Bulletin of the Conference of Socialist Economists

9. Autumn 74

For Contents see back cover

EDITORIAL

In the preparation of this issue of the Bulletin, the Editorial Board had its first major disagreement. It concerned the printing of an article submitted by Paul Bullock on Productive and Unproductive Labour. CSE members will be aware of the debate on this subject that has appeared in previous Bulletins, and its link with the debate on the tendency of the rate of profit to fall. There have been two main schools that have emerged from these debates: one, called by its opponents, though denied by itself, neo-Ricardian, the other Orthodox Marxist, or as called by its opponents, Dogmatists. Paul Bullock's latest submission falls into the second category.

Among the members of the Board who had read the article (few articles are read by all the Board save those expected to be marginal or controversial) a majority objected to its publication in its present form in this issue on the grounds of lack of clarity and failure to answer points raised by opponents in the debate. Most of the objectors came from the first school. David Yaffe strongly supported the printing of the article in this issue, arguing that the piece was definitive on the subject. This disagreement raised the issue of the openness of the CSE Bulletin, and the right of positive veto (i.e. strong support by one member of the Board being grounds for printing). The feeling of the meeting - though at least one Board member interpreted the discussions differently - was that the Bulletin should remain open in this sense, and the Bullock article should be published not in the current issue but in the Winter one when critical comments not taken into account in revision could be printed alongside.

It is increasingly common for Bulletin articles to be revised and thus held over for one issue. The Board, with the exception of David Yaffe, was under the impression that Paul Bullock's article had not been formally submitted and that therefore the decision to print in no.10 was in accordance with current practice. David Yaffe felt, however, that the decision amounted to delay and rejection, and after the meeting submitted his resignation on the grounds that the Board's decision amounted to censorship. He also argued that this was one example of how the CSE was ceasing to be a forum where orthodox Marxist views could be discussed and debated. He gave, among other instances, the Board's rejection of a review of Zinoviev's History of the Bolshevik Party on the grounds that it fell outside the area of coverage for the CSE and the decision of the Co-ordinating Committee not to have a session at the next conference on the law of value 'etc' on the grounds that they didn't want a "re-run of previous debates with the same protagonists". Such attitudes, David Yaffe thought, were not serious and whether consciously or not, supported the domination of bourgeois ideas in the face of the Marxist attack.

Board members responded as follows:

(1) most of them felt that David Yaffe's resignation was an unnecessarily sharp way of making his point, particularly as the Board had up to then been notably informal, and that this informality had led, among other things, to inadequate circulation of Paul Bullock's final version beforehand.

(2) no-one wanted David Yaffe to resign.

(3) all agreed to bring forward the publication of Paul Bullock's article to the current issue as a gesture of good faith to David Yaffe.

(4) a number felt extremely strongly that the procedure which in fact allowed insufficient time for their comments to be taken into consideration by the author when he was revising the draft, should on no account be repeated. They felt that authors should be obliged to at least consider suggestions for improvement and particularly clarification of a paper even though they might be made by people with a different theoretical position

(continued inside back cover)

THE REDUCTION OF COMPLEX LABOUR TO SIMPLE LABOUR*

Alessandro Roncaglia

I

One of the most common simplifying assumptions in economic theory is the existence of a homogeneous, qualitatively undifferentiated, labour force. In reality, however, diverse types of qualitatively different labour exist. In order to show different theories based on the assumption of a homogeneous labour force as simplified representations of reality, and not as imaginary constructions, it is necessary to show that there exists a method of aggregation of diverse types of labour that will not influence the results of the analyses. For different types of analysis there will obviously be different methods of aggregation; the validity of any method of aggregation should be judged exclusively with reference to the objectives of the analysis in question. This fact is, however, too often forgotten and the methods of aggregation adopted by the classical economists and Marx have been criticised because they are not generally valid for the resolution of all the problems presented by the existence of heterogeneous labour. In particular the problem of aggregation (or in the terms of the Classics, the reduction of complex to simple labour) has been confused with the analysis of the structure of wage differentials.

The classical economists maintained, in general, that the qualitative differences in the labour force could be reduced to quantitive differences. They thus looked for a quantitative element that would allow the determination of coefficients for the reduction of complex to simple labour. There were two methods commonly adopted by the classical economists to make the diverse quality of labour homogeneous and thus additive: (a) wage differentials, taken as given, and (b) the reduction of qualitative differences to differences in the costs of training.

The two procedures have diverse significance and the classical economists used them alternatively to treat diverse problems. The first method can be used when the structure of wages is determined independently of the variables under consideration for analysis and reasonably stable for the period under consideration. This, however, is not always the case. For example, as we shall see more clearly below, in the context of a theory of value such as the Marxian the assumption given of wage differentials would involve circular reasoning. In addition, the empirical evidence only partially supports the assumption that the structure of wages is unchanged over time. The second method, based on the cost of training, is, on the contrary, more appropriate for Marxian analysis, but would require manifestly unrealistic assumptions to be used in the analysis of actual market phenomena.

The two methods cited, however, do not provide an explanation of such wage differentials as one finds in reality; the first takes as given what should be the object of investigation; the second gives an explanation that we shall see to be at least partial and subject to highly restrictive assumptions. The problem of wage differentials, however, is going to be held to one side in line with the principle that what concerns us is only the validity of the methods adopted for the aggregation of heterogeneous labour by the Classical economists and Marx.

---

*I would like to thank M. Ridolfi, R. Rowthorn, L. Spaventa, P. Sylos Labini and M. Tonveronachi for their useful comments.
This paper originally appeared in Italian in Note Economiche, 1973, no.3 under the title 'La Riduzione di Lavoro Complesso a Lavoro Semplice'. Translation by J.A. Kregel.

II

Adam Smith is frequently cited as one of the first of the proponents of the concept of human capital. In his examination of the circumstances which influence the difference in wages between different occupations he stresses the degree of agreeableness, peril, responsibility and prospect of success associated with the work, as well as the cost necessary to obtain the necessary qualification:

> A man educated at the expense of much labour and time to any of those employments which require extraordinary dexterity and skill, may be compared to one of those expensive machines. The work which he learns to perform, it must be expected, over and above the usual wages of common labour, will replace to him the whole expense of his education, with at least the ordinary profits of an equally valuable capital.
> (Smith, Wealth of Nations, McCulloch Edition, p.46)

Smith, however, is very cautious in relating the differences in wages to the differences in degree of qualification. In addition to the fact that this is only one of a number of factors associated with wage differentials such an association would require the operation of free competition, that the market should be in equilibrium and that the division of labour should have achieved an advanced stage:

> In order, however, that this equality may take place in the whole of their advantages or disadvantages, three things are requisite, even where there is the most perfect freedom. First, the employment must be well known and long established in the neighborhood; secondly, they must be in their ordinary or what may be called their natural state; and, thirdly, they must be the sole or principal employments of those who occupy them.
> (ibid., p52)

Smith remarks that restrictions to competition imposed by law as well as restrictions due to tradition are particularly numerous in the labour market.

In order to make labour homogenous Smith appears to consider the reference to wage differences as given by the market as most appropriate to his purposes:

> But it is not easy to find any aggregate measure either of hardship or ingenuity. In exchanging, indeed, the different productions of different sorts of labour for one another, some allowance is commonly made for both. It is adjusted, however, not by any accurate measure, but by the higgling and bargaining of the market, according to that sort of rough equality which, though not exact, is sufficient for carrying on the business of common life.
> (ibid., p52)

To the extent that wage differentials are influenced by law and tradition they will be relatively stable and will be subject to slow modification in the long run. Thus while changes in the general economic situation of a country may influence the distributive variables (wage and rate of profit) it will influence them in a uniform manner in the various sectors:

> Such revolutions in the public welfare, though they affect the general rates both of wages and profit, must in the end affect them equally in all different employments. The proportion between them, therefore, must remain the same, and cannot well be altered, at least for any considerable time, by any such revolutions.
> (ibid., p66)

The principal objective of Smith's analysis was the description of the process of accumulation and development. To the extent that the structure of wages does not vary in a given historical period one could use it as a base for the quantif-

ication

of the different types of labour and one could express this heterogeneity in a unique variable. The stability of the structure of wages presumed in Smith's analysis thus requires analysis of the long period.

The case of Ricardo is different. By appealing to the authority of Smith he tried to exclude the heterogeneity of labour in the study of the relation of exchange of goods:

> ...whatever inequality there might originally have been in them, whatever the ingenuity, skill or time necessary for the acquirement of one species of manual dexterity more than another, it continues nearly the same from one generation to another; or at least that the variation is very inconsiderable from year to year, and therefore, can have little effect, for short periods, on the relative value of commodities.
> (Ricardo, Principles, Sraffa ed. p22[1])

Now, if wage differentials are determined to any significant degree by custom and tradition it is plausible that they be taken as reasonably stable in a long period situation.[2] But this stability is not guaranteed absolutely when a shorter time horizon is considered and forces unique to any single sector could come into play. It is in this sense that Mill pointed out that different types of labour could be considered as distinct one from the other; the ratios of exchange of different goods could thus vary, even with an unchanged technology, as a consequence of variations in wage differentials.

For completeness we should also point out that the method adopted by Smith and Ricardo was later taken up by Keynes, for whom the assumption of fixed wage differentials was nothing more than a logical extension of the assumption of fixed relative prices upon which the Keynesian macroeconomic model is based:

> For, in so far as different grades and kinds of labour and salaried assistance enjoy a more or less fixed relative remuneration, the quantity of employment can be sufficiently defined for our purpose by taking an hour's employment of special labour in proportion to its remuneration.
> (General Theory, p.41)

Keynes' analysis, of course, concerns the short period, but for Keynes the stability of wage differentials is, as he makes clear, a simplifying assumption that could be abandoned without difficulty.

III

For Marx the problem is taken differently. With his theory of value he proposed an explanation of the existence and the nature of the relevant economic magnitudes (profit, wage, price, etc.) that characterise capitalistic society. From this point of view it would have been contradictory to make reference to market phenomena in order to homogenise heterogenous labour; the phenomena observed in the market could not be assumed as given, and thus presupposed, in an analysis that intended to explain their existence.

On the other hand the cost of training presented itself as a natural development of the concept of labour-power that was introduced into economic analysis by Marx. Once labour-power is shown to be a commodity whose value depends on its 'cost of production', there is no difficulty in extending this line of thought to link value and 'cost of production' of different qualities of labour-power. This is just the relation that Marx suggests in the following passage:

> All labour of a higher or more complicated character than average labour is expenditure of labour-power of a more costly kind, labour-power whose production has cost more time and labour, and which

> therefore has a higher value, than unskilled or simple labour power. This power being of higher value, its consumption is labour of a higher class, labour that creates in equal times proportionally higher value than unskilled labour does.
>
> (Capital, I, p.197, Lawrence and Wishart edition)

This view is perfectly rigorous and satisfactory: as we shall see below, such a method allows one to obtain a significant, uniquely determined solution for the coefficients of reduction for different types of complex labour to simple labour. Actually, the transformation from these coefficients to the corresponding wage differentials is a problem that is similar to and no more difficult than the transformation from value to price that arises with other commodities, and are the logical corollaries to two different levels of analysis (see VI).

Marx did not worry too much about the problem, and limited himself to a footnote indicating his lack of interest in it (to this effect Marx cites Mill: 'The great class who have nothing to give for food but ordinary labour are the great bulk of the people.') besides, at least in part, the problem is a false one:

> The distinction between skilled and unskilled labour rests in part on pure illusion, or, to say the least, on distinctions that have long ceased to be real, and that survive only by virtue of a traditional convention; in part on the helpless condition of some groups of the working class, a condition that prevents them from exacting equally with the rest the value of their labour-power.
>
> (ibid., p.197, n.1)

The problem of the reduction of complex to simple labour had, however, already been brought up by Marx at the beginning of Capital in a passage that is highly ambiguous, and upon which his critics, especially Böhm-Bawerk, have based their charge of circular reasoning.

> Skilled labour counts only as simple labour intensified, or rather, as multiplied simple labour, a given quantity of skilled being considered equal to a greater quantity of simple labour. Experience shows that this reduction is constantly being made. A commodity may be a product of the most skilled labour, but its value, by equating it to the product of simple unskilled labour, represents a definite quantity of the latter labour alone. The different proportions in which different sorts of labour are reduced to unskilled labour as their standard, are established by a social process that goes on behind the backs of the producers, and, consequently, appear to be fixed by custom.
>
> (ibid., p.44[3])

In a footnote to this passage Marx points out explicitly that he is not talking about the determination of the wage or wage differentials.[4] The apparent error in the passage would appear to have grave consequences: the value of commodities is determined by the quantity of simple labour contained in them, and this quantity would be deduced at the same time from the value of commodities -- a glaring example of circular reasoning! If one is willing to accept the interpretation of Böhm-Bawerk there is nothing left except to believe that Marx is guilty of a mental slip that it would be possible to correct on the basis of a suggestion that Marx himself makes in relation to the cost of training. However, it seems plausible to reject the interpretation of Böhm-Bawerk by demonstrating that in the passage cited Marx indeed was saying something quite different from what has been attributed to him.

This problem of interpretation, it should be observed, in fact relates only to the history of economic thought. Once it has been established that the use of costs of training provides an adequate method to make the reduction from complex to simple labour within Marx's theory it makes little analytical difference whether or not this method coexists in Marx's work along with an erroneous method that is vitiated by circular reasoning. As with all problems of interpretation it is difficult to give a definitive answer. We will content ourselves here simply with the fact that there is at least one element that would allow us to interpret the previous passage in a manner that is consistent with the rest of Marx's analysis. This element is to be found in a passage of the Critique of Political Economy:

> This reduction (from complex to simple labour) appears to be an abstraction, but it is an abstraction which is made everyday in the social process of production. ...Labour, thus measured by time, does not seem, indeed to be the labour of different persons, but on the contrary the different working individuals seem to be mere organs of this labour. ...The Laws governing this reduction do not concern us here. It is, however, clear that the reduction is made, for, as exchange-value, the product of highly skilled labour is equivalent, in definite proportions to the product of simple average labour; thus being equated to a certain amount of simple labour.
>
> (Critique, Dobb edition, pp.30-1)

Marx is thus saying: we are not speaking of a method of reduction here, but the problem will be treated later. But in the Critique he never returns to the problem. Now, as is well known, this work corresponds, in outline and in the categories discussed, to the first three chapters of Capital, Volume I. One might be thus led to suppose that the 'laws that regulate this reduction' would be those indicated at the end of chapter five of Capital, that is, in the passage cited at the beginning of this section in which Marx refers explicitly to the costs of training. The passage of Capital discussed by Böhm-Bawerk corresponds, according to this line of argument, to the passage just cited from the Critique. In this passage as in the first Marx denies that he is talking about the method of reduction. Marx is saying, above all, that the abstraction of the qualitative difference between the different types of labour is something more than just a mental exercise(5) and is in fact a process that in particular historical periods is verified by reality. In other words, in a capitalist system the existence of the market, implying the existence of a quantitative relation between commodities, implies as well a quantitative relation (according to a law not yet specified) between the different types of labour. Thus, in a system dedicated to the production of commodities for the market, labour is going to be considered as social labour, which should supercede the various characteristics of any single worker. The reasoning is not circular for the demonstration of the existence of a quantitative relation is something different from the specification of its characteristics: the 'law of reduction', in our explanation, is determined without any circular reasoning through the concept of the costs of training. As has been noted, this is only one of the possible interpretations of Marx's controversial passage (and to my thinking the most reasonable),(6) but whether this or Böhm-Bawerk's interpretation is correct, it still remains true that the method of training costs provides an appropriate solution to the problem of the aggregation of different types of labour-power within Marx's theoretical scheme.

IV

In order to calculate the reduction coefficients for the transformation of complex to simple labour it is only necessary to refer to the direct and indirect labour employed in the process of training (including the labour to be trained, but excluding that contained in its subsistence).

Using the notation used in Sraffa's Production of Commodities by Means of Commodities(7) we can represent the complex of processes of production employed in an economic system at a given moment of time, considering at the same time the training processes of the labour force (let us suppose for simplicity the absence of joint processes, and thus the absence of fixed capital, and labour-power used for more than one period).

$$\left.\begin{array}{l} A_a + \dots + K_a + {}_\alpha L_a + \dots + {}_\kappa L_a + {}_\sigma L_a \rightarrow A \\ \dots\dots\dots\dots\dots\dots\dots\dots \\ A_k + \dots + K_k + {}_\alpha L_k + \dots + {}_\kappa L_k + {}_\sigma L_k \rightarrow K \end{array}\right\} \quad (1)$$

$$\left.\begin{array}{l} A_\alpha + \dots + K_\alpha + {}_\alpha L_\alpha + \dots + {}_\kappa L_\alpha + {}_\sigma L_\alpha \rightarrow {}_\alpha L \\ \dots\dots\dots\dots\dots\dots\dots\dots \\ A_\kappa + \dots + K_\kappa + {}_\alpha L_\kappa + \dots + {}_\kappa L_\kappa + {}_\sigma L_\kappa \rightarrow {}_\kappa L \end{array}\right\} \quad (2)$$

The expressions grouped under (1) represent the processes of production for physical goods; I_j indicates the quantity of good i necessary for the production of quantity J of good j; ${}_\varepsilon L_j$ indicates the quantity of complex labour of type necessary to produce J of good j. The expressions grouped under (2) represent the training processes for the labour force: I_ε is the quantity of good i necessary to obtain quantity ${}_\varepsilon L$ of complex labour of type ε; ${}_\gamma L_\varepsilon$ is the quantity of complex labour of type γ necessary to obtain quantity ${}_\varepsilon L$ of complex labour of type ε. ${}_\sigma L_j$ and ${}_\sigma L_\varepsilon$ are quantities of simple labour necessary to produce quantity J of good j and quantity ${}_\varepsilon L$ of labour type ε, respectively ($i,j=a,\dots,k$; $\gamma,\varepsilon=\alpha,\dots,\kappa$) Let us suppose that the economic system under consideration be in a self-replacing state such that for all goods and for all types of labour the quantity used up in production is less than or equal to the quantity produced. The aim of our analysis, namely the determination of the labour-values at a given point in time, does not require any assumption concerning the possible changes in the magnitudes of the variables considered over time. It is thus not necessary to specify that the system is in a state of either simple or enlarged reproduction.

Let us indicate the quantity of simple labour directly and indirectly embodied in a unit of commodity i (i.e. its value) by λ_i; and the coefficient of reduction of complex labour of type ε to simple labour by μ_ε. The value of all commodities is equal to the sum of the simple labour quantities embodied in their means of production, that is to the sum of their values plus the simple labour directly employed in their production which is obtained by reducing the various types of complex labour to simple labour by means of the reduction coefficients. We can thus transform the system (1)-(2) into the following equation system:

$$\left.\begin{array}{l} \lambda_a A_a + \dots + \lambda_k K_a + \mu_\alpha\, {}_\alpha L_a + \dots + \mu_\kappa\, {}_\kappa L_a + {}_\sigma L_a = \lambda_a A \\ \dots\dots\dots\dots\dots\dots\dots\dots \\ \lambda_a A_k + \dots + \lambda_k K_k + \mu_\alpha\, {}_\alpha L_k + \dots + \mu_\kappa\, {}_\kappa L_k + {}_\sigma L_k = \lambda_k K \end{array}\right\} \quad (3)$$

$$\left.\begin{array}{l} \lambda_a A_\alpha + \dots + \lambda_k K_\alpha + \mu_\alpha\, {}_\alpha L_\alpha + \dots + \mu_\kappa\, {}_\kappa L_\alpha + {}_\sigma L_\alpha = \mu_\alpha\, {}_\alpha L \\ \dots\dots\dots\dots\dots\dots\dots\dots \\ \lambda_a A_\kappa + \quad + \lambda_k K_\kappa + \mu_\alpha\, {}_\alpha L_\kappa + \quad + \mu_\kappa\, {}_\kappa L_\kappa + {}_\sigma L_\kappa = \mu_\kappa\, {}_\kappa L \end{array}\right\} \quad (4)$$

The system composed of groups of equations (3)-(4), that is $k + \kappa$ equations, will be sufficient to determine the $k + \kappa$ unknowns $\lambda_a,\ldots,\lambda_k$, $\mu_\alpha,\ldots,\mu_\kappa$.[8]

It is necessary to make some observations on this solution. First, the two groups of equations (3)-(4) are simultaneously determined; in other words the reduction of complex to simple labour is carried out at the same time as the determination of the value of the different commodities. Only if $I_\varepsilon = 0$ for $i = a, \ldots, k$ and $\varepsilon = \alpha,\ldots,\kappa$; that is if the training process requires only labour time (simple and complex), system (4) could be solved independently of system (3) and the reduction be made before the determination of values.

Second, in the preceding it is implicitly assumed that the length of the working day is given, at least for skilled labour. In fact the labour inputs in a given process of production are necessarily tied to the specified working time (e.g. number of hours) necessary for each unit produced, while the process of training concerns not hours of work but labour-power (i.e. a man-year of given skill, if a year is the duration of labour power); to pass from a quantity expressed in labour-time (e.g. hours) to a quantity expressed in terms of labour-power (e.g. a skilled labour-year) it is necessary to specify the time in hours of the working year, or, in more usual terms, the length of the working day. One can thus choose to express the product of the training process either in terms of labour-time, as we have done above, or alternatively, one can express all the various inputs of labour in terms of labour-power, that is, in man-years.

Third, one could easily relax the assumption concerning joint production which requires, among other things, that labour power can be used for only one year. In fact we could choose either to make a simple extension of the equation system (similar to that made by Sraffa in his treatment of joint production) or to use Sraffa's concept of sub-systems, or, given that the time element has no meaning in the absence of profit rates, to create a period of production equal to the lowest common denominator of the various fixed capital goods and the various types of labour-power lasting for more than one period, which permits the reintroduction of simple production when there is no joint production in the technical sense of the term. For the fixed capital goods already in use for one or more periods, and for technically joint products, it is possible to come up against the problem of values (quantities of embodied labour) which are negative; but the third of the possibilities given above allows one to confirm that the problem could not arise, in a self-replacing system, in the case of production processes which produce a single product, either a fixed capital good (or complex labour power that is used for more than one period) or if the production process requires the use of fixed capital and/or complex labour power for more than one period.

We should recall here that if the process of training lasts more than one period, but the skilled labour-power is then used for only one period it is not necessary to consider joint production; all processes of training can be sub-divided into a number of parallel processes, each one of them a stage in the process of training. The labour power that emerges semi-trained from the first stage will then appear as means of production for the second stage and so forth until the completion of all stages of training. The case of labour-power that requires more than one year for its training, and which is then used for more than one period is just a combination of the two cases already considered. These cases, as we have seen, do not raise substantial complications in relation to the assumption that the labour-power is trained in one year and then expended for only one year, which is the unrealistic assumption adopted initially. Thus we can accept the results of analysis based on that assumption.

We remark finally that the procedure of reduction outlined above depends only on the knowledge of the technical coefficients; price, rates of wages and profits are not needed in any way. The method suggested by Marx does not then imply any form of circularity.

V

Having examined the method of reduction of complex to simple labour proposed by Marx, and having found it to be consistent with the intention of Marxian theory it will now be easier to separate out the weak points of the critique mounted against Marx in relation to the problem.

The best known is that of Böhm-Bawerk which has been uncritically repeated by numerous authors.

In the first place, Böhm attacks the reduction of qualitative differences in the different types of labour to quantitative differences as 'artificial'. In the second place, basing himself on the ambiguous passage of Capital (discussed in III above) he accuses Marx of circular reasoning because Marx appears to deduce the coefficients of reduction of complex to simple labour from the exchange values of commodities. Finally, Böhm-Bawerk attributes to Grabski,(9) an obscure follower of Marx's, the Marxian method of reduction described in III and developed in IV, and on account of this obscurity the illustrious Austrian economist felt himself justified in stopping short of considering the method, simply remarking that wage differentials that occurred in reality did not correspond to observed differences in costs of training:

> I do not think it will need many words to show clearly the complete inadequacy also of this explanation. I have nothing to say against the view that to labour in actual operation should be added the quota due to the acquirement of labour power. But it is clear that the difference in value of skilled labour as opposed to unskilled labour could only then be explained by reference to this additional quota if the amount of the latter correspond to the amount of that difference.
>
> (Karl Marx and the Close of His System, Sweezy ed. p84)

and that, maintains Böhm-Bawerk, is not true (ibid. p85).

The reply to the first criticism is to be found in the same passage of Marx that the Austrian economist used as a basis for his charge of circularity if the interpretation that we have given to this passage in IV above is correct: the reduction from qualitative differences to quantitative differences is not an arbitrary artifice, but corresponds to the real fact that in a capitalistic system the market imposes the existence of quantitative relations among the different commodities as well as among the different types of labour that produce them. The second criticism (the accusation of circularity) falls, as we have seen, when one uses the costs of training of the various types of labour-power as the basis of the reduction coefficients;(10) whether or not the accusation of circularity is valid in relation to a particular passage of Capital thus has no great importance to the problem at issue. As for the third criticism, the non-correspondence of wage-differentials and reduction coefficients determined on the basis of differences in costs of training, it should be sufficient to recall that values and coefficients of reduction on the one hand, and prices and wage differentials on the other, belong respectively to two different levels of analysis. The non-correspondence of differentials and coefficients thus poses a problem that is no different from the non-correspondence of prices of production and labour values (this criticism has recently reappeared and will be examined in more detail in VI below).

Later criticism has been simple repetition of Böhm-Bawerk's position.(11)

Thus Bortkiewicz held that 'Marx had treated this problem (of reduction) in an unsatisfactory manner' as well as viewing the problem as of little relevance. He seemed to find reference to the cost of training acceptable, but was reserved in his approval of this 'attempt' which he attributed to Hilferding, Grabski, and Dietzel, because of his desire to be 'faithful' to Marx. In fact, several Marxists of the period seem to have forgotten Marx's own suggestion and thus felt obliged to propose alternative methods of reduction. Liebknecht, for example proposes - if with great reservation - reference to the maintenance costs of different groups of workers, determined physiologically.(12) A few years later Boudin proposes the differences in productivity between complex and simple labour, which in practice, is the same as reducing all types of labour to 'efficiency units': "A skilled worker produces in a given period of time more than an unskilled worker...The value of the commodity...will be the amount of average normal labour necessary for its production." (The Theoretical System of Karl Marx, Chicago, 1907, New York, 1967, p116) and the greater value of skilled labour-power will be seen to be deduced from its greater productivity. But because that higher productivity will be measured in physical terms, as is necessary if one is to avoid circular reasoning, it will be necessary that simple and complex labour are perfectly substitutable, an hypothesis wildly unrealistic that Marx would never have admitted.

Among the more recent of the followers of Böhm-Bawerkian criticism is Samuelson, who in a recent article attributes to Marx (and to Ricardo) the method of efficiency units put forward by Boudin and who reaffirms the impossibility of comparing different types of qualitatively different labour in an argument with a 'fictitious' Marx:

> However, the efficiency-unit device will work empirically at best only as an approximation. Natural differences show a Gaussian-like spread. 'A man's a man for all that' is a proper legal dictum. But a woman is not a man, and men are not at any age homozygous twins. Thus, let women be three times as efficient in beaver production and two times as efficient in deer production. How do we get our new quantum of 'socially necessary labour'...?...The answers are, on reflection, clear. Without the Walrasian conditions of equilibrium ...little progress is possible. (Journal of Economic Literature, 1971 pp.404-5)

The reference to Walras indicates that for Samuelson the differences between different types of labour (men and women) are a fact of nature. We are thus told to abandon the point of view of the Classics, that is the consideration of commodities as exclusively produced and reproducible goods and return instead to the Walrasian methodology which is most appropriate to the problem of the optimal allocation of given scarce resources. But even if natural talents are randomly distributed amongst the population this does not constitute an objection to the Marxian theory of value: it is sufficient to refer to the mean as Marx himself proposed. Difficulty with this approach would only arise if people with particular abilities were concentrated in particular occupations. But, as Rowthorn has observed:

> The problem should not, however, be exaggerated. Mechanisation, automation and other changes in methods of production have already reduced dramatically the importance of such special capabilities as great physical strength or manual dexterity, and further changes in this direction will continue to occur in the future. Specific intellectual and artistic natural abilities will doubtless remain important in certain restricted areas of economic activity. But their overall significance is not and probably never was very great. ('The Reduction of Skilled to Unskilled Labour' CSEB 8)

If the problem in practice reduces to artists we can turn in substance to those categories of goods (paintings, statues, etc.) 'whose value is determined exclusively by their scarcity'. But, as Ricardo observed, 'such commodities comprise a very small part of the mass of commodities exchanged daily on the market', and could easily be left out of an analysis of the fundamental mechanisms of the functioning of the social system. We should, however, appreciate Samuelson's ability to pick his examples: the sculptor used as an example by Böhm-bawerk and which can be considered a marginal case, is replaced by a case in which natural ability would have a considerable practical relevance.(13) In reality, for the greater number of occupations, if not for all, it makes no difference if the labour is male or female; particular pieces of legislation which may favour female labour (time off for child birth, early retirement, etc.) create a uniform difference between male and female labour in all sectors of the economy and which can be easily taken into account with the proposed method on the basis of demographic statistics (while the use of Walras' method would require differential advantages for the various employments). As for the example of Samuelson as well as that of Böhm-Bawerk, the reality of mass production undoubtedly confirms Marx's approach when we remember that all wage labourers are in substantially the same position as they face capital.

VI

The method of reducing complex to simple labour proposed by Marx is thus perfectly adequate, emerging unscathed from the various criticisms that have been levelled against it. Once this method is accepted, however, another problem immediately emerges: the specification of the relation that exists between the coefficients of reduction and wage differentials.

This question, already raised by Böhm-Bawerk and Joseph, has been recently put forward by Marishima. After having reduced complex to simple labour with a method analogous to that prposed here (see IV) Morishima observes that there is no reason why wage differentials should be proportional to the coefficients of reduction: 'Then we may have several groups of workers exploited at different rates, in contradiction to Marx's two-class view of the capitalist economy.' Morishima considers this an insurmountable problem for Marx's theory of value.

Let us look at the problem in more detail. If we leave aside the differences between different types of labour-power which do not result from differences in costs of training, and if we suppose that the type of training has been carried out by the labourer himself, and that perfect competition rules on the market, it would be possible to determine the wage differentials by appropriately enlarging the system of equations used by Sraffa to determine relative prices:(14)

$$\left.\begin{array}{l}
(A_a p_a + \ldots + K_a p_k)(1+r) + ({}_\alpha L_a w_\alpha + \ldots + {}_\kappa L_a w_\kappa + {}_\sigma L_a)w = A p_a \\
\ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \\
(A_k p_a + \ldots + K_k p_k)(1+r) + ({}_\alpha L_k w_\alpha + \ldots + {}_\kappa L_k w_\kappa + {}_\sigma L_k)w = K p_k
\end{array}\right\} \qquad (5)$$

$$\left.\begin{array}{l}
(A_\alpha p_a + \ldots + K_\alpha p_k)(1+r) + ({}_\alpha L_\alpha w_\alpha + \ldots + {}_\kappa L_\alpha w_\kappa + {}_\sigma L_\alpha)w = {}_\alpha L w(w_\alpha - 1) \\
\ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \\
(A_\kappa p_a + \ldots + K_\kappa p_k)(1+r) + ({}_\alpha L_\kappa w_\alpha + \ldots + {}_\kappa L_\kappa w_\kappa + {}_\sigma L_\kappa)w = {}_\kappa L w(w_\kappa - 1)
\end{array}\right\} \qquad (6)$$

$p_a, \ldots, p_k$ are the prices; $w_\alpha, \ldots, w_\kappa$ the wage differentials (the coefficients by which it is necessary to multiply the wage associated with simple labour in order to find the wage appropriate to complex labour); r, the rate of profit; w, the wage rate for simple labour. The equations (5) show the fact that the product prices are equal to the prices of the means of production plus profit, plus wages (paid post factum) for the various types of labour employed. The equations (6) show in the same manner the costs of qualification: the wage for complex labour ($=w \cdot w_e$)

should be such as to take into account the costs of training ($=w(w_e-1)$) as well as the wage normally associated with simple labour (w).[15] We then have $k+\kappa$ independent equations; and given one of the distributive variables, w or r we can solve (5) - (6) simultaneously, determining the $k-1$ relative prices, the κ wage differentials, and the remaining distributive variable. As above, the system (6) could be solved independently of (5) only if $I_e=0$ for $i=a,\dots,k$ and for $e=\alpha,\dots,\kappa$.

In general we should find that $w_e \neq \mu_e$ (wage differentials different from the coefficients of reduction; but in general we will also have $p_i/p_j \neq \lambda_i/\lambda_j$ (relative prices different from relative labour values), the two problems are no different in principle. The difference between the relative prices of two commodities and the ratio of the quantity of labour contained in them depends on the manner in which the surplus-value is distributed between the different capitalists: the "postulate" of a uniform rate of surplus value is contravened (save in the special case of uniform organic composition of capital) by the tendency to equality of the profit rates in different industries, for the capitalists are interested in the rate of profit on capital advanced, not on the rate of surplus value of labour directly employed in production. In the same manner the inequality of the coefficients of reduction and wage differentials corresponding to them depends on the fact that skilled labour as well, following the assumptions given above, is interested in returns on the costs they have incurred in their own instruction in the sense of a rate of profit and not a rate of surplus value. With such motives the rate of exploitation will not be uniform in the different sectors if there is not a uniform organic composition in the various 'processes of training' (and in the sectors that produce the means of production for the process of training); this even when the wage differentials are determined by the mechanism outlined above which is particularly unrealistic. In fact, as we have seen above in relation to Smith (paragraph 2) certain special conditions are necessary for the operation of such assumptions (free competition, equilibrium, etc.) which are far from being found in reality, and will be predominated by the forces of custom and tradition such that there will be natural, legal or administrative barriers between jobs or sectors of the labour force, as well as differences of a structural nature (public or private schooling, competitiveness of the market, etc.)

On the other hand, it should be kept in mind that Marx did not intend his explanation of the determination of the coefficients of reduction of complex to simple labour to serve in the determination of wage differentials, but simply to furnish a method of aggregation for the various types of labour-power. In the preceding pages we have seen how such a method was fully adequate to the completion of his theory of value.

NOTES

1. Ricardo, like Smith, also presented the other method, cf. Works and Correspondence, vol.II p226.
2. In recent times different empirical investigations have at least partially confirmed Smith's intuition, and emphasise the importance of tradition in the determination of wage differentials as well as their relative stability in the long-period, although recently there seems to be a tendency towards equalisation. Cf, for example, H.A. Turner, 'Trade Unions, Differentials and the Levelling of Wages', Manchester School, vol.20, 1952, pp227-282 but in particular pp244-258.
3. Böhm-Bawerk comments: '...the standard of reduction is determined solely by the actual exchange relations themselves'. Karl Marx and the Close of his System, Sweezy edition, p.83. This critique is taken up in V below.

4. "The reader must note that we are not speaking here of the wages or value that the labourer gets for a given labour-time, but of the value of the commodity in which that labour-time is materialised. Wages is a category that, as yet, has no existence at the present stage of our investigation. p44,n.2.

5. Or a simple mental construction (ein Gedankenbild) as Bernstein would say. On the particular significance of abstract labour in Marx cf. L. Coletti, Ideologia e Societa, Bari, 1969, pp103-124.

6. This interpretation is also supported by R. Meek in Studies in the Labour Theory of Value, London 1956, pp169-70.

7. A description of the economic system as a flow of goods and a flow of people meeting in the process of production which yields a flow of persons as well as a flow of goods is developed in a manner similar to that used here by A. Breglia in Reddito sociale, ed. P. Sylos Labini, Rome 1965. Cf. especially chapter X, pp61-65.

8. Similar formal solutions to the problem of reduction have been given by N. Okishio, 'A Mathematical Note on Marxian Theorems', Weltwirtschaftliches Archiv, vol. 91 1963, p289; A. Brody, Proportions, Prices and Planning, Amsterdam, London and Budapest 1970, pp86-8; M. Morishima, Marx's Economics Cambridge U.P. 1973, pp191-2; R. Rowthorn, 'The reduction of Skilled to Unskilled Labour', CSEB 8. Morishima shows that the simultaneous determination of an economically significant (i.e. positive) solution for the values and the coefficients of reduction satisfies the assumption of the validity of the system.

9. S. Grabski, in Deutsche Worte, vol.XV, 1895, p155.

10. After Marx this method has been proposed by others as well as Grabski, e.g. H. Dietzel, Theoretische Sozialökonommik, Leipzig 1885, vol.I, pp.248-61 and R. Hilferding, Böhm-Bawerk's Criticism of Marx, included in the Sweezy edition of Böhm-Bawerk's Karl Marx, etc., pp121-99.

11. Cf. for example, C. Adler, Die Grundlagen der Karl Marxschen Kritik der bestehenden Vokwirtschaft, Tübingen 1887, pp81-5; T. Masaryk, Die philosophischen und sociologischen Grundlagen des Marxismus, Vienna, 1899; V. Pareto, Introduction to Karl Marx, Le Capital, Extraits, ed. P. Lafargue, Paris 1893 (reprinted in V. Pareto, Marxisme et economie pure, ed. G. Busino, Geneva 1966, pp52-3); V. Pareto, Les Systemes socialistes, Paris 1926, vol.II, pp 379-81; H. Joseph, The Labour Theory of Value in Karl Marx, London 1963, p41,64, 87-96.

12. W. Liebknecht, Werttheorie in England, 1902, pp99-103.

13. In fact the only possible alternative would have been the distinction between whites and negroes: there is not a great deal of difference between racism and male chauvinism.

14. Sraffa, op.cit., p13. For a similar system of the simultaneous determination of prices and wage differentials cf. J.T. Schwartz, Lectures on the Mathematical Method in Analytical Economics, New York 1961, p39; A.Brody, op.cit. p87; and R. Rowthorn, op.cit.

15. $w \cdot w_e = w(w_e - 1) + w.$

DEFINING PRODUCTIVE LABOUR FOR CAPITAL

Paul Bullock

This article is a result of reflection upon the recent discussions of the definition of productive labour. Its point of departure is the working paper I submitted to the CSEB Autumn 1973. That paper was purely tentative.[1] I have now arrived at what I consider to be the correct definition.

Marxist theory has as its central purpose the explanation of the concrete development of capitalism. Since this is so it is of no use merely to define the inner connections of the process of value expansion, without tracing the dialectical relationship between these inner, abstract, value relations and their specific material expressions. This process of explanation has a particular order. Thus in 'Capital', Marx first analyses the process of production as such, then the process of circulation is studied in Book II in which it becomes clear that the capitalist process of production taken as a whole represents a synthesis of the processes of production and circulation. In Book III then, Marx locates and describes the

"...concrete forms which grow out of the movements of capital as a whole."
"The various forms of capital, as evolved in this book, thus approach step by step the form which they assume on the surface of society, in the action of different capitals upon one another, in competition, and in the ordinary consciousness of the agents of production themselves." (Capital, III, 1971, p25)

To dwell upon the earlier stages of analysis alone will not enable anyone to explain the concrete process of capitalist production as a whole. If we are to understand the appearances of capitalist society for what they really are it is essential to approach the problem dialectically, and not merely formally, that is abstractly.

In his attempt, however, to give "a definitive exposition of Marx's theory (sic) of productive and unproductive labour", Ian Gough fails to trace out this dialectical relationship.[2] His work is a formal exposition of the definition of productive labour in its most abstract sense, in terms of value alone. He refuses to accept that the content, the use value of the commodity, has anything to do with the definition of productive labour. Gough seems blind to the fact that this can only result in inability of the definition to explain the concrete movements of total social capital. In the texts from which Gough generally works, volume I of Capital and volume I of the Theories of Surplus Value, Marx was establishing only the definition in relation to the direct process of production as such. He had no concern with the circulation process, and the process of capitalist production as a whole. And it is only after the consideration of the latter can the question be answered as to how far labourers employed by capital are productive or unproductive. In his establishment of the production process as such, Marx treated the value of the product of the individual capital unseparated from capital as such. Here he assumed that the individual capitalist can first convert the component parts of his capital into money by the sale of his commodities, and then reconvert them into productive capital by renewed purchase of the elements of production in the commodity market.

"What we dealt with was the immediate process of production itself, which presents itself at every point as the process of some individual capital. So far as the reproduction of capital was concerned, it was sufficient to assume that the portion of the product in commodities which represents capital-value finds an opportunity in the sphere of circulation to reconvert itself into its elements of production and thus into its form of productive capital;.." (Capital, II, 1971, p398)

This 'merely formal manner' of presentation is no longer adequate to the study of the total social capital and of the value of its products. "So long as we looked upon the production of value and the value of the product of capital individually, the bodily form of the commodities produced was wholly immaterial for the analysis, whether it was machines, for instance, corn, or looking glasses." (Capital II, 1971,p398). The answer to the question, which labour is productive for capital, can only be answered when we consider the process of production of capital as a whole, and this included consideration of the use-value, the bodily form of commodities.

Gough concludes however, that the content, the use value of the product had nothing to do with the definition. He reaches the following conclusion, after discussing the arguments of other commentators.[3] There are apparently two categories of productive labour. One which Gough takes from Marx's discussion of the production process as such, a general, formal definition for the single capital - that labour which produces surplus value. This is opposed to another which recognises as productive that labour which, irrespective of the production relation, produces material elements for further rounds of production. He correctly sees the latter as non-Marxist. Nevertheless we know that this does not mean that we ignore the implications of the use value when considering the process of Capitalist Production as a whole. Gough cannot see this. He says of his two criteria, "One must not confuse the criteria of productive and unproductive labour required 'for a political economy of growth with the criteria required by a theory of exploitation.'" [4] Consistent with Marx's rejection of the use of the bodily form at the early, formal stage of definition, Gough refuses to consider the question of content. He believes that the criteria for defining productive labour should be based upon the notion of exploitation. Thus for him, capitalist luxury production is an employer of productive labour. Since however Gough only treats Marx's examination of the process of production as such, and not the process of capitalist production as a whole, it is impossible for him to draw such conclusions about specific labours by Marx's method. He states that Marx "...is adamant that a worker who produces a use value and surplus value labours productively, whether he produces guns, or jewellery or millionaire's yachts."[5] But this is only true for Marx's discussion of the production process as such, treated formally, and for the individual capital. It is not true for the process of production of the capitalist mode taken as a whole. Because Gough cannot grasp Marx's method he cannot show us the concrete forms of productive labour. It is noticeable that, even in his own mind, he accepts that the exclusion of reference to use-value must result in the failure to define productive labour in terms of the expansion of total social capital.

The definition of productive labour must be tied to expanding total social capital. To determine which concrete labour is productive or not requires foremost that the formal treatment of individual capital be superseded by the dialectical analysis of total social capital and the consideration of the effects of the bodily forms of the products in the reproduction process. It is indeed doubtful whether Gough recognises the limits of his work, even though he now feels that we should, "abandon Marx's criterion of unproductive labour developed in Capital, volumes II and III..."[6] His arguments can at best, only apply to the level of the direct process of production as such, conceived formally, for the individual capital. We will see below how his assertion that luxury good labours **are** productive also implies that even at this level he is only referring to absolute surplus value.[7]

Marx clearly understood that, "In considering surplus value as such, the original form of the product, hence of the surplus product, is of no consequence. It becomes important when considering the actual process of production, partly in order to understand its forms, and partly to grasp the influence of luxury production, etc., on reproduction. Here is another example of how use-value as such acquires economic significance." (T.S.V., III, 1972, pp251-2 - my emphasis) Where in fact the definition of concrete labour, productive for capital, must be bound to the reproduction of social capital, Gough avoids the matter. He resigns himself to the conclusion that, "...if faced with the widening gulf which has developed today between these two categories (those two he divined above. PB) of productive labour following the growth of arms and 'luxury' production, Marx would no doubt stand firm on his original definition - that productive labour does include output of luxuries." (Gough NLR 1972 p8)

Gough fails to move from the most abstract and formal definition, which Marx continually used in his criticism of Smith, Say and others, to establish his concept of value as a social relation. He fails to see, as I will demonstrate, that Marx goes on to take the content of the product into account in analysing reproduction, the total circuit of expanded reproduction of social capital, and so arrives at a more specific definition of concrete labour productive for capital.

LUXURY PRODUCTION

Capitalism is an historically transitory mode of production. We should, in this case, always be concerned to define those concepts most adequate to the development of the capital relation. The most adequate definition of productive labour for the expanded reproduction of total social capital must be posed in terms of the production of relative surplus value.

> "...capital, depends on the productivity of labour: not however on its absolute, but, on its <u>relative</u> productivity." (Marx, T.S.V. 1969, p152)

Starting from the most abstract definition, it is clear that luxury production conducted capitalistically involves embodied surplus labour time, expressed in surplus products. The labour power used up here produces surplus value. Abstractly then, this labour may be deemed productive. As soon however, as we introduce the material nature of the product, luxury producing labour power takes up a specifically unproductive role for the total social capital. This can be shown for both simple and expanded reproduction. The concrete labour of luxury production is unproductive for total social capital, although it is productive from the standpoint of the individual luxury capitalist.

Before we prove this we must grasp what luxury production is. There are numerous references to be found in 'Capital'. For example, "...luxury goods (all goods which are not necessaries and which are not commonly used by the labouring class)." (Marx T.S.V.III, p43) So luxury goods are consumption goods, but they express (generally) a relation between the system of historically constituted needs existing at any one time, and the coming into being of differently constituted needs. The "...pulling away of the natural ground from the foundations of every industry, and this transfer of its conditions of production outside itself, into a general context - hence the transformation of what was previously superfluous into what is necessary, as a historically created necessity - is the tendency of capital." (Marx, Grundisse, 1973 p528) So it becomes clear that, "Luxury is the opposite of the natural necessity... The development of industry suspends this natural necessity as well as this former luxury - in bourgeois society, it is true, it does so only in antithetical form, in that it itself only posits another specific social standard as necessary, opposite luxury." (ibid)

Luxury production then, will often anticipate future necessity, a necessity which is socially determined. This certain labour considered to be unproductive for total capital, i.e. labour of luxury production, will at a later date fall under a productive relationship, if the results of that labour become socially necessary.

THAT LUXURY PRODUCTION INVOLVES UNPRODUCTIVE LABOUR FOR CAPITAL

I

Marx shows that when we take into consideration the material nature, the use-value, of the product as one of the determinations of the concrete, then we discover that the labour power expended upon luxury production is incapable of producing relative surplus value. Consequently such labour does not fulfil the most adequate definition of productive labour, stated above. This is that such labour must produce relative surplus value.

Marx argues thus, "Let us now assume that the production time for luxuries is reduced due to machinery (or chemical processes), that less labour is required to produce them. This cannot have the slightest influence on wages, on the value of labour power, since these articles do not enter into the consumption of the worker s (at least never into that part of their consumption which determines the value of their labour power)..." (T.S.V., III, p349) Now we know that relative surplus value is produced by a fall in the full value of labour power.

"In order to effect a fall in the value of labour power, the increase in the productiveness of labour must seize upon those branches of industry, whose products determine the value of labour power, and consequently either belong to the class of customary means of subsistence, or are capable of supplying the place of those means..."
"...a fall in the value of labour power is also brought about by an increase in the productiveness of labour, and by a corresponding cheapening of commodities in those industries which supply the instruments of labour and the raw materials, that form the material elements of the constant capital required for producing the necessaries of life."
"But an increase in the productiveness of the labour in those branches of industry which supply neither the necessaries of life, nor the means of production for such necessaries, leaves the value of labour power undisturbed." (Marx, Capital, I, 1938, p.304)

Luxury production leaves the value of labour power undisturbed. "The cheapening of luxury articles does not enable the worker to live more cheaply. He requires the same amount of labour time to reproduce his labour power as he did previously." (Marx, T.S.V. III, p350) It is a simple matter to arrive at the following conclusion. "Increased productivity in the luxury industries therefore, has no influence on the rate of surplus value nor, consequently on the rate of profit insofar as this is determined by the rate of surplus value." (ibid., p349) Clearly then, luxury production has a distinct relation with the rate of profit. It can only "...influence the rate of profit insofar as it affects either the amount of surplus value or the ratio of variable capital to constant capital and to the total capital." (ibid.)

Labour power consumed in this sector is limited in its capacity to expand surplus value. It produces only absolute surplus value, and is not productive labour in a full historical sense. "It is correct, however, that productivity in the luxury industries cannot reduce the value of labour power, it cannot produce any relative surplus value and, in general, cannot produce that form of surplus value which results from the growing productivity of industry as such." (ibid., p350) Luxury good production does result in absolute surplus value however, and it is now clear what I meant when I said above that Gough's definition of productive labour remains posed only in absolute surplus value terms. If he wishes to treat the labour of luxury production on the same terms as that of the production of necessaries and means of production, then the common level is that of absolute surplus value production.

Marx examines the consequences of his observation for the luxury sphere. "Apart from the absolute lengthening of the working day, increased productivity in the luxury industry can affect only the number (of workers employed). The inevitable consequence therefore is a reduction in the amount of surplus value and hence in the rate of profit, even if no increase in constant capital takes place. If the constant capital increases however, a reduced amount of surplus value is calculated on an increased total capital." (T.S.V.III, p.351) Again, "Insofar therefore as increasing productivity in the luxury industry reduces the number of workers which a certain quantity of capital employes, it reduced the amount of surplus value, hence all other circumstances remaining unchanged, it reduced the rate of profit." (T.S.V.III, p.350) It is clear that productivity in the sphere of luxury production will always reduce the rate of profit in that industry unless the means by which productivity is increased are the result of factors external to that industry. "If the increased productivity in the luxury industry was (due to improvements carried out not in that industry itself, but) in those branches of industry which provide it with constant capital, then the rate of profit would rise in the luxury industry." (ibid.)

We have here then, a sphere of production which has only one way, through its own efforts, by which to offset the tendency for the general rate of profit to fall. Insofar as this, the absolute lengthening of the working day, increased absolute surplus value, is historically contained by the working class, this luxury sphere is dependent for any rise in productivity upon external factors. In a competitive market this aid cannot long counteract the tendency of the general rate of profit to fall. (We leave out of account here foreign trade, depression of wages below the value of labour power, the effects of relative over population - the first since we treat capitalism as a whole, and as the sole mode of production, the latter since they themselves can be shown to be temporary.)

In sum then, the sphere of luxury production is a particular burden upon capitalist expansion. This whole sphere is a force for stagnation in the process of accumulation. Where a productivity increase takes place within that sphere by a reduction in the relative numbers of workers, then the profit rate falls. "... since the rate of profit in this sphere enters into the equalisation process of the general rate of profit just as much as that in any other sphere of increased productivity in the luxury industry, would, in the case under consideration, bring about a fall in the general rate of profit." (T.S.V.III, p350)

It is clear now that the labourers working in the luxury industries are capable of producing only absolute surplus value, and in consequence, have a decidedly burdensome effect upon Capital's capacity to expand, in value terms.

II

Now luxury labourers are secondary to the labourers of necessary wage goods and means of production industries in yet another sense. That the luxury labourer can be 'productive' at all (even of absolute surplus value) is due to the productiveness of these other industrial labourers.

In Capital, Marx traces a specific relationship between the wage good department and the luxury good department. This is a function of the surplus value produced by the wage good sector, which Marx notates as IIa (s. is the surplus of this sector). "...v, laid out in the production of luxuries, is equal in value to a corresponding portion of s. produced in the form of necessities of life and hence must be smaller than the whole of this s, namely (IIa)s..." (Capital II, p412).

Since the labour of luxury production needs wage goods, v - "...so the surplus labour of the producers of those necessaries which constitute the wages of producers of luxuries can also be considered as the necessary labour of the working class as a whole." (Ibid.)

With the given bounds (IIa)s., the relationship is ultimately dependent upon the prodigality of the capitalist class. (ibid. p414) That is to say, "...that the variable capital advanced by the capitalist producers of luxuries returns to them in the form of money only by means of the realisation of that v in this portion of s." (ibid. p412) This dependent position of the luxury sphere is here posed in terms of simple reproduction, discounting credit, and ignoring foreign trade. Nevertheless such a dependency can be shown for expanding capital. This is not done here since strictly speaking we are not so concerned with this dependency.

III

So far we have proceeded to show that luxury industry employs labour only insofar as surplus value is produced by wage good workers, and that luxury labour is productive only of absolute surplus value and is thus a peculiar burden upon the attempt by capital to pass over its existing limits. Despite all of this Gough might still wish to assert that no matter what, luxury labour did produce absolute surplus value and was still 'productive'. This claim must soon fall to the ground. The use-value aspect of the product again modifies the process of the value side. "Although the workers engaged in luxury production produce capital for their employers, their product, in the form in which it exists, cannot be transformed to capital, either constant or variable capital" (TSV III, p245)

The labour power embodied in luxuries, must, because of its material nature, be useless as elements upon which further value expansion can be expressed. Marx clearly states, "If too large a part of surplus labour is embodied directly in luxuries, then clearly, accumulation and the rate of reproduction will stagnate, because too small a part is reconverted into capital." (ibid., p346) Clearly, the larger the luxury sphere the more surplus value is absorbed by a production process the result of which is a product which must be consumed as revenue, which is useless for further rounds of value reproduction. Now since I am concerned here to define productive labour I shall not elaborate upon this vital relation between the luxury sphere and the other departments. It must be clear from the above however that the labour of luxury production bears a distinct and negative relation to value reproduction, and is itself dependent upon the surplus of wage good labour. If the concept of productive labour is to retain its definitive relation with value reproduction, then the labour of luxury producers must be excluded.

THE EFFECT OF FOREIGN TRADE

So far we have treated capital alone, ignoring the effects of trade upon accumulation, insofar as it affects luxury products. (Such trade can be carried out with other capitalist states, or with non-capitalist modes of production.) If we assume foreign trade, then wages do not depend on the amount of necessaries produced within the home state. It can also be said that as capital accumulated, "the portion of surplus product which is already produced directly in a form in which it can only serve as capital, and that portion of it which acquires this form as a result of foreign trade, grow more rapidly than the portion which must be exchanged against immediate labour (TSV III, p244)

The diversification and expansion of luxury good production is seen by Marx to depend on foreign trade (ibid., p245). In the case of foreign trade, the extent to which luxury goods are exchanged for value as capital determines the degree to which the rate of reproduction is constrained by luxury production. "Luxury products, apart from those which are sent abroad to be exchanged for necessaries which enter into variable capital either in whole or in part, simply constitute surplus labour and (moreover) surplus labour which is immediately in the shape of surplus products which the rich consume as revenue." (ibid., pp245-6)

If the capitalist mode of production is well established, taking capital as a whole and excluding trade, the labour of luxury production is unproductive. If trade takes place with non-capitalist (socialist) modes then the labour of luxury production can either result in a deleterious or beneficial effect upon the rate of expansion of capital, according to the nature of the products for which luxuries are traded.

I previously assumed no foreign trade. Following Marx, I concluded that the labour of luxury production was unproductive for total social capital, and sure enough, in an earlier section of the TSV III we see, "If there were no foreign trade, then luxuries could be produced at home, whatever their cost. In that case, labour, with the exception of (the branches producing) necessaries, would, in actual fact, be very unproductive. Hence accumulation of capital (would proceed at a low rate) (p121)."

TWO CATEGORIES OF PRODUCTIVE LABOUR

In the earlier discussion paper I suggested that if the labour of luxury production were defined as unproductive for accumulating capital, then the surplus value produced in the luxury sphere would not add to the total social capital. "In the case of immaterial production (the term then used for luxury production) the total capital C, does not become C+d....as labour is performed, although for the individual capitalist the labour is transformed into money capital, and is productive in a certain sense". (CSEB Autumn '73, p90)

This was correct from the present standpoint. The capitalist class is forced to consume the luxury form of value and surplus value as revenue (TSV III, pp245-6). Thus though M' is the result of the total round of capitalist exploitation and realisation of value, the total constant and variable capital which can be applied in the next round will be less than the value M'. There is a certain set of capitalists who hold money the commodity equivalent of which has been destroyed, 'consumed' by capitalists. Thus we can say that the labour of the luxury producer is productive, but for him, and not Capital as a whole. This difficulty was not treated by Marx, since in his discussions of the expansion of capital luxury production is excluded. Thus typically, "The labour time objectified in capital appears, as we have seen, as a sum consisting of three parts, (a) the labour time objectified in the raw material, (b) the labour time objectified in the instruments of labour, (c) the labour time objectified in the price of labour." (Grundrisse, p.321) This follows clearly from the fact that luxury production is not essential to the reproduction of capital, it is a burden.

This argument validates and explains Yaffe's remark that "Sometimes Marx seems to imply that labour is productive, if it produces surplus value for the capitalist only and does not add to total social capital". (The Marxist Theory of Crisis... CSEB Winter 72, fn 30) We continue to give evidence of this below, but here we will repeat the essential nature of the problem. This is the level of analysis at which we work. We are concerned with a definition for the Capitalist production process taken as a whole. In this case it is totally inadequate to rest at the level of the direct process of production as such, or to repeat Marx's examples of the singer, the clown, etc, which apply only for the individual capital. At the level of analysis of the direct process of production as such, capital as such, is not separated from individual capital.

THE 'MATERIAL COMMODITY' OF THE PRODUCTIVE RELATIONS

Having established which labour is productive for capital by tracing the dialectical relation between use-value and value reproduction, it is possible to refer back to the discursive remarks of my previous article (CSEB Autumn 73) and elaborate some further conclusions.

In that paper I first defined productive labour in its most abstract terms. Gough in his comments upon this paper, seems happy enough about this. It is only when I refer to instances in which Marx appears to be concerned with the content of the product, that Gough objects.[6] As Marx begins to discuss the definition of productive labour, citing particular concrete labours, we find the following comments.

"...the mere exchange of money for labour does not make the latter productive labour, and that on the other hand the content of this labour at first makes no difference." (TSV I, p404)
"...the content, the concrete character, the particular utility of the labour, seems at first to make no difference..." (ibid., p405)

In their particular context these remarks are puzzling. They seem to indicate that the content of the labour is of significance in the definition of productive labour. It is only in the light of our discussion of the problem of luxury production that these suggestions make sense. Labour which does not produce wage goods or means of production (elements which ensure the presence of labour power and its means of labour for further rounds of exploitation), cannot be considered productive. Here use value has economic significance.

In my previous paper I confused the references to the 'materiality' of capitalist commodities with these other references to the significance of the content of embodied labour as a determinant of labour concretely productive for total capital. These references to 'material' commodities, in fact, merely pose an historical characteristic of commodity production. It is generally recognised that at the time when Marx was writing 'immaterial' production fell almost exclusively under the 'service' or 'revenue' relation. The labour of immaterial products was exchanged directly against revenue. Observing the limited manifestations of capitalism in this sphere, Marx merely left it out of account. (TSV I, p172)[7] He was thus able to assume that commodity production was more or less coincidental with 'material' production, and pose a "Supplementary definition of productive labour as labour which is realised in material wealth." (TSV I, p409)[8] "It can then be said to be a characteristic of productive labourers, that is, labourers producing capital, that their labour realises itself in commodities, in material wealth." (ibid. 410) As Gough correctly points out (NLR 76, p83) the conceptual distinction need not be obscured by this historical characteristic.

The term 'materialise' which is used by Marx, is something different again. "When we speak of the commodity as a materialisation of labour - in the sense of its exchange value - this itself only an imaginary, that is to say, a purely social mode of existence of the commodity which has got nothing to do with its corporal reality; it is conceived as a definite quantity of social labour or of money." (TSV I, p171)[9]

All the above remarks can be taken to displace any suggestions to be found in my previous paper. They do however, justify the concern I felt for the problem of the exact economic significance of the use-value, and the determinant position this held in the definition of productive labour for capital as a whole. I had never gone as far as Blake and treated the use-values of products, apart from the social relation of their production. The 'content' of the labour, the use-value, was to be considered after the abstract definition of productive labour had been established, i.e. the production of surplus value. I had not worked out the manner of the introduction of the use-value effect. I have now shown how Marx did this. It remains to remind ourselves of the distinction in the stages of analysis that must be recognised. Marx begins with the formal abstract definitions pertinent to the individual capital, but -

"This merely formal manner of presentation is no longer adequate in the study of the total social capital and of the value of its products. The reconversion of one portion of the value of the product into capital and the passing of another portion into the individual consumption of the capitalist as well as the working-class form a movement within the value of the product itself in which the result of the aggregate capital finds expression; and this movement is not only a replacement of value, but also a replacement of material and is therefore as much bound up with the relative proportions of the value-components of the total social product as with their use value, their material shape." (Capital II p398)

SERVICES

Despite Marx's characterisation of productive labour as that labour which produces material commodities, it is clear that immaterial production has fallen to some extent under the capital relation. Following the discussion about luxury production however, it is clear that luxury services will be unproductive for capital despite their 'capitalistic' production. Luxury-capitalists who, at the end of the cycle of production have M' in hand, have a claim to surplus value as capital, despite the fact that they appropriated surplus value as luxuries (products doomed to consumption as revenue), contributing no elements of capital for further expansion.

Gough is wrong, then, to say about the transport industry, "Whether the persons transported are the idle rich or commuting workers is a matter of supreme indifference to Marx in the context of his theory of productive and unproductive labour." (CSEB Winter 73, p69) If the service to sold by the transport capitalist is a luxury consumption by the 'idle rich', then the labour so used is unproductive for total social Capital. It is a matter of indifference to the particular transport capitalist.

The examination of 'services' is required before they can be admitted to have fallen under the capital relation. It is also necessary to examine Marx's reasons for 'leaving them out of account'. After all it might not simply be a matter of historical observation on Marx's part. The centre of my previous article was the discussion about how and why 'services' should now be examined, whether there were other factors, such as the nature of the product, which would always exclude them from the capital relationship. All the various reasons which Marx gave for excluding services from consideration when defining productive labour can be discounted. Thus Marx objects to considering as productive or no, that labour which "produces, trains, develops, maintains or reproduces labour power itself" (TSV I p172) since, at this stage in the discussion, such labour appears to Marx to be productive when under the capital relation, but he is concerned that if included, "this would open the flood gates for false pretensions to the title of productive labour" (ibid.) This objection is unnecessary if we assume familiarity with Marx's method. Any objection that services do not enter the fund of use values which are consumed as wage goods by the working class, is invalid in the contemporary period in advanced capitalist states, for many that are produced capitalistically now do. Services then are not only found in luxury production or under the "servant relation", the exchange of labour power for revenue.

Another objection posed by Marx was that it was in the 'nature' of these services that they would not fall under the capital relation. This 'nature' (TSV I p408)[10] appears to be such that the results of many services could not be guaranteed. This is as mild an objection as any other he notes. It is clear that there are training schemes produced capitalistically, which involve an average time of treatment generally regarded as sufficient to bring about a specified change in the quality of the labour power of the trainees.

Nevertheless, Marx's instinct is correct. It is clear that the lack of certainty of the results of many services, alongside the reluctance or inability of the working class to consume them, e.g. education, doctors etc, have resulted in capital taking on mutated forms, which are alien to it, though these forms are dependent upon capitalism proper for their existence.

Marx's objections then, to treating the labour of services as entering into the

Capital relation, are by no means persuasive. Nevertheless, he was able to characterise services as unproductive. Thus the service relation is the exchange of labour for revenue. This is the obverse of the assumption that all material production may fall under the capital relation, and the characterisation of commodity production as material production.

We have seen then that 'services' may fall under the capital relation, but insofar as they are luxuries the power used up cannot be called productive for social capital.

THE MORE RECENT PROPOSITIONS
OF HARRISON AND GOUGH

In two articles in the Bulletin, Harrison (Autum '73) and Gough (Winter '73) propose an alteration to Marx's definition of productive and unproductive labour. For Gough, as we have seen this involves abandoning, "...Marx's criterion of unproductive labour developed in Capital, II and III..." (CSEB Winter '73 p71). He sees Harrison's work as a 'formulation' of Marx's work consistent with Marx's own. This is an adjustment to Gough's NLR article, but as Fine correctly anticipated (CSEB Autumn '73), is consistent with the emphasis there.

Harrison and Gough's position is briefly this: that all labour performed under the capitalist mode of production should be treated as productive. Harrison argues that since circulation labour is involved collectively with labour of production in producing and realising surplus value, it too should be treated as productive. The use of the idea of collective work to blur the theoretical distinctions between time of production and time of circulation is neither persuasive or helpful. He fails to develop a new schema by which to explain the theory of credit etc which depend upon this distinction. Part of Harrison's puzzlement about the distinction between productive and unproductive labour comes from his attempt to formally allocate supervisory labour to one category or another. This is to pose the question empirically. It may be that certain supervisors are clearly productive labourers, whilst others are unproductive. Generally, what can be said is that they hold a contradictory position, in which they are at least productive in general (of some use value) but consume value as wage. They are unproductive, though industrially necessary. Thus "The exploitation of labour costs labour, insofar as the labour performed by the industrial capitalist is rendered necessary only because of the contradiction between capital and labour, it enters into the cost of his overseers (the industrial non-commissioned officers) and is already included in the category of wages in the same way as costs caused by the slave overseer and his whip are included in the production costs of the slave-owner. These costs, like the greater part of the trading expenses, belong to the incidental expenses of capitalist production." (Marx, TSV III, pp355-6). Clearly these 'wages' are a claim upon surplus value, they do not produce it. Even as part of collective labour their function is only a necessary one.

Gough seems to agree with Harrison that circulation and other unproductive labour (correctly conceived) should be classed as productive. This is not surprising. We have already seen that Gough's notion of 'productive' is based upon an idea of exploitation rather than the production of the value relation. Since circulation labour is exploited, works surplus labour time, it seems reasonable to him to call such workers productive. This point is repeated by Gough. He takes Harrison's point about exploitation and states, "Commercial and allied workers are, like workers involved in production employed by capital, they perform unpaid labour, and they are qualitatively exploited!.." (Gough, CSEB Winter '73 p71). Combined with the statement that these workers perform 'surplus labour' (i.e. surplus labour time), he wrongly concludes that "...all State employees should be regarded as productive." (ibid).

The problem of defining productive labour in terms of value reproduction is completely absent in this reasoning. The term productive has lost its essential element, stressed so strongly by Gough in his NLR article, the production of surplus value.

Realising this he then drags in 'value' by a verbal trick. "We may regard all circulation workers as indirectly productive of surplus value..." (CSEB, Winter '73 p72). The powerful precision of this proposition is supported by a quote from Mandel, in which Mandel states that circulation labour, by reducing circulation time, 'helps' the industrialists to increase the total amount and annual rate of surplus value. That Gough should invoke a reference to circulation time in support of Harrison's attempt to dissolve the concept into production time, is ironic. Mandel is correct to say that the shorter the circulation time the longer the production time, and so the production of surplus value rises. But this can only happen if circulation time is a time when production of surplus value (productive labour) does not take place. The use of the word 'indirectly' cannot conceal this fact. "But Political Economy sees only what is apparent, namely the effect of the time of circulation on capital's process of the creation of surplus value in general. It takes this negative effect for a positive one, because its consequences are positive." (Marx, Capital II p128) Gough fails completely in his understanding of the significance of the circulation sector for capital. The negative effect of this time is for him a 'help', a positive effect. Marx repeats often enough that this time is a barrier which capital struggles to overcome. The labour employed in this sector is a force for the devaluation process!

"To regard the time the capitalist spends in circulation as value creating time or even surplus value creating time is to fall into the greatest confusion. Capital as such has no labour time apart from its production time." (Marx, Grundisse p635).

"In regard to capital as such, circulation time can coincide with labour time only insofar as it interrupts the time during which capital can appropriate alien labour time, and it is clear that this relative devaluation of capital cannot add to its self expansion and reproduction, but can only detract from it; or, in so far as circulation costs capital objectified alien labour time, values."[11]

"...in a specific cycle of turnovers of capital, the sum of values created by it (...) is directly proportional to the labour time and inversely proportional to the circulation time." (Grundrisse p627)

"Circulation time is... - as barrier, negation - to the production time of capital." (ibid. p634)

These quotations are taken from the Grundrisse, since I have taken into account Gough's acquired aversion to Capital II and III. The definition of productive labour is that which produces surplus value, where labour time is materialised as commodity, not merely where surplus labour is performed. Yet Gough blurs the distinction between the concepts surplus labour and surplus value. Circulation labour is not productive labour.

We can finish this section with remarks by Marx which sum up the correct definition of concretely productive labour, as I have established above. He takes an example of the labour of luxury shop workers. If such labour is involved in circulation activities, it must be unproductive. If it is suggested that such workers assist in alteration of the position of the products, their spatial existence, and also perform productive labour, I would point out that this is upon luxury products and so it is only productive for the individual capitalist, not for expanding social capital (A result of the material nature of the product).

"A. Smith was essentially correct with his productive and unproductive labour, correct from the standpoint of bourgeois economy."
"It is therefore quite correct - but also characteristic - that for the consistent

economists the workers in e.g. luxury shops are productive, although the characters who consume such objects are expressly castigated as unproductive wastrels." "The fact is that these workers, indeed, are productive, as far as they increase the capital of their master; unproductive as to the material result of their labour." (Marx, Grundisse p.273).

THE POSITIONS THAT LABOUR POWER MAY BEAR
FOR CAPITAL AS A WHOLE

Briefly ;

1. The sphere of production. Here productive labour is performed. This sphere however, also uses industrially necessary, but unproductive labour such as supervisors. Productive, as a concept, has two levels of expression. At the most abstract and formal level it includes luxury labour. As we move step by step towards the concrete process of reproduction of total social capital however, it becomes clear that the labour of luxury industry is unproductive. It remains 'productive' from the bourgeois standpoint, for the individual luxury capitalist, who indeed expands his money holdings by exploiting labour power.

2. The circulation sphere, in which value receives its most complete, money, form. Here the total value produced by the productive sector is reduced, devalued, since the circulation workers use up means of labour, and consume so that they can reproduce their own labour power. Such labour is unproductive, but necessary and useful.

3. The service, or servant sector, where labour power is sold to capital but directly consumed by it, so that no surplus labour will be embodied in commodities. Surplus labour will normally be performed here since the labourer will be paid the social wage, whilst working social hours. It is unproductive.

4. Petty commodity producers, as Harrison points out, appear as sellers of products to capital, and not as sellers of labour power. Consequently there is no possibility of exploitation by capital here, though profit upon alienation might take place, benefiting the producer. Other market factors might benefit capital proper.

The last two sets of social relations have been collapsed into one by Harrison's notion of non-productive labour, the first two by his (and Gough's) incorrect 'definition' of 'productive labour'.

5. Outside of the Capitalist mode of production, there may lie other completely separate modes, the products of which are used up as forces of production as capital invades these areas.

6. The mode of production which gave birth to capital, specifically, was feudalism. A completely different set of social relations of production obtains here.

We will here examine two cases where labour time is expended and apply Marx's criteria. The first the labour of housewives. I refer to Harrison's article (CSEB Winter 73), in which he tries to 'show' that the labour time worked by housewives is positively related to the process of value production by capital. He proposes that the labour of housewives enters into the reproduction of the labour power of her husband, as use values. This is expressed by talking of a necessary subsistence level of the worker-husband which includes use values from the wife and value from the capitalist (as wage). For Harrison the value of labour power is equal to this, his, notion of necessary subsistence level. It follows for Harrison that the capitalist never pays the worker value equal to that required to make up the worker's labour power. The capitalist gains, indirectly, since for Harrison there is a transfer of surplus labour performed by the housewife to the capitalist.

"The mechanism by which this transfer of surplus labour from housework to the capitalist sector takes place is the payment by the capitalist of wages below the value of labour power." (p43)

This is an awful mess. Firstly, the housewife does not belong to a 'mode' of production; an autonomous mode which has its own laws of development, and which is not dependent upon other modes, is not to be found here. The husband, the labourer, is paid the socially necessary wage to reproduce his labour power at the place of work - and what is socially necessary is predicated by whatever other use-value production historically coexists with capital. Harrison forgets that 'wage' is a specific social expression; it is an expression in price terms of the socially necessary subsistence level. It is not an expression of the sum of all the use-values consumed by labourers, but of value(capitalistically produced commodities) which labourers require to reproduce their labour power, given the nature of the social formation within which capital is developing. Harrison cannot then, on the one hand assert that labourers are paid less than the value of labour power, and at the same time take this 'value' to be the sum of all the use-values consumed by labour. The value of labour power is the value required to enable its reproduction within a social formation, not the value + use value elements which also enter the workers' consumption. He mistreats the concept of value.

To talk of the 'transfer' of surplus labour from housework to the capitalist sector is non-sense. There is no evidence to suggest that the unmarried worker, who is not 'domesticated' receives higher wages than the married or domesticated single worker. But it is consistent with Harrison's suggestions that domestic activities are a force for reducing wages.

There is no mechanism at work by which an average social labour time of housework evolves, and which further assures the commensurability of this labour time with that of the productive worker. That Harrison assumes such a mechanism by no means disguises the hopelessness of his speculation. Housewives would not be housewives if their labour power were bought and sold in the market, they would then be maids, prostitutes, etc. The labour enacted by housewives that is essential for capital, but which cannot fall under the capital relation, is the reproduction of living labour itself. If capital were to take over the production of this, then it would no longer be capital, but slavery proper. It was a stride forward, a step from barbarism, when the use of labour power was separated from ownership by the ruling classes of living labour itself. If capital became responsible for living labour, the 'freedom' to sell labour power would be extinguished, and there would likely be a return to barbarism. This process found expression under the Nazi regimes.

Everywhere else however, the capitalist will attempt to step in, and take over the tasks of the housewife for the purpose of profit. This process depends on the level of accumulation at any time. Prepared foods represent profit, and the time 'freed' for the housewife is then available for sale by her as labour power to capital. Thus the housewife is transformed into worker, kitchen into canteen, part of child rearing to the commerical creche. The family is reproduced anew, qualitatively changed. The time of housework which Harrison sees as a positive benefit to capital, is invaded by capital for its own interests, about which it has a clearer head than he. Our writer has repeated the mistakes of his earlier article. He sees activities that have a negative effect on value expansion, that represent a barrier to it, as having a positive effect.

Women qua housewives are unproductive service workers. The man does not sell the wife's labour power as a commodity on the market. If she sells her services on the market it is in another capacity. The husband is not capitalist in respect to her labour power. She is paid from revenue, his wage. Like the servant however she performs surplus labour, she is materially exploited.

As an example of labour power consumed in the 'State' sector we take the NHS. The

NHS employs labour paid from revenue. The Service may exploit the nurses, porters, etc., but all the labour time worked is consumed by clients, generally the working class. (We ignore here the private practice carried out within the structure of the NHS). In this case no value is produced, services are not sold as commodities, surplus labour time is not realised in money for the NHS. The higher the rate of exploitation the lower the deduction from social surplus value per unit of health care.

On no account should this lower tax level be taken to be of direct benefit to social capital. Only use-value is produced not value. Capitalism loses; "The highest development of capital exists when the general conditions of the process of social production are not paid out of deductions from the social revenue, the state's taxes - where revenue and not capital appears as the labour fund, and where the worker, although he is a free wage worker, nevertheless stands economically in a different relation - but rather out of capital as capital." (Marx, Grundrisse, p532.)

There is a whole field of production from where Capital is excluded, where value is not produced, and despite the degree of exploitation reached, is a drain upon surplus value. It is worth remembering though, what we wrote above. Because of the inability, or reluctance of the mass of workers to pay for this type of service, capital proper does not take root in this sphere so easily. It takes on alien forms, whilst dominating the material basis from which the service arises, and encouraging the growth of finance capital (insurances), e.g. U.S.A., Western Germany in particular. In the NHS, where private capital administers the service, constrained as it is to petty production, the service is of a luxury kind, and the labour involved is thus still unproductive for social capital.

CONCLUSION

In this article I have demonstrated that luxury production uses labour power in an unproductive manner for capital, i.e., where 'Capital' is understood correctly as the production process as a whole. By the use of the correct application of Marx's method, I have also endeavoured to show, though briefly, that seriously faulty conclusions are currently being drawn about the central concept, productive labour.

It appears from an examination of the discussions that the most tenuous relation between work effort and capital is enough to define that effort as productive. The 'positive' position that Harrison and Gough give to circulation workers, and certain 'necessary' but unproductive labourers, conceals a central contradiction of value reproduction. This is that for value to achieve its fullest, money form, and thus for capitalism to reproduce itself, value destruction is necessary. For Harrison to ascribe to housework a positive effect for capital, in terms of 'labour time', conceals the antagonism between capitalism and all other use-value production, and fails to explain the absorption of so many of the housewife's tasks by capital. If these sorts of mistakes continue no real understanding of the concrete processes of capital can ever be expected.

I should like to acknowledge the useful remarks addressed to this paper by comrades of the Revolutionary Communist Group.

NOTES

1. P. Bullock, "Categories of Labour Power for Capital" (CSEB Autumn 1973)
2. I. Gough. "Marx's Theory of Productive and Unproductive Labour, NLR 76, 1972.
3. J. Morris and J. Blake, Science and Society, 1958, vol.22; 160, vol.24.
4. I. Gough "On Productive and Unproductive Labour - a Reply" (CSEB Winter 1973, p.71).
5. Gough's notion of the definition of productive labour is, at least in his NLR article, the same as that of I.I. Rubin "Essays on Marx's Theory of Value" (Black and Red, Detroit 1972). In the last chapter of this book, called 'Productive Labour', Rubin continually defines productive labour for the individual capitalist alone. Nowhere does he talk of productive labour for total social capital, and of course, all the examples he takes from Marx which are clearly labourers of the luxury sphere, are posed only in terms of the entrepreneur, or a capitalist. Rubin remains clear, however, that the labour of circulation is unproductive.
6. Gough is correct to point out the incorrect use of a quote by me (CSEB Winter 1973, pp68-9).
7. ...for leaving out of account the labour which produces services entering into the fund of wage goods and
   ...for leaving services, 'immaterial products', out of account when discussing the characteristics of commodity production.
8. This is an editorial insertion which correctly expresses the idea in this section.
9. Quoted by Gough (NLR 76, p.53, fn.11)
10. The same objection quoted by Yaffe.
11. K. Marx, Grundrisse Der Kritik Der Politischen Okonomie. Dietz Verlag, Berlin 1953, p.528, where we find, "...und es ist klar, dass diese relative Entwertung des Kapitals seiner Verwertung nicht zusetzen, sondern nur von ihr abnehmen kamn;..." Nicolaus, on his page 634 translates Verwertung as Realisation. This is clearly wrong. Both from the context and Marx's own usage we know that Verwertung is to be read self expansion and reproduction. Thus when Marx actually talks of the process of realisation of value he uses Realisierung. For example p171 (Berlin), where we find Realisierung, self realisation correctly treated by Nicolaus on his page 259. Again realisiert - p132 in the German - is correctly treated as realised, p.221 in the English.

Other references in text

CSEB Autumn '73 for P. Bullock, "Categories of Labour Power for Capital" in that issue.
" for B. Fine, "A Note on Productive and Unproductive Labour" "
NLR 76 for I Gough - see note 2
CSEB Winter '73 " - see note 4
CSEB Autumn '73 for J. Harrison, "Productive and Unproductive Labour in Marx's political Economy" in that issue.
CSEB Winter '73 " "The Political Economy of Housework"

Capital I for Karl Marx - (George Allen and Unwin, London 1938, ed. D. Torr)
Capital II & III " - (Moscow, 1971)
TSV I & III " - (Moscow, 1969 and 1972 respectively)
Grundrisse " -(Pelican 1973, ed. trans. M. Nicolaus)

C.S.E. DAYSCHOOL ON THE TEACHING OF ECONOMICS

Francis Green

A day long meeting was held on June 8th at Birkbeck College, where about twenty C.S.E. members discussed some of the problems facing socialist Economics teachers.

The morning session was opened by Ben Fine, who spoke for half an hour in general terms about the content of ideal and less-than-ideal economics courses. The task of an ideal course was to explain the development of capitalism; this could only be done using Marxist methods. Moreover, a Marxist should also be able to explain bourgeois economics. It was a mistake, for instance, to discuss bourgeois economics as useless and bourgeois economists as hypocrites. If this ideal course was impossible, due to time or other constraints, a suitable alternative was to teach 'Radical' economics, discussing subjects such as the distribution of income which can be tackled via a class analysis, and attempting to provoke an interest in Marxism, without actually giving a theory of the development of capitalist motivations.

After a brief discussion, Francis Green spoke. While it was true that there was much that was useful in orthodox economics, and that hence it was worthwhile teaching it, though of course pointing out the criticisms of it all along the line, the danger of teaching exclusively bourgeois economics, albeit critically, was that students tend either to be completely confused by what is going on or else to turn out to be first rate neoclassical economists. More importantly, the view was put forward that the capital theory debate of recent years was proving sterile, at least as regards a weapon for criticising the neoclassical system. Most neoclassical axioms and assumptions were left untouched by logical criticism, and hence it was ill-conceived to look to this debate for an alternative course content. In the discussion, this latter view was expressed also by others, while others thought that nevertheless it would still be possible to use the capital theory debate as a tactic within academic hierarchies to help argue for alternative courses. The rest of the discussion ranged over a number of issues, including the distinction between 'radical' and Marxist courses which was raised by Ben Fine.

The afternoon session was opened by Malcolm Tink who passed round copies of the course he teaches at Sheffield Polytechnic. The course, he said was specifically Marxist and not 'radical', since it was designed to include the question of the development of the institutions of capitalism. Unfortunately, the discussion was less coherent than it had been in the morning. Many people expressed amazement that such a course had actually been allowed to run. C.S.E. members from Manchester in particular, reported little progress over three years in getting alternative courses accepted. The question of textbooks was also raised, nobody had any suggestions that they could whole-heartedly recommend.

Finally, it was agreed that discussion amongst C.S.E. teachers could continue fruitfully; it was hoped to have a session at the next annual conference, when a number of specific course proposals would be discussed and defended by their authors. It was also hoped to produce a paper or pamphlet containing course outlines and reading lists for all 'alternative' courses of one kind or another, which C.S.E. members (or others) are running. If anyone has such material, or knows of a course being run, it would be helpful if they would send a copy to F. Green, Dept. of Economics & Politics, Kingston Polytechnic, Kingston, Surrey.

THE THEORY OF INTERNAL COLONIALISM - THE SOUTH AFRICAN CASE

Harold Wolpe

I INTRODUCTION

The view that there are close parallels between the external relationships established by colonial powers over colonised peoples and the relationship of ethnic cultural, national or racial groups within some Latin American societies, the United States and South Africa has led to the use of the notion of 'internal colonialism' in the analysis of these societies.[1]

The specific feature which is said to distinguish 'internal' from 'normal' colonialism is the fact that in the former the colonising 'nation' or 'race' or other group occupies the same territory as the colonised people. As Simons and Simons (1969,p610) put it: "The imperial colonial qualities of the society...become visible by comparison with the typical colony. In its normal form, the colony is a distinct territorial entity, spatially detached from its imperial metropolis..."

In all other important respects, the implication is, the components of the 'normal' imperial-colonial relation are to be found within the borders of a single state to an extent which justifies the view that it constitutes an internal colonialism. In particular, it is argued in this approach, that the 'underdeveloped' (and 'underdeveloping') condition of subordinate ethnic and racial groups and the geographical areas they occupy within the boundaries of the state, is produced and maintained by the same mechanisms of cultural domination, political oppression and economic exploitation which, at the international level, produce the development of the advanced capitalist states through the imperialist underdevelopment of the colonial satellites.

Notwithstanding the apparently unproblematical use of the terms 'imperialism' and 'colonialism' in the passage cited above (and in the writing on 'internal colonialism' generally), it is obvious from the literature that there are differing conceptions of imperialism and colonialism, and that these are not all equally suitable for conversion into a notion of 'internal colonialism'. Lenin's insistence in his Imperialism: The Highest Stage of Capitalism, that the export of capital is a crucial distinguishing feature of imperialism and, therefore, of colonialism in the monopoly stage of capitalism, is only one relevant example. It is, therefore, of considerable importance to analyse the conceptions of colonialism and imperialism which serve as the model from which the notion of 'internal colonialism' is derived by analogy.

II A CRITIQUE OF THE LITERATURE ON 'INTERNAL COLONIALISM'

In the theory of internal colonialism, the colonial relation appears to be characterized by two main elements. Firstly, the colonial relationship is conceived of as occurring between different countries, total populations, nations, geographical areas or between peoples of different races, colours and cultures. As Blauner (1972,pp12-13) for example, expresses it: "The colonial order in the modern world has been based on the dominance of White Westerners over non-Westerners of colour: racial oppression and the racial conflict to which it gives rise are endemic to it, much as class exploitation and conflict are fundamental to capitalist societies."

Secondly, the colonial relationship is characterized, in a general way, as involving domination, oppression and exploitation. Again Blauner (1969,p395) provides a convenient statement:

"Colonialism traditionally refers to the establishment of domination over a geographically external political unit, most often inhabited by people of a different race and culture, where this domination is political and economic, and the colony exists subordinated to and dependent upon the mother country. Typically the colonisers exploit the land, the raw materials, the labour, and other resources of the colonised nation; in addition a formal recognition is given to the differences in power, autonomy and political status, and various agencies are set up to maintain this subordination."

It is these two features which constitute the core of internal colonialism, that is, of colonialism internal to a particular society. Casanova (1965,p33), for example, states: "Internal colonialism corresponds to a structure of social relations based on domination and exploitation among culturally heterogeneous, distinct groups."

And Tabb (1970,p15) puts it thus: "The economic relations of the ghetto to White America closely parallel those between third world nations and the industrially advanced countries."

In regard to South Africa, the argument has been formulated much more complexly as follows by the South African Communist Party (The Road to South African Freedom n.d.,pp25-6).

"South Africa is not a colony but an independent state. Yet masses of our people enjoy neither independence nor freedom. The conceding of independence to South Africa by Britain in 1910...was designed in the interests of imperialism. Power was transferred not into the hands of the masses of the people of South Africa, but into the hands of the White minority alone. The evils of colonialism, insofar as the non-White majority was concerned, was perpetuated and reinforced. A new type of colonialism was developed, in which the oppressing white nation occupied the same territory as the oppressed people themselves and lived side by side with them."

"On one level, that of "White South Africa", there are all the features of an advanced capitalist state in its final stage of imperialism. There are highly developed industrial monopolies, and the merging of industrial and finance capital. The land is farmed along capitalist lines, employing wage labour, and producing cash crops for the local and export markets. The South African monopoly capitalists...export capital abroad..."

"But on another level, that of "non-White South Africa", there are all the features of a colony. The indigenous population is subjected to national oppression, poverty and exploitation, lack of all democratic rights and political domination by a group which does everything it can to emphasize and perpetuate its alien "European" character. The African Reserves show the complete lack of industry, communications, transport and power resources which are characteristic of... territories under colonial rule... Typical, too, of imperialist rule, is the reliance by the state upon brute force and terror, and upon the most backward tribal elements and institutions which are deliberately and artificially preserved. Non-White South Africa is the colony of White South Africa itself." (my emphasis)

It is clear that by contrast with, for example, Blauner, the Communist Party makes no assumption that race, ethnicity or culture is independent of the mode of capitalist exploitation. On the contrary, the Programme, as appears from the above passage, expressly, and in my view correctly, links racial oppression and domination with capitalism. But what is the nature of this link? It is possible to extract two rather different answers to this question from the Programme.

The first answer seems to depend on a contrast which is implicitly drawn between capitalist societies which are culturally, ethnically and racially homogeneous and in which relations of class exploitation are dominant and those societies in which both capitalist exploitation and internal colonial relations exist side by side (with the latter frequently dominant). Two questions arise here. Firstly, what is the precise relationship between the specific system of class exploitation and domination and the specific relations of racial, ethnic, cultural or national exploitation and domination characteristic of internal colonialism? Secondly, in what way does internal colonial exploitation differ from class exploitation?

In so far as the Programme separates class and race relations, it does not seem to spell out the answer to either of these questions - it stops with the rather general proposition that capitalism in South Africa goes hand in hand with 'national oppression' etc.

It may be noted that a similar lack of specificity is to be found in other writings on internal colonialism. Thus Casanova (1965,p33), for example, asserts:

> "The colonial structure and internal colonialism are distinguished from the class structure since colonialism is not only a relation of exploitation of the workers by the owners of raw materials or of production and their collaborators, but also a relation of domination and exploitation of a total population (with its distinct classes, proprietors, workers) by another population which also has distinct classes (proprietors and workers)."

While this passage is useful for the way in which it points to the, or rather, to one of the modes of class exploitation (that is, the appropriation of surplus value) entailed in imperialism, it nevertheless fails to link 'the exploitation of the workers' to the exploitation of one 'total population' by another and nor does it explain the meaning of exploitation in the latter case.

Similarly, Johnson (1972:p282) states: "The population of internal colonies is subject to discriminatory practices over and above those characteristic of relations between dominant classes and underclasses."

But despite a lengthy discussion of 'Class relations and colonial relations', he is unable to clarify the relationship between 'discriminatory practices' and class relations or the differences between the two. He can only assert the difference:

> "The major differences in the relations between the dominant classes and institutions of society and marginal underclasses on the one hand, and internal colonies,, (An internal colony constitutes a society within a society based upon racial, linguistic and/or marked cultural differences as well as differences of social class.) on the other hand, revolve around different institutionalized practices of domination and different means of social control. It is important to emphasize that all the classes of the dominant society rest upon the colonial population." (1972,p281)

What appears from the above passages is that no attempt is made to identify the specific mode of exploitation and domination characteristic of internal colonialism which purports to differentiate it from class exploitation and domination. Instead, there is a general reference to exploitation, used in a descriptive sense, and to ill defined states of racial or ethnic oppression which are linked, in some way, to capitalism.

The second answer contained in the Programme appears to arrive at a similar result by a different path. An alternative interpretation of the passage from the Programme quoted above, is that it is arguing that class relations are simply assimilated to race relations. Thus 'White South Africa' is identified with the 'capitalist state' and the capitalist system, while 'non-White South Africa' is identified with 'the colony'. From this point on the analysis of class relations gives way to the description of white domination and exploitation of Blacks in terms of the internal colonial analogy.

It is possible to argue that where there is a complete coincidence between race and class the concepts defining the relationship between classes may be utilized in defining the relationship between races or ethnic groups (compare Stavenhagen 1965). Where this is not the case (and it is not the case in South Africa), the substitution of racial groups for classes in the analysis requires a specification of the nature of the relationship between the former groups. This leads once more to the two questions posed above.

This conclusion is underlined by the fact that the characterisation of internal colonialism as a relation between racial or ethnic entities necessarily involves, despite the recognition that these entities themselves have complex class structures, an analysis which treats these categories as homogeneous. But it is this very feature which makes the specification of the mode or modes of class exploitation and the analysis of their precise relationship to the structure of racial domination imperative.

Indeed the Programme of the South African Communist Party recognizes the duality, but since it does not make the necessary analysis, its position appears contradictory: "Power (in 1910 H.W.) was transferred not into the hands of the masses of people of South Africa, but into the hands of the White minority alone." (p25).

This is followed on p27 with: "All Whites enjoy privileges in South Africa. They alone can vote and be elected to parliament and local government bodies. They have used this privilege to monopolise nearly all economic, educational, cultural and social opportunities. This gives the impression that the ruling class is composed of the entire White population. In fact, however, real power is in the hands of the monopolists who own and control the mines, the banks and finance houses, and most of the farms and major industries."

In what follows an attempt is made to suggest the way in which the analytical gap referred to above may be overcome.

III IMPERIALISM AND THE MODES OF PRODUCTION

The obfuscating consequences of an analysis in terms of racial, ethnic, cultural or national entities is nowhere clearer than in the use of the notion of exploitation to describe the relations between such entities. The reason for this is that while the concept of exploitation can have a rigorous and explicit meaning in defining class relations, it becomes a vague, descriptive term in the characterization of relations between such entities as racial, national or cultural groups. Bettelheim (1972, pp300-1), in commenting on the notion of the exploitation of the 'poor countries' by the 'rich ones' has made the same point, in relation to 'normal' colonialism. He states: "Because the concept of <u>exploitation</u> expresses a <u>production relation</u> - production of surplus labour and expropriation of this by a social class - it necessarily relates to <u>class relations</u> (and a relation between 'countries' is not and cannot be a relation between classes)"[2]

He argues that "it is not possible to give a strict meaning to the notion of exploitation of one <u>country</u> by another <u>country</u>" (p301) and he concludes: "Henceforth it is necessary to think of each 'country' as constituting a social formation with a specific structure, in particular because of the existence of <u>classes</u> with contradictory interests. It is this structure that determines the way in which each social formation fits into international production relations." (p300)

With only slight amendments this passage applies equally to the case of internal colonialism. Thus, we may say, that in order to avoid the abstraction involved in treating racial or ethnic groups as undifferentiated and homogeneous, we must think of each such group as having "a...specific structure, in particular because of the existence of classes with contradictory interests". It follows that the concrete social totality is constituted by the complex articulation of class relations within racial or ethnic groups, as well as the relation of classes across these groups together, we may add, with the ideological and political practices which 'fit' these relationships.

This consideration leads directly to the crucial further question of historical specificity. It should be clear from what has so far been argued that the concept of colonialism upon which the internal colonial thesis is based is extremely vague and unspecific. In part, this is due to the failure to distinguish between forms of colonial political, ideological and cultural domination and modes of imperialist economic exploitation. In turn this conflation stems from the failure to distinguish differing modes of imperialist economic exploitation with the result that different forms of colonial domination cannot be explicitly related to different modes of exploitation.

More specifically, much of the analysis of imperialism and underdevelopment (and of internal colonialism) has been based on the assumption that in the era of capitalist imperialism, exploitation everywhere takes place according to a single, invariant mode. There are two variants of this argument, but both contend that capitalist relations have "...effectively and completely penetrated even the most apparently isolated sectors of the underdeveloped world." (Laclau 1971,p21)

In one variant capitalism is equated with commodity exchange - with the market economy - and consequently the participation of the underdeveloped world in the market is construed as evidence of the total transformation of the indigenous economies into capitalist economies, albeit subordinate ones. This is the position advanced by Frank (1967) in his analysis of Latin America. Laclau (1971, p22) argues that:

" "...Frank's theoretical schema involves three types of assertion:

1. Latin America has had a market economy from the beginning;
2. Latin America has been capitalist from the beginning;
3. the dependent nature of its insertion into the capitalist world market is the cause of its underdevelopment.

The three assertions claim to refer to a single process identical in its essential aspects from the 16th to the 20th century."

The consequence of this, as Laclau (1971,p30) has shown is that it becomes impossible to define 'the specificity of the exploitative relationship' in operation at a specific moment and this flows directly from Frank's failure to base his analysis on the concept of relations of production. Thus, an analysis based on the concept of relations of production would have shown, in the particular case of Latin America, not the complete penetration of capitalism but rather that the

"...pre-capitalist character of the dominant relations of production in Latin America was not only not incompatible with production for the world market, but was actually intensified by the expansion of the latter. The feudal regime of the haciendas tended to increase its servile exactions on the peasantry as the growing demands of the world market stimulated maximization of their surplus. Thus, far from expansion of the external market acting as a disintegrating force on feudalism, its effect was rather to accentuate and consolidate it." (p30)

It is thus clear from Laclau's argument that it cannot be assumed from the emergence of a dominant capitalist market, that non-capitalist economies which participate in that market are, thereby, automatically transformed into capitalist modes of production.

In the second variant of this argument, the analysis is, indeed, based on the concept of the mode of production. In this case it is assumed that the effect of the emergence of capitalism as a dominant mode of production is the necessary and rapid disintegration of non-capitalist productive relations. This view seems to be based on Lenin's discussion of imperialism and Marx's analysis of primitive accumulation.

In Imperialism: The Highest Stage of Capitalism (1964,p243) Lenin stated: "The export of capital influences and greatly accelerates the development of capitalism in those countries to which it is exported. While, therefore, the export of capital may tend to a certain extent to arrest development in the capital exporting countries, it can only do so by expanding and deepening the further development of capitalism throughout the world."

In Capital (1961,I,p714) Marx formulated the notion of primitive accumulation in the following terms: "The capitalist system presupposes the complete separation of the labourers from all property in the means by which they can realize their labour....The process, therefore, that clears the way for the capitalist system, can be none other than the process which takes away from the labourer the possession of his means of production; a process that transforms on the one hand, the social means of subsistence and of production into capital, on the other, the immediate producers into wage-labourers. The so-called primitive accumulation, therefore, is nothing else than the historical process of divorcing the producer from the means of production."

However, neither Lenin's general characterization of the development of capitalism through imperialism in the era of monopoly capitalism nor Marx's theoretical analysis of the constitution of capitalism through primitive accumulation, can be construed as concrete historical accounts of the actual progression of imperialism and capitalism either within particular social formations or on a world scale. To interpret Marx and Lenin in this way, is precisely to obliterate the analysis of the relationship of capitalism with non-capitalist modes of production and thereby to exclude the possibility of analysing the specificity of the exploitative relations which concretely characterize social formations.

In fact, the relationship of capitalist to non- or pre-capitalist modes of production may vary in a number of ways and for different reasons. Thus, in one place the relationship of capital to a non-capitalist mode of production may revolve around the extraction in different ways - by plunder, or the exchange of non-equivalents or by means of the process of price formation - of the commodities produced by the latter. Geertz' (1963) study of Inner Java is an example of this. At another place, the main focus of the relationship may be on the extraction, not of the product, but of labour-power. South Africa, as I will show below, is an example of this type of relationship. While in both of these cases the associated political policy turns on the domination and preservation of the non-capitalist societies, in other instances the particular mode of economic exploitation may be accompanied by a policy aimed at or having the effect of destroying the non-capitalist societies.

The relevance of this for the present discussion may be clarified by the following elaboration. In the course of its development, the capitalist mode of production enters into relationships with other, non-capitalist, systems of production - the very origins of capitalism in the interstices of feudalism testifies to this. Relations with other modes of production first occur within the boundaries of the nation state. First with trade and later with the development of monopoly capitalism and the export of capital, capital increasingly enters into new relationships with other, non-capitalist, modes of production, beyond the borders of the nation-state. These relations, which are exploitive in the strict sense of the term - they involve directly or indirectly the extraction of the surplus from the direct producers - characterize, in general, the period of capitalist imperialism. These relations of imperialism are constituted within a particular context of political domination and are sustained and supported by a mode of ideological and political practice which varies with the mode of exploitation. But, as Lenin (1916, n.d., p79) pointed out, both imperialism and colonialism undergo historical changes:

"Colonial policy and imperialism existed before the latest stage of capitalism, even before capitalism. Rome, founded on slavery, pursued a colonial policy and practised imperialism. But 'general' disquisitions on imperialism which ignore, or put into the background, the fundamental differences between socio-economic formations, inevitably turn into the most vapid banality...Even the capitalist colonial policy of previous stages of capitalism is essentially different from the colonial policy of finance capital."

In certain conditions of imperialist development, ideological and political domination tend to be expressed not in terms of the relations of class exploitation which they must sustain but in racial, ethnic, national, etc. terms and, in all cases, this is related to the fact that the specific mode of exploitation involves the conservation, in some form, of the non-capitalist modes of production and social organization, the existence of which provides the foundation of that exploitation. Indeed, it is in part the very attempt to conserve and <u>control</u> the non-capitalist societies in the face of the tendency of capitalist development to disinterpret them and thereby to undermine the basis of exploitation, that accounts for political policies and ideologies which centre on culture, ethnic, national and racial characteristics.

In certain circumstances capitalism may, within the boundaries of a single state, develop predominantly by means of its relationship to non-capitalist modes of production. When that occurs, the mode of political domination and the content of legitimating ideologies assumes racial and ethnic and cultural forms and for the same reason as in the case of imperialism. In this case, political domination takes on a colonial form, the precise or specific nature of which has to be related to the specific mode of exploitation of the non-capitalist society.

These points can be illustrated and perhaps made clearer by an analysis of internal colonialism in South Africa.

4. INTERNAL COLONIALISM IN SOUTH AFRICA

It was suggested in the previous section that one important economic basis of colonial domination is the economic relationship which imperialism establishes between capitalist and non-capitalist modes of production. I also argued that that relationship may take different forms.

In Volume II of <u>Capital</u> (pp109,10), in dealing with the circuit of capital and in particular the commodities which comprise the means of production, Marx stated:

"Within its process of circulation, in which industrial capital functions either as money or as commodities, the circuit of industrial capital whether as money-capital or as commodity capital, crosses the commodity circulation of the most diverse modes of social production, so far as they produce commodities. No matter whether commodities are the output of production based on slavery, of peasants..., of state enterprise...or of half-savage hunting tribes, etc; - as commodities and money they come face to face with the money and commodities in which the industrial capital presents itself and enter as such into its circuit....The character of the process of production from which they originate is immaterial. They function as commodities in the market, and as commodities they enter into the circuit of industrial capital as well as into the circulation of the surplus value incorporated into it."

"To replace them (i.e. the commodities entering the capitalist circuit in the above manner) they must be reproduced and to this extent the capitalist mode of production is conditioned on modes of production lying outside of its own stage of development."

While in the above passage Marx's remarks are restricted to commodities which are also means of production, it seems clear that they apply equally to labour-power which is physically produced in a non-capitalist mode of production but which is converted into a commodity by its appearance on the capitalist labour market.

It is this feature, the introduction into the capitalist circuit of production of labour-power physically produced in a non-capitalist economy, that denotes one important feature of imperialism. This 'crossing' of different modes of production modifies the relationship between wages and the cost of reproducing labour-power in favour of capital. It is precisely this relationship which is the foundation of 'internal colonialism' in South Africa.

In fact, the South African social formation is made up of several modes of production but it is not possible in this paper to discuss all of these or to explore the complex relations between them. For present purposes the analysis may be restricted to the relationship between the dominant capitalist economy and the mode of production in the African areas (Reserves).

The capitalist mode of production in South Africa (as elsewhere) is one in which:

(1) the direct labourers, who do not own the means of capitalist production, sell their labour-power to the owners of the means of production who are non-labourers.

(2) the wage the labourer receives for the sale of his labour power for a certain period is only a portion of the value created by him during that period, the balance being appropriated as unpaid labour (surplus value) by the owners of the productive means.

This second condition is, of course, related to Marx's conception of labour-power as a commodity and expresses the specific form in which the surplus is extracted from the direct producers in the capitalist mode of production.

In general commodities exchange at their value. The value of labour-power is determined in the same way as that of other commodities - by the amount of socially necessary labour time which has been expended in its production. As Marx put it:

"The value of labour power is determined, as in the case of every other commodity, by the labour time necessary for the production and consequently also the reproduction of this special article....Given the individual, the production of labour power consists in his reproduction of himself or his maintenance. Therefore the labour-time requisite for the production of labour-power reduces itself to that necessary for the production of...the means of subsistence; in other words, the value of labour-power is the value of the means of subsistence necessary for the maintenance of the labourer." (Capital, I, p171)

The subsistence necessary for the reproduction of labour-power is extended in at least two ways by Marx: "The sum of the means of subsistence necessary for the production of labour-power must include the means necessary for the labourers' substitutes, that is, his children..." (Ibid., p172)

In addition: "The expenses of...education...enter *pro tanto* into the total value spent in its production." (Ibid, p172)

There are a number of ways in which the proportion of the working day which is allocated to necessary labour may be decreased. Thus, for example, the value of labour-power may be decreased or, again, the length of the working day may be increased and most importantly for the present argument, labour-power may be acquired at a cost below its value.

As Meillassoux (1973) has pointed out, the means of subsistence acquired by the labourer can be divided into two parts - the direct wages paid to the worker in and during employment and indirect wages which he receives in the form of social security benefits, for example, unemployment payments, family allowances, health services, education and so on. In its most advanced form indirect wages are institutionalised in the social welfare arrangements of the Welfare state, but obviously, these arrangements are the outcome of a lengthy historical process.

Under certain conditions the capitalist mode of production is able to avoid, to a greater or lesser extent, the payment of indirect wages; that is, it is obliged to pay only the immediate sustenance of the labourer but it can avoid paying for his subsistence during unemployment, or for the subsistence of children or costs of education, etc.

The most important condition enabling capitalism to pay for labour-power below its cost of reproduction in this way is the availability of a supply of labour-power which is produced and reproduced outside the capitalist mode of production.

In South Africa this condition was (and still is, although to a decreasing extent) met by the presence of non-capitalist modes of agricultural production in the areas of African concentration (particularly, but by no means exclusively, in the Reserves). These modes of production take varied forms which have undergone, considerable modification under the impact of capitalism but which nevertheless retain, in one form or another, their non-capitalist characteristics. Thus, in one mode of production where land is held communally by the community and worked by social units based on kinship, the product of labour is 'pooled' and then redistributed directly by means of an allocation through the kinship units in accordance with certain rules of distribution. Again, and much more frequently, while land is owned communally it is allocated to kin-based production units which produce and consume their product. Moreover, even where land is held in individual tenure, it is worked by kin groups between the members of which, certain reciprocal obligations of support are in force. Whatever the mode of production, however, the crucial element is the existence of reciprocal obligation of support and consequently a distribution of the product which includes kin absent temporarily from agricultural production on the land held by the kin group.

Given the nature of the relations of production and distribution in such modes of production, the potentiality exists of utilising labour-power drawn from it into the capitalist sector without fundamentally altering those relations. Thus, as Meillassoux (1973) argues, if the necessary subsistence for the entire year can be produced by labour which is limited to a part of the year, then labour-power will be potentially available to the capitalist sector for the remainder of the year. This potential labour-power can be brought into the circuit of capitalist production provided that the capitalist sector 'finds the means to extract it practically, without the direct intrusion of capital into the self-sustaining sector, an intrusion which would destroy the relations of production and, therefore the basis of the production of labour-power in the sector external to capitalism. It is presumably in this kind of situation that various 'political' measures may be taken to force labour-power onto the market. On the other hand, if the subsistence produced during the productive season is insufficient to meet all necessary needs then, provided there are no actual productive possibilities beyond the period of agricultural production, the propulsion of labour-power onto the market may occur through the operation of economic forces.

In either case, the significant aspect is that the capitalist sector benefits from the means of subsistence by way of indirect wages. This, as I have shown in a previous paper (1972), has the important effect of raising the rate of surplus value. The uniqueness or specificity of South Africa, in the period of capitalism, lies precisely in this: that it embodies within a single nation-state a relationship characteristic of the external relationships between imperialist states and their colonies (or neo-colonies).

Bettelheim (1972,p297) has pointed out: "Inside social formations in which the capitalist mode of production is dominant, this domination mainly tends to expanded reproduction of the capitalist mode of production, that is, to the dissolution of the other modes of production and subsumption of their agents to capitalist production relations. The qualification "mainly" indicates that this is the predominant tendency of the capitalist mode of production within the social formations under consideration. However, this predominant tendency is combined with another secondary tendency, that of 'conservation-dissolution'. This means that within a capitalist social formation the non-capitalist forms of production before they disappear are 'restructured' (partly dissolved) and thus subordinated to the predominant capitalist relations (and so conserved)..."

Within the advanced capitalist states themselves the dominant tendency, more or less rapidly, brought about the complete or almost complete dissolution of the non-capitalist relations of production. The explanation for this, in each society and the specification of the processes involved require, of course, their own historical analysis.

In South Africa, on the contrary, the dominant tendency has been inhibited by the secondary tendency of 'conservation-dissolution'. That is to say, the tendency of capital accumulation to dissolve the very relationship (with the non-capitalist economies) which makes that accumulation possible (at a particular rate) is blocked by the contradictory tendency of capital to conserve the relationship and with it the non-capitalist economies, albeit in a restructured form for the reasons already outlined.

The political expression of this imperialist-type relationship takes on a colonial form. This is so because, at one level, the conservation of the non-capitalist modes of production necessarily requires the development of ideologies and political policies which revolve around the segregation, and preservation and control of African 'tribal' societies. The ideological focus, it must be stressed, is always necessarily on the 'racial' or 'tribal' or 'national' elements, precisely because of the 'tribal' nature of what is being preserved and controlled.[3]

So too, the policies pursued and the laws passed must have the same focus. Therefore, the attempt to conserve these societies in the face of disruptive tendencies centres on guaranteeing the availability of some land (1913 Land Act) to the 'tribe', the preservation of the social and political organization of the 'tribe' and thus the retention of much 'Native' law and so on. At the same time the disruptive tendencies create problems of control for the capitalist state and these are met by a vast super-structure of administrative control both through the state and through 'tribal' authorities. The counterpart of all this is the structure of domination exercised over the African labour force through the pass laws, urban areas acts, police, Bantu administration department, and so on.

In a previous paper (1972) I showed concretely and in some detail how the specific changes in ideology and political policy - the transition from "Segregation" to "Apartheid" reflected changing relationships between the African redistributive economies and the capitalist sector with particular reference to the supply of cheap labour-power. In brief the preservation of the conditions (migrant-labour, fixed land area, low capital investment in African agriculture) which enable labour power to be extracted from the African societies serve to destroy the productive capacity of these societies (given the increase in population, and consequent over-population on the fixed land means, backward farming methods, etc.). The diminution of the product from these Reserve economies generates rural impoverishment and, also, in the absence of the assumption by the capitalist sector of responsibility for indirect wages, extreme urban impoverishment. The consequence is increasing African pressure on wages and rural conditions, pressure which become elaborated into an assault on the whole political and economic structure in the 1940s and 1950s. Apartheid may be seen as the attempt of the capitalist state to maintain the system of cheap migrant-labour, in the face of this opposition, by means of the erection of a 'perfected' and 'modernized' apparatus of political domination.

Although, in this section, the focus has been on the extraction of labour-power by a capitalist mode of production from non-capitalist productive systems, it must be stressed, that it is not intended to suggest that this is the only form such a relation may take. I indicated above that imperialism may also operate by appropriating the product of non-capitalist societies or, indeed, by destroying those societies such that the producers are 'freed' of the means of production. These types of relations give rise to varying forms of political domination.[4] It is apparent that it is precisely the changes in the relationships between South African capitalism and non-capitalist modes of production in conditions of a rapid rise (as Legassick (1973) has pointed out) in the organic composition of capital, that need to be analysed in the contemporary period.

NOTES

1. See, for example: Blauner (1969, 1972), Carter et al (1967), Casanova (1965), Frank (1967), Lerumo (1971), Marquard (1957), Simons and Simons (1969), South African Communist Party (n.d.), Stavenhagen (1965).

2. Ernesto Laclau in a personal communication has pointed out that the unequal exchange of non-equivalents also constitutes an unexploitative relation. This, however, in no way affects the general point being made by Bettelheim since an analysis of the class structure of 'countries' in a relationship of unequal exchange is no less important than in the case of production relations.

3. Stavenhagen (1965) makes a similar analysis in relation to the 'corporate' nature of the Indian Community but he does not articulate the relationship between this and the precise mode of economic exploitation.

4. I leave open whether the notion of 'internal colonialism' has any proper application in conditions of racial discrimination where, however, the internal relations within the society are overwhelmingly capitalist in nature, that is, where non-capitalist modes of production, if they exist at all, are marginal.

BIBLIOGRAPHY

C. Bettelheim (1972). Theoretical Comments in A. Emmanual - Unequal Exchange: A Study of the Imperialism of Trade (New Left Books)

R. Blauner (1969). 'Internal Colonialism and Ghetto Revolt', Social Problems, 16, 4, 393-408

(1972). Racial Oppression in America (Harper and Row)

G.M. Carter, T. Karis and N.M. Stultz (1967). South Africa's Transkei, the Politics of Domestic Colonialism (Heinemann)

P.B. Casanova (1965). 'Internal Colonialism and National Development', Studies in Comparative International Development, I, 4

G. Frank (1967). Capitalism and Underdevelopment (Monthly Review Press)

C. Geertz (1963). Agricultural Involution (University of California Press)

D.L. Johnson (1972). On Oppressed Classes in J.D. Cockcroft, A.G. Frank, and D.L. Johnson (eds), Dependence and Underdevelopment (Doubleday)

E. Laclau (1971). 'Feudalism and Capitalism in Latin America', New Left Review, 67, May-June.

M. Legassick (1973). Capital Accumulation and Violence in South Africa (unpublished paper).

V. Lenin (1964). Imperialism: The Highest Stage of Capitalism, Collected Works, V.22 (Moscow Progress Publishers).

A. Lerumo (1971). Fifty Fighting Years (Inkululeko Publications).

L. Marquard (1957). South Africa's Colonial Policy (South African Institute of Race Relations).

K. Marx (1962). Capital, I & II (Foreign Languages Publishing House).

C. Meillassoux. Imperialism as a Mode of Reproduction of Labour Power (unpublished Seminar Paper).

J. Rex (1959). 'The Plural Society in Sociological Theory', British Journal of Sociology.
(1973). Race, Colonialism and the City (Routledge & Kegan Paul).

H.J. & R.E. Simons (1969). Class and Colour in South Africa (1850-1950) (Penguin Books).

South African Communist Party (n.d.). The Road to South African Freedom (Ellis Bowles)
(n.d.). Fifty Fighting Years.

W.K. Tabb (1970). The Political Economy of the Black Ghetto (W.W. Norton & Co.).

R. Stavenhagen (1963). 'Classes, Colonialism and Accultration', Studies in Comparative International Development, I, 6.

H. Suzman (1972). 'The Progressive Party's Programme for a Multi-Racial South Africa', in N. Rhoodie, South African Dialogue (McGraw-Hill).

P. Van Den Berghe (1968). South Africa, A Study in Conflict.

H. Wolpe (1972). 'Capitalism and Cheap Labour-Power in South Africa: From Segregation to Apartheid', Economy and Society, I, 4.

THE POST-KEYNESIAN (RADICAL) APPROACH TO MONETARY THEORY

J.A.Kregel

I

Perhaps the easiest way to delineate the the kind of analysis of monetary relations that we will be concerned with here is to recall Joan Robinson's remark that Keynes started out to rewrite the theory of money, but finished up with a new theory of output as a whole (Robinson, 1933). This indicates that there should be no separation between 'monetary' and 'real' relations in the analysis of a modern, monetary production economy. On such grounds we must reject the early 'Keynesian' theories of Modigliani (1944, 1963). It is also evident enough that any macro theory based on the micro foundations of Walrasian equilibrium also requires this false division. This allows the exclusion of Friedman's many theories now that he has admitted being what he has been accused of all along - a new-Walrasian with divine insight as to what commodity or asset (or combinations thereof) in the system really is 'money' (Friedman, 1970, 1971). Despite his quarrels with Friedman, Tobin belongs in the same category for his assumption of gross substitution of all goods and assets brings him back to Walrasian barter (cf. Tobin, 1970, Friedman, 1970a). The Clower (1969) and Leijonhufvud (1968) insights also reject all these approaches, but from the point of view of recognising that Keynes's ideas cannot consistently fit into a Walrasian framework. A radical Keynesian must then mean someone who believes that no advance has been made in monetary theory since around 1938. In commonly accepted terminology such a position would be that of 'post-Keynes'.[1]

As Joan Robinson's perceptive remark implies, the study of only 'monetary theory' within a post-Keynesian context may not be appropriate. If the monetary and real relations of a system are inseparable we will have great difficulty talking about monetary theory in isolation from some overall conception of the operation of the economic system we are working with. Indeed, as our exercise of definition by exclusion above indicates, many disagreements in 'monetary theory' stem, not so much from disagreements about monetary phenomena, but more from implicit differences about the underlying general model of the overall operation of the economy.

A post-Keynesian would not begin his analysis of money by analysing a world without money, and then invent good reasons why, in such circumstances, 'money' should be invented. The postulated existence of barter would be a contradiction in terms for a post-Keynesian. While some economists may still believe in the actual historical existence of a barter economy and its usefulness in analysing a money economy, Keynes himself took it for granted that the subject of analysis was the world as it was in today's reality. He accused 'classical' theory of trying to analyse the actual economy with a theory that was concerned primarily with what he called 'real-exchange' economies, accepting that these theories were not meant to only analyse barter, but also the relations of the real world. The world of barter has to be created in our imaginations to find something to which these theories were applicable. That they could be useful in the analysis of a modern production economy, Keynes rejects out of hand.

This, of course, means that Keynes' monetary theory of production is suitable to analysing the role of money in a modern industrial economy, but that it would be inappropriate in the analysis of the conditions necessary for the development of such an economy (much less the development of 'money'). The neoclassical study of the 'historical' changes in exchange (e.g. Friedman, 1969, Johnson, 1969) presupposes the existence of a world of actions and institutions just like the real world, except that only pairwise trades are possible. If this conception is a figment of our imaginations then little can be gained by introducing money into it. The post-Keynesian then has little interest in what we could call the 'technical problems of exchange'. He accepts the world, given as it is, and attempts to analyse this world. Money is a natural element in the world that we know, and that is that.

It may be useful at this point to say something on the subject of the long-run, that happy land that Keynes (1971,p.65) told us we would never live to see. After the storm is over and the seas have calmed we may be unaware that the tempest has ever existed.[2] This sort of reasoning has led some to make a distinction between analysis applicable to the long and short-periods. Keynes is said to be solely preoccupied with the short-period which leaves the long-period relations undiscussed. There will, on this theory, be some other theory that will be relevant for the long-period and if we are interested in long-period trends we are instructed to forget the short-period and its theory and stick to our long-period theory where the tempests have all been calmed and gone away without leaving a trace on the waters. Such a world is also a figment of the neoclassical imagination that Keynes was eager to dispel.[3]

The long-period, as it is described by the neoclassical theorists, is a place where all the problems that bothered Keynes are glossed over, they have the time to let themselves disappear. Like a barter economy, such a state of existence is a creation of the imagination. Paradoxically, it is a method for getting rid of time, of ignoring the fact that today is a unique point in time, effected by its unique accumulation of past actions and expectations, some realised, some not; and a unique future about which further unique expectations are held. Keynes was intensely interested in the long-period, less so as it applied to his grandchildren, a zero rate of interest, or the size of the population, than as to how the anticipation of future events more distant than the current production cycle would impinge on current decisions which would have consequences in the future.

But now we have come upon a crucial point of difference - in an economy without time the past and the future are collapsed into a point where everything happens at once. In such conditions I know what prices my products will fetch at the same time I have to buy the factor services or build the machines to produce them. I know the aggregate effects of my individual actions. In such a world physical exchange is possible and my excess of receipts over expenditures will always be in the goods or assets that yield the highest returns. (It is this kind of world that Clower discovers to be incompatible with Keynes.)

"During the lengthy process of production the business world is incurring outgoings in terms of <u>money</u> - paying out in money for wages and other expenses of production - in the expectation of recouping this outlay by disposing of the product for <u>money</u> at a later date." (Keynes 1971, p33). In any other kind of world, and especially in one without time, Keynes commented to the effect that only a lunatic would hold money for it served no purpose in exchange and earned no return (the conception of a store of value is meaningless in a timeless world). (Keynes, 1937). He might better have said that only a lunatic could have conceived of such a world as a proxy for the real world - instead he accused this timeless classical theory of being a "pretty, polite technique which tries to deal with the present by abstracting from the fact that we know very little about the future..." (ibid).

This proxy was, of course, a world that Keynes refused to analyse for it abstracted from the most important aspect of the actual world, the fact that time runs ever forward and we cannot know what the future will bring. Now there are several practical aspects that the neoclassical abstraction eliminates: (1) the technical problem of exchange, (2) knowledge of our actions, (3) formation of prices and the passing of information, (4) uncertainty, (5) the process of production, (6) distribution, (7) the role and existence of money, or quite generally whether or not full-employment is a natural condition of the economic system.

Since all these aspects are bound up with the existence or absence of time it is not surprising that their interrelations should be confused and obscured in the neoclassical approach. For example, the neoclassical analysis of money in terms of comparing barter and money economies requires time to exist in terms of making exchanges, but it is carried on under the assumption that the other problems in our list above remain in a timeless state, e.g. production is timeless and distribution is determined as manna falls randomly from heaven, etc. Thus, paradoxically, money is said to arise because search and exchange are costly in terms of time - barter is time inefficient. This sort of 'time-in, time-out' world where time functions in only part of it requires the same sort of mental acrobatics from our friendly lunatic as imagining a purely timeless world. In this sense of 'partial' time, money, in the post-Keynesian analysis is <u>not</u> associated with time.

Another example is problem number 3 which we can call the Walrasian problem. It is bound up with the problem of temporal trading and who collects the information about prices and distributes it - who is the auctioneer. Here we have pseudo-time in exchange along with the timeless states of the other problems. It is often said that the Walrasian system comes to grief because it is non-monetary (or only uses a numeraire) and it is the absence of money that allows the information-price problem to be solved. But as Clower has pointed out, we can 'solve' this problem of the Walrasian trading system by postulating the existence of a middleman who holds stocks of all goods and sets firm buy and sell prices for each of them. All goods continue to be traded against all others, prices are determined, but the introduction of money is not necessary to the problem of setting and distributing information about prices upon which certain plans then can be made. Again, this is not the sense in which money and time are linked.

It is also often said that the crucial factor is uncertainty - no uncertainty, no money. But we could introduce uncertainty into the 'middleman' model in terms of a random distribution of manna from heaven without doing much to change the story (except possibly introducing real consumption loans or credits, and the condition that there be someone around (god?) who acts as a lender (or manna dropper) of last resort to the middleman). No, the whole system must be subject to time, especially production must take time for the relation of money to time and uncertainty to be meaningful. This, of course, implies the existence of contracts for both goods and services denominated in money. From this we might conclude that attempts to analyse money merely where it plays a visible role - circulation and exchange - is ill-suited to the analysis of money in a monetary economy.

Thus when we say that money, in the context of post-Keynesianism is directly tied to the problems of time and uncertainty, to disequilibrium, we are clear that this applies to <u>all</u> aspects of the system. We do not notionally hold some of them timeless while analysing money or any other aspect of the overall economy.

It should by now be well known what Keynes meant by uncertainty. Neither need it be stressed that this was a quality that could not be treated by the laws of probability. If time moves ever forward, and each point is unique, we cannot permit replication. Shackle's example is particularly apt: 'Napoleon could not repeat the battle of Waterloo a hundred times in the hope that, in a certain proportion of cases, the Prussians would arrive too late....Had he won, repitition would for a long time have been unnecessary; when he lost, repitition was impossible.' (Shackle, 1955).

Uncertainty is usually linked only to the possible outcomes of investment projects, but Keynes applied it quite generally to all decisions, especially as it applied to the psychological propensities - consumption, investment, liquidity preference (i.e. what Keynes called his independent variables. We should note that these variables could not be independent in a system that does not explicitly take time and uncertainty into account.) Having set up his conception of the economic system Keynes says, given the world we see before us:

"these facts of experience do not follow of logical necessity, (so) one must suppose that the environment and the psychological propensities of the modern world must be of such a character as to produce these results. It is therefore useful to consider what hypothetical psychological propensities would lead to a stable system; and, then, whether these propensities can be plausibly ascribed, on our general knowledge of contemporary human nature, to the world in which we live." (1936, p250)

The effects of the hypotheses which he then outlines are, of course, readily measurable, but the psychological propensities themselves are, by their very nature ill-suited to estimation for there is no reason to believe that their response to unknown, non-reproducible events will be constant. Not only can uncertainty not be reduced to certainty equivalents, the functions themselves, expressing the psychological propensities, while estimable, will not, in general, be steady or constant over time or over all shocks. Uncertainty helps us understand how the system reacts; but makes prediction about these reactions a very tricky business.

In such a system the prime role of money is as a shield against uncertainty - it allows us to go away to decide another day. Thus, when we find Keynes accused of playing down the effects of money on the system this in fact means that Keynes was not willing to postulate a direct relation between money, expectations and uncertainty. Just because money is the most certain link between the present and the unknown future it does not follow that changes in money variables or the quantity of money will have a direct effect on individual's assesment of the future or their reaction to uncertainty. Reactions in the face of uncertainty are quite independent of the fact that money provides the most useful and certain link between the present and the future.

For the analysis of money, as Keynes tells us, we take the system as we find it (unemployment, the holding of money, etc.) and just as in the case of finding plausible values for the psychological propensities, try to find those conditions surrounding a monetary system that will be compatible with the facts of the world as we observe it.

Money holds its pride of place as a link between the present and an uncertain future because money, out of all other goods and assets, has the greatest ability to hold its value over time. Money transfers unexercised purchasing power, more or less intact, through time, to points in time when individuals may be more willing to make decisions over the disposition of their purchasing power. This ability is not due so much to any physical or natural characteristic (e.g. divisibility, malleability, etc.) as to what Keynes called the properties essential to the existence of money in a monetary system of production. The most important (a point to which we shall return) is the stability of wages and prices in terms of the money unit.

Now let us distinguish two problems, the existence of a monetary economy, and what will play the role of money in such an economy. Taking the questions in order, we assume that something exists in the system as money. To be a monetary system Keynes says that money must satisfy two conditions (a) zero (or negligible) elasticity of production, (b) zero (or negligible) elasticity of substitution. In short, money cannot be produced and reproducible by the application of labour over time, nor a substitute for such goods as are reproducible.

The first condition is necessary if an increase in the demand for money is not to increase its production and thus employment in the production of money. The second condition is to assure than an increase in the demand for money will not spill over into the demand for other commodities that do not satisfy condition (a), thereby increasing their employment, production and price. All this is a technical way of saying that a decision to decrease consumption in the present (and thus increase the present holding of money) will not automatically produce an increase in demand in any other place in the system, i.e. that Say's Law will not function in the sense of making full employment a natural result of the system. A decision not to consume in the present represents both a decision to hold money and to consume at some non-specified future date. But such a decision reduces the demand for present goods without reflecting a demand for any other present goods or future good of a specified nature at a specified date, so there is not a direct increase in investment demand to offset the decrease in consumption demand.[4]

If money is to serve as a store of value, to offset uncertainty over its use it must also be able to be used to carry out consumption and investment decisions - it must also serve as a medium of exchange. Thus money must serve equally well as a means of avoiding uncertainty as it serves as a means of making commitments. This requires that money always be exchangeable for all goods and for itself, or that there are no transactions costs involved by shifting money from its function as a store of value to its function as a medium of exchange. The price of money in existence must be the same as the price of money newly produced. With this condition fulfilled the 'money' of the system will not be replaced by 'near' monies, although a rise in the price of money (rate of interest) may cause substitution of other assets for money (which is necessary for keeping order in the structure of interest rates) without the medium of exchange function of money being challenged by other assets (reproducible or non-reproducible; producible assets will not in general serve this purpose because of their high costs of transformation into means of payment and occasionally the complete lack thereof). Further, this aspect also requires the constancy of purchasing power, for rapid changes in wages and prices will rob money of its role in solving the 'technical problem of exchange'. Since such changes will affect all near-substitutes, no one will replace money, the more likely effect being the reversion to a state where no good serves as money.)

We can now treat the question of what good will be held as money. This is determined primarily by conditions of production. The liquidity premium on money can be defined as that premium that is necessary to induce people to store value in some other form than money. We note that this premium, l, can have nothing to do with the conditions of production of money, but with the state of confidence and expectations and the difficulty of transferring other goods from their store of value function to the medium of exchange function as well as the possible changes in value of these goods. These possible changes in value is what makes other goods competitive with money as stores of value. For physical capital the difference between the supply price at which a piece of newly produced equipment can be bought and the demand price or the discounted value of its expected future yields will give its premium or marginal efficiency, y. But increases in the demand for and production of such goods will cause their marginal efficiency to fall, thus decreasing their yield the more of them that are produced and put in operation. This kind of yield money does not have for it always and at all times has the same price in terms of itself.

At the same time there will be carrying costs, c, which for goods will be positive but for most of them less than their yield, y; while for money these costs are equal to zero and to its yield. The liquidity premium for money (which always exchanges for itself) will thus always be higher than for physical assets which must be converted into money before they can be used in exchange. Thus when we compare the total yield (y+l-c) the yield on physical goods has an equilibrium value of zero when supply prices equal demand prices (or the internal rate of return equal to the rate of interest) which is by definition zero for money. Thus money's premium over other goods stems from its liquidity, the premium for liquidity being determined by the supply and demand for money (or, given supply, on changes in demand) so that its total yield is unaffected by conditions of productivity. Keynes can then say that the production of all other goods is limited by the return on money (marginal efficiency = rate of interest) and that no other good or asset can take this role because their total yield will be lower than that on money. Thus as each asset is driven to the point where its y is zero it will be uncompetitive with money as a store of value as money will have a positive l.

This condition is that the own rate of return (or total yield) on the asset chosen as money will always fall at a rate slower than that of any other producible or non-reproducible asset. It is this commodity that is chosen as a store of value and medium of exchange because its yield is unchanged (or falls less fast) while the yields of all other assets in the system fall as their quantity is increased over time. The effect of money on the system is then in terms of the effect of its liquidity premium, the rate of interest, on the profitable production of reproducible goods, and depending on their conditions of production, on prices and quantities. This effect can always be offset by changes in expectations (shifts in mec), but the general causation remains unchanged.

Thus, in a monetary production economy that visibly does not produce full employment the preceding characteristics of money are necessary if a system of monetary production is to produce other results than those indicated by Say's Law and the Quantity theory of Money. The fact that such a system produces fluctuations does not, however, mean that the existence of money is their direct cause. The existence of money certainly allows them to occur and may potentially worsen them, but nothing more than this can be said. The fact that money has no natural response to changes in demand through the operation of supply and demand prices (as with producible goods) means that the quantity of money is free to be affected in the manner that may seem the most appropriate. If it is thus 'managed' badly it can certainly make a given situation worse without being the main and ultimate cause of all the ills of modern capitalism. It would certainly be inappropriate to let money look after itself, or set a given rule for money management to be followed once and for all. The relation between money and output and employment is a long and intricate process, along which, says Keynes, 'there may be several slips between the cup and the lip.' (1936,p173).

In addition there are several more general conditions that we have not stressed. The first is institutions. Monetary institutions are obviously important and necessary, as is something to guarantee the entire operation of such institutions, e.g. the state; although within the Keynesian context the state plays a role more in the enforcing of contracts written in money than in enforcing what is used as money. Along with contracts come debts. Here the state becomes more important, for the necessity of modern government to go into debt to finance its operations (bellicose or otherwise) explains a large part of both the existence of such debts in terms of the issuance of money notes, as well as on the structure of monetary control and policy through government issue of non-reproducible assets other than notes (the national bank and the national debt are the sine qua non of the entire concept of monetary policy). This divorce of the issue of money from real production of course plays a major role in the power imbalance between the labouring classes and the employing classes - the existence of loans allows investment to be truly independent of real savings decisions.

In such a system the value of money will be primarily determined by the level of money wages (in relation to productivity), and thus the general price level will be linked not to the quantity of money but to money wages. In these conditions the concept of an equilibrium value of money will have very little meaning.

Closely associated with this point is the required stability of money wages, given the variable nature of real wages. In such a system we can allow real wages to be flexible as long as the money wage is not disturbed - which leaves the store of value function of money unruffled. In fact, the stability of money wages is the sine qua non of the continued existence of a monetary production economy in the Keynesian sense for if the liquidity premium on money fell below the carrying costs (rate of fall in value due to the rate of rise in prices) then there would be nothing in the system which satisfied the conditions of having a liquidity premium in excess of carrying costs and the system would be, technically, non-monetary. Thus the perfectly flexible wages and prices of the ideal classical scheme have place only in that non-monetary world where production is timeless and there is a perfectly competitive labour market (which occupies itself with wage differentials without affecting real wages) is a dream that an industrial economy can ill afford if the level of production is not to be affected adversely.

Thus we can say that a post-Keynesian position implies not only a position about money, but more importantly a view about the operation of the system as a whole - a belief that the real world which we are trying to explain is one in which monetary and real phenomena are inherently inseparable. In such a world time exists, production takes time, decision over hiring and spending must be taken in advance of the actual conditions that the output, contracted for in the present, will face in the future. Simply picking on time and uncertainty as the foundation of money would be as misleading a simplification as those made by the 'Keynesians' or the monetarists, for such a foundation can only lie in our overall view of the functioning of the economy.

II[5]

Marx also starts his analysis of money with the world as it is, from capitalism in its most developed form, in order to find the logical role and development of money in such a system. For Marx as well the problem of capitalist crises was tied up with money: 'Without money, no capitalism'. But Marx was less concerned with the specific aspects of uncertainty as they applied to capitalists taking decisions about employment and production as he was with the social relations of production that were required and which produced the necessity of money: 'All the illusions of the Monetary System arise from the failure to perceive that money, though a physical object with distinct properties, represents a social relation of production.' (Critique, p35)

The influence and role of money could only be understood by looking at its functions in the process of social exchange and the circulation of commodities under given relations of production. Marx's analysis of money is thus in line with the development of the rest of his system through the definition and discussion of commodity production by means of analysis that commences with the law of value. It is here that money is created and that its use brings about a fundamental social change by laying open the possibilities for crises.

Thus, in terms of social relations, Marx rejects the evolution of money as a result of the difficulties associated with real-exchange barter. He instead looks to barter as involving the transformation of use values into commodities, money coming into existence as the result of the evolution of exchange value, not from the difficulties of barter exchange. 'The exchange process becomes at the same time the process of formation of money. This process as a whole, which comprises several processes, constitutes circulation'. Thus money cannot exist outside conditions of generalised exchange and cannot be understood outside the process of circulation. The understanding of money thus comes from an understanding of the relations of production that stand behind generalised exchange. Like Keynes, Marx rejects the possibility of drawing a strict division between a barter exchange and a monetary system.

For exchange and exchange value to exist certain production relations must already exist (division of labour, existence of a surplus, etc.), production must not be for the use of producers, but for exchange with other commodities. Such exchange, as Marx notes, is not initially within social groupings but between them, exchange being in terms of the surplus of social production over social requirements, and carried out by custom as much as anything else.

In conditions of generalised exchange, goods are produced expressly for exchange for other goods, and have a common basis for exchange only because all are produced by labour, i.e. they represent materialised labour time. Thus also the first generalised measures of exchange were physical commodities. In order for commodities to be exchanged some measure of their relative values is necessary, i.e. money is necessary for commodities to confront one another as exchange values, to become exchange values in the process of exchange, to reduce them to generalised labour time. The existence of exchange thus implies the formation of money which can serve as a measure of the generalised labour embodied in the commodities exchanged. This money thus must also have a value, but in becoming money becomes itself generalised exchange value. It is thus also a commodity, but as money it is a commodity whose use value arises simply because it has exchange value. Money, as generalised exchange value has a use value separate from its proper use value, i.e. its use value in exchange.

In addition, money also serves as a standard of price, that is, as an invariable unit - in terms of metals an invariable unit of weight. Thus exchange value can be denominated in standard units - x pounds of silver or gold. What commodity is actually used as money depends on the development of social conditions, cows or units of grain serve equally well as standards of price (it is here that the state exercises control by defining just what is acceptable in the unit chosen - obviously a cow is not a cow - the unit must be defined in terms of controllable units, cows of given weight and age, once the unit is chosen by social or natural conditions its definition and control becomes the duty of the state). But we must be careful to distinguish that money first serves as a measure of value that becomes generalised by the development of exchange because it initially has value (is produced by labour time) and thus also has a variable value, but also serves as a standard of price because its unit of physical measure is invariable. In this sense of invariable physical units, money also serves as a unit of account, but the fixing of the units is quite distinct from its own value which may vary.

Given these two particular qualities money serves in the circulation process to convert particular use values into generalised exchange values which have use value only when converted into desired use values. Thus circulation runs from commodity to money to commodity C-M-C. 'The formula C-M-C can therefore be reduced to the abstract logical syllogism P-U-I, where particularity forms the first extreme, universality characterises the common middle term, and individuality signifies the final extreme." (p.94) Thus money, as generalised exchange value becomes a medium of exchange adapted to the process of circulation, i.e. a medium of circulation of commodities. (Thus much as in Keynes' view the value of money is determined by the wage while the unit of money is always transferable at zero costs between its store of value function and medium of exchange function so that the value of money is variable while its units are not.)

From these simple relations Marx is able to draw two striking conclusions. First the separation of sale (C-M) and purchase (M-C) brings the possibility of commercial crises for the two sides of the circulation process need not occur simultaneously; C-M # M-C at every instant of time, which gives a straightforward rejection of Say's Law (Keynes was not content with such a proof and further stipulated the conditions on productivity and substitution).

Secondly, Marx draws attention to the fact that in this scheme it is the desire to circulate goods, to convert use-values into exchange-values into use-values, that causes money to circulate and not vice versa. The system is based on the requirements of use-values, which under division of labour and private production require that production be of exchange values. It is not yet money as such that is desired under such conditions but the generalised ability to convert exchange-values into use-values. Commodities only have use after the completion of the circulation process, whereas money only has use value when it is being used in exchange, when it is in circulation. This allows Marx to refute the second pillar of neoclassical theory - the Quantity theory of money. Given the distinction between a standard of price and a generalised measure of value: "Prices are high or low, not because more or less money is in circulation, but there is more or less money in circulation because prices are high or low". (p. 105) The relation is then taken to run from commodity circulation implying money circulation, and from the standard of price of commodities in circulation to the quantity of money necessary to carry out this circulation. Thus changes in the value of the standard of value of commodities changes the standard of price of commodities only because commodities circulate, not because there is more money to be circulated. Thus Marx rejects both Say's Law and the Quantity theory of money by applying the law of value to the social circulation.

Further, a distinction can be drawn between money as a means of payment - the exchange of money for goods and goods for money; and money as a means of purchase - payment after the exchange of goods has already taken place. This creates a lag between the circulation of goods and the circulation of money i.e. money circulates only after the functions of circulating oods has been already performed. Money then becomes merely a nominal money of account in a system of accounts settlements. In this case money loses its use value as a means of circulating goods, but becomes the ultimate form of exchange value. As such it need no longer circulate to maintain its use value as the ultimate form of debt settlement. Now there is a further possibility of crises for C-M-C must always hold, but now when credit systems arise, not only are C-M and M-C separated, but C-C occurs before and without the intervention of M. In the case of fiat money issues (which are now possible) the money that circulates need not have value but need only be a representation of the generalised exchange value of a particular commodity. Thus, credit, bills, notes, which have no intrinsic value circulate in the place of generalised exchange value since there is no longer any need for the value itself to circulate. In commercial crises, as Marx points out, this sham is seen through, and people run from the nominal form of money to the physical generalised exchange value that it represents. As in Keynes money has its anchor in the stability of money wages and prices, for Marx the anchor is ultimately labour value. (In this context the exchange of national monies is instructive. The gold backing of national monies gives them generalised exchange value and a standard of price. When the link between national money and gold is broken they exchange just like commodities with no standard of price of value - there is no basic peg on the system and it can be expected to be indeterminate and subject to continual crises.)

Thus Marx finds the disproof of Say's Law and the Quantity theory of money not in uncertainty and time, but in the contradictions of production for exchange value and the system of circulation of exchange values that this requires. Money as a generalised medium of exchange and measure of value becomes the desired form of value to hold, but at the same time loses its value because it only has use value when it is in circulation. The problem is not to be found in uncertainty and time but in systems of production based on exchange value which lead people to desire money rather than goods. Such systems are monetary systems as a matter of course, but they could not be full exchange systems without a commodity (or fiat for this commodity) that serves as generalised value and as medium of exchange, but this very requirement brings the possibility of commercial crises and creates the contradiction that production becomes production for money, which when held out of circulation has no use value. The basis of exchange to convert commodities into ultimate use value is forgotten as money as an exchange value without a use value becomes the basis of production and the basis for capital accumulation. On this view money is a cause of crises, but only as it plays a role in the social relations of production which throw up the contradictions between use value and accumulation.

III

What basis does this give for a comparison between the two approaches to monetary theory? First of all we can note most generally that neither the Keynesian nor the Marxist approach will treat money in a vacuum. Money has importance only as it enters into the broader overall view of the functioning of the economic system. Further each takes the world as it is and attempts to describe the relations that are actually found there. It should not need adding that Marx's conception is broader.

Both approaches come up with the same general results as far as the applicability of Say's Law and the Quantity Theory of money are concerned. Although Marx does not consider the explicit relations of time and uncertainty a certain similarity arises when we realise that these factors only have distinction application in the Keynes theory when they are opened to and embrace the relations of production (which are of greatest importance for Marx). Neither would accept the use of the ill-conceived barter economy as a starting point of investigation nor as a feasible real world possibility

Each has a lynch pin around which values are tied, the money wage rate for Keynes, the labour value of the commodity that serves as money for Marx. For each the commodity that serves as money has, in this sense a variable value while being invariable as a standard of price.

In the final analysis money has effects and benefits in the sense that it contributes to the ease of capital accumulation. For Keynes this comes in the ability of entrepreneurs being able to command finance and thus real resources for investment in advance of any production (generally the ability to enter into contracts in terms of money, both for factors services and for money itself). For Marx it comes in terms of the contradiction of capitalist production which accumulates not for use values but for money profits and capital investment, which distorts the perceptions of all the social relations of the economic system. The accumulation of money then becomes a precondition for the full-fledged accumulation of capital in a capitalist production.

In the last analysis then the difference is not so much in the approach to money as to the role of money in the two overall conceptions. The most specific difference is of course in Marx's use of the labour theory of value to analyse the contradictions of simple commercial exchange and tracing this through to the contradictions of the full capitalist mode of production. For Keynes this analysis is simply the conditions of the world that will be compatible with explaining the world as we know it in terms of its superficial phenomena (the elasticity conditions, etc.).

NOTES

§ This paper was presented at the Bath CSE conference on Monetary Theory 24th November 1973. Its aim was to outline the 'radical' or post-Keynesian position in relation to current theories on money and the study of money in Marx.

1 Davidson (1973) who is a leading exponent of the approach describes his position as in the centre between right and left on the political spectrum. This suggests that the term 'radical' may be misleading. We could say, however, that given the current state of the debate on monetary theory, a position that rejects all currently proposed views is highly radical! We have chosen to substitute post-Keynesian for the name radical as proposed by the conference organisers for this best suits the current sense of the term (although Davidson would differentiate his position even from that of the post-Keynesian).

2 The famous quote, used in relation to the quantity theory is in the Tract on Monetary Reform, p.65: 'But this long run is a misleading guide to current affairs. In the long run we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean is flat again.'

3 Although one should perhaps distinguish between the classical method of trying to find the basic determinants of long-run variables under given conditions and the neoclassical 'land of the long-run' where actions have no consequences because they can always be undone.

4 Within a Walrasian context this would be expressed as the condition that goods buy money, money buys goods, but goods do not buy goods. The excess supply of labour exerts no influence because it is not an effective demand. In Keynes' system an increase in the demand for money is effective, but only in the money holdings and the rate of interest - which may or may not effect investment in the proper direction.

5 This is not meant to be an exhaustive analysis of Marx's position, only an outline of some basic points of similarity and difference between Marx's approach (as can be discerned from the Critique and Capital) that might raise points for further investigation in what is one of the least explored areas of Marx's thought (the sole exception being Suzanne de Brunhoff, La Monnaie chez Marx, Paris, Editions Sociales, 1967). The recent appearance of the Grundrisse should also be of value, but I have not taken it into account in the short precis that appears here.

REFERENCES

Clower, R.W. (1969) Introduction and articles in Penguin Readings Monetary Theory

Davidson, P. (1973) Money and the Real World, London, Macmillan.

Friedman, M. (1969) The Optimum Quantity of Money, London, Macmillan.
(1970) 'A Theoretical Framework for Monetary Analysis', Journal of Political Economy.

Johnson, H.G. (1969) 'Inside Money, Outside Money, Income, Wealth, and Welfare in Monetary Theory', Journal of Money, Credit and Banking.

Keynes, J.M. (1936) The General Theory
(1937) 'The General Theory of Employment', QJE
(1971) Collected Writings

Leijonhufvud, A. (1968) On Keynesian Economics and the Economics of Keynes, OUP

Marx, K. A Contribution to the Critique of Political Economy, Dobb edition.

Modigliani, F. (1944) 'Liquidity Preference and the Theory of Interest and Money', Econometrica

(1963) 'The Monetary Mechanism and Its Interaction with Real Phenomena', Review of Economics and Statistics

Robinson, J. (1933) 'The Theory of Money and the Analysis of Output', Review of Economic Studies.

Shackle, C. (1955) Uncertainty in Economics, CUP

Tobin, J. (1970) 'Money and Income: Post Hoc Ergo Propter Hoc', QJH

THE CONTINUING SAGA OF THE FALLING RATE OF PROFIT - A REPLY TO MARIO COGOY

Susan Himmelweit

Surprised at the lack of comment in the last number of the Bulletin on Mario Cogoy's article,[1] I shall here attempt a refutation of some of the points he makes. He argues firstly, that what Marx called the organic composition of capital is the ratio $\frac{c}{s+v}$ not $\frac{c}{v}$, and secondly, that because this ratio rises the rate of profit falls. While remaining agnostic on the question of which ratio Marx meant to be the organic composition, I shall also take it to be $\frac{c}{s+v}$ because this is simply the ratio of dead labour to living labour used in production, and its value is a function merely of technical conditions of production at a particular point in time and is not affected by changes in distribution. It is certainly a more useful ratio than $\frac{c}{v}$.

Cogoy then gives us a 'proof' that a rising organic composition of capital implies a falling rate of profit whatever happens to the rate of exploitation. To do this he assumes that for a constant number of workers v+s, constant capital c grows at a constant rate u and the value of labour power v decreases at another constant rate 1. He thus makes the rates of change of c and v predetermined and independent of changes in the other and of anything else. This cannot be done, the rate of change of c depends crucially on the rate of surplus value in determining firstly, what surplus is available to be accumulated and, secondly, in what proportions capital must be divided between c and v. The rate of surplus value is $\frac{(s+v)-v}{v}$, where s+v is the constant number of workers, and therefore necessarily changes when v does. Ignoring these interconnections leads to accumulation growing to amounts far above the surplus produced in the previous year, for capital c+v at time n is $c_o(1+u)^n + v_o(1-1)^n$ and so accumulation

$$= c_n + v_n - (c_{n-1}+v_{n-1})$$

$$= u(1+u)^{n-1} - 1(1-1)^{n-1}$$

the left hand part of which tends to infinity while the right hand part shrinks to zero, thus the total grows without limit. On the other hand, total surplus s is limited by being less than s+v, the constant number of workers and thus cannot provide for the ever increasing accumulation of capital. Thus it is not possible for an economy to follow this path. It is possible to get round this problem by redefining the time periods involved, by letting the length of a period be just that time necessary for the required amount of surplus to be accumulated. Thus the time periods get longer and longer. This would not however, get over the fundamental objection to Cogoy's method that he lets the rate of change of c and v be determined independently of each other and of the rate of surplus value. The proportions into which the accumulated surplus is divided between c and v, will be affected by both technology, in determining the relation between values and physical quantities, and the class struggle over wages and the rate of profit. These cannot be assumed to work out in just such a way that c rises and v falls exponentially.

Apart from this, whether these observed assumptions are realistic or not, they do impose a severe limit on the applicability of the proof. By putting in predetermined rates of change as algebraic letters, the level of generality of the argument is not raised much above that of a numerical example. What Cogoy wants to show is that his law holds <u>whatever</u> happens to c, v and s provided $\frac{c}{s+v}$ increases without limit. This is very easy to do for the rate of profit

$$r = \frac{s}{c+v} \leqslant \frac{s+v}{c} = \frac{1}{\left(\frac{c}{s+v}\right)}$$

So if $\frac{c}{s+v} \rightarrow \infty$, the rate of profit tends to zero.[2]

It is worth noting that $\frac{s+v}{c}$ is the maximum rate of profit r^* payable, for any given technology, for if wages are zero, v=o and so $v^* = \frac{s}{v+c} = \frac{s+v}{c}$. So the maximum rate of profit is just the reciprocal of the organic composition of capital and the statement that a rising organic composition of capital implies a falling rate of profit comes down to saying

(i) $\frac{1}{r^*} \rightarrow \infty$ by assumption

(ii r is less than r^*

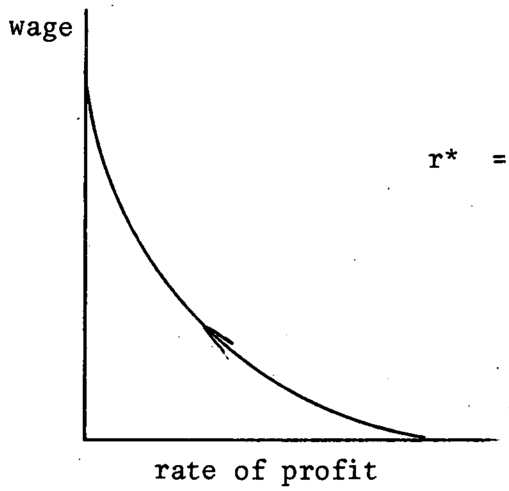
So $r \rightarrow 0$

i.e. the maximum rate of profit tends to zero, therefore so must the actual one.

No causal mechanism is implied by such mathematics alone but if a causal mechanism is not intended, the assumption can be framed just as well in terms of the rate of profit itself as in terms of the organic composition of capital. Thus if Cogoy is to have shown more than that the rate of profit falls under the assumption of a falling rate of profit he must show a mechanism by which a rising organic composition of capital <u>causes</u> a falling rate of profit.

What follows is an attempt to show that the link that does exist between the organic composition of capital and the rate of profit in fact works in the opposite direction.

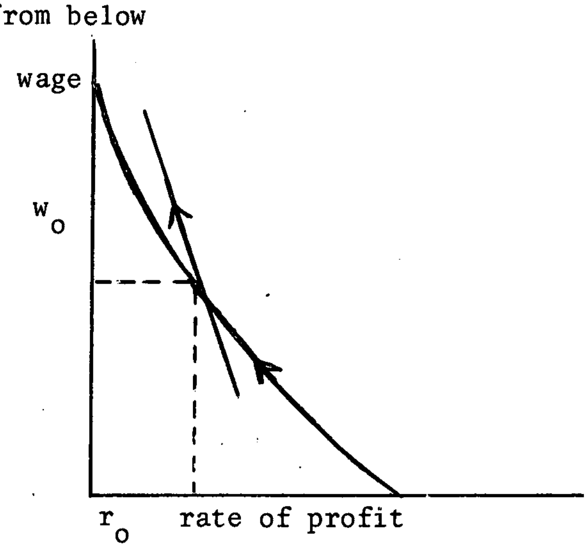
The important point to recognise is that the rate of profit cannot fall except if wages rise. Where methods of production do not change, this is obvious and can be plotted as a wage-profit frontier. (see over) As accumulation proceeds we find "...the requirements of accumulation begin to surpass the customary supply of labour, and, therefore, a rise of wages takes place."[3] Thus movement is up the wage-profit frontier and the rate of profit falls. The organic composition of capital is unchanged.



$$r^* = \frac{1}{\left(\frac{c}{s+v}\right)}$$

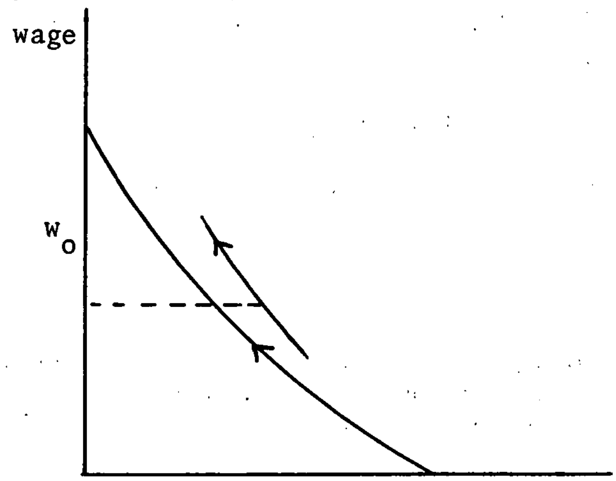
"Once given the general basis of the capitalistic system, then, in the course of accumulation, a point is reached at which the development of the productivity of social labour becomes the most powerful lever of accumulation."[4] So techniques of production change. They can change either to techniques that were available previously or to ones that were not. If they were previously available they must not have been used earlier because they would have involved higher costs for "No capitalist ever voluntarily introduces a new method of production, no matter how much more productive it may be, and how much it may increase the rate of surplus value, so long as it reduces the rate of profit."[5]

So because wages rise some techniques become more profitable than others that had previously been used. Thus the new wage-profit frontier must cut the old wage profit frontier from below



and movement is up the new frontier after wages have risen above w_o and the rate of profit fallen below r_o. If there is no reswitching, the new frontier must cut the profit axis at a lower maximum rate of profit than the old one and then the new methods of production have a higher organic composition of capital than the old ones.[6] During the change over to the new methods, i.e. while further accumulation is used purely for buying means of production, to increase the total constant capital to the new level, without expanding the demand for labour, neither wages nor the rate of profit changes. When the demand for labour does increase again, the rate of decline of the profit rate is slower than it would have been if the change over had not taken place, since the new wage profit frontier is steeper than the old one.

If techniques change to ones that were not available previously, either because they were not known or because the necessary capital to exploit increasing returns to scale had not been previously accumulated, the rate of profit will rise, otherwise the technique would not be introduced. Wages may rise or fall according to what happens to the demand for labour, and the new technique may or may not have an increased organic composition. The only requirement is that the new wage profit frontier has a higher profit rate at the wage rate ruling at the time of the change over. It may or may not cross the old one.



Thus we see that accumulation produces three processes, the first, simple accumulation with no changes in technique, produces a falling rate of profit but no change in the organic composition of capital, the second, a change in the method of production to techniques previously available changes, and in general increases, the organic composition of capital and in so doing temporarily halts and then slows down the eventual decline in the rate of profit, and the third, a change to techniques not previously available, increases the rate of profit and may change the organic composition of capital in any direction. So the only times when the rate of profit falls, are just those when there is no change in the organic composition. Changes in the organic composition of capital, when they occur, either halt and then slow down or reverse the fall in the rate of profit.

Thus the rising organic composition of capital, far from being a cause of the falling rate of profit, is itself a counteracting tendency to it. Both tendencies have a common cause in the accumulation of capital which leads to an increased ratio of capital to available labour force, this <u>is</u> an "incontrovertible fact"[7] of capitalist accumulation (assuming population growth is sufficiently slow), but this is not the same as an increased organic composition of capital. The organic composition rises because capitalists find techniques with a higher organic composition more profitable than previously employed techniques as wages rise.

It may be argued that, because of the "anarchy of production" under capitalism, the techniques that are chosen as most profitable on the basis of existing prices do not turn out to be so when competition, through cheapening the commodities for which methods of production have changed and thus changing prices ratios, re-establishes a general rate of profit. This of course, could not happen in a one-commodity world, since there are no relative prices involved. That it does not happen in general can be shown as follows:

Let A be the input-output matrix and l the labour input vector of production, for the economy as a whole, at some point in time. Then if b is the vector of a worker's consumption (i.e. the wage in commodity terms), the equilibrium price vector p and profit rate r is given by

$$\text{(i)} \quad p(A+bl)(1+r) = p$$

A change to a new technique in the production of commodity i, will be made by an individual capitalist if

$$\text{(ii)} \quad (p(A'+bl'))_i \leqslant (p(A+bl))_i = \frac{p_i}{(1+r)} \qquad \text{from (i)}$$

where A' and l' are the input-output matrix and labour input vector which include the new technique. Since A' and l' differ from A and l only in their ith column and component respectively, we have

$$\text{(iii)} \quad (p(A'+bl'))_j = (p(a+bl))_j = \frac{p_j}{(1+r)} \qquad \text{for all } j \neq i$$

Now consider the standard commodity x' of the new system. It is an eigen-vector of A'+bl' which satisfies

$$(A'+bl')x' = \frac{x'}{(1+r')}$$

where r' is the general rate of profit that becomes established when the new technique becomes the usual one for the production of commodity i, assuming that consumption per worker remains unchanged at b.

From (ii) and (iii)

$$p(A'+bl')x' \leqslant \frac{px'}{(1+r)}$$

so

$$\frac{px'}{(1+r')} \leqslant \frac{px'}{(1+r)} \qquad \text{and so } r \quad r'.$$

($px' \neq 0$ since all non-zero components of b enter into x', so if $px'=0$, then the wage is zero, which is not an interesting case.)

Thus if a technique is chosen by an individual capitalist as being the most profitable, its adoption will not decrease the general rate of profit. (It will actually increase the rate of profit if the new technique is in the production of a basic commodity and will leave the rate of profit unchanged if the commodity is non-basic). So the capitalist class as a whole does not behave differently from an individual capitalist when it comes to choosing techniques of production.

Thus accumulation lowers the rate of profit when techniques do not change. The organic composition of capital does not change unless techniques do. Techniques are only changed if they reverse, halt or slow down the fall in the rate of profit. These are therefore the only circumstances in which the organic composition rises. These processes can of course all be happening simultaneously in different sectors. The reason for separating them out is just to show that whenever the tendency of the organic composition to rise is manifested, it is as a counteracting influence to the tendency of the rate of profit to fall.

So what has happened to Cogoy's argument? We have seen that whenever the organic composition of capital increases, the maximum rate of profit r* decreases. This however has no downward effect on the actual rate of profit and cannot be used to argue that being an upper bound on the rate of profit, a decrease in r* must imply an ultimate decrease in r, since the change in r* has only occurred <u>because</u> r is already sufficiently low to make the changeover to a new technique more profitable. So while r* is mathematically an upper bound on r, it never acts as such, since r* only decreases to values still above the general rate of profit.

Thus there is no causal content in Cogoy's argument, which must be seen as purely tautological. The rising organic composition is not a cause of the falling rate of profit. It is one, among many, of the counteracting influences to it. The only cause of the falling rate of profit is, through rising wages, the over accumulation of capital.

NOTES

1. Mario Cogoy, "The Fall of the Rate of Profit and the Theory of Accumulation" - "A Reply to Paul Sweezy", CSEB, Winter 1973, pp.52-65.
2. Here and throughout this paper, c, v and s are to be taken to be the values of these variables that would obtain if both production and consumption were of commodities whose range of organic compositions was proportionate to that of the standard commodity. Thus these values are then independent of what is produced and just reflect technological and distributional factors. It is only be adopting this definition that we can have $r = s/(c+v)$. If commodities exchange at their values, all organic compositions of capital are equal at any point in time, and thus the actual s, c and v produced would satisfy the definition as above. This is the assumption that I would assume Cogoy is making.
3. Karl Marx, Capital Vol I, Moscow 1954, p.613.
4. ibid., p.621.
5. Karl Marx, Capital Vol III, Moscow 1962, p.264.
6. The assumption that commodities exchange at their values would rule out reswitching.
7. c.f. Karl Marx, Theories of Surplus Value, Vol II, Moscow 1968, p.364, and David Yaffe, "The Marxian Theory of Crisis, Capital and the State." CSEB, Winter 1972, p.17 (in order of appearance).

SKILLED LABOUR IN THE MARXIST SYSTEM - A COMMENT

P.G. Hare

The reduction of skilled labour to its equivalent in terms of unskilled labour has always been a serious problem for adherents to the Marxist labour theory of value. For it has long been recognised that the use of relative market wage rates to weight labour of different types introduces a fundamental circularity into the theory, since the whole object of the labour theory of value is to derive labour values for commodities which are independent of the currently observable income distribution. If there is only one type of labour in existence then the difficulty disappears, but until recently there has been no unambiguous solution to the general reduction problem.

Weizsäcker (2) suggested that the most logical solution would be to measure labour of any type of skill by the total labour time expended. This certainly provides a measure of total labour outlays which is independent of relative wage rates, and so constitutes a possible solution to the problem. But Rowthorn (2) has produced a

Much more interesting and theoretically satisfactory solution by regarding skilled labour of any type as a combination of unskilled labour and some educational or training activity. Thus skilled labour is treated as a produced good, and values (reduction coefficients) for the different types of skilled labour are derived simultaneously with values of all ordinary commodities. In this note I propose to accept Rowthorn's basic analytical approach, and suggest two improvements to it.

Firstly, as Weizsäcker points out, in a growing economy the usual Marxian value concept is very static. To maintain the economy on a certain steady growth path, it is not only necessary to replace materials and support labour in the current period, but it is essential to allow for the additional material requirements of the next period. If this is done, the resulting concept of value will be distribution free, though dependent on the long-run average growth rate of the economy. A useful consequence of this approach is that one is not obliged to resort to verbal gymnastics in order to avoid referring to exploitation in the context of a growing socialist economy. Thus in an economy growing at rate g per year, the basic value equations take the form:

$$v = (1+g)(vA+kB+\bar{v}) \tag{1}$$

where v is an n-component vector of commodity values.

- A is an n x n matrix of current input-output coefficients, so that from (1), only circulating capital is being considered.
- k is an m-component vector of reduction coefficients for the different types of skilled labour.
- B is an m x n matrix of skilled labour coefficients; thus b_{ij} is the amount of skilled labour of type i required to produce one unit of commodity j.
- $\bar{v}$ is an n-component vector of unskilled labour requirements per unit of commodity produced.

The second modification to Rowthorn's analysis concerns the treatment of education and the production of skilled labour. Rowthorn argues that one unit of skilled labour of type s is equivalent to one unit of unskilled labour plus one unit of an educational or training activity which produces skill s. He therefore obtains the relation

$$k = e + \bar{k} + vG + kH \tag{2}$$

where $\underline{e}$ is the unit vector (with m-components).

- $\bar{k}$ is an m-component vector of unskilled labour requirements (including the trainee's labour) per unit of skilled labour produced.
- G is an n x m matrix of commodity requirements of training activities.
- H is an m x m matrix of skilled labour requirements of training activities.

But surely the formulation of (2) implies that each time a unit of skilled labour is performed, the associated training costs must also be incurred. It would seem more realistic to suppose that training costs are only required to the extent that

(a) there is economic growth in progress, so that the stock of skilled workers of each type is being increased

(b) departures from the labour force due to death or retirement need to be replaced by newly trained workers.

The result is that equation (2) needs amendments to allow for these points.

Let us retain the earlier assumption that the economy is growing at a steady rate, g per year, and suppose that a proportion λ of the stock of skilled workers leaves the labour force each year. Then equation (2) should be modified to the following:

$$k = e + (g+\lambda)(\bar{k}+vG+kH) \qquad (3)$$

It is worth remarking here that if g and λ are zero, then (3) implies that k equals e, which agrees with Weizsäcker's suggestion that only labour time matters in the measurement of values, not the type of labour involved. This is, however, a somewhat unrealistic special case.

Equations (1) and (3) can now be combined to obtain solutions for k and v, thereby solving the reduction problem:

$$(v,k) = (\bar{v}, e + (g+\lambda)\bar{k})(I-D(g))^{-1} \qquad (4)$$

where $$D(g) = \begin{pmatrix} (1+g)A & (g+\lambda)G \\ (1+g)B & (g+\lambda)H \end{pmatrix}$$

Thus the basic structure of the above argument is identical to that of Rowthorn's paper, with some variations to allow for the effect of economic growth, resulting in (4).

REFERENCES

1. R. Rowthorn, "Skilled Labour in the Marxist System", CSEB, Spring 1974 pp 25-45

2. C.C. von Weizsäcker, "Modern Capital Theory and the Concept of Exploitation", Kyklos Vol. XXVI, No.2 (1973), pp. 245-281

LETTER TO THE
EDITORIAL BOARD

A line mainly to congratulate you on the vigour and quality that the CSE Bulletin has developed.

What I am currently much interested in is the meaning (economics-wise) of socialism /communism as a new economic formation. 'Capital' is about the 'historical logic' of a commodity economy after labour-power has become the dominant economic formation and money the embodiment of economic relations in their most generalised form, money being the organising and 'disciplining' element of economic activity and of the intractability of economic life from moment to moment. The antithesis, the new formation escapes from the money/commodity formation into 'a community of free individuals, carrying on their work with the means of production in common, in which the labour-power of all the different individuals is consciously applied as the combined labour-power of the community'. (CAPITAL Vol.I Cap.I) Everything produced by these communities is 'simply an object of use' for the community. 'The social relations of individual producers' will be with regard both to their labour and its products ...perfectly simple and intelligible, and that with regard not only to production but also to distribution'. 'The life-process of society'... is 'production by freely associated men (and, I would add, women) and is consciously regulated by them in accordance with a settled plan'.

The epoch we live in is one of transition in which oil (commodity/money) is mixed with water (production for use/plan). These are antithetical economic 'disciplining factors' or 'organisers'. Use of resources to serve a concretely defined use in A is the antithesis of production of exchange-values B. Capitalism has to resort to A often - war production, roads, etc. - but it tries to hide up this fact, to treat it as environmental background and not as 'essence'. This game is played even when whole industries are nationalised and workers 'unionise' to defeat the market and then the analysts call it 'incorporation'.

The practical point about socialist theory is to create ability to recognise the antithesis (commodity versus plan, market versus use) in its embryonic forms and also to recognise the end-objective (death to 'Lord Commodity', death to 'King Money'). (Confusedly there is a hint of this in Preobrazhensky's New Economics and as practice, without theoretical explanation so far as I know, in the Chinese communes). Socialist class-struggle is waging war - organisationally, practically (eg for free health services or for employment in UCS) AND 'at ideas level' (may I use 'ideologically' in this sense) - eg it should be emphasised that UCS is only a tiny area of ground won and the counterattack is 'incorporation' ie. give up the job but keep the 'money/market' principle.

The 'freely associated men' trying to assert themselves against 'money/market' disciplines is the economic theory underlying workers' control. The point of the theory of 'M's Capital' (so far as the future is concerned) is to sharpen the analytical vision to enable it to look more perceptively into the present, to judge class struggle in terms of how to widen and strengthen 'areas' (territory, e.g. Cuba, China; institutions eg. TUs, comprehensive schools; value systems and ideas eg. anti-Racism, Marxist courses in Universities) which are for the new socio-economic formation against the 'areas' held by the old socio-economic formation. Ideas and organisations (eg. State Police) are instruments in this struggle - of which the end (because the commodity has unified the world) can only be at the ONE WORLD level.

For economists the immediate practicability arising out of all this is to do more to suggest there are solutions (to poverty, pollution, alienation, etc.) that step right outside of the money-criteria solutions. There is, of course, a 'sort of technical' economics in studying how to push back the jungle of the money-capital system, how to make clearings, eg. how Vietnam is to live in the surrounding, capitalist world, how nationalised urban land and, say, no-rent communities might be established in limited areas or when they can't and a revolutionary change in control over state-power at nation-state level is a prerequisite. (As 'war-economy' in 'production for capitalist-USE' it has some exemplars of techniques that might be used for jungle clearing). But possibly the most important 'practicability' is consciousness-changing of workers' control type movements in industry and in the community; since 'consciously planned production for use by freely associated producers' implies as a prerequisite a 'collective socialist will' at small community levels and understanding of the elements of the 'new' anti-money, anti-commodity, anti-market 'economics'. That is, economists need to announce to the world that there is the possibility of a new economic formation and that it is possible to proceed without money-criteria and commodity-market production and division of labour based on labour-power categorised as specialist activities adapted to sale as commodities. That is, material production can be differently organised, directly, simply by the producers themselves devoting resources to consciously approved purposes; what is more this concept of production defines economic principles for organising institutionally (historically objective) and ideological struggle against capitalism. Best wishes and prosperity to CSE

STEVE BODINGTON

BOOK REVIEWS

Problems of planning in the USSR: The Contribution of Mathematical Economics to their solution 1960-1971 (Cambridge University Press 1973) by MICHAEL ELLMAN.

Reviewed by Grahame Thompson (1) and Simon Mohun (2)

(1) Optimal Planning in the USSR (Grahame Thompson)

Introduction

This book is a culmination of Ellman's previous work on the Soviet planning system undertaken by him at the D.A.E. in Cambridge and it is also based on his own Ph.D. thesis. The book comes at a time of resurgent interest in the 'mechanisms' of the Soviet and other East European economies, associated with the so-called 'reform' programme. Two features of this reform programme, which can be loosely crystallised around the term 'market socialism', are (a) a greater reliance upon certain aspects of the market mechanism and market relations and (b) a greater emphasis - at least, verbally - upon the use of optimal planning techniques associated with certain mathematical programming algorithms. It is to a critical examination of the contribution of this latter feature in overcoming the problems of the Soviet planning system that Ellman directs his research. He is particularly concerned to discuss the advances made (or potential advances that could be made) in organising the economy more efficiently by the displacement of the 'administrative' economy and its replacement with an optimally functioning one based upon mathematically solved plans. It is with the problems posed by this transformation that Ellman deals, and in so doing Ellman raises the difficult and important problem of the relationship of political economy to mathematical programming posed by this transformation of the economic mechanism. One of the merits of the book is that this is done within a framework that is generally socialist so that readers of this Bulletin will find the questions asked, and the way they are asked, familiar and important. However, in this reviewer's opinion, a lot of the more important questions are not adequately posed, and in many cases the answers given are even less satisfactory. The purpose of this review is to focus on a number of issues that are raised in the book, to more adequately reflect the 'pertinence' of these issues and to try to elaborate them a little, and finally to locate these issues in the wider context of the problems faced by social formations that are in a period of transition from the dominance of one mode of production to the dominance of another. Needless to say, this rather ambitious task, is likely to be less than fully achieved in a review article, but it is hoped that some positive contribution can be made.

Outline of Contents and Areas Covered

The book begins with an historical introduction of what amounts to the 'fall and rise' of mathematical economics in the USSR. The introductory chapter is in fact one of the most interesting and informative in the book. After an initial flourish of mathematical economics in the USSR just after the revolution, a long period of decline set in with the advent of the Stalinist era. It was not until 1956, after the 20th Congress, that the 'rise' about which Ellman has most to say began, and it seems to have gone on unabated ever since, though not without opposition.

During the whole period of the 'fall and rise', the main point of contention was over the exact relationship between optimal mathematical programming and political economy or historical materialism. Stalin stressed the absolute primacy of political economy over optimal programming, arguing that the latter was a technical practice confined to areas of policy implementation only.[1] With the end of the Stalin era however, his dogmatic assertions in all fields come under increasing scrutiny and once again interest in optimal planning developed as a response to the pressing problems facing the organisation of the economy. Ellman documents the struggle between the 'avant-garde' of the optimal planners and what he calls the upholders of the "official doctrine of the USSR-Marxism-Leninism" (p8. Ellman's position in this conflict is enigmatic. He argues that the function of Marxism-Leninism

> Was and has been ever since Stalin's 1929 speech to provide an ex post 'theoretical' justification of 'practice'. Its inability to assist in the resolution of economic problems was notorious and was repeatedly pointed out in official statements after Stalin's death. The evident need for a science which could assist in the resolution of economic problems, combined with the inability of political economy to do this, explains the support given to mathematical economics by the authorities in the 1960s. (pp8,9)

Is this an attack on Marxism-Leninism, as such or is it an attack on the dogmatic lip service paid to it by authorities whose actual practice is far from Marxist-Leninist? The difficulty is that Ellman never adequately defines what he understands by Marxism-Leninism. Is it for him just useless dogma employed to justify the status quo which needs to be completely displaced, or is it a genuine expression of the science of historical materialism which has been (temporarily at least?) repressed but which could assist in the resolution of (genuine) economic problems etc? More of this later.

Throughout the post Stalin period optimal planning challenged the position of political economy. In some cases it was argued that the economic mechanism should be radically transformed by emphasising the allocative function of prices and other value relations derived from the dual of cost minimising problems ('shadow prices', etc). Ellman argues, however, that this "natural" (sic) reaction by optimal planners was effectively defeated in favour of the more limited 'efficiency' function of mathematical economics. In fact, Ellman argues that by the end of the period (1971) a 'modus-vivendi' had been reached between the optimal planners and the Marxist-Leninists. According to Ellman, this is based upon two features. In the first place, a recognition by the optimal planners that Marxist-Leninist political economy was dominant -

> The TSEMI (The bastion of the optimal planners (G.F.T.)) has recognised that only Marxist-Leninist political economy can form the theoretical basis of economic policy of the party and the socialist state ...Mathematical economics was a specialised academic discipline taught to future planners (p12).

i.e. basically Stalin's position.

Secondly, this is based upon a recognition by the political economists and the party that they can learn from the optimal planners, something about the scientific value of the working of the Soviet economy. This is demonstrated by the fact that

> in the CC decree of December 1971 criticising the work of the Institute of Economics (the bastion of the political economists (G.F.T.)), the latter was instructed, inter alia, to pay more attention to the contemporary achievements of economic science and the new methods of research, in particular economic-mathematical modelling (p14).

The situation at the end of the period as opposed to the beginning is summed up by the Soviet economist I. Birman quoted by Ellman:

> Formerly it was necessary to argue, demonstrate, substantiate, convince. Today it would seem that everyone is convinced, openly at any rate they do not argue, and may even help us. Conditions have been created for the development of the economic-mathematical institutes and special faculties (within higher educational establishments); books and journals are published, dissertations are defended; prizes are awarded. But, and this is the chief difficulty practical contributions are awaited from our work, real benefits are required from us, we are required to give answers to numerous important and difficult questions (Ellman p16)

In the succeeding chapters of the book Ellman goes on to demonstrate just the practical contributions that mathematical economics can and has made to the notorious 'supply' system in the USSR and also the implications that certain optimal planners have drawn from their results about the organisation of the wider 'economic mechanism' of the Economy; i.e. the second feature of the 'modus vivendi' mentioned above. But the problem of the relationship between political economy and mathematic planning is essentially assumed to be theoretically settled in this discussion, on the lines of the first feature of the modus vivendi mentioned above. Below I will take up this theoretical issue in a more detailed way. It seems to me that Ellman's discussion is very inadequate in this part and in latter parts of the book. The analysis takes place on what I will call a 'technical level' and does not pose the real theoretical problem that lies behind and beneath this technical level; that of the precise articulation of the relationship between two scientific domains with different theoretical objects i.e. the science of historical materialism and the science of mathematics. This is the genuine scientific problem that lies at the heart of the issues that Ellman raises. Unless this is posed as such, the argument can only be at the level of assertions and not at the level of scientifically produced knowledge of the Soviet economy.

However, after this historical introduction, Ellman provides two chapters which look at the way the supply system in the USSR is organised under what is broadly termed the 'administrative economy'. Here the technique of material balances is discussed and the problems it raised highlighted. Input-output analysis is discussed but it is argued that the technological rigidities involved with this technique rule it out for having an impact on the solution of the supply problem.[2] The major problems arising out of this kind of 'current planning'[3] according to Ellman are those of achieving consistency between the different interdependent elements of the supply system and of achieving a 'taut' plan. A number of 'piecemeal' reforms, such as wholesaling and contract making, that have been attempted essentially within the administrative economy concept, are pointed out, but generally the two chapters are employed to build up the case against this type of planning as a whole and for the transformation of it by the employment of optimal programming techniques. To spell out the implications of this is the task of the rest of the book. Fortunately, for the general reader, this is done with remarkable restraint on the use of mathematical notation.

In the chapter headed "Can the Optimal Planners Help Improve the Method of Economic Calculation?" four 'case studies' of the employment of mathematical programming to solve 'real' problems are looked at. Each is illustrated employing simple mathematical notation and the general conclusion is drawn that, in each case a significant increase in efficiency resulted. It is suggested that the use of opportunity costs rather than production costs is germane to optimal planning since these stress the scarcity values of resources.

In the following chapter, "What are the Implications for the Economic Mechanism of Linear Programming?" a detailed examination of the interpretation of prices that are calculated and employed in the Soviet Economy is undertaken. This concentrates on the interpretation of the 'shadow prices' obtained from linear programming algorithms associated with the Russian economist Kantorovich. He has stressed the allocative efficiency of prices rather than the re-distributive function and Ellman is critical of this. This is a very technical discussion and also a rather confusing one. Ellman is obviously well aware that this is a controversial area, and he gives time to discuss the 'great economists' interpretation of prices and the relationship their theories have to both the static problem of allocating existing resources and to the dynamic problem of growth and the development of the productive forces. He is critical of the Robbins/Neo-Classical version of 'what economics is about' and more sympathetic to the Ricardian/Marxist interpretation. What seems to be lacking however, is a decisive exposition of exactly what the implications of the undoubted 'value' interpretation given to the 'shadow prices' are, and what role they play in the Soviet economic mechanism. Do they fulfil the same role in the Soviet economy as they do in capitalist economies? These issues are partly taken up in the next chapter where the concrete suggestions of the optimal planners for improving the economic mechanism are discussed. These suggestions have tended to take a value or 'price' form however, such as the introduction of further rent payments, payments for assets, payments for labour, profit etc.

At this stage, two observations can be made: (a) these suggestions for reforming the whole of the economic mechanism have taken a 'monetary' form rather than a 'physical' form and (b) they must be seen against the development of what is known as 'Khozraschet' economy. This is an economic mechanism, the distinguishing feature of which is the absence of 'current planning', but with the emphasis on overall planning at the national and regional level, of economic units which have their own profit and loss accounts, which can more or less choose their own inputs and outputs, fix their prices and which pay for their natural resources and capital goods as individual units (pages X and XI of Ellman's Glossary). Thus the movement of Soviet economy would seem to be towards greater emphasis on the individual enterprise as the basic unit of production and to the employment of optimal planning mechanisms to co-ordinate and direct this movement. "It would be a mistake to suppose that the compilation of optimal plans is an alternative to the expansion of 'Khozraschet'" (p89). This is where value relations come in, since it is these that are increasingly being employed to exercise this overall planning function. Now this might seem to be a very similar planning mechanism to the partly 'attempted' and even 'implemented' in certain sectors of capitalist societies. In fact it is through the exact specification of the role that prices play in the overall economic mechanism that a distinction (but one that is still confined to surface phenomenon) can be drawn.[4] Unfortunately, Ellman does not coherently make this distinction.

What is the function of prices in the capitalist mode of production? To answer this we must return to Marx. What distinguishes Marx from all other classical and bourgeois economists is his achievement of correctly conceptualising the reproduction of the total social product and total social revenue via the formalisation of the two great departments of production. (Department I - the production of means of production, and Department II - the production of the means of consumption). It is the mechanism of the reciprocal movements between these two departments that guarantees the social product as being absolutely consistent with social revenue, even under the conditions of expanded reproduction, and thus aggregate demand and supply are equated. With demand and supply consistent prices are assigned the function of equalising the rate of profit between different branches of production with different organic compositions of capital, assigned this function by the law of value operating through this organic composition of capital and through the laws of competition.[5]

This is a radically different function for prices to those which emerge as 'shadow prices' from a mathematical programming problem, and this is the indication of where the Soviet economic mechanism differs from that of economies dominated by the capitalist mode of production. If the objective function is to minimise the cost of attaining a given output, the 'shadow price' can be interpreted, as the marginal cost of each input, and clearly similar marginal costs can be obtained for outputs, with slightly different formulations of the problem. Profit in the capitalist sense only figures in these 'marginal costs' if it is explicitly built into the models as an addition to input costs or as an added constraint on the objective function.[6] Thus the function of prices as such is different under the capitalist mode of production than those prices which are produced by optimal planning techniques. However, it should be noted that these latter prices still take a 'money' form. The relevance of the continuation of the 'money' form will be discussed below as will the crucial question of the relations of production which these remarks imply.

In the final chapters of the book, Ellman turns to his own suggestion for the type of reform he considers necessary for the Soviet economy. He recognises that the optimal planners are effectively pressing for a radical change in the "productive relations of socialism"(p134) and asks what would be the social base for such a major transformation. This seems to be a disguised way of posing the question of the nature of the class struggle in the Soviet Union. This is answered with an interesting discussion about the possible make-up of any ruling elite that might exist in Russia. The Parkin thesis of the attempted replacement of any entrenched bureaucratic elite by a 'white-collar intelligentsia' is reviewed. This however couched very much in terms of sociological stratification theory which can hardly take the place of a thorough Marxist class analysis. Of course, one would not expect a definitive construction of the nature of the Russian social formation but I think one must dig a little deeper than Ellman does by closely examining the actual relations of production that exist and in what direction these relations are moving. It is not sufficient to concentrate upon changes in income distribution as Ellman tends to do.

Ellman's own position can be summed up as follows:

> I reject the thesis that the maintenance of the administrative economy is desirable because economic reform is simply an expression of the self interest of the white-collar intelligentsia (and more advanced regions) and offers the workers (and backward regions) only increased inequality, unemployment and higher prices. I accept that 'the erosion of a command system and the release of market forces can have a detrimental effect on the life chances and the share of rewards of those who lack the kinds of skills which give bargaining power in the market-place'. One must bear in mind, however, that the waste generated by the administrative economy, and its negative effects on personal consumption, have a severe adverse effect both on working-class living standards and on working-class attitudes to production. (Ellman, p144)

So Ellman essentially sees the increased employment of optimising techniques as necessary reforms in a system that is steadily moving towards socialism. Exaggerated claims about the usefulness of these techniques must be avoided but they can help

> to transform state ownership (of property) into social ownership by increasing social control over decisions made, both locally and nationally while not allowing each productive group to become entirely independent. (p150)

Along with the optimal planners, Ellman agrees that the 'deepening of optimisation' in its present form, is an expression of the actual movement of the economy towards socialism and that this is complemented by the development of the 'Khorzraschet' economy.

> I take it for granted that after the reform, as before it, the Soviet economy will be a socialist planned economy. This results from the state ownership of the means of production and the leading role of the party. The latter ensures that the economy will be powerfully influenced by measures aimed at attainment of the economic, social and political objectives of the party. These depend on the concrete situation, but in general are likely to include a high and stable rate of economic growth, full employment, equitable regional development and a fair distribution of income. (p171, my emphasis)

Fundamentally, things are on the right course.

The book ends with an impressive twenty-six page bibliography.

The Role of Mathematics in Political Economy

Let me retrace my steps a little and take up the discussion of the relationship between mathematics and political economy. The whole question of the relationship between any two scientific domains is extremely complex and I can only make a few points here. It is a problem which is becoming increasingly epistimologically important, however, not only in the case we are discussing, but in other areas as well.[7]

Perhaps the best way to begin posing this more general problem is by a reflection of the way mathematics is 'combined within' the domain of the science of physics. The work of Gaston Bachelard is critical here.[8] Bachelard shows that the role of mathematics is to completely revolutionise the concepts of physics so that they themselves become mathematical expressions of relationships which ultimately exist only as equations and formulae. They thus become 'objective laws', and mathematics itself becomes the mode of experimentation within the scientific discourse of physics. It provides a criterion of scientificity that is internal to the modes of mathematical proof within physics.

We can contrast this to the way mathematics is approached in relation to bourgeois economics. Here it essentially forms another 'language' which can be 'brought in' to assist economic 'proof' but which does so in a subsidiary and secondary manner. 'We could do without it, but it is easier to express this in notational form' etc. Secondly, it is 'brought in' under the guise of 'model building' i.e. as an attempt to 'map' the 'real world' as closely as possible. Stressing this 'model building' function is typical of empiricist ideologies concerning the role of scientific elaboration. In relation to the science of mathematics as a whole, recent attempts that have been made to interpret this as a 'science of model building' represents an attack upon materialism as such.[9]

The essential point to note here is that with these ideological uses of mathematics, mathematics is not internalised within the system of concepts and modes of proof of the 'parent' discipline, but exists independently, outside of this discourse, and is only 'borrowed' by that discourse where 'necessary' etc. Unfortunately, it seems to me, that it is in just this ideological way that the Russian optimal planners and Ellman have interpreted the role of mathematics in relation to the science of historical materialism. In this sense, they are just mirroring bourgeois economics. Certainly, the central epistimological problem does not even seem to have been posed, let alone solved. In fact, this would require nothing less than the mathematisation of the concepts of historical materialism themselves.

So where does this leave optimal planning? For the moment, it leaves it where it belongs, as a technical practice pure and simple. As yet it cannot produce concrete scientific knowledge of the Soviet economy. To produce this we are thrown back onto the concepts of historical materialism and particularly on to developing the concepts which enable us to think the process of transition from one mode of production to another. This does not mean, however, that we must abandon optimal planning in relation to actually organising such an economy in transition. But this must be seen for what it is. The employment of optimal planning as it is now practised is not a theoretical indication of the movement towards socialism, but it is still an extremely valuable tool for helping to organise production in transitional conjunctures. The reason for this is that basically optimal planning still works with 'money' or 'value' relations (though at this stage with money relations of a particular type as argued above) and 'money' relations that seem to be increasing rather than decreasing, with the development of the 'Khozraschet' economy. What are the reasons for the persistence of these 'money' relations and why are they so important?

The Role of the Analysis of Relations of Production

It is at this point that we reach the crux of the matter. The 'persistence' of money relationships in the Soviet economy is an expression of the continued existence of commodity relationships in that economy.[10] Commodity relations necessitate the circulation of 'commodities' on the basis of their exchange value and through a market, i.e. on the basis of 'money value', 'prices' etc., rather than on the basis of their use value. Now it is well known that both Marx and Engels stressed that under the dominance of the Socialist mode of production 'commodities' would not function as commodities with exchange values, but as use values, i.e. they are produced for their utility and not for the market and are exchanged as such. Where this is the case, socialist relations dominate capitalist commodity relations. So far as the Soviet economy is 'organised' (a) on the basis of enterprises - the fundamental form of the productive unit under capitalism - which have an autonomous existence in the immediate productive process (Khozraschet) and which are (b) articulated through a 'plan' on the basis of price or money relations (see the Appendix to Ellman's chapter 3), then at the level of the economic instance capitalist relations still predominate over socialist ones. Property is not possessed socially even though it is legally owned by the state. It is in fact 'invested' in the enterprise and controlled or possessed by the agents of that enterprise, the managers, whosoever they may be. The fact of an increased reliance upon these monetary relations and incentives, in the organisation of the economic mechanism is an indication of an inevitable tendency towards the further introduction of market relations and thus fundamentally of capitalist relations.

The fact that a plan exists under these circumstances, is not in itself decisive, since it cannot be based on an "internal and deep knowledge of the units of production and the processes of production which take place within them. So in the absence of this knowledge no planning can be put into operation. What exists then, is an unstable combination of commodity relations and administrative orders (which the managers of the enterprises obey more or less)". (Bettelheim, p417). In this case the role of the plan is to duplicate and 'accompany' commodity relations rather than to dominate and control them. (However it duplicates and accompanies them in a particular way, see below)

What is necessary for the plan (and thus the technique of optimal planning) to adequately dominate commodity relations is to develop genuine social planning, on the basis of the absolute dominance and control by the direct producers of their means of production, so that the relation of effective appropriation of the object and result of labour is concretely possessed by the direct producers and can be 'put to work by them'. This requires the establishment of the forms of economic calculation required by the practice of social planning and the production of the concepts necessary for the scientific practice of measurement. Fundamentally, this scientific practice of measurement (which would embody the genuine 'link' between historical materialism and mathematics) would be predicted on some measurable 'real', physically determined unit of social utility. It is just towards this that the Russian optimal planners should be moving if they are to assist in the establishment of socialism.

Before I finish, a number of points arise from the discussion immediately above. In the first place, the discussion has concentrated on relations in production. What about relations in other spheres? What about relations in the political and ideological spheres, and what about the relations in consumption?[11]

Any social formation is a complex hierarchised structure of different material processes pertinent to different and relatively autonomous levels or spheres. Ellman recognises that there is a complex interaction between the optimal planners and the objectives set by the party and the Central Committee. But he argues that it is the political level that sets the objectives of the optimal planners via the control exercised over them by the party, and that this guarantees a socialist objective function. This obviously raises fundamental issues about the forms of internal democracy within the Soviet Communist Party and in relation to the Soviet State. These cannot be pursued here. But in part this misses the critical issue. Obviously there are 'non-correspondences' between the relations of the different relatively autonomous levels in the social formation; this is what stamps these formations as transitional ones. But, as Bettelheim argues

"These different relations are partially transformed by the existence of a workers' state through the action of a ruling workers' party and in particular through the role played by the 'workers' party and the trade unions internal to the enterprise. However, this role can only be partial, for a true transformation demands among other things the substitution of new ideological and political relations for the old, that is an ideological 'revolutionisation' of the workers which makes them assert themselves as the true controllers of production." (Bettelheim, p403)

Within this hierarchy of relations, it is the economic relations which are determinant in the last instance, so that it is the relations in production which are crucial here. They structure and give the specificity to the relations in the other spheres, and although there may be a non-correspondence between them there is always a 'tendency' towards correspondence. This tendency towards correspondence must be set against the background of not only the movement within the sphere of the productive relations themselves, but also against the actualities and possibilities of ideological and political struggles in the Soviet Union and the relations these have to the former. The movements within the relations of production are indicative of the path to be 'followed' or actually being 'followed' in the spheres of the other relatively autonomous sets of relationships.

But what about the relationships in consumption? To be brief, it must be recognised that the sphere of distribution is not autonomous from the sphere of production. Any productive process involves the successive transformation of inputs into outputs, i.e. consumption into production and production into consumption. (Every consumer' is a 'producer' and every 'producer' is a 'consumer').[12] What is the determinant moment in this process? The whole of Marx's analysis shows us that it is the moment of production that is determinant, "Every mode of production determines modes of circulation, distribution and consumption as so many moments of its unity"[13] One cannot treat the mode of consumption independently from the mode of production as Nove would like.

What can one say positively then about the concrete organisation of production in societies like the USSR so that the 'interests' of the 'consumption end' of the total process of social production are more effectively and adequately met?

I think it is here that we can say something positive about the way optimal planning is practised at the moment. It is practised as I've argued, under conditions of commodity relationships and with a monetary form, but this is a transitional form in itself. This I tried to argue earlier in relation to the precise interpretation of prices in this relationship. Although it is an 'unstable' form for the reasons outlined above, it is a form which is not 'classically capitalist'. In as much as the money relations are to a large extent 'administratively' set, prices are not performing the same function (as yet) as they do under capitalism, though there is a tendency for them to do so. It is characterised by what I will call the 'circulation of money/financial incentives' duality. To encourage the financial incentives side of the duality would encourage capitalist relations, to maintain the purely circulation side, at this stage, would not encourage capitalism.

So the use of optimal planning in its present form (which from Ellman's work seems to provide more rational organisation of production and consumption at the technical level) is acceptable only as long as it is understood that it is not a socialist form of planning, and also that it is necessary to transform it if such a socialist form of planning is to emerge. This latter task will require a new look at 'current planning' in relationship to the possible course of the political and ideological struggle in the USSR and in relation to the concrete experience of the Chinese economy with regard to the former. To be more precise, this will require a movement towards the 'concretisation' of the epistimological problem and the subsequent development of a scientific theory of measurement.

Finally, let me say that many of these points that arise from Ellman's book are not meant to be criticisms of his work as such, but are genuine problems which are raised by it.

FOOTNOTES AND REFERENCES

1. This position of Stalin's is elaborated in its most accessible form in his Economic Problems of Socialism in the USSR, 1952, reprinted in The Essential Stalin, B. Franklin (Ed), Croom Helm, London, 1973.
2. This assertion is slightly contradicted later on where glowing reference is made to input-output techniques (see pages 58,61 & 62, and Chapter 4).
3. These technical terms are very well explained in the Glossary at the front of Ellman's book.
4. I put the terms 'attempted' and 'implemented' in quotes here to indicate that this attempted implementation of planning in certain sectors of capitalist society cannot be fully successful. I hope the reason for this will become clear below.
5. Ellman's comment that "The Marxist identification of the prices actually observed in capitalist industry with the theoretical category of the prices of production is based on the idea that equilibrium in capitalist industry can best be represented by a model in which goods are produced under conditions of a uniform rate of profit" (pp101-2) is clearly wrong, and does not take account of the transformation of values into prices.
6. This point also partly applies to the kind of pricing system which is employed in the nationalised industries in this country. Note however, that this is not to say that this is an indication of socialist relations of production in these industries. See the argument in the text below.
7. I think one case which has some relevance and should be mentioned is the question of the relationship between political economy and psychoanalysis in the womens' movement. At the moment there seem to be two parallel and distinct theoretical movements towards some kind of analysis of the precise place occupied by women in the social formation and the ideological reflection of that place. On the one hand John Harrison and Wally Seacome in historical materialism working on the articulation of the mode of production and the place of women in it (though I think John Harrison confuses different labour processes with different modes

of production in CSEB Winter, 1973). On the other hand Juliet Mitchell in psychoanalysis dealing with the object of the unconscious and the concepts of 'masculinity' and 'femininity' in relation to this. The difficulty is that to correctly theoretically specify the totality of the material processes which go to produce and reproduce 'women' as the supports of these processes and thus to the 'ideology of women', it is necessary to produce concepts which link psychoanalysis and historical materialism, other than through the use of concepts reworked from Levi Straussian anthropology.

8. Very little of Bachelard's work has been translated into English. His main book in English is The Philosophy of No, Orion Press 1968. There is also a book about Bachelard written by Dominique Lecourt about to be published by NLB, parts of which have already been circulated privately, and also a translation of the introduction of Bachelard's Le Materialisme Rationnel by Jill McGreal. I have used these as the basis for my remarks in the text, plus the special double issue of Theoretical Practice, No 3/4, Autumn 1971 on 'Marxism and the Sciences'.

9. In economics this ideological attack upon the science of maths in an attempt to reinterpret it as a science of 'model building' is most obviously associated with J. von Neuman and O. Morgenstern's: The Theory of Games and Economic Behaviour, Princeton University Press, 1954. See also Barry Hindess: 'Materialist Mathematics' in Theoretical Practice, No 3/4, op.cit.

10. Here I am summarising part of the argument used by Charles Bettelheim in his work on transitional economics. His most well known book is Calcul économique et formes de proprieté, part of which has been translated and published as 'State property and Socialism' in Economy and Society, Vol.2, No.4, November 1973. There is also an interesting exchange of views between Paul Sweezy, and Charles Bettelheim, reprinted in On the Transition to Socialism, Monthly Review Press, 1971. See in particular Bettelheim's Dictatorship of the Proletariat, Social Classes and Proletarian Ideology. I do not agree with all of Bettelheim's formulations, which I hope will become apparent in the text.

11. This latter point is the brunt of Alec Nove's criticism of Bettelheim's work in 'Market Socialism and its Critics' in Soviet Studies, July, 1972. In this review I can't deal with all Nove's points but a number are implicitly taken up in the text.

12. See K. Marx, Introduction to a Contribution to the Critique of Political Economy, Lawrence and Wishart 1971.

13. E. Balibar in 'On the Basic Concepts of Historical Materialism', L. Althussen and E. Balibar, 'Reading Capital', NLB, 1970.

2. On Economic Theory, Political Theory and the USSR (Simon Mohun)

Michael Ellman's latest book is both interesting and infuriating. It is interesting because he critically surveys the proposals made by Soviet mathematical economists for improving Soviet planning methods; as such, it is of interest to all who are interested in planning techniques in a non-capitalist environment. But it is infuriating because both the content (especially as regards exegesis of mathematics and bourgeois economic theory) and the style (the sequential order of sentences within a paragraph occasionally appears to be chosen at random) of this book are somewhat idiosyncratic.

Following an historical introduction, the first two chapters provide a general outline of planning problems, the primary context being annual planning, and the third chapter sketches an outline of the 'optimally functioning socialist economy' as perceived by Soviet mathematical economists. Chapter 4 describes how input-output and linear programming techniques have improved economic calculations in specific areas (such as variant calculations of the structure of production in medium-term planning, and investment planning), while the following chapter is concerned more generally with Kantorovich's theoretical work on linear programming. Chapter six analyses specific proposals advocated by the optimal planners (such as the introduction of rent and rental payments, the use of profit as a local optimality criterion, and the transformation of the whole economy into an 'optimally functioning economic system'), and chapter seven outlines Ellman's own ideas about the type of economic reform which should be implemented in the USSR. A conclusion giving a general summary then completes the book.

Ellman's main concern is a critical analysis of both the proposals and the methodology of that school of Soviet economists which advocates policies designed to secure an efficient allocation of resources. This is of course pre-eminently the subject matter of bourgeois economics in its most well-defined and rigorous forms. That being so, it is perhaps a pity that Ellman in his Glossary defines 'the efficient allocation of resources' as 'the rational organisation of the productive forces' (px), and 'the rational organisation of the productive forces' as 'the efficient allocation of resources' (pxii). Now the efficient allocation of resources has a very precise meaning in bourgeois economics, being a consequence of postulating maximising behaviour. What is particularly important in this context is that <u>if</u> resources are efficiently allocated, and <u>if</u> the standard convexity conditions are assumed, and <u>if</u> behaviour is individualistic (no externalities), and <u>if</u> no consumer is satiated, then there exist non-negative numbers which can be interpreted as prices, and which can be used to decentralise production decisions such that individual producers each maximise profits, individual consumers each maximise 'utility', and supply in each market is not less than demand. This result forms the major part of what is often called the 'fundamental theorem of welfare economics'; the tool used in the proof is the separating hyperplane theorem, and it has been known in the West in this form for over twenty years. Basically the theorem says that a competitive equilibrium is Pareto-efficient (which is trivial), and conversely that at a Pareto-efficient allocation prices can be found which permit decentralisation of decisions and thereby support a competitive equilibrium (which is non-trivial). If the problem is set up in a (linear) programming framework, then corresponding to the primal (technological) problem of efficiently allocating resources is a dual ('value') problem of assigning prices to these resources. The dual variables measure the sensitivity of the optimal value of the primal objective to variations in the primal constraint constants, the obvious marginal interpretation follows, and such variables are usually known as Lagrangian multipliers, or, for Kantorovich, 'objectively determined valuations'; they are of course shadow prices.

In essence, these sorts of theorems are not new. Insofar as they are concerned with discovering just what it is possible to say about the compatibility of individual decision-making with a social (Pareto) optimum, they go right back to Adam Smith's idea of the invisible hand. Together with the theorems concerned with the existence, uniqueness and stability of competitive equilibria, they constitute the fundamentals of general equilibrium theory and hence of bourgeois economic theory. But Ellman sees this not as the major body of bourgeois economics but as the doctrine of the 'Lausanne school' (pp.7,105,177 and elsewhere); he mentions the 'fundamental theorem' once (p125) and inaccurately; he attributes the decentralisation 'theorem' (?) to Lancaster (p127) and does not mention its fundamental significance; and he mentions the separating hyperplane theorem (p127) and sensitivity analysis (p80) in contexts which give no clear idea of either their meaning or their importance. Such mathematical name-and-concept-dropping obviously tends to detract from a book which is concerned with meta-mathematical economics rather than with a description and an analysis of the economics itself. Moreover, running through the whole book are categorical statements on bourgeois economics which are either misleading or just plain wrong:

"The liberal idea of the market economy as a device for securing the efficient allocation of resources has been formalised by identifying the prices resulting from market processes with the shadow prices of a linear problem of the organisation of production. (p101)

"The logical basis of [Kantorovich's] conception of optimal functioning is a modification of the theory that the price mechanism can lead to the efficient allocation of resources. It is well-known that this theory (as formulated for example in the basic theorem of welfare economics) is false, or as it is usually put, suffers from 'exceptions' (such as increasing returns to scale and externalities). (pp125-6)

"From the stand point of economic theory the main problem with drawing policy conclusions from the theorem of the characteristics of an optimal plan is that there is a danger of the hypertrophy of propositions which are valid in allocation models at the expense of propositions that are valid in growth models and macro-economic models. (p178)

"....Western economics is undergoing a paradigm shift from allocation to growth..."(p179)

And there are many other examples (notably on pp138-9). Duality is discussed (p101), but the context has no reference to how and why duality can be used - in the opinion of the Soviet mathematical economists - in order to circumvent the problems Ellman outlines in his first two chapters. This is important, for without such reference the major theoretical justification for adopting an 'optimally functioning economic system' is missed, a justification common to both bourgeois economics and the Soviet school, which is hardly surprising, given their common concerns.

This justification runs in terms of the informational requirements of a procedure which is designed to reach the optimum. In terms of bourgeois economics, such a procedure can be based on either central planning or markets, because bourgeois economic theory is 'institution-free'. Since the time of Barone it has been known that in equilibrium an idealised planned economy and an idealised market economy are fundamentally similar in that the optimal conditions for each are identical. The inter-war debates on the possibility of a planned - misleadingly termed socialist - economy were concluded with the exploitation of this similarity by Lange and Lerner: the millions of equations in millions of unknowns were to be solved through mimicry of the perfectly competitive mechanism, using a central planning board (CPB) as the reincarnation in corporate form of Walras' auctioneer. The advantages of this sort of scheme are clearly the informational economies thereby attainable. Firms need only know their own production possibilites and consumers their own preferences, each responding individualistically to the price signals (informational privacy); and neither consumers nor firms on the one hand nor the CPB on the other need know the source of the price and quantity signals that they respectively receive (anonymity). Of course consumers and firms know that prices are announced by the CPB, but the latter has no need to identify which quantity message is sent by which agent.

Ellman emphasises the dimensionality involved if perfect consistency is sought in Soviet planning (p22: each iterations would involve some 1.2 $\times 10^{12}$ messages from firms alone), and it is this enormous dimensionality, with its inevitably attendant inefficiencies, which can be circumvented, under the conditions specified above, by decentralisation through a price system. Moreover, if the specified conditions hold, then optimality as well as consistency can be attained. Ellman only briefly and inadequately mentions this informational justification (pp62,173-4), but this is <u>precisely</u> why the Soviet optimal planners advocate on technocratic grounds

"the formulation of an optimal plan by means of a multi-level tatonnement process followed by its implementation by enterprises guided by the profit maximisation rule in an environment characterised by wholesale trade, flexible prices, and optimal payments for resources."(p128)

This assessment of what it is that is being advocated is very important but is not properly amplified by Ellman. For formulation is technocratic, but implementation is political.

First, consider the aspect of plan formulation. It is here that decentralisation of the informational requirements of a planning procedure is so useful, but Ellman's treatment is hardly satisfactory. He does not explain what is meant by the 'decomposition method in terms of indirect centralisation' (p126), nor what is meant by a 'multi-level tatonnement process' (p128). Decomposition or multi-level procedures are those which decompose the planning problem into a number of smaller problems, the responsibility for whose solution rests with particular sectors of the economy. The solutions of these smaller problems provide information for the solution of the master programme in an iterative procedure until an optimal solution is reached. Nothing needs to be mentioned about decision-making; throughout, the emphasis is on informational decentralisation in a purely technical problem.

However, once a plan has been formulated it has to be implemented. The significance of decentralisation through a price system is that it confers on agents the ability to make their own decisions, and that it provides natural incentives for them to make the correct decisions - for if they fail to do so they will lose profit or utility. But decentralisation of the authority to make decisions is by no means a technical problem; it has a very fundamental political significance. For advocacy of such decentralisation at once implies a proposed diminution of the authority of the centre, and hence a proper analysis is immediately confronted with the necessity of explaining the nature of that authority. But Ellman, far from detailing the analytically different meanings of decentralisation, contents himself with the rather obvious remark that the reason for controversy between the political economists (rightly defined as those whose function it is 'to provide an ex post "theoretical" justification of "practice") and the optimal planners 'is that it is not much use calculating optimal plans if the economy functions in such a way that the optimal plans are not implemented and non-optimal decisions are made instead'. (pp8-9,9-10). The absence of clear analysis renders the exegesis both confusing and scrappy. Obviously, one must distinguish the description of algorithms from the description of real-world economies, as Ellman points out (p129), but the different meanings of decentralisation link the two in a way in which Ellman nowhere explores.

It is surprising that Ellman makes no mention of Kantorovich's attempt to reconcile his approach with the labour theory of value. Basically, Kantorovich interprets his o.d. valuation (shadow price) on a marginal unit of capital as the saving of a quantity of labour-time, through the use of that unit, that would otherwise have to be expended, thereby freeing such labour-time to be expended elsewhere. Obvious transformational problems between value and price at once arise, unless the law of value is deemed not to operate in the USSR. Ellman propounds no views of his own on this matter, and neither does he report any Soviet views, (although they may not exist above the level of apologia, given the stagnation of Marxist theory in the USSR since the 1920s).

What Ellman does do is to make several bald statements contrasting Marxist with bourgeois analysis. Thus,

"Marxists have always objected to the marginal productivity theory of distribution because it attempted to explain the distribution of income under capitalism by technological factors (the marginal products of the factors of production) rather than by social ones (i.e. exploitation). Soviet mathematical economists are not developing an apologetic theory which hides the fact that capitalism is a mode of production based on the exploitation of labour, but are concerned with raising the efficiency of socialism." (pp6-7)

Both these sentences are mere assertion, and both are debatable. Again, "although Marxists are aware of the existence of a question of the rational organisation of the productive forces, this question is less important for them than the question of the development of the productive forces, and both questions are less important than the question of the productive relations..." (p98)

Such a linear ranking hardly does justice to the analysis of the contradiction between productive forces and production relations. Elsewhere Ellman is more accurate:

"Marxists have traditionally believed that socialist planning is bound to be more efficient than the anarchy of production prevailing under capitalism because the socialist mode of production eliminates the conflict between the social character of the productive forces and the individualistic nature of the capitalist mode of production." (p176)

But now the context is efficiency again. Having confused engineering efficiency with allocative efficiency (p44,n1), Ellman does not say anything about the relation between the Marxist argument about the efficiency of socialism and the bourgeois argument about allocative efficiency - in many ways he leaves the impression that but for the real world 'exceptions' to the perfectly competitive model the two would be identical. But this is precisely to ignore explcitation in the labour market, and beyond summarising the figures for the 1930s (p172), Ellman does not discuss this issue. It has to be said that the application of Marxist principles to the USSR consists of more than the employment of ill-defined and undefined concepts in unsubstantiated statements.

In his penultimate chapter, Ellman does attempt an analysis of socio-po-itical aspects of the proposed reforms. He describes (in a typically awkward sentence) the thesis that the struggle for economic reform is

"simple one front of a struggle between two social groups, the white-collar intelligentsia, i.e. those who hold 'professional, managerial and administrative positions'...whose training and knowledge are indispensable to the running of any industrialised society, and the apparatchiki, the officials occupying the leading positions within the party and the state security organs, who at the moment hold power by virtue of the doctrine of the leading role of the party of the working class armed with a knowledge of Marxism-Leninism, and of the political institutions in which this doctrine is embodied but who are not essential for the running of a modern industrial state."(p135)

The thesis continues that thes two groups are rivals within a dominant class (not defined) and that the white-collar intelligentsia, first, is striving to oust the apparatchiki as the dominant group by emphasising technical competence and the need to replace the apparatchiki's 'arbitrary' political decisions by its own 'rational' economic decisions; and second, is seeking to increase its material position vis-a-vis manual workers by advocating the transition to a market economy wherein talent and ability would receive greater remuneration. Ellman criticises this approach primarily because 'it ignores the historical and political aspects of economic reform' (p137). Despite his major evasion of commitment, viz;

"The extent to which the holders of full-time party posts really do form an 'objective' social stratum (in the sense of forming an homogeneous group with similar interests and career patterns) and a 'subjective' one (in the sense of having a group consciousness), and the type of decisions on which they have a common position, are important areas for further research." (p.136)

he defines the ruling group as those who emerged from the Civil War, the 'formative experience of the Soviet state' (p137), to rule by fiat (the practice of administrirovanie). Superficially, Ellman seems to accept the Trotsky-Deutscher-Carr position:

"The social basis of the power of these people was the political power of the party in a society characterised by the virtual absence of an independent working class (resulting from its small size, its links with the peasantry and the absorption of many of its members into administration), the hostility which existed between the party and the peasants, the suspicion with which the party regarded the specialists and the precarious position in Soviet society of the Nepmen.

"The transition to the administrative economy in 1929-30 represented a triumph of administrirovanie and the bosses who exercised it, over the peasants, the specialists, the workers and the Nepmen. (p137)

But there is no analysis of the mode of production in the USSR; in particular, there is no analysis of the nature of the accumulation of use-values and of the bureaucratic control over their distribution. Hence while consumption privileges are mentioned (pp147-8), and so too is the distinction between state ownership and social ownership (pp149-50), no coherently integrated analysis of the bureaucracy emerges. Consequently, Ellman can write in successive paragraphs without seeming contradiction,

"In the minds of some of its keenest supporters.....a major objective of economic reform is to end the combination of all economic and political power in the same irresponsible hands. Economic reform aims to end this concentration of power by transferring much economic power to bodies independent of the political apparatus, such as enterprises, associations, banks, trade unions and workers' councils, and at the same time to make economic decision-making responsible by bringing it under democratic control, at both the local and national levels.

"From this perspective, the challenge mounted to political economy by the theory of optimal planning in the 1960s...appears as an ideological expression of this social change. It was an attempt to replace one doctrine: political economy, which provides the ideological legitimation for rule by the bosses, by another doctrine: optimal planning, which legitimises the rule of the white-collar intelligentsia...as the theoretical basis of the economic policy of the Soviet state. (p141)

He correctly says that it 'would be a serious mistake to suppose that the USSR is a society of the worker type' (p147) (presumably meaning workers' state), and he correctly defines as a (but not the) 'major source of inequality in the socialist countries...the importance of administrative privilege as a source of consumption benefits' (p147)- but the reason for advocating the elimination of such privilege is, in a beautiful rationalisation of bureaucratic paternalism,

"to improve the attitude of the workers to production, to convince the narod that what was being done was part of a progressive policy of social change and not simply a policy representing the class interest of the white-collar intelligentsia, to improve economic policy by ending the isolation of the authorities from the effects of their policies on living standards, and to bring nearer a society in which a person's contribution, rather than the official position he temporarily occupied, was decisive for determining his living standards." (p148)

For Ellman, the reforms which should be implemented constitute 'a major change in the productive relations of socialism' (p134). This requires 'the transition from one allocation model to another' (p139), 'the establishment of civil liberties' (p139), and 'a reaction against Stalinism' (p140) (Is this last phrase deliberately ambiguous?). However, he explains,

"The reasons for the political unacceptability of 'market socialism', 'a major change in the productive relations of socialism comparable to the transition from War Communism to NEP', a 'new economic mechanism', 'the khozraschet economy' and kindred ideas, are that experience of the new economic model in other socialist countries suggests that it might bring unemployment and open inflation, accentuate regional disparities, have adverse effects on the distribution of income, and above all that it might weaken the role of the socialist state and the party of the working class in the management of the economy (pp184-5)".

The socialist state? The party of the working class? Isolated sentences proclaim the necessity of transforming the party (p171,n1), of establishing civil liberties (pp.139-40,148,150,175); but nowhere can analysis be found of why 'that part of the socialist programme which remains unfulfilled (self-management)' (p.175) cannot be fulfilled in current Soviet conditions. An analysis of the economic reform required in the USSR has to confront the question of political revolution.

Finally, there are several minor criticisms that should be made of Ellman's book. First, some political judgements are perverse, especially those pertaining to Czechoslovakia; thus as an important date, Ellman cites 1968 (August) as one when the 'USSR supports socialism in Czechoslovakia' (pxx), and 'the 1968 events in Czechoslovakia had shown what incorrect theoretical views could mean in practice' (p5). This raises the question of which readership Ellman has in mind for his book. Second, sophisticated concepts of both economic and political theory go unexplained, yet Ellman feels it necessary to note that 'Mikoyan was a prominent party leader of the 1950s' (p3,n1), that 'uncertainty raises problems' for bourgeois economic theory (p106,n1), that 'Kalinin was a prominent party member who for many years was Head of State' (p.137,n1), that 'Kamenev was a prominent Soviet politician of the 1920s (p140,n2), and that 'the Great Patriotic War is the Soviet phrase for the Soviet-German war 1941-5) (p186,n1). Third, the index is poor, and the overlap of the coverage of this book with Ellman's Soviet Planning Today (Cambridge 1971) is substantial.

Ellman has clearly put considerable work into his book (his 'useful' but not 'exhaustive' bibliography comprises nearly 600 books and articles - two-thirds of which are in Russian - 32 journals, 8 occasional papers, and 4 newspapers), and he does provide a great deal of useful information. His own conclusion however is a little grandiose

"In some quarters the work of the optimal planners is regarded as a vindication of the neo-classical emphasis on the efficient allocation of resources and a powerful criticism of Marxism for ignoring it. If the argument of this book is accepted it follows that the concept of efficient allocation of resources does have considerable normative usefulness in some areas...but not in others (such as the level of employment, the rate of growth, the price level, the distribution of income, the relations between social classes). Nor is it very useful as a descriptive theory of an economy...Simultaneously, however, the argument of this book vindicates the Marxist emphasis on the usefulness of political economy as a guide to understanding the social processes unfolding on our planet, and supports the thesis that it is the class historical approach, rather than the study of efficient allocation, which throws most light on such topics as economic reform in the European socialist countries." (pp182-3)

The conclusion of this review is considerably more pedestrian: Ellman's book is one which can profitably be read provided that considerable caution is used, for neo-Keynesian-type economic theory and reformist political practice are not reliable tools either for the critique of bourgeois theory or for the explanation of real world phenomena.

An Introduction to Modern Economics (McGraw-Hill). JOAN ROBINSON AND JOHN EATWELL

Reviewed by Francis Green and Moray Clayton

Lipsey gives us an 'Introduction to Positive Economics; from Robinson and Eatwell we have an 'Introduction to Modern Economics', which McGraw-Hill hopes 'will have a profound effect on the teaching of economics.' What is 'modern' economics? And what has this book got to offer 'to students who are beginners in economics' (preface xvi)? The argument of 'modern' economics is described in the analysis as being in 'post-Keynesian' terms. What this means we describe shortly.

The book starts with a 51-page section on the development of economic doctrines, and continues with a section on analysis. These two together provide the major part of the book, which concludes with a very brief section called 'Modern Problems'.

The history of economic thought is treated chronologically. Starting as expected with the Mercantilists, who are given more credit than the usual one that they confused money with wealth - namely that they were in some sense intellectual ancestors of Keynes through having recognised the concept of effective demand - and the Physiocrats, we are quickly introduced to Smith, and Classical Political Economy. Here the discussion is organised around the fundamental ideas of class analysis, capital as an 'advance', the determination of the surplus and the laws of development of capitalist society. Smith's division of labour concept is described and nicely criticised, 'The original role of the division of labour was... to control the manner in which work was performed and...to guarantee a position for the capitalist in the production process' (p17). Classical price and distribution theory is treated, not surprisingly, through a relatively lengthy discussion of Ricardo's corn economy and his labour theory of value; this is comprehensible if you know the stuff already, but probably hard going for the uninitiated. Finally, the concept of effective demand is discussed in the context of Say's Law and Malthus' theory of gluts.

Marx is allotted a section to himself of six pages. His system is described as a 'new system which contained many of Ricardo's ideas with a more general theory of history and society." (p78) However, that is the last time we hear of that more general theory. A page is devoted to the 'metaphysical' side of the labour theory of value; the rest is devoted to the labour theory of value as a theory of price. Here, Marx's notation is introduced and then criticised - not exactly easy meat.

The neoclassical revolution is explained as due '...not so much [to]...a weakness in pure theory as [to] a change in the political climate...' (p35), namely, the shift of the focus of antagonism from landlord versus capitalist to capitalist versus worker. The fundamental ideas are described as utility, the equilibrium of supply and demand, the concept of factors of production, and Marshall's 'waiting' theory of profits. Scarcity is discussed in the context of Walras. Marginal productivity is introduced and then dismissed as a purely circular doctrine. Three critics, namely Bukharin, Veblen and Schumpeter are mentioned. Finally, neo-classical theory is overturned, at least temporarily, by the Keynesian revolution of the 1930s. The hall-marks of the new system are described as the end of laissez-faire, the introduction of time, and uncertainty, the overthrow of Say's Law and the mark-up theory of prices. However, the post-war return to full employment allowed the return of academic orthodoxy. And now, 'twenty-five years of near full-employment have left too many problems unsolved, and too many weak points in neo-classical logic have been exposed. It is time to go back to the beginning and start again.' (p51) And with that we are ushered into the 'modern' economic analysis of capitalism.

The decision to introduce beginning students right away to the history of thought is a rare but highly laudable one. Beyond that, however, there is not a good deal to praise. It may be that fifty pages just is not enough to cover all the tasks the authors set themselves. Nevertheless, the pages are often used wastefully in too fine technical analysis. Is it, for example, good to mention Marx's theory of history once, without explanation, and devote three pages out of six on some of the more technical aspects of Marxian notation and the value-price transformation problem? The overall effect is not as illuminating as one would have wished. An additional source of confusion, present both in this and the subsequent section (Analysis), is the authors' use of the concept of a metaphysical statement (a statement calculated to affect conduct, although nothing would be different if it were not true). A metaphysical satement seems to be equated with a tautology: e.g. 'As a metaphysical concept, utility has to be defined in terms of itself. Utility is the characteristic of commodities, which makes individuals want to buy them, and individuals buy commodities to enjoy utility in consuming them (p36). (Actually, if that argument is meant to imply that neo-classical consumer theory is always tautologous, that is plainly wrong.) Similarly, Marx's qualitative value problem seems to be categorised as definitional, although the 'metaphysic is powerful and has several times shaken the world.' (p29) This is questionable methodology.

Finally, how is the development of thought explained? There are a number of scattered remarks, associating particular economists to their respective class backgrounds, and attributing the neo-classical revolution to a change in political climate. Beyond this, there is no real explanation. This is perhaps the most fundamental criticism, and yet at the same time the most excusable failing. Such a task would be difficult.

We now move on to consider the book's analysis of the world. Modern economics in form and content is Joan Robinson's economics. Throughout her numerous publications Robinson insists on clearly separating propositions about statics and comparative statics from propositions about dynamics; propositions about the model from propositions about the real world; propositions derived in one good model from propositions derived in more than one good model. These distinctions are made sharply in the second part of this book - Analysis. For instance, diagrams are first used on page 78; in the preceding page of discussion about using diagrams in economics we are given "three absolute rules....The third rule is that a plane diagram can only show relationships between the quantities represented on the axes, not the effect of changes". Or again, the introduction to this part warns; "Before any conclusion from...[the arguments of abstract models]...can be applied in reality, the relevant details have to be put back." (p55) And how often does one see: "The requirements of fair play between authors and readers are that, as each model is displayed, the simplifications to be made are clearly set out, the entities entering the argument are specified, and no quantities are referred to without indicating the units in which they are reckoned"? (p55). Such care, such clarity, such intentions are to be applauded, encouraged - and taken as a critical standard.

The aim of the second part is to develop techniques and concepts that are relevant to understanding economic activity in agricultural or industrial societies be they 'capitalist' or 'socialist' societies. Robinson and Eatwell begin with land (homogeneous), labour (homogeneous), and one input and output (corn) "in an economy consisting of independent peasant families." (p64) The return to labour and its distribution in various social situations are considered. When machines are introduced "in a simplified version of an advanced capitalist economy" (p89) a sector for producing machines is introduced complete with arrangements for feeding machine producers. "A machine is a large indivisible unit which cannot be sold piecemeal week by week. Furthermore, the machine-sector firms need corn to pay wages before having a machine ready for delivery; in short they need credit. We assume, therefore, that machine-making capitalists can issue bills against themselves." (p.97) In this sector two class model total wages and total profits are divisions of output. Total output is explained in the manner of Kalecki rather than Keynes and is a very clear exposition of Keynesian theory. A chapter on technical change completes the discussion of the corn model.

In chapter 5 the determination of relative prices is discussed in "flexprice" markets (...where the Marshallian analysis is applicable [but] there is no tendency for equilibrium to be established." p57) and "fix price" markets. Chapter 6, "Rates of Profit" (our emphasis) considers costs from a long-period point of view. This - as we are warned - is a difficult chapter; it has a section on "The production of commodities by means of commodities" and an appendix on the wage-profit line. In these and chapter 7 (incomes and demand) the usual micro theory - in particular consumer choice theory and perfect competition - is brushed aside as metaphysical and unreal.

The chapters on Finance, Growth and International Balances are unexceptional. (Not surprisingly, the quantity theory of money gets short shrift). But the final chapter of this part is novel. Socialist Planning is a brief and serious treatment of how some of the problems previously discussed in a capitalist economy are approached in a centrally planned economy. This chapter reviews the previous discussion from a different perspective - good teaching on both counts. Part three discusses Modern Problems - of capitalist nations, socialist states and the third world. These are no more (and cannot be more) than a collection of experiences and uses of the techniques developed in Part two; some of the relevant details are put back.

The exposition in this book is classical; discussion and illustration by numerical examples. Diagrams are confined to appendices and are again illustrations, not scaffolds for arguments. Neo-classical theories - of distribution, of prices, of growth, of money - are similarly relegated and dismissed. These dismissals are at times confusing for a fairly advanced language is employed (e.g. p174). Nor is there any discussion of how one chooses between alternative hypotheses or models. On one level such discussion would have us into the science and ideology debate; more than a summary would be out of place in an introductory text. On a lower level one expects some discussion of positive economics. The conclusion to be drawn is this; second year macro theory would not follow readily for Robinson and Eatwell instructed first years. Neo-Keynesian theory should be taught as an instruction in the ruling ideology - it is important to learn the language of the ruling classes.

We must also note some deviations from the authors' requirements. On numerous occasions simplifications are not clearly set out.

For example on p76 we have "It is natural for a capitalist to be ambitious and to want to expand..."; we have previously met (p73) this natural "profit maximiser". These are simplifications of capitalist behaviour - which Robinson and Eatwell recognise in this case for a much longer discussion begins on p.235. (This discussion is not foot-noted; there are a number of instances where concepts are introduced to be explained much later - but without reference to this later explanation). The discussion of wage rates - on p69 "set at a conventional level", on p72 "set at a conventional level determined by social and historical influences", on p76 a note that "in a modern economy...the acceptable level of workers' consumption includes much more than "corn" (subsistence)" is another example. (And explanations of why the acceptable level is rising in a modern economy ignore - when they don't depreciate - the role of trade unions, e.g. p130.) Again, "market dealings give rise to the use of money" (p147) is a simplification. The more accurate "money is a social institution..." (p148) does not influence the discussion in any way.

These are more than deviations from high standards. They are manifestations of the state of neo-Keynesian economic theory. Neo-Keynesian economic theory is increasingly being seen as useless for an analysis of advanced capitalist economies; the recognition that "economics" takes place in a society and must explicitly relate the social framework to analysis parallels this view. But non-Marxists cannot analyse these relationships; to understand a social formation one must apply the methods of the materialistic conception of history.

Robinson and Eatwell are not Marxists; they are leading post-Keynesians and clearly demonstrate the difficulties of that position. (Their use of a Marxist language in a distinctly non-Marxist way is misleading, if not pernicious). Post-Keynesians recognise that economics must have a context (neo-Keynesians do not). "The most essential element to include in any piece of analysis is an indication of the nature of the social system to which it is applied." (p54) How is this essential element included? "We first consider an economy consisting of independent peasant families" (p64) and discuss stationary states, growth-even kulaks. Six pages later "We now consider an economy...in which all the land is owned by feudal lords..." (p70) Feudalism is chosen; the social system is introduced by choice rather than as a necessary resolution of contradictions. For post-Keynesians history is chronology - an explicit recognition of the mere passing of time. Historical materialism is more than this.

How then are we to view this book? Certainly it is not Marxist. Nor is it, of course, by any means orthodox neoclassical. Rather it can be seen as the first (and last?) textbook product of a school of thought which can loosely and variously be described as 'neo-Ricardian', 'neo-Keynesian' or, perhaps best, in the authors' terminology 'post-Keynesian'. This view of the world is seen by some, e.g. Nell (Review of Radical Political Economics 1972), as a new 'vision' or new 'paradigm', which is set to replace neoclassical orthodoxy. What are the characteristics of this new vision? The major ones are listed by Nell as (a) emphasis on the interdependence of production, (b) substitution possibilities are assumed away (although switching between techniques, or 'blue-prints', is expected), (c) consumer sovereignity is dismissed because prices are independent of demand, (d) Industries, not individuals, are analysed, and (e) distribution is not regarded as a 'species of exchange'.

It is not clear whether some or all of these do in fact represent a fundamental departure from orthodoxy. A closer look would show rather more common points than proponents of the 'new view' would care to accept. Be that as it may, the extraordinary twist is that the choice between the new view and the old ultimately comes down to a question of logic. Here, then, we find a now familiar friend, the Cambridge Controversy. Now, it is undoubtedly true that aspects of neo-classical theory have been found wanting, logically speaking. Certainly the use of aggregate production functions and related phenomena is now not permissible. Nevertheless, it is not true to say that the neoclassical framework has to be completely dismantled because a few logical mistakes have been found in one particular aspect, namely capital theory. All the major neoclassical assumptions stand, and are on the whole immune to the criticism of internal logical inconsistency. They must rather be attacked for their external inapplicability, i.e., for their inability to explain the real world, and for the ideological purpose they serve. The Cambridge Controversy is a blind alley for anyone who wishes to understand capitalism. So also is Robinson and Eatwell's 'modern' economics. The overall emphasis of the book is based on a critique of the logical inconsistency of the orthodoxy to which the book is offered as an alternative. It is this which explains both the difficulty of the book in those most important sections where a new analysis is offered, contrasted with the very simple approach in other parts (e.g., on International Balances, Ch.10), and also the general feeling of unease, when reading it, that though in some ways it is an improvement (it is, at least, different) on orthodox text books, it offers no great illuminations of capitalist society.

So that this critique should not be wholly negative, it is worth discussing briefly the lines along which a more useful beginners text might be written. One possibility is to run a course which effectively goes through 'Capital' but this is surely too ambitious to start with. The content of a good radical/Marxist course (and, hence, textbook) is the subject of ongoing debate within the CSE. But one possibility worth mentioning here would be following Edwards and McEwan ('A Radical Approach to Economics: basis for a New Curriculum' American Economic Review, 1970), to organise a Political Economy text around the basic capitalist institutions. First one could sketch the development of these institutions, and then discuss (a) the ways they affect economic and social relations - income equality, environment, alienation, racism, sexism, etc., and (b) the ways they affect the distribution of power (thus enabling a discussion of the class system and the role of the state). Such an approach would go a lot further than 'modern' economics.

To date (June, 1974) 15,000 copies have already been sold of Robinson and Eatwell's book, and this is before the publishers' adoption season, indicating a widespread desire for an alternative, authoritative text book. It is difficult to assess the consequence of this event on economics teaching. It is at least questionable whether it will have the 'profound effect' that McGraw-Hill have hoped for. For the reasons we have dealt with above, we cannot recommend the book for use with beginners. It could be helpful in later years to make post-Keynesians of neo-Keynesians but a profound effect will only be felt with the introduction of Marxist economics.

Managerial Theories of the Firm, by J.R. WILDSMITH (Martin Robertson 1973, pp.140)

Reviewed by Hugo Radice

This is a competent, but limited and uncritical, survey of the so-called managerial theories of the firm. Wildsmith begins, as is traditional, with the separation of ownership and control, i.e. the emergence of management as a separate group (without reference, of course, to the pioneer of this analysis, Marx, Capital III, ch.23). The contribution of organization theory (behavioural or satisficing models) is mentioned but dismissed because of the supposed analytical superiority of utility-maximization models. A summary of the traditional profit-maximizing models leads in to the central sections, which set out the models of Baumol, Williamson, Marris and others. These chapters provide a useful guide to the main books and articles in the field; relevant empirical studies are included as well as the formal models. A weakness which could have been corrected within the apologetic framework is that the work of Galbraith, really the only managerialist with anything to say on the 'macro' level apart from some formal models by Marris, only receives passing mention. But Wildsmith, like most managerialists, does not seem to realise that oligopolistic competition, i.e. the operation of the law of value under monopoly capitalism/finance capital, has to be at the centre of any adequate analysis of the firm: while Galbraith at least offers a systemic view, Marris & Co. hover between their analytically convenient steady-state growth models and the 'real world of oligopoly, crisis, structural change, etc., for which bourgeois economics can offer only the old platitudes. The chief value of managerialist work to Marxists is that it draws our attention to an often neglected contradiction within the capitalist class, and to the continuing inadequacies of post-Keynesian bourgeois economics. While the data generated by this school on company finance, share-ownership, corporate growth patterns, etc., is very useful, Wildsmith's book confirms my view that analytically it has little to offer.

Marx and the Orthodox Economists, PAT SLOAN (Basil Blackwell 1973), pp viii & 181

Reviewed by Moray Clayton

"The present book is an attempt to highlight in a simple way, at the risk of over simplification, the main differences between the approach of Marx and the approach of orthodox Economists; taking certain specific problems for the purpose of illustration" (p7). The intended audience is students of the two gospels written, for one group by Marshall, Keynes et al and for the other by Marx, Engels and Lenin; "neither side...is encouraged to probe into the standpoint of the other" (p7).

These views and aims are defensible, even admirable. That the first problem considered is scientific objectivity, is exceptional. But a person of Sloan's experience should realise that the risks of oversimplification, in this above all problems, are huge. He doesn't and under the grand title "Objectivity, History and Class" we are given examples of (non) considerations of Marx by writers of bourgeois texts and the view that Marx "did not accuse the orthodox economists of being unscientific within their terms of reference, but of having the wrong terms of reference" (p24). Sloan would not say "bourgeois writers of texts" although he does say "in neither case can the approach of economists be said to be disinterested" (p25); he does not attempt to explain that objectivity and history are class relative. (The clearest statement of this, of which this reviewer is aware, is Mao's "Our Practice"; but Mao is not one of Sloan's gospellers".)

We are left with two equal but different views of problems. The labour theory of value "differs fundamentally from the orthodox" (p29); the source of profits is labour power or monopoly power and so on through inequality of income, competition and monopoly and eventually "convergence or coexistence".

This books fails its intended audiences entirely. For those schooled in Marxism it presents no coherent view of bourgeois economics (though this is but a subsidiary aim). For the student in Britain or the USA it presents no Marxism but Marx-too-ism.

Decline of the Dollar, E. MANDEL (Monad Press, distributed by Pathfinder Press, N.Y.

Reviewed by
Christine Downton

The Decline of the Dollar is a collection of articles covering the years 1964-72, from the sterling to the dollar devaluation, together with two chapters on the possibilities of the reform of the international monetary system. The book provides a continuous commentary on the decline and collapse of the monetary system established under the hegemony of the US after World War II. In this lies its weakness as well as its strength for while a lively coverage of the recurring international crisis of the 1960's provides a picture of the steady deteriorations of the Bretton Woods system, the fact that the articles represent immediate responses to particular incidents results in a certain lack of coherence for any overall analysis

To some extent this problem is solved by an excellent introduction by Jon Britton. In this the main threads of Mandel's analysis are brought together and the underlying problem identified as being the contradiction between the domestic and international role of the dollar. The maintenance of full employment and profits in the domestic economy required continuous intervention by U.S. governments. This created inflationary pressures which spilled over into international markets and undermined the stability of the dollar as a reserve currency. However, by identifying the cause of the outflow of $s in the early 1960s as being for the maintenance of the international capitalist system, rather than caused by trade or foreign investment deficits, Mandel argues that this early outflow was a sign of the strength rather than weakness of the U.S. economy. The continuing and accelerated outflow of the latter 60s and early 70s he sees as being caused by a reversal of this strong U.S. position. The 1967 and 1968 devaluations of sterling and the franc contributed to weakening the dollar, but the main problem he identifies as a weakening of the relative position of the productivity of labour in the U.S. The combination of the strains imposed on domestic investment and capacity by the Vietnam war, together with the rapid increases in nominal wages, reversed the favourable position of U.S. labour costs in relation to those in Europe and Japan. This brought about a decline in competitiveness of U.S. goods which pushed the U.S. balance of trade as well as the capital and money balance into deficit.

This analysis however implies that had this weakening of the competitive position of the U.S. not occurred the 1972 crisis would have been averted, which ignores other features which underlay and result from the dollar outflow. A major result of the outflow was that the U.S. by using its seignorage rights as creators of international liquidity was able to pay for the Vietnam war without sacrificing domestic capital formation or the international penetration of U.S. capital, particularly in Europe and Latin America. Without the dollar outflow either domestic or U.S. foreign investment would have had to be reduced; the role of the dollar was therefore intimately linked with the international penetration of U.S. capital which was accelerating throughout the period. The question must therefore be posed whether this process would have been tolerated in the long run without some retaliation from the European countries even without the additional deterioration of the U.S. balance of payments caused by the reduction in competitiveness of U.S. goods.

The acceleration of U.S. foreign investment aided by the dollar deficit also raises the question of Mandel's argued contradiction between the domestic and international role of the dollar. In fact the printing of dollars served the interest of U.S. capital in both spheres by maintaining both domestic and foreign investment levels. While of course this has ultimately led to dollar devaluation, the U.S. penetration of the World economy is already well established and further penetration can be financed out of non-repatriated profits or borrowing in European and World financial markets.

The benefits seignorage rights have given U.S. capital also raise some issues concerning the reform of the international monetary system. While Mandel is correct in pointing out that the return to the gold standard is out of the question, since the potential disruptions it offers via its adjustment mechanism would be highly undesirable in the eyes of business, any system based on SDRs could be used to finance the costs of the maintenance of world capitalist order provided the distribution of seignorage rights were controlled by the U.S. with the cooperation of Europe and Japan. Nevertheless one must agree that such a reorganization of the system will provide only a temporary respite from the basic problem - that is that the maintenance of profits requires inflationary finance both domestically and internationally.

In conclusion Mandel's book provides some very penetrating insights into the international monetary system and provokes the hope that it will be followed by a more comprehensive analysis based on this commentary.

BOOKS RECEIVED

POSITIVE DISCRIMINATION AND INEQUALITY (Fabian Research Series 314) Ed. H. Glennerster, S. Hatch (The Fabian Society, March 1974) ISBN 7163 1314 6, 40p.

RATIONALITY AND IRRATIONALITY IN ECONOMICS, Maurice Godelier (New Left Books, 1972) SBN 902308 44 0, £4.50 Hardback.

*THE ECONOMICS OF COLONIALISM, BRITAIN AND KENYA 1870-1930, Richard D. Wolff, (Yale University Press, March 1974) ISBN 0 300 01639 5, £4.40 Hardback.

*MULTINATIONAL ENTERPRISES AND SOCIAL POLICY, International Labour Office Studies and Reports (Geneva 1973, New Series No.79) ISBN 92 2 101003 1, £1.75 paperback.

*PROTEST OR POWER? A STUDY OF THE LABOUR PARTY, Margaret Stewart (George Allen & Unwin Ltd 4/74) ISBN 0 04 351048 5, £2.95 Hardback (also paperback).

*PRIVATE ENTERPRISE AND PUBLIC INTERVENTION. THE COURTAULDS EXPERIENCE, Arthur Knight (George Allen & Unwin, 5/74) ISBN 0 04 338068 9, £4.75 Hardback (& paperback).

*ECONOMIC ESSAYS ON VALUE COMPETITION AND UTILITY, V.K.Dmitriev (ed. D.M. Nuti) (Cambridge Univ. Press, 5/74) ISBN 0 521 20253 1, £6.00 Hardback.

*THE BALHAM GROUP. HOW BRITISH TROTSKYISM BEGAN, Reg.Groves (Pluto Press 3/74) ISBN 0 902818 42 2, 75p paperback.

*WORKERS AGAINST THE MONOLITH, Ian H. Birchall (Pluto Press 1974), ISBN 0 902818 40 6, £1.50 paperback.

*THE FIRST SHOP STEWARD'S MOVEMENT, James Hinton (George Allen & Unwin 11/73) ISBN 0 04 331059 1, £5.95 Hardback.

*THE 3rd INTERNATIONAL AFTER LENIN, Leon Trotsky (New Park Publications May 1974) ISBN 0 902030 49 3, £1.50 paperback.

CRISIS IN STEEL (Young Fabian pamphlet 38), Young Fabian Steel Group (The Fabian Society June 1974) ISBN 7163 2038 X, 30p.

*CONTROL OF LONG TERM INTERNATIONAL CAPITAL MOVEMENTS, Sir Alec Cairncross (The Brookings Institution, Staff Paper, George Allen & Unwin 2/74) ISBN 0 8157 1237-5, £1.25 paperback.

*PLAN IMPLEMENTATION IN NIGERIA 1962-1966, Edwin Dean (Oxford Univ. Press 6/74) £6.00 Hardback.

*SOCIOLOGY AND DEVELOPMENT, Ed. De Kadt & G. Williams (Tavistock Publications 1974) ISBN 0 422 74330 5, £5.40 Hardback; £2 paperback.

ECONOMIC GROWTH AND SOCIAL EQUITY IN DEVELOPING COUNTRIES, Ed. Irma Adelman & Cynthia Taft Morris (Univ. Press London; Oxford Univ. Press 7/74) ISBN 0 8047 0837 1, £5.75 Hardback.

*FROM THE BOURGEOIS TO THE PROLETARIAN REVOLUTION, Otto Rühle (Socialist Reproduction Summer 1974) 40p paperback.

INFLATION AND LABOUR MARKETS, Ed. D.Laidler & D.L. Purdy (Manchester University Press 7/74) ISBN 0 7190 0568 X, £4.95 Hardback.

MAKERS OF THE RUSSIAN REVOLUTION. BIOGRAPHIES OF BOLSHEVIK LEADERS, George Haupt and Jean-Jacques Marie (George Allen & Unwin 8/74) ISBN 0 04 947021 3, £6.00 H'back.

CHILE: THE GORILLAS ARE AMONGST US, Helios Prieto (Pluto Press Ltd 1974) ISBN 0 902818 56 2, 50p paperback.

*MARXIAN ECONOMIC THEORY, Meghnad Desai (Gray-Mills Publishing Ltd 1974) ISBN 0 85641 013 6.

* In hands of reviewer. All other books available for review.

After these responses it was also found from the Board minutes that Paul Bullock's article had in fact been formally considered at the March Board, but that those who were minuted as wanting to send comments on the paper had not received it until late June with the result that it had been revised in the light of comments by David Yaffe alone (who had read the draft submitted to the March Board meeting).

This is the background to the dispute. The outcome is that this issue carries Paul. Bullock's article. David Yaffe has withdrawn his resignation and the Board will thus continue as before until the March annual conference.

The controversy suggests a number of things which will be necessary if the broad argument is to be continued without resignations. The clearest are administrative: the more copies of articles that can be submitted the better (8 allow a rapid circulation, though if authors have no access to duplication we will of course do it); and that articles must be submitted before the deadline if they are to be properly considered at the Board meeting (deadlines will be announced in the News Letter).

It is also important that debates on the Board fairly reflect the wider debates and concerns of the CSE. The latter are partly reflected in the submissions, and in the discipline of the day schools and CSE conferences. But notes, comments and suggestions on the Bulletins as they appear would be very much appreciated. One thing on which the current Board is all agreed, however, is that the Bulletin should not become a professional journal, but should contain and develop political debates as they are reflected in political economy, and that it should continue to see its prime task as contributing to the development of the socialist movement.

Members of the CSE who wish to review any of the books still available in the 'Books Received' list on B.R.24, or any book recently published should contact

David Yaffe,
78, Parkhill Road,
London, NW3 2YT.

Reviews should also be sent to this address.

If members wish to review a book which has not been sent to us could they let us have the title, author, publisher (with address) and we shall write to obtain the book for them. Will members of the CSE who have had books published please ask the publishers to send us a copy for review. Reviews can be of three kinds:

1. Short synopsis of contents of book (10-20 lines)
2. Short review with a brief discussion of the content of the book and central points raised (1,000-2,000 words)
3. Long review concentrating on central points of the book and offering a wide discussion of the issues raised.

The type of review will clearly depend on the standard and interest of the book. All reviews should include a short synopsis of contents of book (10-20 lines).

David Yaffe (Reviews Editor)