POLITICAL ECONOMY AND CAPITALISM

Some Essays in Economic Tradition

By MAURICE DOBB, M.A.
LECTURER IN ECONOMICS IN THE UNIVERSITY OF CAMBRIDGE

GREENWOOD PRESS, PUBLISHERS
WESTPORT, CONNECTICUT
1972 (1975)
and to make the discussion accessible to the wider circle of those who have a lively sense of the intimate relation between economic thought and practice in the world to-day and have little time for what is merely “light-bearing” without being “fruit-bearing”. If some of what is written here may bear the character of thinking aloud rather than of finished thought, the thought has at least not been hasty but has extended over several years. In this process of groping I have incurred a debt to Mr. Dennis Robertson and Mr. Piero Sraffa, who have read some, and to Mr. W. E. Armstrong, Professor Erich Roll and Mr. H. D. Dickinson, who have read all or the greater part of these essays at various stages in their growth, and whose criticism has banished a number of confusions which might otherwise have remained. Mr. Clemens Dutt, Mr. A. G. D. Watson and Mr. George Barnard have also given me valuable advice and correction on a number of special points. But none of these must be blamed for errors which remain, or for any of the opinions which are expressed.

M. H. D.

CAMBRIDGE,
July 1937.

In the revised edition I have made some substantial alteration to the second half of Chapter IV, in order to elaborate certain aspects of Marx’s theory of crises which in the earlier edition I had tended to ignore, and also some alterations, to meet the requirements of maturer thought, in the last dozen pages of Chapter VI. Elsewhere, although only too conscious of mistakes and deficiencies, I have confined myself to a few very minor

M. H. D.

May 1940.

Chapter I
THE REQUIREMENTS OF A THEORY OF VALUE

There are those whose attitude to classical Political Economy is contained in the statement that nothing is to be gained by examination of the elementary blunders of economists a century ago. In so extreme a form as this the attitude is probably rare. But there is a similar, if less impatient, opinion in general currency in academic circles which represents the classical economists as the crude, if brilliant, “primitives” of their art, from which our contemporary sophistication has no more than very minor lessons to learn. While classical Political Economy, it is said, may have posed many questions rightly and yielded certain brilliant guesses at the truth, its technique of analysis was inadequate to furnish logically satisfactory answers, and precision of thought as well as the solution of major problems were hindered by certain elementary confusions. Ricardo’s genius was limited by his adherence to the crude and narrow labour theory of value, and by his “ignorance of the terse language of the differential calculus”. Of Marx have we not been told that, taking as intellectual baggage a few hasty misreadings of Ricardo, he was led by commendable but unbalanced “sympathies with suffering” to positions which maturer reason must inevitably reject? The modern theory of value, product in the main of the final decades of the nineteenth century, divides the
POLITICAL ECONOMY AND CAPITALISM

The economics of to-day from that of a century ago much as Newton's principles divided the work of his successors from pre-Newtonian physics. Ricardo and Smith might be the Pythagoras and Aristotle of economic science; but they were little more than this. So much has this belief become part of the texture of economic thought that to dispute it is to render oneself suspect, either as an ignoramus or as a victim of perverse obsessions which should have no place in scientific judgment.

To-day there is a tendency to maintain that the early economists were not merely immature but were misled into false inquiries. Even the concept of utility, which originally was championed as providing a more adequate answer to the questions which the classics had propounded and as covering a greater generality of cases, is frequently discarded as untenable or otiose. It is a growing fashion to say, with Cassel, that a theory of value is unnecessary and that all the requisite propositions can be enunciated simply in terms of an empirical theory of price. We are told that a theory which represents exchange-relationships as functions of certain human preferences, expressed in human behaviour, is all that a true science of economics should have or needs to have, and that such a theory ipso facto constitutes the only theory of value which can exist when value is properly defined. To the study of economics, says Mises, the study of purposes or ends is as irrelevant as is a study of real costs; and the only theory of value necessary to economic study is an equational system which generalizes the relationships which must prevail between scarce means and given ends in all possible situations.  

1 Die Gemeinwirtschaft, Eng. trans. as Socialism, p. 111 et seq.

REQUIREMENTS OF A THEORY OF VALUE

declared that the search of previous economists for a theory of value, based on concepts either of real cost or of utility, represented an obsession with ethical and political questions; and that only the abandonment of this false search has led to the placing of modern economics on a scientific basis.  

An American writer, addressing himself particularly to Socialists, has said that Marx failed to understand the requirements of a theory of value, and that the modern doctrine, because of its superior objectivity and greater generality, is more properly the economic theory of a socialist economy than the value-theory of Ricardo and Marx.

Clearly, any decision on such a matter, even any understanding of what is involved, requires an answer to the question: What conditions must an adequate theory of value fulfil? Prior even to this question, it may be necessary to answer a further question: What relevance at all has a theory of value to the structure of propositions which constitutes Political Economy?

Croce has said that "a system of economics from which value is omitted is like logic without the concept, ethics without duty, aesthetics without expression". But this analogy is unconvincing unless the purpose of economic inquiry is more precisely defined. Clearly there are a number of propositions about economic events which it seems possible to make without any prior postulation of a principle of value, still less of "adequate conditions" for a theory of value. Moreover, it seems quite possible to make a number of state-

1 G. Myrdal, Das politische Element in der Nationalökonomen Doktrinbildung (1932), Chapters 3 and 4.
2 P. M. Sweezy in Economic Forum, Spring 1935.
3 Benedetto Croce, Historical Materialism and the Economics of Karl Marx, p. 138.
ments about the behaviour of prices without any attention to a priori considerations concerning formal adequacy. Will not the sum of such statements, if consistent and true, itself constitute our theory of value? If a theory of value is conceived of as anything more than this, does it not define itself as something metaphysical, and something irrelevant to the positive inquiries which economists have in hand? Why not argue, not about formal adequacy, but simply about the sort of empirical statements to be made which are true to fact?

What is meant when one speaks of the formal adequacy of a theory in this context is the conditions which it must fulfil if it is to be capable of sustaining corollaries of a certain type of generality. One is referring to the relationship between propositions and the forecasts which can be built upon them. It is a question of the level of knowledge which one's set of statements constitutes—of how far one's knowledge is able to reach. It is a familiar fact that in the history of any branch of scientific knowledge inquiry has started with description and classification of events within a somewhat vague and undemarcated field. On the basis of such classification analysis is able at a later stage to construct certain limited generalizations. But such generalizations may for long remain applicable only to a limited type of situation or to a limited part of the field, and be incapable of sustaining forecasts of that more general type which relate simultaneously to the major events within the system and enable one to determine the configuration of the system as a whole. To achieve the latter requires that generalizations reach a certain degree, not only of comprehensiveness, but of refinement. A certain level of abstraction is required. Such a mile-

stone in the path of knowledge seems to have been provided, for instance, in chemistry by the concept of atomic weight of chemical elements, and in physics by the Newtonian law of gravitation. In Political Economy it seems true to say that prior to the publication of The Wealth of Nations the study of economic questions had not passed beyond its descriptive and classificatory stage: the stage of primitive generalization and of particular inquiries. Only with the work of Adam Smith, and its more rigorous systematization by Ricardo, did Political Economy create that unifying quantitative principle which enabled it to make postulates in terms of the general equilibrium of the economic system—to make deterministic statements about the general relationships which held between the major elements of the system. In Political Economy this unifying principle, or system of general statements cast in quantitative form, consisted of a theory of value.

The question of the adequacy of a theory of value, therefore, means the conditions which such a set of statements must fulfil if it is to be competent to determine the equilibrium or movement of the system as a whole. The purely formal answer to this question is familiar enough. The set of statements must have the form (or be capable of expression in the form) of an equational system in which the number of equations, or known conditions, is equal to the number of unknown variables in the system to be determined—no less and no more. This, however, is purely the formal requirement. To sustain forecasts concerning the real world the theory must have not only form but also content. It must have not only elegance but also "earthiness"; and what is more concretely required when these conditions
are expressed in realistic terms is less familiar, and is, indeed, more frequently than not ignored.

An equational system means that certain relationships are defined which govern, or connect, all the variables within the system. These are the generalizations of which the theory is composed. A formal condition for this equational system to be capable of solution—for the "unknowns" to be "determined", or to have particular values assigned to them, when sufficient data about the situation are known—implies that somewhere in the system certain quantities which have the character of "constants" appear. The system as a whole is, of course, determined both by the relationships which the equations define and by these "constants". But in an important sense it is the "constants" which are the key which furnishes numerical values to the whole. They are the data which, when known in any particular case, enable one to calculate (by means of the equations) the position of all the rest. The significance of a "constant" is not that it is necessarily unchanging and unchangeable,¹ but that it is some quantity which in any particular case can be known independently of any of the other variables in the system. It must be something which can be postulated independently of the rest. It is some quantity brought in, as it were, from outside the system of events to which the set of equations refers; and in an important sense it is on this outside factor that the total situation is made to depend. When it is known, the "shape" and "position" of the situation can be fully calculated, for the reason that the unknowns are all ultimately expressed in terms of their relation to it, whereas it is not in turn expressed as a function of any of them. The quantity represented as a constant is, hence, determining, but not determined, so far as this particular context of events is concerned. For instance, the "gravitational constant" which figures in Newtonian physics expresses the acceleration of a body as (in part) a function of mass; and is valid in so far as one can treat mass as something independent of velocity. If, however (as more recent concepts are suggesting), the mass of a body in turn varies with its velocity, this constant is to that extent inadequate as a basis for calculating changes in velocity.

To take a slice of the real world and to analyse it in this way is equivalent to declaring this slice to be an "isolated system", in the sense that it is connected with the rest of world-happenings only through certain definable links, so that if we know what is happening at these links at any moment, we can calculate what will happen to the rest of this "isolated system". As Professor Whitehead has said, it means "that there are truths respecting this system which require reference only to the remainder of things by way of a uniform systemic scheme of relationships. Thus the conception of an isolated system is not the conception of substantial independence from the remainder of things, but of freedom from casual contingent dependence upon detailed items within the rest of the universe."¹

¹ Prof. Ragnar Frisch has pointed out that when economic theory is expressed in a dynamic, and not in a static, form, dealing with movement as well as equilibrium, certain of these "influencing coefficients" will have the character of "given functions of time". (Review of Economic Studies, Vol. III, No. 2, p. 100.)

and solvable, merely by observing the formal rules and inventing the necessary constants which are required to determine the whole—by assuming certain things to be independent, whether they are in fact so or not. In this way quite a number of theories of value can be devised, with no means of choice between them except their formal elegance. This is an easy, much too easy, game. On the other hand, it is true that in the real world there are no completely “isolated systems”. A law of value, therefore, while it must be subjected to realistic, and not merely formal, criticism, can be expected to be no more than an approximation to reality, capable of sustaining a certain type, but not every type, of forecast, and achieving the highest degree of generality that is consistent with the complexity of the phenomena which one seeks to handle. The ultimate criterion must be the requirements of practice: the type of practical question which one requires to answer, the purpose of the inquiry in hand.

The smaller the degree of generality that one’s questions require, the easier it often is to find a principle which will fit the case. The more particular, and less general, the problem to hand, the greater the number of surrounding conditions which one is justified in assuming to be constant. The problem of determining the result then becomes relatively simple provided one can know enough of the surrounding conditions (indeed, at the extreme of particularity one generally in practice knows too few of the relevant conditions to forecast the result, so that what one may gain in apparent simplicity one more than loses in insufficient knowledge). For instance, if one wishes to determine the price at which fish will sell in a particular market on one particular day, the result is given if only one knows the supply of fish on the spot, the ephemeral desires of housewives and the amount of cash which the latter at the moment have to spend. All of these things can be reasonably treated as independent both of one another and of the price at which the fish is sold. Again (to take a more long-period example) if one is dealing with a particular commodity in isolation from the rest, one is entitled to take the level of wages, of profit and of rent as independent factors, as part of the given data of the problem; and a simple “cost of production” explanation suffices (given conditions of “constant returns”) to determine the result. When, however, one is dealing with the generality of commodities, or even with large groups of commodities, or with a long instead of a short period of time, these simple assumptions break down: what in the isolated particular case one treated as independent factors cannot now be so treated. In this case one is no longer justified in using the level of wages, of profit and rent as determining constants, for the reason that these will be influenced by the values of commodities as well as influencing them. It follows, therefore, that an essential condition of a theory of value is that it must solve the problem of distribution (i.e. determine the price of labour-power, of capital and of land) as well as the problem of commodity-values; and it must do so not only because the former is an essential, indeed major, part of the practical inquiry with which Political Economy is concerned, but because the one cannot be determined without the other. In other words, neither Distribution nor Commodity-Exchange can be properly treated as “isolated systems”. To express it more generally, a principle of value is not adequate which merely expresses
POLITICAL ECONOMY AND CAPITALISM

value in terms of some one or other particular value: the determining constants must express a relationship with some quantity which is not itself a value. This was the reason for which Ricardo rejected mere "supply and demand" explanations, and Marx scorned the "cost of production" theory of J. S. Mill: because such theories sought an explanation of value in terms of quantities which could only be treated as independent in circumstances which precluded the principle from having the requisite generality; in Mill's case in terms of a given level of wages and rate of profit for which he adduced no independent principle of determination.¹ This was the reason too why Ricardo was so concerned to demonstrate the unsuitability of Malthus' attempt to represent the value of commodities in terms of the value of labour-power,² and why Marx so brusquely set aside the relativism of Bailey.³

There is a further requirement which deserves explicit mention if only for the reason that it so frequently passes unobserved. It seems clear, from the nature of its subject-matter and the type of statement which it is required to make, that an economic theory must be quantitative in form. If this is so, it is necessary that the determining relation or relations which figure in the equational system should be capable of expression in terms of quantitative entities in the real world. They must be translatable into actual dimensions which can be factually apprehended and known. This is elementary; but it is not always observed by those who construct principles on purely formal lines. This does not necessarily mean that a theory of value needs to relate the exchange-value of commodities to some single dimension or real entity; although in practice it may work out that this has to be done. But to permit any full quantitative statements to be made, such governing dimensions or entities to which the price-variables are connected must themselves be related in a way that enables them to be reduced to a common term. For instance, if one's equations were to express the price of a commodity as some particular function of two quantities, u and v, one would need to know how u and v were themselves related for one's statements to have any precise meaning. (If we were to know that commodity a, for example, was equal to 5u and 1v, while commodity b was equal to 1u and 5v, it would be impossible, in the absence of further knowledge of the relationship between u and v, to state whether a was greater than b or b was greater than a.) This is simply to say that u and v must be actually capable of numerical expression. For this reason it would not be sufficient for a cost-theory of value to express value as a function, say, both of labour and abstinence, or of quantity of man-power and quantity of nature used in production, unless the theory was able to embrace some further condition or datum which afforded a common

¹ Cf. below, pp. 16 and 137.
² Cf. below, p. 89 f.
³ A writer recently commenting favourably on Bailey has referred to "irrational disquisitions which depend upon a qualitative or monist conception of the nature of exchange-value" and regrets that value-theory "has not been more influenced by the proposition that the objective exchange-values of a commodity are to be found in the other commodities for which it can be exchanged (and not in some different inherent quality)". (Karl Bode, in Economica, Aug. 1935.) This comment would seem to miss the essential issue in the criticism of Bailey. It may be perfectly proper to define exchange-value as "the other commodities for which (a given thing) can be exchanged"; and it was so defined by Ricardo and Marx. But it does not follow that a determinate theory of value can be cast purely in such terms.
term to the two elements of cost. And for this purpose it would not be legitimate to assimilate labour and abstinence or man-power and nature in terms of their market values, since this would be to make the determining constants, or the knowns of the problem, dependent on the unknowns which were to be determined. Similarly, a principle which made value a function of “desire” and “obstacles” would need to include some such condition as the postulate that in equilibrium the differential coefficients of “desire” and “obstacles” (subjectively estimated) were equal. This is evidently the meaning of Marx’s emphasis, in the much misconstrued opening chapter of Das Kapital, on the necessity of finding some uniform quantity, not itself a value, in terms of which the exchange-value of commodities could be expressed; as it is clearly also the explanation of Marx’s statement in a letter to Engels that, in his opinion, the major contribution of his first volume was the separation of labour-power and labour—the former a commodity represented in its value and the latter an objective representation of human activity and an entity capable of independent quantitative expression. This seems to provide the reason why the two major value-theories which have contested the economic field have sought to rest their structure on a quantity which lay outside the system of price-variables, and independent of them: in the one case an objective element in productive activity, in the other case a subjective factor underlying consumption and demand.

This crucial “value-constant” classical Political Economy found in a relationship of cost. The exchange-value of a commodity was defined in the purely relative

1 Marx-Engels Correspondence, pp. 226 and 232.

REQUIREMENTS OF A THEORY OF VALUE

sense of the amount of other commodities for which it was customarily exchanged. But a determinate solution for this system of exchange-ratios was sought in the principle that these ratios were governed ultimately by the quantity of labour required (in a given state of society and of technique) to produce the commodities in question. It was this solution which constituted the famous labour-theory of value. Prior to Ricardo this principle was not enunciated in any complete or clear-cut form. Frequently, indeed, it was formulated obscurely, and even ambiguously; Adam Smith having referred both to the amount of labour and also to the value of labour used in production.1 As used by Ricardo and Marx the conception of labour was an objective one; labour being conceived as the expenditure of a given quantum of human energy; even though it was later to be translated into subjective terms as a mental “sacrifice” or psychic “pain” involved in work. Viewed objectively in this way, the determining relation was a technical one, and not a value-relation. In any given technical situation it would be a given factor, synonymous with the degree of labour-productivity, and independent of the value of labour-power (i.e. the wage-level). Moreover, it was a

1 For instance: value “is equal to the quantity of labour which it enables him to purchase or command”; and “the real price of everything, what everything costs to the man who wants to acquire it, is the toil and trouble of acquiring it”. (Wealth of Nations (Ed. 1826), pp. 34-5.) Ricardo commenting on this says that Adam Smith sometimes speaks “not (of) the quantity of labour bestowed on the production of any object, but the quantity which it can command in the market: as if those were two equivalent expressions, and as if because a man’s labour had become doubly efficient he would necessarily receive twice the former quantity in exchange for it”. (Principles, p. 6.) In Letters to Malthus (Ed. Bonar, p. 233) we find Ricardo writing: “You say a commodity is dear because it will command a great quantity of labour; I say it is only dear when a great quantity has been bestowed on its production.”
relation capable of being expressed in terms of "greater" or "less". Given conditions of "constant returns" it was independent also of demand: the productivity of labour in terms of commodity $a$ and commodity $b$ would remain unaffected whether much of $a$ was demanded and little of $b$, or much of $b$ and little of $a$.

This principle of the identity of value-ratios with labour-ratios rested on conditions which defined the nature of the dominant tendencies in an exchange-society. In an exchange-society characterized by the division of labour, by competition and the mobility of resources, competition would ensure that labour was distributed between the various lines of production in such a way that these ratios were equal. It depended, therefore, on a particular conception of the equilibrium of such a society; and it depended on the conception of the level of wages as being uniform for labour of uniform quality, though not on that level being constant. But the statement was subject to two important qualifications. First, with respect to land, it held true only under marginal conditions of production, or for production under the least favourable natural conditions being utilized at the time. This indeed must be so in the case of any form of cost-theory. Secondly, it implied the important simplifying assumption that the ratio of labour to capital employed in different lines of production was everywhere equal: what Marx termed equality in the "organic composition of capital" or what later economists would have called uniformity of the "technical coefficients". This assumption meant that value was only an abstract approximation to concrete exchange-values. That it should be so has generally been held to be fatal to the theory; and was the onus of Böhm-Bawerk's 

requirements of a theory of value

criticism of Marx. But all abstractions remain only approximations to reality: this is their essential nature; and it is no criticism of a theory of value merely to say that this is so. Whether such assumptions are permissible or no is a matter of the type of question, the nature of the problem, with which the principle is designed to deal. The criticism only becomes valid if it shows that the implied assumptions preclude the generalization from sustaining those corollaries which it is employed to sustain. It is frequently said that Ricardo, at least in the first edition of his Principles, did not appreciate the importance of his implied assumption. It has even been suggested in the case of Marx that he did not notice the crucial qualification, and that he then wrote his third volume to evade a difficulty which he had not previously observed; with the result that he produced a substitute theory which was indistinguishable from the "cost of production" theory of Mill. But these are rash and ill-founded presumptions. It is altogether more reasonable to suppose that Ricardo gave cursory mention to the qualifying assumption in his first edition, not because he did not appreciate it, but because he considered it unimportant for the purpose of the main inquiry he had in hand. It is too seldom remembered to-day that the concern of classical Political Economy was with what one may term the "macroscopic" problems of economic society, and only very secondarily with

1 That this view is incorrect is sufficiently shown by the fact that in his Misère de la Philosophie, published many years before the first volume of Kapital, Marx pointed out that a rise of wages would have a different effect on different industries, causing the price of goods to rise in some and actually to fall in others owing to the fact that "the relation of manual labour to fixed capital is not the same in different industries". Cf. below, p. 73.
“microscopic” problems, in the shape of the movements of particular commodity prices. Ricardo, at any rate, did not pretend that his principle was adequate to determine the latter. But Ricardo, more than others, was first and foremost concerned with problems of distribution—with the movement of the three great revenues of society, rent, profit and wages—and with commodity-values in relation to this.\(^1\) Hence he was concerned not with particular commodity-values, but with broad classes of commodities, such as agricultural produce and manufactures, or with commodities on the one side and money on the other. To this type of problem he considered his approximation an adequate one, and affording the degree of generality which the scale of his problem required. So it was with Marx in the scope of the problem so far as it was covered in his volume I. When he approached the problem of particular commodity-prices in his volume III by means of a further approximation in the shape of his theory of the “price of production”, it had this essential difference from the cost of production theory of Mill. Marx had criticized the latter because it had left “cost of production” itself unexplained: it had described cost of production as consisting in the wages paid for the labour used plus an average rate of profit, without affording any explanation of the determination of the rate of profit itself.\(^2\) In Marx’s theory of the “price of production” profit figured as a quantity determined in terms

\(^1\) Ricardo wrote to Malthus: “Political Economy you think is an inquiry into the nature and causes of wealth; I think it should rather be called an inquiry into the laws which determine the division of the produce of industry among the classes which concur in its formation.” (Letters to Malthus, p. 175.) In the Preface to his Principles he wrote: “To determine the laws which regulate this distribution, is the principal problem in Political Economy.”

\(^2\) Cf. below, p. 137.

of the law of the first approximation, as presented in volume I, profit depending on the surplus or difference between the value of labour-power and the value of finished commodities. In this crucial respect the second approximation depended on the first (as, for example, do the successive approximations of the law of projectiles in physics), and was not a contradiction of it in its essentials. The solution of the “microscopic” problem was conceived as dependent on the solution of the “macroscopic” problem; microscopic phenomena as ruled (with appropriate modifications) by the macroscopic law. The theory of gravitation is not rendered absurd and useless merely because it requires substantial modification to explain why airships and aeroplanes can rise in the air.

The essential importance of this labour-principle was that it could be employed to determine the value of labour-power itself (under certain given conditions). The key question as both Ricardo and Marx saw it was: What determined the difference between this and the value of commodities in general? For instance, if wages rose, would this difference be narrowed, or would the price of commodities rise pari passu? On this difference profit and in turn the rate of profit depended. If this could be determined, then, not only was a key afforded to the problem of distribution—to the variation of class revenues—but the constituent elements of Mill’s “cost of production” and Marx’s “price of production” were also determined.

This, it may be said, is still to approach the matter in a formal way. Any principle may be made formally consistent at a sufficient level of abstraction; but that is not to say that it has realistic worth. Why should a
cost-theory of value based on labour, which is admittedly only one of the factors in wealth-production, have a superior claim to any alternative cost-theory that one might devise: for instance, a principle which took capital or land as the determining quantity? To concentrate on labour alone is, surely, arbitrary dogmatism: it is to imply the sequel in this initial assumption, without affording any independent ground for believing the sequel to be true? This, it is true, is ultimately a practical and not a formal question. The truth of an economic principle must lie in whether, in making abstraction of certain aspects of the problem, it does so in order to focus upon features which are in fact crucial and fundamental features of that slice of the real world to which the theory is intended to apply.

In the case of land or capital clearly there were serious practical objections to taking them as a basis: difficulties which would have exceeded any of those which are charged against the labour-theory. Classical Political Economy was already focussing attention on the non-homogeneous character of land, and was using the differences in the quality of land, along with its scarcity, as basis of the classical theory of rent. Acres are more dissimilar than man-hours of labour. In the case of capital there was the more crucial objection that it is itself a value, depending upon other values, in particular on the profit to be earned. How, then, could this quantity be used as basis for a determinate explanation of profit? If, on the other hand, the term were to be taken as designating, not a value, but the concrete things—machines and structures, etc.—which capital-values represent, then these could only have quantitative significance in this context as "stored-up labour". As for a combination of these factors to form a composite cost-principle: there is the additional objection that there is no discoverable common term by which these diverse quantities could have been related; and such a principle would have remained vitiated by an essential dualism. How, for instance, even if acres could be taken as homogeneous, could one relate man-hours and acres and capital-units?

But there is a practical reason which is more decisive than this. That labour constitutes a cost in a unique sense was, of course, an assumption. But it was an assumption born of a particular view of what was the essence of the economic problem. As such it was not an arbitrary definition, but an attempt to depict the essential shape of real events; and by its adequacy in doing this it must ultimately be judged. Any theory of value necessarily constitutes an implicit definition of the general shape and character of the terrain which it has decided to call "economic". The crux of the economic problem, as this theory represented it, and as it had been traditionally viewed, lay in the struggle of man with nature to wrest a livelihood for himself under various forms of production at various stages of history. As Petty had said, labour is the father, nature the mother of wealth. To this relationship the contrast between human activity and the processes of nature was fundamental; human activity being endowed with primary significance as the initiator and begetter of change and increase. If when we speak of the economic problem we refer, not to its formal character, but to its real content, and intend to indicate some element common to the various forms which the economic struggle has taken at different stages of history, it is hard to see what statement is possible which does not include this ever-changing relationship be-
POLITICAL ECONOMY AND CAPITALISM

tween labour and nature, and the fundamental contrast between these two factors, as a crucial element. And if we seek to give any quantitative expression to this relationship—to man’s mastery over nature—it is hard to see what simple notion one can use other than the expenditure of human energies requisite (in a given state of society) to produce a certain result. Among the earliest distinctions in Political Economy was that between “riches” and “value”; the crux of this contrast being that, while nature as well as human activity was productive of wealth or riches, value, being a social relationship, was an attribute of human activity and not of nature. The essence of value, in other words, by contrast with riches, was conceived to be cost, and the essence of cost to lie in labour, by contrast with nature. Labour, conceived objectively as the output of human energy, was the measure and the essence of Ricardo’s “difficulty or facility of production”. This contrast between labour and nature, conceived as parallel to the contrast between value and riches, was clearly a primary notion, to which the consideration that man is a tool-using animal and manufactures instruments to increase his power over natural forces (whence follows the distinction between labour devoted to the creation of instruments and labour devoted to their use) was secondary. All this is elementary enough. At the same time, it would seem to be sufficiently fundamental for any value-concept which ignores these simple notions to have very limited power to sustain pronouncements about essential processes in the real world.

Whether human labour is a cost in a unique sense is, therefore, a practical question, for judgment, not for logic, to decide. True, human activity is itself differenti-

REQUIREMENTS OF A THEORY OF VALUE

ated as labour which embodies itself in tools and instruments and labour which is devoted to the use of these instruments in the direct and current production of commodities. But while the making of such instruments and their subsequent maintenance and repair represents a cost in this crucial sense, there is no comparable cost in the mere use (as distinct from using-up) of these instruments, or in the mere postponement of their use in time.¹ As Böhm-Bawerk himself has said (in criticizing the use-theory of Interest): “it is by the passing of available energy into work that the ‘use’ of goods is obtained by man”; there is no other sense of “use” than the “putting forth of physical powers”, or energy; and “for any ‘use of goods’ other than their natural material services there is no room either in the world of fact or in the world of logical ideas”.² Hence, in basing itself on this simple but fundamental characterization of economic activity, the labour-principle was not merely providing a formal concept: it was making an important qualitative statement about the nature of the economic problem (a qualitative statement often confused with an ethical one), and imparting the implications of this statement to its corollaries. So also, indeed, was the utility-theory; although the qualitative statement it made was of a quite different order, being concerned, not with relations of production, but with the relation of commodities to the psychology of consumers. In expressing value as some function of utility it was characterizing the equilibrium which it defined as an

¹ The question of “real cost” viewed subjectively as something psychological, and hence of so-called “abstinence”, is a different matter, and is considered separately below.

² Capital and Interest (Ed. 1890), pp. 220 and 231.
equilibrium of a specific kind, related in a certain way to a "maximum" of utility (a statement which has independent meaning quite apart from any moral or ethical postulate). The statement which the labour-theory implied was that exchange-values bore a certain relation to the output and using-up of human energies, and in doing so provided a term which gave some meaning to the distinction between a gross and a net product and to the concept of surplus, and provided a criterion for differentiating one type of income from another. Thus it is possible in these terms to distinguish exchange-relationships which represent a passing of value-equivalents from those which do not: for instance, the sale of labour-power representing the exchange of income against human energies expended in production, contrasted with the sale of a property-right over the use of scarce resources, representing no such passing of equivalents and constituting an income by no means "necessary" in the fundamental sense in which a subsistence-income to labour is necessary or the return to a machine of a value equal to what the operation of that machine has used up (in a physical sense). And if so radical a distinction as this exists, it must surely be of crucial importance in determining the behaviour of different income-classes and the reaction of economic changes on them? Without some such value-conception, fundamental distinctions of this kind can have no place in economic theory. With a different value-principle they disappear; and (as will later be seen) in the modern subjective theory of value the very concept of surplus, contrasted with cost, loses any essential meaning, and a criterion for any fundamental distinction between different class incomes is lacking.

Requirements of a Theory of Value

Ricardo, it may be, only dimly sensed the requirements of a value-theory. At least, there is no evidence that he based it on any developed methodology. Yet it seems clear that in essentials the instinct of his robustly analytical mind was right. There is little doubt, however, that Marx was more fully alive to the methodological problem than his contemporaries and most of his successors. His analysis of capitalist society was approached from the standpoint of a general philosophy of history, by which it can be said that the descriptive and classificatory emphasis of the historical school and the analytical and quantitative emphasis of abstract Political Economy were combined. More essentially even than with Ricardo his concern was with the movements of the main class revenues of society, as key to "the laws of motion of capitalist society" which his analysis was primarily designed to reveal. To this inquiry he considered his value-principle fully adequate as well as necessary. That both he and Engels were well aware of the limitations as well as the requirements of the abstractions he used is suggested by the following passages, in which their mutual theory of the rôle of abstraction in thought and practice is revealed. "The formulation in thought of an exact picture of the world system in which we live is impossible for us and will always remain impossible. . . . Mankind therefore finds itself faced with a contradiction; on the one hand, it has to gain an exhaustive knowledge of the world system in all its inter-relations; and on the other hand, because of the nature both of man and of the world system, this task can never be completely fulfilled. . . . Each mental image is and remains in actual fact limited, objectively through the historical stage and subjectively
through the physical and mental constitution of its maker. . . . Pure mathematics deals with the space forms and quantity relations of the real world—that is, with material which is very real indeed. In order to make it possible to investigate these forms and relations in their pure state, it is necessary to abstract them entirely from their content, to put the content aside as irrelevant."

In a letter to Conrad Schmidt discussing specifically Marx's theory of value, Engels wrote:—"The conception of a thing and its reality run side by side like two asymptotes, always approaching each other yet never meeting. This difference between the two is the very difference which prevents the concept from being directly and immediately reality and reality from being immediately its own concept. Still . . . it (the concept) is something more than a fiction, unless you are going to declare all the results of thought fictions."

But it was not many years after the publication of *Das Kapital* before a rival value-theory was to rise and with remarkably little resistance to conquer the field. This was the utility-theory, which seems to have germinated simultaneously in several minds, being enunciated alike by Jevons in this country and by Menger and Wieser and Böhm-Bawerk of the Austrian School. The new theory had the attraction of ingenuity and elegance as well as of novelty (although, like most ideas, it was not unforeshadowed); and owed its invention in part to the use of conceptions of the differential calculus, with its emphasis on increments of a quantity and rates of increment. It seems clear that Böhm-Bawerk at any rate appreciated the problem which the classical theory had sought to solve. While he is sparing, almost niggardly, in paying tribute to Marx even for formulating the question accurately, there is every indication that he framed his theory directly to provide a substitute answer to the questions which Marx had posed. It is, at least, a remarkable fact that within ten years of the appearance of the first volume of *Kapital*, not only had the rival utility-principle been enunciated independently by a number of writers, but the new principle was finding a receptivity to its acceptance such as very few ideas of similar novelty can ever have met. If only by the effect of negation, the influence of Marx on the economic theory of the nineteenth century would appear to have been much more profound than it is fashionable to admit.

Utility, as something individual and subjective, was the quantity to which value was anchored by this new theory. Value was expressed as a function, not of utility treated as an aggregate, but of the increment of utility at the margin of consumption. In place of an objective cost-relation, lying behind production, a subjective relation between commodities and individual states of consciousness was taken as the determining constant in the equational system. As Professor Pigou has said, the "economic constants" are conceived as "depending upon human consciousness". By this means, it was claimed, a greater degree of generality was attained than had been possible for classical Political Economy. It was applicable whatever the technical combinations of factors of production might be; and so was unrestricted by assumptions about the "organic composition of capital". For this reason it sufficed to determine simultaneously and completely both the "macroscopic"

---

2 *Marx-Engels Correspondence*, p. 527.

---

1 *Economics of Welfare*, p. 9.
and the "microscopic" configuration of economic society. Many proceeded to claim that, since the fundamental instincts of human consciousness remained the same, the principle would hold for any type of economic society. To academic economists it came, as Wicksell has described it, as something of a revelation. At the same time it implied certain limiting assumptions of its own, quite different in character and significance from those surrounding the classical principle. In particular, since states of human consciousness could only find expression in value-terms, usually in terms of money, abstraction had to be made of the different income-positions of different individuals. Consumers had to be treated in abstraction from their character as producers, and vice versa. The problem of value had to be treated as though it could be solved independently of the effects on demand of the distribution of income: otherwise a demand-schedule could not be regarded solely as a function of utility and as independent of the value of commodities and of productive-agents. This has led some writers to maintain that the principle is only fully applicable to a society of equal incomes—in other words, to a society where there is no problem of distribution left to explain. And it led Wieser to define "natural value" as the exchange-ratios which would rule in a communist society. Further, by taking as its foundation a fact of individual consciousness, it not only separated his attributes qua consumer from his attributes qua producer and income receiver, but made abstraction of all social influences upon individual character—all reactions of the society of which he was part and the economic relations into which he entered on his desires and aversions, his pleasures and pains. The significance of this abstraction will be more

fully discussed later; but it was clearly inevitable that the corollaries of such a principle should have an individualist bias, since an individualist description of human society was contained in its assumptions. Whether such a description is justified or not is not a formal or logical question but a question of fact.

There has been some dispute as to whether utility, so defined, can properly be treated as a quantity at all. Into this dispute we need hardly enter, since it seems to have little importance for the issue in hand. The truth may well be that utility, though a mental fact, can be defined in such a way as to give it what Kant termed "intensive magnitude"—of enabling it to be conceived in terms of "greater or less".\footnote{Cf. an article by O. Lange in Review of Econ. Studies, June 1934, also a reply to it, ibid., October 1934, and W. E. Armstrong in The Economic Journal, September 1939.} Whether, when so defined, it is something which exists is another matter. But for the present the question of its existence as an entity need not concern us. If existent it can only have economic significance when objectively expressed through an individual's behaviour on a market—in a concrete act of purchase or sale. The immediate mental activity behind such an act of purchase is sometimes referred to as a "desire" (behaviourists would term it, presumably, a behaviour-reaction) to distinguish it from the more fundamental fact of consciousness to which the term satisfaction or utility is applied. Here for long the subjective theory of value has continued to rest on a very slender pediment: so slender that Marshall hid it in a footnote. That it does so rest seems to have remained surprisingly unnoticed by many. This premise consists in the identification of "desire" with "satisfaction". As Marshall said: "We fall back on the
measurement which economics supplies of the motive, or moving force to action, and we make it serve with all its faults, both for the desires which prompt activity and for the satisfactions that result from them."\(^1\) Professor Pigou has defended this identification as a sufficient approximation and as true of "most commodities, especially those of wide consumption that are required as articles of food and clothing".\(^2\) Without this simple assumption there is no ground for expressing demand as a function of utility; and hence no ground for connecting value-phenomena with such a quantity at all. How far they can be regarded as connected even at a low level of approximation will be part of the criticism of a later chapter.

As has been said, it is increasingly fashionable to-day to discard utility as either a shadowy or a superfluous entity. "Satisfaction" and other such deeper mental states are thrown to psychology or to ethics, and foundation-material sought in the sterner stuff of desires, empirical preference-scales and behaviour-reactions. Prices are the resultant of certain schedules of demand-prices—of certain empirically observed market-offers; and economics as a science of "catallactics" is presented as the last word of amoral purity and scientific objectivity. But is this escape a legitimate mode of escape? Is it an escape consistent with the requirements of a theory of value? On the purely formal plane, of course, the equations can be made adequate enough: the necessary "constants" can be defined as "constants"; and there is the logical end of the matter. But whether such equations, when given realistic interpretation, can con-

\(^1\) *Principles*, pp. 62-3.
\(^2\) *Economics of Welfare*, First Ed., p. 25.

sistently sustain the corollaries they are required to do is a different question. What quantity, independent of value-movements, have we left on which to rest our system? If demand is not to be a function of utility, by what is it determined? By empirically observed preference-scales; which have a suspicious appearance of being the same entity under a different title! These preference-scales are not necessarily grounded in either any instinct or any basic rationality. What warrant have we to assume them to be creators rather than the creatures of market-price? Is not much of the objection to mere "supply and demand" explanations appropriate also here? Is it not perilously similar to an attempt to frame the "gravitational constant" without the concept of mass, substituting, let us say, some such entity as the "attractional propensity" of an object in its stead? If this criticism is valid, then we are left with a formal technique, which can be used to explore the implications of certain definitions and to furnish a descriptive account and a classification of certain types of value-relationships; which can postulate realistic tendencies and make realistic prognoses in the case of certain particular problems treated separately and in isolation, but with respect to the "macroscopic" phenomena of economic society is impotent to pronounce judgment. An economic law is not merely a conditional sentence stating that if a situation be defined in this or that way it will necessarily have this or that attribute. Such is no more than tautology. As Cannan has said (in discussing the "law of diminishing returns")\(^1\) an economic law or tendency must state the probability of some actual course of events occurring. And it is to permit statements of this kind to be made that a law of

\(^1\) *Theories of Production and Distribution*, p. 168 et seq.
value must be adequate. Otherwise, whatever its formal
elegance, it is not worthy of the name.

We have mentioned that there is a crucial respect in
which any type of demand-theory, whether it be well or
ill-grounded, seems necessarily to be inferior to a cost-
principle as a basis of interpretation of economic events.
It is that only in terms of the latter can the concept of
surplus acquire a meaning; while without it (or something
akin to it) no criterion of differentiation between class-
inecomes seems able to exist. The reason for this is that
a cost-principle essentially makes some statement con-
cerning the nature of productive activities—of the
relation between men in the activity of production—
whereas a demand-theory is a generalization about con-
sumption and exchange—about the relation between
men *qua* consumers and the commodities which result
from production. Any question of a type which includes
the concept of surplus is a question about the connection
between a given income and productive activity, and
hence *ipso facto* involves a concept of cost; cost and
surplus here figuring as correlative terms. A principle
which interprets value purely in terms of demand can
define the productive "contribution" of a person or a
class only according to the value of what *eventuates*: it
cannot define this contribution according to the activity
or process in which the contribution *originates*, since it
includes no statement about any productive relationship
of this kind. Hence any participant in production which
acquires a price—any agent which figures on the market
at all—must *ipso facto* have made a "contribution", this
being synonymous with the value which consumers have
directly or indirectly placed upon his services. Not
merely the labour of weavers, the wool fed to the looms,

the wear and tear of machines, but also the loan of scarce
resources represents value contributed to the productive
process. Even such things as "goodwill" and time and
risk-bearing may represent value-contributions; since
the latter consist in the sum total of conditions which
are both essential to production and are scarce. If a
thing acquires a price, it *ipso facto* performs a service;
the sum total of values contributed must (at least, under
competitive conditions) equal the value of the result;
and the whole inquiry concerning "surplus-value"
becomes meaningless.

But the inquiry becomes meaningless because of the
form in which the problem is stated, and not because it
does not refer to something actual in the real world.
Indeed the concepts of cost and of surplus are not
merely abstract categories, product of a certain mode of
thought, but are among the most fundamental as well
as the earliest in economic inquiry, which we meet
with even when Political Economy was at its purely
descriptive stage. So long as cost and gross product
could both be represented in terms of the same thing,
the concept was easily expressed without the intervention
of a value-theory. On a farm a certain amount of corn
is fed each year to the sustenance of men and of animals,
and a certain amount of seed corn is placed in the ground.
At the end of the season the harvest of corn exceeds
what has been used up to produce it. The difference
figures as the surplus, or net produce, on which the
Physiocrats placed such emphasis as the life-blood of
society and the determinant of the level of civilization
which a given society could attain. But when it is wool
that is fed to the looms and flour to the weavers, and cloth
which is the result, the difference between the original
and the final quantities can only be expressed in terms of value. The question immediately arises as to why such a value-difference should exist at all and, if it persists, what causes it to do so. Why should not competition either raise the original values to equal the final values, or lower the final value to equal the original value of the constituent elements?  

1 This problem of the creation and of the disposal of this surplus-value was a central one for classical Political Economy, as indeed it must be for any theory of distribution. The significance of the labour-principle of value was that it gave a quantitative meaning to the original value-contribution made to the productive process in a sense which enabled it to be different from the final value of the product. As a cost-principle it evaluates a productive contribution in terms of the physical using-up of something which has to be replaced by human activity. If the labour or activity required to replace what is used up is less than the labour embodied in the total product, a surplus emerges. The crucial question is then this: Is this surplus distributed in proportion to the productive contribution of the participants in production (in proportion to the share of each in the cost involved), or is some class which has made little or no productive contribution successful in annexing it, and if so, how and why? This is no ethical inquiry alien to the realm of rigorous scientific definition. Yet it is an inquiry which modern economics has successfully eliminated. It will

1 Böhm-Bawerk, for example, posed the question in this way in discussing the reason for a "surplus-value" on capital: "Why should the pressure of competition on the capitalist's share never be so strong as to press down its value to the value of the capital itself? . . . If this were to happen, the surplus-value, and with it the interest, would . . . disappear." (Op. cit., p. 171.)