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'*Value* will not help. It has no operational content. It is just a word.' Thus ends Joan Robinson's second lecture on economic philosophy entitled 'The Classics: Value'. Earlier Joan Robinson had neatly dismissed Marx's use of the labour theory of value as metaphysical:

On this plane the whole argument appears to be metaphysical; it provides a typical example of the way metaphysical ideas operate. Logically it is a mere rigmarole of words, but for Marx it was a flood of illumination and for latter-day Marxists, a source of inspiration (Robinson, 1964, p. 39).

It is an easy guess that one of the 'latter-day Marxists' referred to was Maurice Dobb, who had dealt at some length with the same question in his *Political Economy and Capitalism* (Dobb, 1937). Dobb had begun his inquiry with the question (p. 3): 'What relevance at all has a theory of value to the structure of propositions which constitutes Political Economy?' It is, in general, to that question, and in particular, to Dobb's treatment of it, that this paper is addressed.

1. Alternative approaches

I shall argue that there are at least three distinct non-metaphysical interpretations of the labour theory of value, viz. (i) descriptive, (ii) predictive and (iii) normative. Following Maurice Dobb, I shall start from the descriptive interpretation, relating it to its predictive and normative interests.

Joan Robinson, on the other hand, concentrates on the last two of these three interpretations, and after rejecting the predictive and normative views of the labour theory, ends up with the conviction that it must be metaphysical.

The predictive interpretation that she explores concentrates on the theory of value as a theory of prices. But she argues that it is not much good as a theory of prices:

If we define *value* as the labour-time required to produce a commodity and then advance the proposition that commodities normally exchange at prices proportional to their *values* in this sense, then we have to reduce it from a metaphysical statement to a hypothesis. But it is a hypothesis that it would be a waste of time to test, for we know in advance, and Marx also knows, that it is not accurate (Robinson, 1964, p. 38).

Joan Robinson also considers the interpretation that the theory may be asserting that labour has the right to the whole product. It is this interpretation that Gunnar

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Myrdal (1953) has analysed in his pursuit of 'the political element' in economic theory, with profit being viewed as 'an illegitimate "exploitation" ', a term having—as Myrdal puts it—'powerful effects through Marx's propaganda' (p. 110). But Joan Robinson rejects this interpretation as the primary one.

Marx's use of the labour theory of *value* was by no means the simple claim that the labourer has a right to the produce of his labour. On the contrary, his claim is that the theory of *value* is precisely what accounts for exploitation (Robinson, 1964, p. 36).

This brings us to the third and the last possibility in Joan Robinson's multiple-choice examination. Marx's concept of 'value' is a 'metaphysical idea', and Marx's use of it 'logically . . . a mere rigmarole of words' (p. 39). What *is* a metaphysical proposition? Joan Robinson explains:

The hallmark of a metaphysical proposition is that it is not capable of being tested. We cannot say in what respect the world would be different if it were not true . . . Adopting Professor Popper's criterion for propositions that belong to the empirical sciences, that they are capable of being falsified by evidence, it is not a scientific proposition (Robinson, 1964, pp. 8–9).

But, happily, all is not lost, since Joan Robinson sees merit in metaphysics:

Yet metaphysical statements are not without content. They express a point of view and formulate feelings which are a guide to conduct . . . Metaphysical propositions also provide a quarry from which hypotheses can be drawn. They do not belong to the realm of science and yet they are necessary to it. Without them we would not know what it is that we want to know (Robinson, 1964, p. 9).

I believe Joan Robinson's assessment of the Marxian theory of value well reflects the position of many economists who are sympathetic to Marx but find his labour theory of value to be an albatross round the neck. As Michio Morishima (1973), who pursues several predictive interpretations, puts it (after demonstrating the limitations of the labour theory as a theory of prices or of distribution or even as 'a two-department macro-dynamic theory'):

One of the conclusions of this book is that Marx's economics can acquire citizenship in contemporary economic theory by detaching it from its root, the labour theory of value, and grafting it onto the von Neumann stock so as to produce the Marx–von Neumann flower! (Morishima, 1973, p. 194).

While the predictive questions that Ian Steedman (1977) pursues are not all the same as those investigated by Joan Robinson and Michio Morishima, his conclusion is similar:

Marx's value reasoning—hardly a peripheral aspect of his work—must therefore be abandoned, in the interest of developing a coherent materialist theory of capitalism (Steedman, 1977, p. 207).

2. Labour theory as descriptive theory

Any description relies on factual statements. But it also involves a selection from the set of factual statements that can be made pertaining to the phenomenon in question: some facts are chosen and others ignored. The selection process is part of the exercise of description, and not a 'metaphysical' exercise. (A boy I knew in school complained after seeing his first movie, aged ten: 'What beats me is that they never seem to go to the toilet') The appropriateness of a description has to be judged in terms of the selection criteria used in it. In examining the labour theory of value, we have to ask: (i) What is being described? (ii) What are the selection criteria?

There are, of course, very many versions of the labour theory of value. As interpreted by Maurice Dobb (1937, 1973), it is the *activity* of production that is being described, and the selection criterion is focused on 'personal participation'. This leads also to a description of the process of *exchange*—not primarily in terms of relative prices—but in terms of relations between persons through personal participation in the production of commodities that are being exchanged. This is in line with Marx's characterisation of 'value' as 'a relation between persons expressed as a relation between things' (Marx, 1887, p. 45). Exchange of commodities is seen as 'a definite social relation between men, that assumes, in their eyes, the fantastic form of a relation between things' (Marx, 1887, p. 43).

Such an approach serves also to explain the place assigned to labour as human productive activity: why it was natural for Marx to place it in the very centre of the stage. Implied in this, indeed, is a virtual definition of productive *activity*, and correlatively of appropriation or exploitation, in the sense of the annexation or receipt of part of the fruits of production by those who have contributed no productive activity and lack any personal participation in the process of production *per se*. As such 'exploitation' is neither something 'metaphysical' nor simply an ethical judgement (still less 'just a noise') as has sometimes been depicted: it is a factual description of a socio-economic relationship, as much as is Marc Bloch's apt characterisation of Feudalism as a system where feudal lords 'lived on labour of other men' (Dobb, 1973, p. 145).

What is the purpose of this descriptive interpretation of the labour theory of value? Part of the purpose is undoubtedly *predictive*—the possibility of using the 'law of value' to predict prices, wages and profits by using value magnitudes. Another purpose is clearly normative—personal participation can be seen as the basis of entitlement of fruits of production. These two approaches will be critically examined in sections 3 and 4, respectively. But in addition Maurice Dobb saw in the labour theory of value a description of production that focused on human beings—giving a quantitative expression to human effort 'in the struggle of man with nature to wrest a livelihood' (Marx, 1937, p. 19). This human focus is not an unnatural one; as Harry Braverman (1974) puts it: 'for humans in society, labour power is a special category, separate and inexchangeable with any other, *simply because it is human*' (p. 51). Marc Bloch's characterisation of the source of feudal lords' living (quoted above) similarly makes a fundamental distinction between personal participation and ownership of non-human resources used in production. The object is not to pooh-pooh the fertility of land, or of produced means of production, but to refuse to give the same status to the ownership of these resources in describing participation in production as personal participation through labour. The distinction is, of course, far from 'metaphysical'.

The point of such descriptions can be illustrated with a somewhat different but related distinction captured in descriptive statements of the type: 'Michelangelo made this statue of David.' Note that the description is remarkably selective on facts: it says nothing about the tools and instruments used in making the statue; it is silent on the ownership of the huge block of marble that Michelangelo used; it eschews the patronage that Michelangelo received. The description is not based on the assumption that Michelangelo would have been able to make the statue even without these other things, but on the contrast between the role of Michelangelo in the making of the statue and the role of these other things. In going from all possible factual statements about a phenomenon to a pithy description, there is, in a sense, a loss of information, but there is also, in another sense, a *gain* of focus. The purely descriptive interpretation of the labour theory of value has much to do with such a deliberate choice of focus.

The use of the descriptive approach should not, however, be taken to imply the assertion that there are no ambiguities in the description. Alternative descriptions of the same phenomenon are possible even within the same general descriptive approach. An important distinction is that between *actual* labour time and the 'socially necessary' labour time. The former is purely factual, while the latter involves 'counter-factuals': the labour that *would have been* 'required to produce an article under the normal conditions of production, and with the average degree of skill and intensity prevalent at the time' (Marx, 1887, p. 6). Both the formulae give a special place to 'personal participation', but in somewhat different ways. The former describes actual participation, while the latter is concerned with the extent of participation that would, under 'normal' conditions in that society, be necessary. To arrive at precisely one of these two formulae, the selection criteria have to incorporate not merely the focus on personal participation but also a choice between 'actuality' and 'normality'.

Other differences arise from such sources as the treatment of *heterogeneous* labour, the use of *indirect* labour at different points of time, and the accounting of *joint* production and *fixed* capital. Alternative conventions have been proposed to deal with these issues in constructing value magnitudes from primary data.† Even within the same approach of describing production in terms of personal participation, these alternative conventions would lead to somewhat different descriptions. It is not the purpose of this paper to attempt to assess these alternative conventions, but I should note that the conventions have to be judged in terms of the motivation of the exercise of description in the particular case in question.

3. Description and prediction

In his study of the 'requirements of a theory of value', Maurice Dobb came up with a truly formidable list of requirements. One of them would appear to be the determination of distribution as well as commodity-exchange rates:

> an essential condition of a theory of value is that it must solve the problem of distribution (i.e. the determination of 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 (Dobb, 1937, p. 9).

How would the labour theory of value solve the problems of determination of prices and distribution? The simplest case is, of course, the one studied in Volume I of *Capital* with equal 'organic composition of capital' in a model without fixed capital and joint production. This model makes prices proportional to values, and the price of labour-power is also given by the labour-content of its consumption. But Marx had himself noted that this was not a very good predictive model. It is sometimes asserted that Marx came to this recognition very late—only while writing Volume III of *Capital*—but as a matter of fact as early as 1847 he had already noted the difference in his critique of Proudhon (see Marx, 1847). In fact Marx, in his turn, had himself speculated whether Ricardo knew this, and had come to the conclusion that Ricardo had 'doubtlessly realised' this (see Marx, 1894, p. 179). It was not really a very difficult thing to realise.

† See the recent controversy, for example, on the reduction of complex to simple labour involving Bródy (1970), Roncaglia (1974), Rowthorn (1974A), Tortajada (1974), Akyüz (1976) and Steedman (1977).

But that being the case what was the point of devoting so much effort to this particular model? Dobb discusses the problem at great length—as have others (see especially Meek, 1956)—but I shall separate out here for comment only two of Dobb's arguments.†

First, since in this special case all commodities exchange at their values (as defined by the labour theory), and this applies to labour-power as well, there arises the question as to whether there could be exploitation and profits in this case also:

The specifically *economic* problem consisted not in proving this [the capitalist form of exploitation], but in *reconciling* it with the law of value: in explaining how this could happen in the economists' realm of competition and 'unseen hand' where everything exchanged at its 'natural value'. In a popular vein in his *Value, Price and Profit,* he [Marx] says: 'To explain the *general nature* of profits, you must start from the theorem that, on an average commodities are *sold at their real values,* and *that profits are derived from selling them at their values*. . . If you cannot explain profit upon this supposition, you cannot explain it at all' (Dobb, 1973, pp. 146–147).

On this interpretation the interest in the special case lies not in its being an especially favourable one for the labour theorists, but just the opposite, viz. in its being a hurdle to cross in establishing exploitation as a general rule *even when* prices are proportional to values. Thus the predictive value of this case would not, *on this view,* be the central issue; the interest in analysing it would lie in examining 'the origin and persistence of surplus-value in the *strong* case' (Dobb, 1973, p. 147).

The second argument relates to the view that prices being proportional to values is a 'first approximation'. To this Paul Samuelson had retorted: 'Modern science and economics abound with simplifying first approximations, but one readily admits their inferiority to second approximations, and drops them when challenged' (Samuelson, 1957; 1966, p. 348). Dobb's reply to this took the form of asserting the following:

This light-hearted retort might have some point where the 'first approximation' contains nothing essential that cannot be expressed equally well and easily in other terms. But it ceases to do so where there is something in the first approximation that is lacking in later approximations, or cannot be expressed so easily in those terms (e.g., the first approximation may be a device for emphasising and throwing into relief something of greater generality and less particularity) (Dobb, 1973, pp. 148–149).

Ben Fine (1977) argues that Dobb has here 'too readily dismissed' Samuelson's objection since this is indeed the basis of Samuelson's rejection of 'values as an unnecessary analytical diversion'—a rejection corroborated also by Morishima and Steedman. There is force in this criticism of Dobb's dismissal of Samuelson, but what Dobb's reply does demonstrate again is Dobb's primary concern with the labour theory of value as *description,* seeing production activities in terms of human involvement. The 'later approximations' may be better predictors of relative *prices* but they lack this feature of describing personal participation. In effect, Maurice Dobb does not join the *predictive* battle and reasserts the *descriptive* advantage from this chosen perspective.

When the special case is abandoned and prices are no longer proportional to values, any method of deriving prices from values must invoke *additional* information. A truly astonishing amount of energy has been devoted to this 'transformation problem', and for reasons that are not altogether clear. Dobb was for a long time relatively exceptional among Marxist economists in reserving his energy for other pursuits. Various solutions have been offered, perhaps the most elegant one of the classic formulation of the problem coming from an economist not belonging to that tradition (see Seton, 1956–57). What

† For a different answer to the question, see Sowell (1967) and Baumol (1974), broadly in line with Meek (1956).

these solutions do is to combine the labour information implicit in value magnitudes with other information so that prices emerge as functions of values *plus* some other features of the economy. There is no doubt that this can be done, but the question is what is the point of doing this? As Steedman puts it:

> More fundamental, however, is the point that there is no useful purpose to be served by calculating Marx's additive value magnitudes at all. They are mere derivatives of the physical data and the latter suffice to determine the rate of profit and all prices of production (Steedman, 1977, p. 149).

Steedman seems to concentrate here exclusively on the role of the labour theory of value in determining prices and distribution, so that the failure of that role would leave the labour theory with 'no useful purpose'. This is, of course, a rather narrow interpretation of the labour theory. But leaving that aside and concentrating on the labour theory as a theory of the determination of prices and distribution, one would have to examine more closely the motivation behind this particular interpretation of it. *If* it had been successful in this, what *would it have* achieved?

The question relates to the interpretation of Sraffa's sense of 'determination' of prices and profit rate (or of prices and the wage rate), which is relevant to the view of 'Marx after Sraffa' put forward by Steedman and others. Sraffa (1960) demonstrated the remarkable fact that in his model the mere description of the observed configuration of physical inputs and outputs permitted one to identify a frontier of uniform profit rates *vis-à-vis* uniform wage rates. And that if either the profit rate or the wage rate is additionally given, then the other as well as all prices can be calculated. This is a model of 'determination' of prices as seen by an observer with access to other data, deriving one set of magnitudes (prices) from another set (the physical input–output configuration and, say, the profit rate). But this view of determination does not specify anything about causation. More importantly, it does not deny the *influence* of other forces on prices.

Joan Robinson could, therefore, scarcely be right when she attributes the following demonstration to Sraffa:

> When we are provided with a set of technical equations for production and a real wage rate which is uniform throughout the economy, there is no room for demand equations in the determination of prices (Joan Robinson, 1971; reprinted in Hunt and Schwartz, 1972, p. 202).

But the fact that prices can be calculated from a given configuration of observed inputs and outputs and a given profit rate (or a given wage rate) says nothing whatsoever about the role of demand in the determination of prices. Would a change in demand conditions leading to a different basket of commodities being produced lead to a different set of prices? Nothing on this is asserted by Sraffa, who is not concerned with change at all (see Sraffa, 1960, pp. *v–vi*). There are, of course, well known conditions under which demand will have no influence on prices but only on quantities produced (see, for example, Johansen, 1963), but Sraffa did not, in fact, invoke these conditions. Indeed, he was at pains to point out that he was not even assuming constant returns to scale (p. *v*), which is an essential ingredient of making prices independent of demand conditions.

This is not the occasion to go into Sraffa's methodology, but it may be briefly mentioned that it can be seen as exploring how much can be said about the *inter-relations* between prices, distribution and physical quantitative magnitudes using only directly observed data, without making any use of *counter-factuals*. The use of counter-factuals is an essential part of any 'marginalist' analysis (what *would have* happened had the facts been different, e.g. if one more unit of labour had been applied?). Neoclassical equilibrium conditions—whether of partial or of general equilibrium—use such counter-factual displacements as important features. Sraffa's relations involve no counter-factuals whatever, only observed quantities, and in this 'prelude' to a critique of marginalist theory Sraffa analyses the propositions that could be made *without using any counter-factual quantities*. The careful avoidance of counter-factuals applies not merely to demand but also to supply, and thus nothing about variations of scale or of proportions of 'factors' is introduced into the analysis. Not only are *demand* equations not used, nor are *supply* equations—only the observed configuration of physical quantities.

The 'transformation problem' belongs, in some ways, to the same arena,† viz. how to get one set of magnitudes (viz. prices) from another (viz. values and other descriptive data about the *given* situation).‡ It is not my purpose here to argue that this is not a 'genuine' predictive exercise: it obviously *is* a predictive exercise in Milton Friedman's (1953) sense of predicting 'phenomena that have occurred but observations on which have not yet been made or are not known to the person making it' (p. 9). In so far as the relations are purely 'analytic', there is, of course, no possibility of their being falsified by observation, but there are empirical assumptions used in the derivation (e.g. in Sraffa's case the uniformity of the rates of profit and wages), so that the observations *could* falsify the theory. But the predictive claim of such theories must be very limited, since all the predictions are made *conditionally* on the physical quantities actually observed (in Sraffa's own case), or conditionally on the selection of production processes with constant returns to scale (as in various extensions of Sraffa, and in the usual formulations of the transformation problem), and the question as to how these parameters happen to be determined themselves is not explored. The problem is essentially one of noting consistency requirements and deriving from them a strategy of calculating one set of values from another.

It is in the context of this calculational exercise that Steedman (1977) and several others see no advantage in going to prices via values, when prices can be calculated directly on the basis of the physical data and the wage rate. But even if Steedman (1977) were wrong, and there were great calculational advantages in going via values, this would have been a 'predictive' achievement only in the very limited sense described above. Whether we feel this rejection of going via values to prices to be a major 'blow' depends on what we think to be the worth of this calculational exercise. The exercise begins at too late a stage of price determination—with too many things taken as *given*—to be of great use in making actual predictions about the future. (I believe that the contribution made by Sraffa (1960) has got very little to do with predictions about the future, but more with the use of factual and counter-factual information. However, this is not the occasion to go into the question of an assessment of the value of Sraffa's work.) There are, of course, additional assumptions involving linear technology, no non-labour primary factor, etc., that would give immutability to the *ratios* of the observed physical quantities, giving the calculational exercise greater

† Note, however, that if value is defined in terms of 'socially necessary labour-time', then the transformation problem explores the relation between a set of factual statements and a set of counter-factuals.

‡ On this and related issues, see Dmitriev (1898), Bortkiewicz (1906–7), Meek (1956), Garegnani (1960), Morishima and Seton (1961), Okishio (1963), Bródy (1970), Samuelson (1971), Morishima (1973), Pasinetti (1973, 1977), Rowthorn (1974A), Desai (1974), Eatwell (1975), Bose (1975), Fine and Harris (1976), Gerstein (1976), Newman (1976) and Steedman (1977), among other contributions.

predictive value, but the assumptions are quite demanding, and actual attempts at empirical verification or falsification have been remarkably rare.

Thus while the merit of going via values in the 'calculational exercise' for the 'determination' of prices has rightly been questioned, the merit of the 'calculational exercise' *itself* from the *predictive* point of view seems also rather limited.

I end this section with two further remarks. First, if value is of descriptive interest *in itself*, then one may be interested in the relationship between values and prices even if this is not a convenient way of calculating prices with given physical data, or a good way of predicting future prices. Value is then treated not as an 'intermediate product' in some calculational or predictive exercise but as a concept of interest in its own right.

Second, so far as prediction is concerned, it is well worth remembering that prices and distribution are not the only variables in the prediction of which Marx was interested. In this sense the predictive context is far wider than anything the 'transformation problem' can conceivably capture. The descriptive aspects of the labour theory of value relate closely to Marx's class analysis, and the assessment of the predictive value of that analysis takes us well beyond the relations of prices with values.

4. Description and evaluation

I turn now to the relevance of description for normative judgements. The belief that normative statements cannot be entailed exclusively by descriptive statements (the so-called 'Hume's Law') has sometimes made economists deny that debates on values can ever be resolved by facts. But even if this belief in Hume's Law is fully justified, which is by no means clear (see Sen, 1966, and Hare, 1977), this does not in any way deny that our value judgements may be based on factual assumptions *among others*, so that the acceptability of descriptive statements may have a very significant bearing on our value judgements. (I have tried to discuss elsewhere the *analytic* relations—as opposed to psychological ones—between facts and values; see Sen, 1967.)

One can easily construct arguments in which the descriptive statement that 'Michelangelo made this statue of David' is *one of* the antecedents and the consequent is the evaluative statement that 'Michelangelo should be praised for the beauty of this sculpture', or—for that matter—the normative judgement that 'Michelangelo should be paid for this sculpture'. It was in this way that Dobb seems to have viewed the ethical relevance of the descriptive statement of the labour theory of value, without treating it as 'simply an ethical judgement' (Dobb, 1973, p. 145).

Indeed, in disputing the ethical relevance of alternative approaches, particularly that of the marginal productivity theory of distribution, Dobb focused on what he claimed to be its descriptive poverty. Two different types of criticism are worth mentioning here—neither dealing with the problem of the definability of marginal product (emphasised by Joan Robinson, 1953–54, and Nicholas Kaldor, 1955–56), or with its empirical validity (emphasised by R. A. Lester, 1946, and Aaron Gordon, 1948). First, Dobb returned to the question of 'commodity fetishism' in assessing the 'contribution' of *owners* of factors of production.

> The fundamental objection to this, as to any form of productivity theory, was that, as Marx pointed out, it included the illicit link of imputing to the owner the 'productivity' of the things he owned. 'A social relation between men assumes the fantastic form of a relation between things'; and the behaviour of things is not only represented animistically as due to some innate

property in them, but imputed to the influence of those individuals who exercise rights of ownership over them (Dobb, 1937, p. 138).

Second, he argued that the focus on the difference that *would have been* made by the presence or absence of a resource, on which the marginal productivity theory depends, hides important descriptive features of the production process (*who* is doing *what*) by confining itself to a particular set of counter-factual observations.

Suppose that toll-gates were a general institution, rooted in custom or ancient legal right. Could it reasonably be denied that there would be an important sense in which the income of the toll-owning class represented 'an appropriation of goods produced by others' and not payment for an 'activity directed to the production or transformation of economic goods'? Yet toll-charges would be fixed in competition with alternative roadways, and hence would, presumably, represent prices fixed 'in an open market, where the bargainers on both sides are reasonably competent and cognisant of the conditions' [Pigou, 1920, p. 130]. Would not the opening and shutting of toll-gates become an essential factor of production, according to most current definitions of a factor of production, with as much reason at any rate as many of the functions of the capitalist entrepreneur are so classed to-day? (Dobb, 1937, p. 66).

It is the description of production activities in terms of *human* involvement that Dobb emphasised in the labour theory of value, as interesting both in itself as well as for the evaluative exercise. It is, however, worth underlining that the descriptive feature thus focused on is not the so-called 'law of value' dealing with the proportionality of prices to values. Indeed, the 'view' that 'the law of value is premiss and surplus-value consequent' is explicitly rejected, denying 'that the notion of exploitation, and hence of surplus-value, was in some way derived from the proposition that things exchange according to the amounts of labour embodied in them' (Dobb, 1973, p. 146). The crucial descriptive aspect remains the capturing of the human dimension of production and distribution in the labour theory of value viewed as a category of descriptive statements, rather than the possibility of 'determining' or 'predicting' prices on the basis of values, examined in the last section.

In assessing the labour theory of value in terms of its evaluative relevance, it should be borne in mind that the normative implications are not put forward by Dobb—nor indeed by Marx—as having absolute priority over all other values with which they could conceivably conflict (i.e. it is not claimed that the corresponding value judgements must be 'compulsive' in the sense specified in Sen, 1967). Indeed, in his treatment of policy issues in economics, Maurice Dobb put a great deal of emphasis on the question of welfare and needs, not viewing persons only as workers (see especially Dobb, 1969). This, in fact, was not a departure from Marx's own position; Marx described the right based on work as lying within 'the narrow horizon of bourgeois right', arising from a view in which persons 'are regarded *only* as *workers*, and nothing more is seen in them, everything else being ignored' (Marx, 1875, pp. 22–23).†

5. Labour value and use value

I turn now from the description based on labour value to that related to use value. It is worth noting that Maurice Dobb's concern with descriptive richness, which was discussed earlier, applied not merely to the labour theory of value, but also to wants and needs. In fact, in his writings not only did Dobb accept the legitimacy of the perspective of wants and needs, he also made considerable use of it in his analysis of

† This is discussed further in Sen (1973), pp. 87–96; (1977A), pp. 1559–1561.

welfare judgements and economic planning. To these uses I shall come presently, but a remark on the question of the consistency of this 'catholicism' with the Marxian tradition is worth making first.

Despite the emphasis that Marx put on the labour-based description of economic activities, his concern with the perspective of use value was very deep indeed, and sharply in contrast with the scorn with which this concept is treated in some later Marxian—and non-Marxian—approaches.†

In English writers of the 17th century we frequently find 'worth' in the sense of value in use, and 'value' in the sense of exchange value. This is quite in accordance with the spirit of a language that likes to use a Teutonic word for the actual thing, and a Romance word for its reflexion (Marx, 1887, p. 2).

Indeed, Marx's (1887) inquiry into capitalism in *Capital* began with the relation of commodities to 'human wants' (p. 1), and his investigation of the 'higher phase of communist society' ended by characterising distribution 'according to needs' (Marx, 1875, p. 23). This concern with wants and needs is part of Dobb's inheritance from Marx.

Acceptance of the relevance of wants and needs is not, however, the same as accepting the perspective on the subject provided by the standard 'utility theory'. Dobb's criticism of 'utility theory' was not based on a rejection of the relevance of its subject matter, but on the way that theory handled that subject matter. He accepted the legitimacy of the perspective of utility, giving it *in principle* an important descriptive status. After noting that 'the labour-principle . . . was making an important qualitative statement about the nature of the economic problem', he went on to assert:

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 characterising the equilibrium which it defined as an equilibrium of a specific kind, related to in a certain way to a 'maximum' of utility (a statement which has independent meaning quite apart from any moral or ethical postulate) (Dobb, 1937, pp. 21–22).

A description that made no reference to the 'relations of production' would obviously appear rather limited to Maurice Dobb, given the main focus of his social and economic attention. But the criticism that Dobb levelled was not confined to *this* incompleteness, but applied also to the limitation of the descriptive value of utility statements even within its chosen sphere. It is the failure to go into the causation of preferences, and in particular into social interdependence, that Dobb found to be a particularly damaging limitation of neoclassical utility theory.

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 . . . it was clearly inevitable that the corollaries of such a principle should have an individualistic 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 (Dobb, 1937, pp. 26–27).

But while Dobb found the psychological basis of utility theory to be unduly narrow and insufficiently 'social', his concern for descriptive richness made him much more

† In the subject index of Volume I of *Capital* (Marx, 1887), edited by Engels, the first reference to 'use value' is to pages '1–114'.

critical of those theories of behaviour that tried to dissociate behaviour from the underlying psychology. In an early critique of the motivation underlying the 'revealed preference theory'—a theory soon to be formalised by Paul Samuelson (1938)—Dobb (1937) pointed to the descriptive poverty of that approach:

If all that is postulated is simply that men *choose*, without anything being stated even as to how they choose or what governs their choice, it would seem impossible for economics to provide us with any more than a sort of algebra of human choice (Dobb, 1937, p. 171).

In fact, he had expressed his criticism of the descriptive impoverishment implicit in a non-psychological approach to behaviour as early as 1929:

Actually the whole tendency of modern theory is to abandon such psychological conceptions: to make utility and disutility coincident with observed offers on the market; to abandon a 'theory of value' in pursuit of a 'theory of price'. But this is to surrender, not to solve the problem (Dobb, 1929, p. 32).

Dobb thus accepted the description of mental features associated with economic relations as important, even though inherently incomplete, and—in the particular form in use—insufficiently probing about social causation. The abandonment of psychological examinations in the direction of the 'revealed preference' approach was seen as a weakening of the descriptive basis of modern economics.†

Despite his rejection of traditional *utility theory*, Maurice Dobb's acceptance of the relevance of utility description had a profound impact on his analysis of policy issues and planning. His contributions in this area are well known (see especially Dobb, 1969). But it is perhaps worth noting that his acceptance of the two perspectives of labour and utility led him to the basic conflict between the *claims* arising from the two perspectives—one based on needs and utility and the other on cost and labour. The contrast between the two ways of describing the final outcome alerted him to a potential over-determinacy in models of socialist planning of the kind put forward by Dickinson (1933), Lerner (1934), Lange (1936), and others. This criticism of contemporary socialist planning models by Maurice Dobb was, in a sense, exactly parallel to Karl Marx's (1875) criticism of the Gotha Programme for making inconsistent demands (see Sen, 1973, pp. 87–91).

If carpenters are scarcer or more costly to train than scavengers, the market will place a higher value upon their services, and carpenters will derive a higher income and have greater 'voting power' as consumers. On the side of supply the extra 'costliness' of carpenters will receive expression, but only at the expense of giving carpenters a differential 'pull' as consumers, and hence vitiating the index of demand. On the other hand, if carpenters and scavengers are to be given equal weight as consumers by assuring them equal incomes, then the extra costliness of carpenters will find no expression in costs of production. Here is the central dilemma. Precisely because consumers are also producers, both costs and needs are precluded from receiving simultaneous expression in the same system of market valuations. Precisely to the extent that market valuations are rendered adequate in one direction they lose significance in the other. Mr Dickinson cannot have it both ways (Dobb, 1933, p. 37).

Oscar Lange (1938) resisted this critique by specifying conditions under which this conflict will disappear (p. 102), but these conditions are really very special (see Sen,

† Dobb's (1929, 1937) critique of the descriptive poverty of the revealed preference approach was delivered even before the approach had found rigorous expression in the writings of Samuelson (1938), aimed at 'dropping off the last vestiges of the utility analysis' (p. 62). But the origins of the approach antedate Samuelson (see, for example, Robbins, 1935, pp. 138–139). I have tried to analyse elsewhere (Sen, 1977B) some of the consequences of the descriptive poverty of the revealed preference approach, as well as of traditional utility theory.

1973, pp. 90–91). Abba Lerner (1944) was more concerned with the conflict, and sought a 'compromise' between the conflicting principles (p. 36). Lump-sum taxes provide a way of bridging the gap between productivity-based rewards and need-based payments. But its practical feasibility as well as its underlying informational requirements raise problems that are by now well known. It was this conflict that Dobb had first identified in his penetrating critique of contemporary models of socialist planning, by contrasting the utility description with the description based on labour productivity and costs.

I end this section with a few remarks on the contrast of the perspectives of *use* and *exchange* in the specific context of labour. While wants and needs constitute one aspect of 'use value', the perspective of 'use value' is not confined to this aspect, since other types of 'uses' can also be considered. In a letter to Engels, written in 1867, Marx had described one of the two 'best points' of *Capital* as: '*the double character of labour*, according to whether it is expressed in use value or exchange value (*all* understanding of the facts depends upon this, it is emphasised immediately in the *first* chapter)' (Marx, 1934, pp. 226–227).† Indeed, Marx's notion of 'exploitation' was based on the contrast between the use value of labour-power to the capitalist and its exchange entitlement in terms of consumption. Marx had not extended the analysis to the socialist economy, and it was essentially this problem that Maurice Dobb investigated in the context of his study of technical choice and appropriate labour utilisation in a socialist economy with surplus labour (see Dobb, 1951, 1954, 1956, 1960).

In assessing the use value of labour utilisation for a socialist economy, Dobb analysed the impact of wage employment on consumption, of consumption on investible surplus, of investible surplus on economic growth, and of growth on future wellbeing. While Dobb was careful to point out that his analysis of the relations in question 'was more concerned with ways of thinking about economic growth than with actual policies and events', he allowed that 'it may serve to show many of the textbook-maxims about growth that have been current in the past to be inadequate, to say the least' (Dobb, 1960, p. *vii*). Since the impact on consumption depended, among other things, on the wage rate, this established a direct link between the market wage and the use value of labour for a socialist economy. This investigation initiated by Dobb, in which many others contributed directly and indirectly, was completed within Dobb's basic framework by Stephen Marglin (1974) in his definitive analysis of 'value and price in the labour-surplus economy'.‡

Needless to say these relationships are thoroughly dependent on the relations of production, e.g. on whether the employment relation takes the form of a wage system. With non-wage systems, the link between employment and consumption can be

† The other 'best point' was seen by Marx as: 'the treatment of *surplus value independently of its particular* forms as profit, interest, ground rent, etc.'

‡ It is this approach that is the subject of a spirited attack by Bagchi (1978). He argues that the analysis presented by Dobb and Sen contains a number of serious omissions, such as that we 'ignored' learning by doing (p. 219), that Dobb 'never saw' certain advantages of 'small and locally controlled projects' (p. 218), and 'throughout the work of Dobb and Sen . . . there is the implicit assumption' that the institutions exist in mixed economies to ensure that the surplus is invested (p. 220). He concludes that the Chinese experience has raised serious questions about the emphasis of the Dobb–Sen approach (p. 229). Some of Bagchi's detailed comments seem inaccurate; e.g. it is *not* assumed that in mixed economies the entire surplus is invested (see Dobb, 1960, p. 42, Sen, 1960, pp. 51–57). Shorter gestation period of local projects as well as learning by doing *are* discussed (see Dobb, 1960, pp. 46–57, Sen, 1960, pp. 47–49). But Bagchi is surely right that these models of the late fifties left many important policy issues untouched, or—more often—insufficiently discussed. He is also right that the lessons from the Chinese experience are important.

substantially broken, and this would lead to quite a different formulation of the problem (see Sen, 1960, Appendix A; 1973; 1975). This would also require a shift from the emphasis on work-entitlements, related to evaluative aspects of the labour theory of value (see section 4 above), to one in which the claims of needs take priority. The conflict between the two types of entitlements has been much debated recently, especially in the context of the Chinese experience. While Maurice Dobb himself was rather sceptical of the importance of the Chinese experience—in my judgement wrongly—there can be little doubt that he made substantial contributions to the analysis of the two contrasting perspectives. The line of reasoning relating Marx's *Critique of the Gotha Programme* to Dobb's writings on socialist planning remains as much in focus today as it did in the 1930s when Dobb was making his definitive contributions in this area.

6. Concluding remarks

Three different approaches to the labour theory of value have been presented and explored in this paper. The descriptive approach was taken as the primary one (section 2). The predictive and evaluative interpretations are also built on specific descriptive features (sections 3 and 4). While each approach involves focusing on certain facts rather than others, to call any of them 'metaphysical' would be an elementary error. Each approach can be critically assessed within the methodology of the exercise involved, viz. description, prediction and evaluation.

While the predictive exercise has been typically favoured in the vast literature on the labour theory of value, that approach has suffered from a lack of clarity on the nature of the predictions involved, which has had the effect of arbitrarily elevating the importance of the so-called transformation problem. The merits of the recent contributions to non-counter-factual economics by Piero Sraffa are great, but the nature of these contributions has been frequently misinterpreted (section 3).

Evaluative exercises provide one type of motivation in choosing between alternative descriptions (section 4). In assessing labour-based descriptions from the point of view of entitlements, it is important to bear in mind Marx's (1875) warning that in this human beings 'are regarded *only as workers*, and nothing more is seen in them, everything else being ignored' (pp. 22–23). The descriptive richness of different characterisations can be judged from the evaluative point of view, and Maurice Dobb's critique of the descriptive poverty of the marginal productivity theory relates to this context.

Since the focus of description must depend on the nature of the motivation behind the act of describing, and since several motivations underlying the labour theory of value can be distinguished, it is not really surprising that different conventions for calculating aggregate labour magnitudes would exist and also appear natural in different contexts. The source of these ambiguities need not rest in 'approximation exercises', but in the basic multiplicity of motivation underlying the labour theory.

Dobb's concern with wants and needs in addition to work and labour made him use a *dual* perspective, as Marx had done earlier. This led Dobb to accept the relevance of 'utility' description, though rejecting the limited nature of the traditional 'utility theory'—in particular its 'unsocial' character. In an early critique of the revealed preference approach, Dobb also analysed the descriptive impoverishment involved in this development. The dual perspective permitted Dobb to take a leading role in clarifying certain fundamental conflicts in socialist planning (section 5).

This paper has been both about the labour theory of value and about Maurice Dobb's contributions. Perhaps I should end by commenting on Abram Bergson's (1949) remark—made in a *not* unfriendly critique of Dobb's work on socialist economics—that 'in Dobb's analysis the labor theory is not so much an analytic tool as excess baggage' (p. 445). I believe that a by-product of this paper is the demonstration that this is not the case.

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