalist lines produces a check to this production periodically and with disastrous results for the mass of the population. We thus have here a situation which suggests an underlying contradiction.

What is the basic contradiction in capitalism? What are the two essential but incompatible aspects of capitalist production? They are, co-operative production on the

¹ This application of scientific method is so important that I soon shall deal with it more extensively on another occasion. It is obvious that in the frame of this booklet I can give only a very bald outline of the crisis.

² See *Plebs Outline of Economics*, p. 81.

one hand, and private ownership of the means and fruits of production, on the other hand.

Modern production is based on an immense co-operation. Millions of people had to co-operate, in one way or other, in order to produce any commodity, say a piece of soap or of chocolate. On the other hand, the products of this co-operation are owned by a small minority. The work of the millions is carried on for the profit of the few.

It is the most obvious fact about the crisis that we have, on the one hand, large quantities of products which cannot be sold and, on the other hand, large masses of workers who are in need of these same products. The World crisis of 1929 to 1934 forced 25 to 30 million workers to become unemployed in the capitalist countries. The productive capacity of the factories could not be fully utilised. The following table shows the extent to which German factory productivity was utilised in recent years :—

1929,	...	...	67·4%
1930,	...	...	52·2%
1931,	...	...	44·5%
1932,	...	...	35·7%

As a result of the contradictory nature of capitalism, production must necessarily, after some time, go beyond the limits of purchasing power. Everything conspires to extend production and to contract the market.

If production were expanded according to a plan, no harm would result. But production is extended by employers who fiercely compete for their share in the market ; who, during prosperity, must rush with their products into the market if they do not want to be late. Each capitalist is at the heels of another capitalist. Everybody must take the opportunity as long as it is there. Everybody must produce at top speed, irrespective of the volume of purchasing power, which does not expand so quickly. Soon the market is flooded with products of all kinds and the crash comes.

The market, on the other hand, depends largely on the masses of the population. Of course, there is also a market for machines. But the machines, once bought, produce

things to be consumed by the masses. Nobody buys a hot-water-bottle-machine for its beauty. It is bought in order to produce hot-water bottles, which must be sold to the masses. The purchasing power of the market thus depends mainly on wages and salaries. During prosperity, wages rise, but they are far from rising sufficiently to absorb the growing production. For the output per worker increases much faster than his wages do, even in times of prosperity. The increase in the rate of interest compels the employer to resist further wage demands. The relatively high wages and the fierce competition for the market compel him to introduce new machinery which saves labour and wages, but while it increases production it reduces purchasing power.

It is very nice to advise the employer to pay higher wages in order that he may avoid a crisis. No doubt he would listen to such exhortations, if he were interested in the production of shoes, cotton, machines, etc. But he is interested in the production of profit only. Higher wages are paid at the expense of his profit and thus diminish his interest in producing anything at all. During a crisis, the surplus goods which have been stored up must first be sold. Prices fall. Between 1929 and 1933, wholesale prices in the main industrial countries decreased annually by between 30 and 35 per cent. It took three years, from 1929 to 1932, for the stocks of agricultural produce and of industrial raw materials to diminish seriously. After this has been achieved, we have the paradox that a crisis which was the result of low purchasing power can in the end be overcome only by raising prices and lowering wages. These two operations diminish purchasing power but they raise the rate of profit which provides an incentive for resuming production.

The art of politics consists in solving those contradictions with which reality presents us. To find a solution to the contradiction of capitalism is the great issue of to-day.

A permanent solution is possible only by destroying one of the two sides of the contradiction. The only permanent cure which keeps for the working class the fruits of technical progress consists in the abolition of private profit.

The private ownership of the means and fruits of production must be replaced by their common ownership and democratic control. On the other hand, the destruction of the co-operative character of work can also afford a permanent cure. This method would sacrifice the greater part of the present population of England, thirty-six out of forty millions, in order to return to the barbarism of a village economy. These are the two permanent solutions.

More in favour with the capitalists than either of these *permanent* solutions is the *temporary* remedy of war preparation. The capitalists as a class live from hand to mouth. The surplus of products which an impoverished home population cannot consume perpetually presses hard on the capitalists. They relieve the pressure by extending the market abroad—by imperialism. Imperialism leads to war. War eases the contradiction for some time. The preparation for war extends the market by creating a demand for arms. When the war breaks out, surplus products and surplus men are blown up together. Capitalism can breathe again—unless the masses have lost their patience.

The contradictions of capitalism to-day may again soon explode in a new great war. The coming catastrophe can be avoided only by the working class pulling together for a constructive, socialist solution of the basic contradiction of capitalism.

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