Bulletin of the Conference of Socialist Economists

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FOREWORD

This issue of the Bulletin is mainly devoted to contributions to debates already underway in the CSE. Andrew Gamble and Paul Walton continue the discussion of capitalist crisis, Paul Sweezy's piece,* also to be published in 'Monthly Review' and elsewhere, is specifically directed in part at a contribution to an earlier Bulletin, and Andrew Glyn's note is also relevant to this discussion. Arising out of a CSE conference in Brighton at the beginning of June on the Theory of Value we have short introductory notes by Ian Steedman and David Jaffe setting out briefly, and in a non-technical way, the main differences between the schools of thought, as they emerged at the conference. Geoff Hodgson's paper was discussed at the conference and Patrick Goode's paper is a revised version of the one which he presented. John Harrison's paper on unproductive labour was circulated to the June conference, but time prevented it being discussed; we include it here together with further contributions by Paul Bullock and Ben Fine, which were in part stimulated by it. The book reviews by Bill Warren and Gioacchino Garofoli take up issues of immediate importance for an analysis of the present role of the state, while the Editorial Board hopes that the theoretical debates within the CSE will continue with undiminished vigour, and will rightly occupy much of the space in the Bulletin, we also hope that more empirical material will be forthcoming. There is no follow-up to the short piece on British Capitalism in the last issue, which it was hoped would be the first of a series, because no offers were forthcoming or could be solicited. Members of the CSE must have knowledge of particular aspects of the current situation which it would be worth putting down on paper. All offers or suggestions on this to:

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Please note that apart from correspondence on 'current topics' and on book reviews (see p. 125) all other correspondence should be sent to:

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*This article was written as a contribution to "Festschrift fur Eduard Marz" which will be published late in 1973 by Europa Verlag.

CONTENTS

THE BRITISH STATE AND THE INFLATION CRISIS[1]

Andrew Gamble and Paul Walton

The meaning of crisis varies with the mode of production. When the feudal mode of production broke down, it usually did so because of some disaster, such as plague, blight or tempest, which disrupted feudal social organisation. One or another of the basic forces of production would be ravaged by a natural force of destruction which it was beyond the power of feudal social organisation to control. The social relationships of production between lord and peasant were threatened at such times because at times of severe deprivation the vassals were more likely to regard their lords' appropriation of a share of what they produced as unjust oppression.

Only under capitalism has production been continually interrupted because of the way it is socially organised, and thus the spectacle presented of forces of production, both men and machines, lying idle side by side. The form of the crisis is no longer the underproduction of use valves but the overproduction of exchange values: "An epidemic that in all previous epochs would have seemed an absurdity - the epidemic of overproduction."[2] But although capitalism is beset by these temporary crises, these periodic interruptions of production, which have to be resolved in favour of capital for accumulation to be resumed, it is also marked off from all preceding modes of production by the nature of the internal limits to its indefinite expansion. Unlike feudalism, the mode of production based on capital is doubly contradictory. For while its progress is defined by the temporary crisis which forces capital into new fields and constantly broadens the base on which accumulation starts again, this tendency to break down all barriers to production is only the means by which production is advanced to the point where further production based on capital is more difficult and ultimately no longer possible. It is in this sense that capital is literally its own gravedigger.

One thing must be made clear however. An economic crisis is not the same as revolution. The general laws of motion of the capitalist mode of production can be formulated in abstract terms, and the limits to its potential expansion can be defined. But no such abstract course of development can be outlined for the class struggle that ensues in this context. We are here using the term crisis to deal with three different aspects of late capitalism:

1 the long run tendency to breakdown of capitalism as an accumulation process based upon the tendency of the rate of profit to fall.

2 The actual historical crises of capitalist production which appear for a variety of reasons, some of them unrelated to the general tendency for crisis to emerge. There can be crises in the financial and monetary system which are really problems of profit realisation, not problems of capital accumulation as such.

3 Political or social crises which are related to such economic crises but in a complex causal fashion. They can be brought about by wars or other forms of inter-imperialist rivalry, by the challenge of a national liberation struggle, by divisions within the ruling class, by strategies of this class that are aimed at making the economic system more profitable; or by the working class asserting its own economic interests.

For analytical purposes such levels may be distinguished, but in any actual crisis the separation of politics and economics in this manner can never be sustained. But the economic contradictions which set the scene for political struggles can be studied independently so long as this is acknowledged and it is understood that in the last instance economic crises can always be resolved politically. Such resolution of economic questions involves a decisive change in the relationships of class forces which only appear possible or necessary at a certain stage of crisis or development. Prior to this point only technical solutions seem on the order of the day.

Yet the prospect of revolution does not automatically flow from objective crises. A theory of revolution must base itself on a concrete historical analysis of the political peculiarities of a particular social system. Indeed the only work in which Marx develops a generalised political analysis alongside his economic analysis of capitalist production is the Communist Manifesto. But the prediction of political revolution is not accompanied in this polemical work by any developed theory of economic crisis.[3] Instead in this scenario of the future progress of capitalist society, capitalist production does not break down; revolution breaks out. The contrast between the world of wealth monopolised by an ever dwindling number of big capitalists and the world of poverty inhabited by the great mass of workers and others forced down into the body of the proletariat, becomes so great that the oppressed rise up. The death-knell of capitalist property sounds. The expropriators are expropriated.

The analysis that underlay this Political Solution is shared by all of the early economic writings of Marx and Engels, but receives its most detailed statement in the Manifesto. Above all they wanted to show that the laws of political economy, so beloved of the theorists of the bourgeoisie, had a destructive as well as a creative side. Competition was not only the means by which wealth was enlarged, it was also the instrument that divided society into two antagonistic classes and constantly widened the gulf between them.

But when Marx looked beyond the relationships of the market and achieved a new labour theory of value to analyse what was historically unique about the capitalist mode of production, he also provided for the first time a definition of its limits, and therefore a projection of its ultimate breakdown. In his later works, Marx writes as if a decisive challenge to the rule of capital could only be made when the capitalist mode of production had almost reached its limits, and was about to break down. Marx himself certainly believed in, and worked for, a political intervention to end the capitalist mode of production long before all the productive forces for which there were room in it had been developed. Yet despite Marx's own energetic political activities in forming the first International, his own theory insisted that the possibility of creating non-antagonistic forms of social production required a development of productive forces which, under the new system, would allow the overcoming of the division between mental and manual labour and the achievement of free time for all, beyond necessary labour.[4] There is a tension in Marx's work between his view that "no social order ever perishes before all of the productive forces for which there is room in it have developed",[5] and the necessity for the working class and its allies to seize political power wherever possible, ending the oppression and exploitation of capitalism even before all its potentialities have been realised.

The great debates among Marxists, such as Lenin, Trotsky, Rosa Luxemburg and Kautsky, both before, during, and after the Russian Revolution grapple with the problem of squaring the political and objectivist arguments about the maturity of capitalism with the practical possibilities for a revolutionary seizure of power. The strategy of the permanent revolution and the theory of Russia as the weakest link in the chain of Imperialist States were advanced after the experience of the 1905 Revolution and finally adopted by the Bolsheviks in 1917. But they were always firmly grounded in the perspective that such a revolution would only lead to socialism if it initiated and sustained a world-wide revolutionary process. This debate now has a new significance for recent economic theory has begun again to explore Marx's thesis that some kind of breakdown in late capitalism is to be expected as it moves towards capital intensiveness and automation of the production process.[6] The gap between the objective crisis and the immediate crisis has lessened.

Marx's version of the reasons for such collapse are outlined in the Grundrisse. Here he suggests that the development of large scale industry and capital intensive production means that commodity production comes to depend less upon the labour time expended upon it during the production process and more upon the general state of science and technology. Yet the measure of commodity values in capitalist society is labour time. Thus there is an emerging contradiction built into such a system of production. For labour power in its direct form will eventually fail as the measure of commodity production. The breakdown of the capitalist system on such objective grounds is described by Marx in the following manner: 'On the one hand it calls into life all the forces of science and nature, as well as those of social co-operation and commerce, in order to create wealth which is relatively independent of the labour time utilised. On the other hand, it attempts to measure, in terms of labour time, the vast social forces thus created and imprisoning them within the narrow limits that are required in order to retain the value already created <u>as</u> value. Productive forces and social relationships - the two different sides of the development of the social individual - appear to be, and are, only a <u>means</u> for capital, to enable it to produce from its own cramped base. But in fact they are the material conditions that will shatter this foundation.'[7]

The greatest importance lies therefore in determining the present limits of capitalist production, and the signs and nature of its crisis. These questions should not be avoided merely because analyses announcing the death throes of capitalism have been so frequent, so common and so incorrect. During the 1930s many thought, with good reason, that the limits to capitalist production had been reached and that the political and economic choices facing the various national bourgeoisies lay between a free enterprise economy in which the rule of capital was only maintained by permanent high unemployment of men and machines, and some form of Fascism - direction of the affairs of capital by the State, elimination of independent working class organisation and the provision of replacement markets for the products of capitalist industry, ownership of these industries remaining in private hands. In other words the choice seemed to be long term stagnation or totalitarian control of the production process.

But the revival and unprecedented growth of capitalism after 1945 confounded the expectations of Trotsky and Keynes alike that the limits to the accumulation of capital had been reached. It was time for a new flowering of trust and despair, at the prospect of a capitalist system, tolerant, repressive and everlasting. But during the last few years the post-war boom has slowed down, the fight for markets has intensified, deep-seated national, and now international, monetary crises have emerged and above all the rate of profit has fallen. Accompanying these developments there has been an unprecedented rise in strikes, coupled with chronic inflation, and higher unemployment. The question that confronts us then is whether this new crisis is merely another temporary barrier to the development of the productive forces under capital which is preparation for yet further expansion, or whether it signals the approaching limit of capitalist production as we know it.

THE ABSTRACT LIMITS OF CAPITALIST PRODUCTION

The fundamental cause of both crisis and ultimate breakdown is the absence of sufficient profits to keep accumulation going. In the end it is the inability of the capitalist and of the capitalist State to ensure that production is profitable, that ends production based on capital. Each successive crisis forms a barrier, usually pushed aside to make way for a further expansion of the forces of production. For a short while, however, each of these crises puts the continuation of capitalism in jeopardy, for they are by no means due to technical faults or natural catastrophes. They are crises that arise from the manner in which production is organised.

There are two aspects of capitalism that are crucial in this respect. Firstly in the production process itself there is a contradiction between the constant enlargement of the productivity of labour and the gradual expulsion of living labour from the productive system. Secondly, there is a contradiction between production and consumption, between a system of production which tends towards the unlimited expansion of social wealth, and a system of social relations which has to ensure that only a part of this wealth is distributed to those that produce it. The first contradiction shows itself in a rising organic composition of capital and a falling rate of profit. It concerns the actual extraction of surplus value. The second contradiction centres around problems of <u>realizing</u> surplus value.

Marx is quite clear that the former is more basic to capitalism. For much of his analysis indeed he assumes that Say's Law operates, i.e. that supply creates its own demand in all markets. This means that provided surplus value can be extracted it can also be realized. The commodities that are produced can be sold.

Actual crises, however, are usually crises of realization, and this has led many Marxist economists to regard crises of accumulation and the falling rate of profit either as irrelevant or as aspects of realization. A true understanding, however, of the abstract limits of capitalist production must not only distinguish them but must also put greatest emphasis on the production and not the realization of surplus value. Marx's analysis of capitalism is an analysis of a mode of <u>production</u>. He defines capitalism by the social relationship between labour and capital in the production process. For surplus value to be realized it must first be produced. Crises of realization are an endemic problem for the capitalist mode of production, but they are not basic to it. It is only when the reproduction of capital through the extraction of surplus value becomes problematic that there ensues a falling rate of profit and thus a concrete situation which makes a crisis-free capitalism impossible.

THE EXTRACATION OF SURPLUS VALUE AND THE FALLING RATE OF PROFIT

Marx distinguished between the absolute and the relative modes of extraction of surplus value. Briefly, absolute extraction means increasing exploitation by squeezing more out of the labourer, by lowering wages, lengthening hours and speeding up the work. Relative extraction means increasing exploitation by raising the productivity of the labourer, not by making him work harder, but by giving him machines to work with. The result of this is to increase surplus labour - the time the worker works for the capitalist - relative to necessary labour - the time the worker replaces his wages. Although they are frequently to be found together there is a greater emphasis on absolute extraction in early capitalism and on relative extraction in late capitalism.

Whichever mode of extraction is dominant the process of accumulation may undergo a crisis. Such an interruption appears as an overproduction of capital, but only because capital cannot be invested at that time productively, i.e. in a way which will enlarge total capital. As we shall see, a real crisis of capitalism occurs whenever the rate of exploitation remains constant or falls. If the rate of exploitation is constant or falling the surplus capital cannot be fed back into the process of accumulation without causing a fall in the rate of profit. The contradiction of capital is that to maintain the existing value of capital, capital must be accumulated in ever greater amounts. Since every successful extraction and realisation of surplus value enlarges the mass of capital that must be reinvested profitably, the rate of exploitation must rise for the rate of profit to remain the same.

Why is the rate of exploitation too low for a given amount of capital? In a capitalist sytem where the absolute mode of extraction deminates, the ultimate limit to exploitation is the physical capacity of the labourers. But what of late capitalism where, as we have said, raising the productivity of labour through investment in machinery is the dominant aspect of exploitation. This adds to the mass of surplus value, but it is achieved by increasing the proportion of constant capital to living labour. This threatens the rate of profit because ever greater investment in constant capital must be made to raise even marginally the rate of exploitation. An increasing proportion of such investment is required to renew the existing stock of capital and does not by itself raise the productivity of labour.

Hence the tendency for the rate of profit to fall is the fundamental tendency of capitalist production that rests on the relative extraction of surplus value. The rise in the proportion of constant to variable capital is called the rising organic composition of capital: 'The composition of capital is to be understood in a twofold sense. On the side of value, it is determined by the proportion in which it is divided into constant capital or the value of the means of production, and variable capital or value of labour power, the sum total of wages. On the side of material, as it functions in the process of production, all capital is divided into means of production and living labour power ... I call the former the value-composition, the latter the technical composition of capital.'[8] Marx stated that the value composition is in part determined by the technical composition. But they are not the same, because with the increasing productivity of labour the difference between the constant and variable capital grows more slowly than the difference between the mass of means of production and the mass of labour power.

It is well known that Marx believed that the fundamental tendency of capitalist accumulation was a falling rate of profit. There is a debate as old as the history of Marxism over the implications of Marx's law of value. The main problem with his analysis is not that his formula cannot be tested empirically, but rather that the predictions of crisis that flow from it turn upon certain relationships existing in the real world. Such predictions are only possible when certain assumptions are both clearly understood and hold in reality.

Marx's algebraic formula for the analysis of capitalism in its value aspect is composed of three main elements: s (surplus value); c (constant capital); v (variable capital). From these he derives two important relationships, the rate of exploitation s/v and the rate of profit, s/c+v. Algebraically there are a number of possible ways in which these relationships could be expressed. There is no mathematical logic requiring the rate of profit to fall. Rather the tendency for the rate of profit to fall depends upon Marx's assumption that in the long run the rate of exploitation cannot be raised sufficiently. But in the short run there are counteracting influences to the falling rate of profit which allow the rate of exploitation to rise as fast or faster than the organic composition of capital. If we express this algebraically, the rate of profit falls when

$$\frac{s_1}{c_1 + v_1} \qquad \frac{s_2}{c_2 + v_2}$$

i.e. when any increase in c is as great or greater than any increase in s/v which it causes; in other words the rate of exploitation has to rise at least as fast as c to maintain the rate of profit. If s/v remains constant (or falls), then the rate of profit will fall when c rises.

Marx makes the reasonable assumption that in the long run capitalism will face a profits crisis, hence a crisis of accumulation, as capitalism moves from the absolute to the relative extraction of surplus value. As this occurs capitalism will encounter acute difficulties in raising the rate of exploitation correspondingly. It is important to remember that Marx analyses capitalism from both its material and value aspects. Raising the rate of exploitation by increasing investment in machinery (i.e. raising the technical composition of capital) requires at the same time a big rise in productivity to offset the rise in organic composition that would otherwise result. This becomes harder as the proportion of investment that must go towards replacing existing machines rises.

Marx believed that the rate of exploitation could not increase fast enough to prevent the organic composition of capital from rising, and indeed the evidence seems to bear this out. There is little dispute that there has been an enormous rise in the technical composition of capital in the historical development of capitalism. Mattick and Mandel have further argued that the available figures show a rise in organic composition also and a falling rate of profit.[9] But some Marxist economists at various times have disputed whether the organic composition has risen, and whether falls in the rate of profit are in any way related to changes in organic composition.[10]

The real point, however, is not that a direct relationship can always be observed between the organic composition of capital and the rate of profit, because that ignores the situations in which the counter-acting influences operate. Yet it is the case that falls in the profit rate and crises of accumulation can only be explained against the background of a rising organic composition. Such a rise can only be slowed down by rising productivity (increasing the rate of exploitation). It cannot be permanently halted or reversed. If it is difficult to measure directly the organic composition of capital, its rise may still be inferred from its consequences, most notably the changing proportion of productive and unproductive labour, which forms the basis for an expanding State sector, and the massive extension of private credit.[11] If the organic composition of capital was not rising, the rate of accumulation would not falter, so there would be no need for the State to be growing. In the last analysis, State intervention and the growth of the unproductive sector are brought about by the rising organic composition of capital. The business cycle is largely controlled, but a new kind of crisis takes its place - a permanent inflationary situation, which in a context of labour militancy and international competition, can produce a struggle for shares in the national income, and beyond a certain point a contradiction between prosperity and accumulation, i.e. too large a State sector damages investment.

An interesting, if statistically inconclusive, empirical example was given in a recent issue of the Economist.[12] This showed how countries with the highest State spending in 1970 had the lowest investment, whilst those with the lowest - France and Japan - had the highest rates of growth.

THE REALIZATION PROBLEM

Once surplus value has been extracted, it must be realized. The problem is a simple one. Can the commodities be sold? Crises occur here because of the contradiction between production and consumption. They are of two main kinds - crises of underconsumption and crises of disproportionality. The first occur because there is insufficient effective demand to buy the commodities that are produced. The second occur when there is an overproduction of means of production in the capital goods sector. There is too much productive capacity.[13] This overproduction must not be understood as the piling up of stocks of goods but rather as the <u>growing disproportion</u> between what Alfred Sohn-Rethel has called 'Marktökonomie' and 'Betriebsökonomie' - <u>the economy of the market</u> and <u>the economy of the plant</u>. The economy of the market is subject to the law of value; goods cannot be sold unless they realize surplus value. But the economy of the plant is subject to no such law, for it seeks the best organisation of the instruments of socialised labour and production.

The capitalist realizes surplus value by selling his commodities for a sufficient sum of exchange values, and this means that only those can buy the goods who have sufficient exchange value, in the form of money, for only this ensures that the capitalist will finish with more exchange value than he started. The source of this surplus value is the time that the workers are working not for themselves but for the capitalist, so it is obviously in the capitalist's interest to reduce the time of necessary labour, - and increase the time of surplus labour. This is accomplished, as we have seen, with the aid of investment in new machines and processes. But here the contradiction between the production and realisation (<u>Verwertung</u>) of surplus value shows itself. For as <u>surplus labour</u> expands, so in <u>proportion necessary labour</u> shrinks, and the possibility of realising surplus value shrinks also, unless the rate of exploitation can be increased sufficiently. If accumulation falters, then overproduction and inadequate effective demand because of income inequalities prevent the conversion of the output into exchange value; and even the growth of private credit, which provides a temporary respite, cannot indefinitely stave off the crisis of realization.

THE COUNTERACTING INFLUENCES TO THE FALLING RATE OF PROFIT

Crises of realization by themselves could be overcome, or at least managed, provided the rate of exploitation can be raised. But all actual crises reflect the contradictions of both production and realization of surplus value. Every crisis provides the opportunity for capital to be restructured and for production to be made profitable again. This requires that the existing value of capital be reduced and the rate of exploitation be raised. In general, the fall in the rate of profit, which remains the ultimate cause of the crisis, has to be nullified by bringing into play one of the counteracting influences to the law.

There are four main such counter tendencies, each of which offers a way out of the crisis by restoring the rate and mass of surplus value to desirable levels. Explanation of the continued progress of capitalism normally emphasise one or other of these counteracting influences. Firstly, the rate of surplus value can be increased. This can be done by cutting down necessary labour and increasing surplus labour by introducing technological innovations that raise labour productivity, and by a re-organisation of work methods with the aid of such techniques as scientific management and time and motion study. Secondly, the price of constant capital or capital intensiveness may be reduced by technological innovation in the capital goods sector, and this in turn reduces the value of constant capital employed in manufacturing industry. Thirdly, the base of capitalist production may be extended. Fourthly, since the absolute mass of surplus value increases even when the rate of profit is falling, an increasing part is used to maintain and to generate markets.

THE ROLE OF THE STATE

During earlier stages of capitalist production the mechanism for restructuring capital and boosting accumulation was the business cycle, with its sharp upswing and downswing of business activity. But capitalism has grown so vast and so interdependent that the business cycle can only achieve this restructuring by a degree of unemployment and reorganisation that is no longer politically possible. The objective basis for the interventionist role of the State in modern capitalist economies is to perform more smoothly the task once crudely effected by the business cycle. Put another way it ensures that one or more of the counteracting influences to the decline in the rate of profit do in fact assert themselves.

Considered in isolation any one of these might be thought a permanent counter to the tendency of the rate of profit to fall. Every crisis that is successfully overcome however enables the accumulation process to go forward. The limits to the realization of surplus value imposed by the unequal distribution of income and overproduction are finally not temporary but absolute limits, for if the tendency for the rate of profit to fall becomes actuality, and the counteracting influences are no longer effective, then the capitalist class can no longer ensure a faster accumulation of capital, and capitalism crumbles.

What is the effect of these counteracting influences? On the one hand they allow capital accumulation to continue, on the other they only make its final arrest more certain. Increasing the rate of surplus value creates surplus labour by reducing necessary labour to a minimum. Thus, in the long run, it is at once the instrument of the labour time of living labour, and a powerful contributor to a situation of general overproduction, once the accumulation rate slackens.

The cheapening of the price of constant capital is capital saving from the point of view of manufacturing industry, and therefore does not cause the organic composition to rise. From the standpoint of capital as a whole, however, all technological innovation is labour saving, - that is its purpose.

Confuses labour/capital
labour/output } labour saving.

In this case it is labour saving for the capital goods sector. There is now some evidence that future technological innovation, associated above all with computers, will tend to have a labour saving bias, not just for the capital goods sector, but for manufacturing industry as well. This is what one would expect as capitalism moves towards automation. The character up to now of technological innovation in the capital goods sector has merely delayed the extension of its labour saving bias to all sectors. This could not continue indefinitely.

The enlargements of markets both at home and overseas raises demand for the commodities of capitalist industry and evens out the organic composition and hence the rate of profit of different capitals. The inevitable result was the establishment of the World Market. But today it cannot be expanded fast enough to absorb (profitably) the growing output of the various capitalist blocs. The result is fierce international competition. Although some industrialisation is now proceeding in the Third World, it is unlikely to give any real relief to capitalism. The improbable event of wholesale opening up of markets in the Soviet Union, Eastern Europe and China could do more, but in general any further development of industrialism through the world market requires an initial capital investment that is too high.[14] Imperialism in the form of direct control of foreign territories may still be of importance as regards some raw materials, but much less so as regards markets for goods of the developed countries, since the growth of trade is now overwhelmingly dependent on exchange between the advanced capitalist countries.[15]

Finally, the rising mass of surplus value. A certain part of this is now consumed as necessary expenses for the further realisation of surplus and the maintenance of their property by the big corporations themselves. Spending on all kinds of marketing and security comes into this category. But what is of greatest importance is that the increasing mass of surplus value has made possible the rise of the State sector. There are two ways of thinking of this development. Either the State can be seen as the agency that disposes of the surplus which productive capital cannot invest by spending it on education or arms. This implies that modern capitalism has an inherent tendency to under-consumption and stagnation.[16] Or the State can be seen as providing services that are strictly necessary to maintain the profitability of capital. This implies that there will be a conflict over the division of the surplus between the State and productive capital if these services are financed predominantly out of taxes on profits.

The second view is more plausible for the following reasons:

The view that the State uses the surplus to cure the stagnation of capitalism derives from the experience of the 1930s and shares the same assumptions as Keynesian theory, namely that crises are caused chiefly by lack of effective demand, and so implies that, if the State provides this extra demand by budget deficits or credit expansion, full employment and prosperity can be maintained indefinitely.

But State expenditure has to be financed partly out of revenue. Although this can ensure prosperity and full employment for a time it cannot ensure accumulation. Indeed it makes such accumulation more difficult. In his models of simple reproduction Marx assumes that all surplus value is consumed as revenue. If capitalism were an economy based on simple reproduction, then the State could absorb the whole of surplus value and stabilise the economy permanently. But capitalism is of course based upon expanded reproduction. If capitalists do not invest enough of their surplus value but rather consume at times realisation crisis

at times falling rate of profit crisis

it, then accumulation will suffer. Today the State is the chief and voracious consumer of surplus value. What is consumed cannot be accumulated, and so there is a contradiction between the size of the State sector and productive capital. On the one hand State spending cuts short the business cycle, and State intervention helps to restructure capital. On the other hand the cost of the State sector encroaches on accumulation. State action is intended to overcome the problems of realising surplus value, but finally it intensifies the crisis of accumulation. Thus there is a conflict between prosperity and accumulation. The more the State ensures the first through its own spending the more it endangers the second. The accelerating inflation suffered by all developed capitalist countries since the war is in conventional terms a sign of excess demand in the economy, "too much money chasing too few goods". The reason for this excess demand, however, is partly the size of the State sector. There is competition for resources between the demands of consumption, investment, and State programmes, and capitalist governments have usually chosen to bridge the gap by expanding the money supply and private credit, rather than cutting their own expenditure or causing serious unemployment.

Our argument is not that State expenditure equals unproductive expenditure equals the cause of permanent inflation. Such a position is clearly nonsensical. Rather we wish to show how permanent inflation is linked to the way in which the modern State intervenes in the economy attempting to ensure conditions for profitable accumulation. It is the State that creates the conditions for inflation.

The transition from a gold standard to a labour standard has meant that the price level rises as a result of credit expansion and trade union pressure. The State allows the accumulation of private debt to ensure prosperity where formerly budget deficits were employed. The mechanism for this is the constant increase in the supply of money. The State authorises such increases in the quantity of money to finance its own expenditure and the growth of private credit. It is the State's refusal either to cut its expenditure or to restrict the money supply that creates the structural conditions for permanent inflation.[17]

The increase in State expenditure which has occurred in all the advanced capitalist economies in this century, is by no means all at the expense of accumulation. Much of it directly aids accumulation. In looking at the modern State we must distinguish at least three aspects of its role in the economy. Firstly, it manages demand in order to achieve full employment and other economic objectives. Secondly, it is the most visible expression of the unproductive sector within the capitalist mode of production, chiefly in the fields of welfare, education, and defence. Thirdly it has the task of restructuring capital, and ensuring the most favourable conditions possible for accumulation.

It is clear that these different roles can be contradictory, but there are difficulties in applying the law of value to the modern State, in particular in deciding how much of State expenditure is unproductive; (for instance, expenditure on education is partly unproductive - the wages of teachers - but partly it provides extra markets for productive capital - spending on equipment, books, etc.). It is also true that whilst some State expenditure is unproductive for capital in the short run. Much of it is undertaken to increase the returns to capital in the future. The question is whether an increasing proportion of current GNP must be devoted to such unproductive expenditure if future accumulation is to be assured.

It follows from the general analysis of crisis that the nearer capitalism approaches to automated production and the greater becomes the proportion of dead labour to living labour, then the more serious becomes the political crisis of capitalism. For it is not to be expected that the capitalist class, faced by the breakdown of the economic system which is the source of both its wealth and its power, should acquiesce passively in its own demise.

THE PRESENT CRISIS

In the past during the social turmoil which spreads through all classes and institutions at a time of economic crisis, the leading sections of the ruling class have shown themselves ready to back the most savage and reactionary movements in order to preserve their power, to suspend or abolish all the liberties and freedoms that embody the historical, political achievements of their own class.

Today at a time when a new politico-economic crisis has begun to grip the states of advanced capitalism it is as well to be clear that capitalism is unlikely to emerge again to enjoy another burst of economic development accompanied by the relative tranquillity of the 1950s and early 1960s. This crisis is international not national in character. Its outward manifestations are the crisis of the international monetary system and the efforts of all the major capitalist countries to enlarge their shares of the world market and to maintain their profits by incomes policies, speed-ups, productivity bargains and limitations on the right to strike. For a fuller understanding of the present crisis we turn to examine the outline, shape, and potential of the particular crisis in British capitalism.

British Governments since the war have pursued four related objectives in their economic policies: full employment, economic growth, a favourable trade balance, and price stability. The overriding purpose that guides them all is maintaining the profitability of private capital. Even a brief glance at the conventional measures of political and economic trends reveals how much Britain has failed to achieve these objectives and how serious in consequence is the present crisis for British capital.

1. There has been a long term decline in the profitability of industrial and commercial companies. On Glyn and Sutcliffe's figures, the pretax rate of profit declined from 16.5% in 1950-54 to 9.7% in 1970.[18] The post-tax rate of profit fell from 7.1% to 4.1% between 1964 and 1970.[19] (whilst the rate of profit fell the post tax share of national income going to profits rose, due to Government taxation policy. The share of profits in Company net output has fallen from 25.2% in 1950-54 to 21.2% in 1964 and 12.1% in 1970.[20]

2. There has been a steady worsening of Britain's performance in the world market, which has affected the goals of both economic growth and a favourable balance of payments. As Robin Blackburn has put it: "a comparison of the percentage share of world exports of manufactures by the major capitalist powers gives a sharp picture of the consequent decline of British Imperialism, despite the high level of its continuing export of capital."[21] Britain's share of exports of manufactures from the 12 main exporting nations declined from 20% in 1955 to 12.3% in 1967 and 11.0% in 1971.[22] There have been repeated and ever deeper balance of payments crises, which culminated in the pound, formerly both the symbol and the instrument of British capital's international strength, being thrown overboard no less than three times since 1967. This gave temporary relief to the balance of payments.

Balance of Payments	1952-5	56-60	61-64	65-68	69-71
Current account balance	67	136	31	139	669
Visible balance	-260	- 94	-213	-376	54
Basic balance	- 93	- 53	-170	-273	604

Indeed despite the long battles in the past of the City and finance capital to maintain a fixed parity for the pound, sterling now floats, or rather sinks.

3. There has also been a significant departure from the policy of full employment. Unemployment rose steadily after 1966 and reached one million in 1972. Furthermore the published statistics may understate the real total by more than 50%, and the bare average does not reflect the much higher rates to be found in some regions.

4. Economic growth has been higher when compared to growth rates in the past, but since the 1870s it has been much slower than Britain's main industrial rivals. This has worsened the competitiveness of British industry in the long run.

Underlying rates of growth 1955-68

Annual percentage rates:

	GDP	GDP per employed person
Belgium	3.9	3.5
France (59-68)	5.5	4.9
Germany	5.0	4.3
Italy	5.3	5.8
Japan	9.7	8.3
UK	2.8	2.3
USA	3.9	2.4

(24)

5. It is, however, when we turn to measures of inflation that we find the most marked failure of British Governments to achieve one of their objectives.[25] Prices have risen from an annual average of 2% in 1956-62 to 3.7% in 1962-69, and to 7.9% in 1969-71.[26]

Moreover, as the authors of a recent Cambridge paper on inflation argue, - not only is inflation financially harmful, but in addition the "accelerated inflation of 1968 onwards induced a massive wave of industrial unrest in Britain: and it was the new 10 per cent rate of price increase there in 1970-71 that compelled Mr. Heath's new government to withdraw from its initial hostility to 'incomes and prices policies.'"[27]

After a period in which strikes appeared to be withering away a new wave of militancy has appeared.

Between 1960 and 1967 the annual averages for number of strikes, workers involved, and days lost were:

2,371 strikes; 1,200,000 workers involved; 3,001,000 days lost.

Between 1968 and 1972 the comparable figures were:

2,820 strikes; 1,717,000 workers involved; 11,994,000 days lost.

	Average Duration	Average number of Workers involved per strike
1960/67	2.5	506
1968/72	7.0	609

(28)

But the signs of the crisis are not limited to the economic and social statistics that we have just listed. They have their counterparts in the political responses and developments of the last ten years.

We have seen a growing estrangement of the population from the institutions of parliamentary democracy and from their traditional allegiance to the main political parties; we have seen the Tory Party undergo a major ideological transformation, which has involved the rejection of many of its past ideological symbols and a rise of new powerful forces that have pushed the party to the right on immigration, welfare and the economy.[29] We have seen the first legislation since 1927 against the trade unions the increasing use of the laws of conspiracy against strikers, students and squatters, the growing reality of press and television censorship. Open internment and repression in Ulster shows us that the British Establishment does not lack the will or the means to clamp down when it is challenged. States of emergency used to be rare occurrences, since 1970 several have been declared.

This recent period has seen not only the great rise in labour militancy and an increasing number of aggressive as opposed to defensive strikes, but also many more sit-ins and factory takeovers. For inflation breaks the relationship between labour time and wages. The notion of a fair day's work for a fair day's pay is eroded, and greater and greater sums are demanded. At the same time the logic of a market that closes down factories and throws men out of work is challenged. The collective strength of workers is reaffirmed by direct battles with the law in which the workers emerge victorious. The victories of the miners and the dockers strengthened militancy throughout all sectors and helped force the Government to launch its new wage freeze.

At the same time, growing attempts are being made to organize the poor - those who depend on the welfare handouts of the State, and of council tenants. The stand of councils like Claycross in Derbyshire against the Fair Rents Bill is an indication that open class war is now beginning on many fronts. The recent series of large National strikes appears after a long period of full employment, rising wages and apparent stability. Some of these strikes are aggressive and some merely defensive. The real target today of many of the higher paid workers who are striking is the share of profits and the real goad to larger and larger wage demands is the combination of accelerating prices and the growing burden of taxation.

The Ford workers for instance have prepared a claim that shows the company to be making in 1972 past depreciation pre-tax profits of £60m, or approaching £1,000 per Ford Worker.[30] Their demand for an extra £10 a week appears moderate in this context. For the majority of workers, however, with no access to the high productivity increases in other industries, the late sixties saw declining or stagnating real wages and growing unemployment. As the Cambridge Study puts it: "in face of the stagnation of wage earners' real income which begings to be evident from 1965, the number of wage increase strikes rises sharply from 1966 to the end of the decade, despite the almost equally sharp rise in unemployment, so that the previous inverse relation between wage disputes and unemployment is completely disrupted."[31]

Moreover, for the first time in British Trade Union history its bureaucracy on the T.U.C. has demanded of a government a whole alternative social and economic programme. Vic Feather and his associates intend to use this alternative policy no doubt as a programme for negotiation - and whilst this policy itself is a far cry from socialist demands, it demonstrates that economic bargaining has become simultaneously political bargaining; for wage negotiations with employers have been transferred temporarily and perhaps permanently into government hands. In this sense then the present strength of military is partly a response to the newly emerging authoritarian Capitalist State.

In 1970 we entered a new period of militancy.

	No. of Strikes	Workers Involved (million)	Days Lost (million)
1970	4,000	1.8	10.9
1971	2,200	1.2	13.5
1972	2,470	1.7	23.9

The general direction of the affairs of capital by the State has advanced to the point where the continued existence of effective trade Unions is threatened. The only alternative for the T.U.C. is to put forward an alternative political programme, or be swept away, whether by mass discontent of the rank and file, or by permanent statutory controls. The State itself and no longer private employers provide the front line of every wage dispute. Furthermore, the very basis for maintaining dominance under late Corporate capitalism is the increased use of calculations of economic self-interest.[32] What Marx had grasped is that ultimately such calculations would increasingly be made by the masses too. It is apparent that if sections of the work-force in late capitalism choose to pursue economic self-interest in a calculating fashion, they can exploit the vulnerability of the millions of pounds tied up in capital investments. The pursuit of a calculated marginal return on investments in a highly capital intensive society can be put at risk by increasingly small numbers of the work-force because the developing complexity of the division of labour rests upon domination rather than social agreement.

It may be seen that with the advance of technology and the increasing division of labour, efficient calculation and prediction in a society based upon the separation of workers from the ownership, and direction of the means of administration and decision-making is likely to become increasingly difficult.

The bankruptcy of ruling class ideology is at present matched by the bankruptcy of British capital as a whole. Its economic and Political dominance demands that it refuses wage increases in a period when both defensive and offensive strikes are occurring. The present crisis thus temporarily binds together both lower and higher paid workers within a spectrum of economic self-interest. The State faced already with inflation finds inflation accelerating under militant pressure.

INFLATION WAGES AND THE STATE

Inflation is thus the form in which the contradictions which beset the continued accumulation of capital are expressed most sharply. Yet the causes of inflation are shrouded in mystery.

As Keynes wrote a long time ago: "There is no subtler, nor surer, means of overturning the existing basis of society than to debauch the currency.

The process engages all the hidden forces of economic law on the side of destruction and does it in a manner which not one man in a million is able to diagnose."[33] Today we have an army of experts trained to make a diagnosis of inflation but no agreement on its causes or cures. As fast as new theories are proposed they prove to be discredited by events.[34]

Given the superficial ad hoc character of so much economic theorizing this is hardly surprising, for the inflation of the last twenty years is unlike any other previously experienced.

The task of diagnosis is made no easier because economists, true to their trade, generally insist on regarding inflation as a technical problem which can be solved by better management, (of demand or whatever). This has meant that the deep roots of the problem in the social process of production are rarely probed.[35]

Thus we find politicians, and, journalists frequently describing inflation as a confrontation between the wage earner on one side and the consumer on the other. The employer and the retailer apparently play only a passive role as the honest brokers between them. Both are pictured as prisoners of the decisions of the workers from whom labour power is purchased, and the consumers to whom the commodities that are turned out must be sold. If the cost of labour power or any other input rises then the price of the final article must rise too. The employer and the retailer it is claimed do no more than pass on the higher costs caused by workers using their bargaining power to get higher wages.

But if this were all there was to inflation why should it agitate the spokesmen of capital? If the employer can pass on in full any increase in his costs then he need not suffer any reduction in profit. If he anticipates the rise in wages by raising his prices first, he will even increase his profits. A moderate amount of inflation can under certain conditions actually stimulate economic growth by reducing the real value of debts and allowing faster depreciation.

The official reasons for regarding inflation as an evil are two fold. In the first place it is calamitous for all those who live on fixed incomes (as opposed to being positively beneficial for large property owners, and supposedly neutral for wage and salary earners).

In the second place it ties the price level to a labour standard rather than a gold standard.[36] Prices will rise according to how fast wages go up. Since there is no longer any clear mechanism for adjusting the price levels of different countries this means that one country may inflate faster than the others (if exchange rates remain fixed) and this in turn will cause balance of payments deficits, necessitating deflation and so interference with growth.

The first reason for resisting inflation is obviously a smoke screen. Those on fixed incomes such as pensioners and students, do undoubtedly suffer from inflation, but their incomes could be pegged to a cost of living index if their plight were really the main reason for curbing inflation. The second reason is more truthful, but it conceals as much as it reveals because of the assumptions that are built into it.

These assumptions concern the nature of the production process. Chief among them is the idea that anything which endangers the making of profits and consequently the continued accumulation of capital is against the natural order of economic life, i.e. the social relationship between capital and labour on which the capitalist mode of production is founded. So what concerns the capitalist about inflation is not that his costs are rising, but that he may not be able to pass on these increased costs by raising his prices <u>and still sell all his output</u>.

From the standpoint of capital what is worrying about inflation is not that prices are rising but the uncertainty about whether they will rise fast enough to cover costs and maintain profits.

Why should the capitalist be unable to increase his prices fast enough? The usual answer is stiffer competition. As important, however, are firstly the rise of private debt caused by the expansion of credit, and the inevitable barrier to its indefinite increase, and secondly, the threat which inflation poses to the international monetary system and therefore to the present level of international trade. Whilst various national capitalists can raise prices as wages and costs generally rise, they face the fact that there is no clear medium of international exchange. As exchange rates, whether fixed or floating, come to depend upon a labour standard, absolute measures become impossible. For exchange rates are a fiction which may or may not bear a real relationship to labour productivity or labour time. The monetary crisis of late capitalism is both a reflection of its inability to accumulate capital in a calculated predictable fashion and its dependence upon expanded credit to realize value. Mandel's clear analysis of this monetary crisis highlights the contradictions involved in abandoning gold to extend credit. He suggests that 'from the capitalist point of view the most reasonable way out of the impasse could be to bolster gold by an international reserve currency completely detached from the national economy of any capitalist country - a central bank currency administered, according to strictly objective criteria by a central bank of the central banks. But that would be a complete utopia. The realization of such a programme presupposes the existence of a world capitalist government independent of the imperialist powers; that is, the disappearance of inter-imperialist competition.'[37]

As Mandel notes, this is utopian. Indeed, the solutions to the monetary crisis that are canvassed at present are reminiscent of earlier Prodhonist plans to replace the money and credit system with a currency based on labour time. Effectively there is now a labour time standard for international exchange. But Marx has shown in the Grundrisse that such a system is bound to collapse. As Martin Nicolaus notes in his brilliant introduction to his English translation, Marx argues, 'Money serves the function - this is one of its functions - of averaging the particulars out to form a common measure or standard. To do that, money requires to be different from each of the particulars individually. If one tries to remove the means of averaging different particular labour times, but still hold to the determination of value by labour time, the result is that one man's hour-chit equals another's two-hour chit or another's half-hour chit etc.; so that the face value of the notes becomes merely imaginary, and the circulation of this 'currency' must break down in chaos and confusion.'[38]

In short, inflation is related to the crisis of profits - a crisis temporarily alleviated by State expansion and credit, yet a crisis which is rapidly leading to a breakdown of the international monetary system. These three phenomena, inflation, credit finance, and the monetary crisis are all part of the crisis of profitability.

The great merit of Andrew Glyn's and Bob Sutcliffe's recent book is that they have cut through the mystifications that surround the subject of inflation and have presented the actual crisis, the crisis of profits, not the pseudo crisis, the plight of those on fixed incomes. It is clear from their work and from recent reports of the OECD that inflation and the squeeze on profits are not confined to one country but now affect all the developed capitalist economies. All are engaged in various kinds of counter inflation policy. But what gives rise to inflation? Glyn and Sutcliffe show how militant wage bargaining has wrested a larger share of the national income away from profits before tax, but leave unsolved the question of what makes the bargaining power of labour so much stronger than ever before under capitalism. A complete explanation for inflation has to link the increased militancy with the structural crisis of modern capitalism.

The crisis of inflation today reflects both the growth of the unproductive sector, and the necessity of expanding private credit to overcome the realization problem.

The distinction between productive and unproductive labour, which is a crucial one for Marx's whole analysis, is set out most fully in 'Theories of Surplus Value', Part I. The basic distinction is this: Both kinds of labour are defined from the standpoint of capital and from nowhere else. Hence it is the economic relation that is important for Marx, not the social, ethical, aesthetic or any other kind of relation. Unproductive labour is labour that is exchanged against revenue. One can easily imagine therefore various kinds of labour which can be performed either productively or unproductively, depending on its relationship to capital. Does the labour increase capital, is it a source of surplus value, or is it a deduction from surplus value? That is the central question.

"An actor, for example, or even a clown, according to this definition is a productive labourer if he works in the service of a capitalist (an entrepreneur) to whom he returns more labour than he receives from him in the form of wages."[39]

Productive labour therefore has nothing to do with whether it is labour that produces a vendible commodity rather than a service. The material characteristics of the commodity or service that are produced are irrelevant. What matter are the social relations of production.

In Marx's day the largest group of unproductive workers was the domestic servants. Today it is workers that are employed by the State, which is financed to a large extent out of revenue, deductions from surplus value. To call teachers, nurses, doctors, civil servants, social workers, dustmen, etc., unproductive workers does not mean their services are unnecessary nor that they are no longer members of the proletariat. It merely draws attention to the fact that their labours do not increase capital, but are an expense that must be borne by it.[40]

In an earlier period the political economists spoke for the rising bourgeoisie by pointing to the existence of the unproductive class of landowners, lawyers, soldiers and courtiers, who drew their income from the labours of the productive classes, and whose expenditure was preventing a more rapid accumulation of capital. Now a new unproductive sector has appeared, but the difference is this; whereas before unproductive labour was viewed as a drain on the new mode of production, today it is recognized as necessary expenditure for this mode of production to continue.

The most visible realization of this new unproductive sector is the modern state, and it is the relation between the State and the productive sector that both keeps the latter in being and threatens its existance. It is the dynamics of this relationship that determine the course of development and the crises of our era.

The size of the modern State must constantly be borne in mind; State expenditure as a proportion of GNP rose from 13% to 27% after WWI; by 1948 it had risen to 42.4% and by 1967 it was 48.9%. The State now employs over 20% of all those in employment. Taxation as a percentage of GNP has risen from 23.2% in 1938 to 48% in 1970.[41]

As we have argued there are two ways to account for the rise of the State sector. It can be viewed as the bin for dumping increasingly vast amounts of surplus for which industry can find no profitable outlets. On this view the capitalist system has an inherent tendency, if left to itself, to stagnation and underconsumption. We find this view in the work of Baran and Sweezy, of the theorists of the permanent arms economy, as well as Keynesians of all kinds. The crucial point of reference and departure for all these theorists is the Great Depression of the 1930s. The post-war boom is interpreted in the light of the apparently hopeless stagnation of that time.

Of the major industrialised countries only two got to grips with the crisis, Germany and America. But it is clear neither was really successful. The New Deal did not prevent a new recession starting in 1938, and the only way out for Germany was the attempt to enlarge its markets and investments by force of the arms it had been producing single mindedly since 1933.

Since 1945 a very different picture appears; steady sometimes bounding growth for all the major capitalist states; general amazement at the productive forces locked away in a mode of production widely believed to have reached its limit.

But the celebrations of everlasting capitalism were held a little early. Were the new economic techniques really responsible for the new prosperity, or was the actual springboard the immense destruction of capital values in the Second World War? If the Keynesians and underconsumptionists are right it is clear that there was nothing in principle to prevent unimpeded progress, provided the State developed the right economic techniques.

Now of course in one respect the State does stabilise capitalism. But in acknowledging that we must not overlook that it destabilizes it too. It is this contradictory nature of State activity that makes us question the whole underconsumptionist thesis. If the increased role of the State was brought about merely because greater knowledge was gained of the workings of the economy, and it was understood that to avoid depressions the State had to manage demand and increase its own expenditure it is hard to see how a problem like inflation could arise.

Inflation has puzzled the armies of economists and pundits that now interpret economic events. Two main theories have been spawned (both derived from Kaynes) to account for it.[42] But we will get nowhere if we persist in regarding these theories as pure attempts at scientific explanation of a puzzling phenomenon. If we do we will understand nothing at all. Indeed the only reasonable conclusion would be that inflation is both "demand pull" and "cost push" in its origins, for both factors are so intertwined that it is generally impossible to tell them apart.

But the controversy makes more sense when we move away from the atmosphere of the repair shop and instead see these two theories as rival political economic strategies that may be adopted by Governments faced with the structural crisis in the economy that takes the form of inflation. When we do this, we can begin to understand something of the structure of modern capitalism. Moving away from an underconsumptionist view of the State sector, we begin to see the underlying cause of inflation to be not faulty demand management, but the permanent excess demand in the economy caused partly by the level of State expenditure, and partly by the constant increase in the money supply permitted by the State to finance private credit.

This does not mean that we can point to any simple relationship between changes in the size of the State sector with changes in the rate of inflation.

Nevertheless since the war the level of the State expenditure has created continual inflationary pressure which always threatens to get out of hand unless offset by counteracting factors. Chief of these are rapid economic growth and more intensive exploitation of labour. But the deteriorating performance of the British economy not only stops these coming into play but also has gradually made British industry less competitive. The direct consequence has been a declining share of profits in the national income, but the kinds of policies with which the State has responded, including increased taxation, devaluation, and incomes policies have only strengthened wage militancy. An accelerating rate of inflation has been the result.

As Glyn and Sutcliffe demonstrate, the interaction between wage pressure and international competition has squeezed profits to the bone in the late sixties. It has fallen to the State being forced to step in to restore rates of profit through the tax system, by Investment incentives, reducing company taxes and direct aid to private industry. But this has to be paid for if the State sector is to be maintained at its present levels, and under the present Governments this means an increase of taxation on wages. This is a policy, however, which cannot be extended indefinitely. Its immediate effect indeed is to increase claims for wage increases, by reducing real wages and to make accumulation still more difficult by encroaching further on the productive sector.

The debate in the ruling class on the causes of inflation is thus about the State sector. If inflation is primarily a "demand pull" phenomenon it follows that it can only be permanently contained by a drastic reduction of State activities, the elimination of the budget deficit, the exercise of monetary restraint, the deliberate creation of unemployment. This view in most of its variants regards the unions as only a marginal cause of inflation. Wage demands are but the expression of an inflationary situation, the mechanism by which excess demand is translated into higher prices. The secret of controlling it is therefore to restore the responsibility for resisting wages to individual employers. They will be forced to resist because once there is no longer excess demand in the economy, which would allow price rises, and no more government handouts to industry through the tax system, then to grant wage increases the company could not afford would mean bankruptcy. Thus the old economic law of capitalism would be restored - discipline would once again be imposed by the market and no longer by the State.

This strategy is that of Powell and sections of the Tory party. The alternative strategy uses variants of the cost push theory, which accepts, for practical purposes, the level of State expenditure and hence the size of the State sector as it exists at the moment, and therefore generally denies that this has anything to do with inflation. On the contrary, true to its underconsumptionist leanings, this theory assumes that, were the level of State expenditure cut, private investment would not expand, so slump and depression would ensue. It therefore regards the level of State expenditure as necessary for prosperity and accumulation to continue. The cause of inflation is ascribed to the monopoly power of firms and unions which enable them to cause a wage price spiral. In certain conditions, however, such a spiral is thought disastrous because it makes exports noncompetitive. The solution is control of wages, through incomes policies, in order to align them with productivity. An incomes policy is expected to work by educating the unions and employers into a true understanding of the 'facts' about the economy and the sacred truth that inflation is caused when wages rise faster than productivity. Such are the daily ideological vapourings we read in the liberal press.

So on the one hand one section of the ruling class urges a return to the discipline of the market, a discipline it knows can only be re-established by cutting back the State, whilst another has moved steadily to advocating the conquest of inflation by the control of wages at source, and thus the restriction of free collective bargaining. Each grasps one side of the problem. Powell for instance is above all concerned to break asunder the State and the economy, not because he is merely some romantic Victorian daydreamer, but because he believes that the relationship increasingly imperils the survival of capitalism by undermining the impersonality of the market. His opponents, however, see no practical way of reducing the State sector. Tory Governments are elected with pledges to cut back State expenditure drastically and in office are soon muttering about economies and cost effectiveness, and the leval of government spending goes on rising. The cost push theory is a convenient ideological tool for the ruling class for it turns attention away from the level of Government spending towards the control of wages. But since wage demands are not in fact the root of inflation but only the scapegoat, the State becomes steadily committed to greater and greater intervention in the economy in order to make labour and not profits suffer from the effects of the inflation its own spending generates.

But the adoption of incomes policies drives the capitalist State in directions it would not choose to go. The rising organic composition of capital shows itself as the steady decline of living labour in the productive sector. The number of unproductive workers, which includes all those in the direct employment of the State and also workers in nationalized industries which run at a loss, has grown. One way they differ from productive workers is that increases in their productivity are difficult, often impossible, to measure. The wages of productive workers, however, in high productivity industries appear increasingly arbitrary in relation to the continual increases in productivity, for wages are here a shrinking portion of capital costs. Yet traditionally the wages of those in the State sector are compared to the wages in outside industry. The whole edifice of wage rates and wage differentials for productive and unproductive workers alike rests upon the exchange value of living labour. The dam cannot be allowed to crack at this point. So one of the aims of incomes policies is to nationalize the increase in productivity and spread it around first between wages and profits, secondly, between different groups of wage earners, so as to keep the existing structure of wages in being.

In an inflationary situation, however, where many employers, especially those with capital intensive plants, would be only too willing to pay higher wages, the Government is forced to take tougher and tougher measures to restrain headlong wage inflation. It is a phenomenon noted by the authors of the recent Cambridge study on inflation, that when the annual rate of price inflation goes above 10% an important threshold is reached. For as they suggest: "In the equilibrium - inflationary economics, social and industrial conflict is mostly about the distribution of the yearly (marginal) additions to the national product: the basic distribution of income, whether between social classes or economic groups remains relatively stable from year to year. But in the strato inflations, social conflict centres on the basic distribution of income itself."[43]

Faced by the acceleration of inflation, the Government has an unpalatable choice. Short of an attempt to restore free competitive capitalism and drastically restrict its own activities, the State has two basic remedies to the wage offensive:- direct control of wages and conditions, and restoration of profit margins by redistributing national income to profits through taxes. Both have appeared together under the last two Governments. Control of wages at source however cannot ultimately be successful until the trade union movement is completely shackled. Redistribution of income from the poor to the rich via taxation has eventual limits, and in any case involves the State gradually taking over more and more from private capital the responsibility for maintaining profits and accumulation.

State destruction of the trade union movement took place in Nazi Germany. Industry became State run for private account, labour was militarised, wage rates rose 8% between 1933 and 1937, prices rose 25%. The share of wages in National Income rose from 17.4% in 1932 to 25.4% in 1937.[44] But it is very difficult for the State to run an economy for private account if consumer demand is a large part of effective demand, because this means that real wages must be high. Nazi Germany operated a subsistence wage economy geared to the production of armaments. This met the interests of the leading sections of German capital. Today consumer capitalism rules this out for the advanced industrial states. Real wages must be maintained and in the long term increased, unless the structure of industry is to be drastically altered. How can the balance be held? Ernest Mandel has written: "the dilemma confronting the State in the age of declining capitalism is the choice between crisis and inflation".[45] The choice of "crisis" the deliberate creation of unemployment on a massive scale would be electoral suicide for which ever political party willed it. It would also seriously damage the hopes of British capital for expansion in the Common Market. Since the war all the parties that have manned the capitalist State apparatus have chosen to use the State and credit to ensure prosperity and so inflation. But inflation, as we have seen, can unleash a struggle for shares in the national income that threatens any weak capital with extinction, at the same time that an enlarged State sector and a falling rate of profit makes accumulation more difficult. Today even three, four, five per cent unemployment does not discipline the labour force and reduce their wage demands. The State is obliged to step in directly to confront the working class on behalf of capital. The political struggle is beginning in earnest.

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indebted to those people who after hearing the Lecture or reading it in draft contributed a number of empirical and theoretical suggestions which have led us to alter the argument and its presentation in some important respects.

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21. R. Blackburn "The Heath Government: A New Course for British Capitalism" NLR 70.

22. A. R. Prest & D. J. Coppock ed. 'The UK Economy A Manual of Applied Economics' Fourth Edition London Weidenfeld & Nicholson 1972 p. 118.

23. Ibid p. 113.

24. OECD 'The Growth of Output' 1960-1980, 1970, p. 220.

25. London and Cambridge Economic Service. 'The British Economy.' Key Statistics 1900-1970.

26. D. Jackson, H. A. Turner, F. Wilkinson: "Do Trade Unions Cause Inflation?" Cambridge 1972.

27. Ibid p. 37.

28. This information along with much critical and helpful advice for this section has been obtained from John Westergaard and Henrietta Resler.

29. See especially R. Blackburn op. cit. and T. Nairn "Enoch Powell: The new Right" NLR 61 May-June 1970.

30. "The Ford Claim 1973." London 1973.

31. Jackson, Turner, Wilkinson, op. cit., p. 86.

32. cf. forthcoming article by Greg Philo and Paul Walton 'Max Weber: on efficient domination and self interest' Social Theory and Practice June 1973.

33. J. M. Keynes "The Economic Consequences of the Peace" London Macmillan 1919, p. 220.

34. The most striking recent example is F. W. Paish's theory of the relationship between wage rates and excess capacity, which he based on the Phillips curve. This curve no longer allows accurate prediction. Unemployment and Wage rises have soared together. See. F. W. Paish "Studies in an Inflationary Economy," London Macmillan 1962. Turner et. al. op. cit. A. R. Prest & D. J. Coppock op. cit. pp. 35-42.

35. An exception is V. L. Allen's far sighted book "Militant Trade Unionism" London Merlin 1966. See in particular the section on the structural causes of inflation.

36. Cf. J. R. Hicks "Economic Foundations of Wages Policy" Economic Journal 1955.

37. E. Mandel 'Decline of the Dollar: A Marxist view of the Monetary crisis' New York 1972, p. 94.

38. M. Nicolaus 'Foreword' to Marx 'Grundrisse', London 1973, p. 15.

39. K. Marx 'Theories of Surplus Value' Part I, p. 157.

40. We are aware that there are considerable problems of measurement of many of the variables of Marxist economics. The difficulties are twofold. In the first place statistics are not collected in ways that allow them to be used for empirical testing of Marxist theories. In the second place the level of abstraction of many of the concepts means that no direct empirical measurement can be expected. This is true of all scientific paradigms. This does not however mean that one cannot operationalise the concepts and find ways of measuring all of the categories central to Marxist economies. One of the weaknesses of Marxist economists has been the lack of trained econometricians in their ranks. Such measurements would simply depend on a number of working assumptions which would have to be clearly stated and therefore open to review. For example, productive/unproductive workers - when examining and utilising such a distinction in a mathematical manner one would not simply have all the difficult problems of double accounting, but one would have all the difficult decisions of deciding what was to count as a contribution to the accumulation of capital and what was not. Such a distinction is especially difficult to make when examining the State sector for although most workers will be unproductive in the technical sense it may be the case that either their work is a necessary prerequisite for any accumulation; (e.g. coal extraction where industrial capital depends upon coal as a fuel resource) or such work may be necessary for capital accumulation in the broader competitive sense (e.g. training and education of scientists in one country may differ from the size of investment in the education sector in another and may produce marginal differences in the rate of technological innovation and thus in the respective competitiveness of competing capitals).

41. Sources: M. Barratt Brown, "What Economics is About," London Weidenfeld 1970 and A. Shenfield "Trial by Taxation" ex R. Boyson ed. "Right Turn" London Churchill 1970.

42. For a useful collection of articles on the debate see R. J. Ball and P. Doyle "Inflation" Penguin 1969.

43. Jackson, Turner, Wilkinson op. cit., p. 37.

44. E. Mandel, 'Marxist Economic Theory,' London Merlin 1968 p. 537 Introduction to Leon Trotsky "The Struggle against Fascism in Germany" New York Pathfinder 1971, p. 30.

45. E. Mandel, 'Marxist Economic Theory,' p. 532.

SOME PROBLEMS IN THE THEORY OF CAPITAL ACCUMULATION

Paul M. Sweezy

A recent article by Mario Cogoy contains an interpretation of Marx's theory of capital accumulation which appears to be shared, with variations by a growing number of other Marxist economists.[1] This is a complicated and difficult problem which I have no intention of trying to treat exhaustively in a brief essay. But there are a number of basic points of view expressed or implied in this literature which seem to me erroneous, potentially seriously misleading, and hence in need of explicit criticism.

First, however, since the work of the late Paul Baren and myself (especially but not exclusively our joint book Monopoly Capital) are a favourite target of the authors referred to, I must clear up a misunderstanding which seems to be common to all of them. This is that Baran and Sweezy, like Joan Robinson and other left Keynesians, reject Marx's theory of value. I can assure them that this is simply not so. At no time in our long period of close association and collaboration did it ever occur to Baran and me to call in question, let alone reject, the labor theory of value as elaborated by Marx and as we understood it. In this connection let me quote two points emphasized by Cogoy (p. 398) as being opposed to Neo-Marxism, a category in which he includes Baran and Sweezy:

> (a) The theory of value is an instrument for the analysis of accumulation and total social reproduction. It is not a theory of relative prices; the academic critiques directed at the theory of value (and in particular that which considers that the monopolistic structure of the market has abolished the conditions for the validity of the theory of value) rest on a fundamental incomprehension of Marxist theory: they attribute the central role to empirical exchanged relations (prices), while for Marx it is the social relations of production (wage labor-capital) which are the true objects of the theory of value.
>
> (b) Not only is the theory of value not modified by state intervention into the economy and by the development of waste, but rather the function of the state and the growth of the unproductive sector flow from the dealectic of value and of the laws of capital accumulation.

Cogoy will perhaps be surprised to learn that I entirely agree with both these points, and I commend him for stating them so clearly and concisely. At the same time, I would hope that he will agree with me that the theory of value in its most abstract expression, i.e., as elaborated in Volume 1 of Capital, is not the final form of the "instrument" he is talking about. There are two issues involved here: (1) the dropping of the assumption that all industries have the same organic composition of capital; and (2) the introduction of monopolistic market structures. Let us consider them in turn.

1. In reality of course the organic composition of capital varies widely from one industry to another. Once this is taken into account, as Marx showed in Part II of Volume 3, we move from values to prices of production. Bourgeois economists from Böhm-Bawerk on have seen in this a contradiction and an abandonment of the Marxian value theory. This view is absolutely incorrect. Prices of production are not what Cogoy calls "empirical exchange relations" but modified values: without the theory of value there could be no theory of prices production. The question then arises as to whether the passage from values

(Volume 1) to prices of production (Volume 3) brings with it significant changes in the accumulation process. And the answer is definitely that it does not.[2] It follows that in discussing capitalism's overall laws of motion one is fully justified in ignoring prices of production and operating directly with the theory of value and accumulation as developed in Volume 1.

2. Matters are different when it comes to taking account of monopoly. Marx himself did not take this step in any systematic way, in spite of the fact that in his dynamic theory (in this respect totally different from orthodox neoclassical theory) competition of capitals is virtually identical with the concentration and centralization of capitals. The period of monopoly capitalism was just beginning at the time of his death, and it is not surprising that he produced no theory of the transformation of values (or prices of production) into monopoly prices. However, there is one very striking passage near the end of Volume 3 which permits us to see that he was fully aware of the problem and to surmise some of the ways he would have handled it. In a chapter entitled "The Semblance of Competition," he wrote that

> if the equalization of the surplus value into average profit meets with obstacles in the various spheres of production in the shape of artificial or natural monopolies, particularly of monopoly in land, so that a monopoly price would be possible, which would rise above the price of production and above the values of the commodities affected by such a monopoly, still the limits imposed by the value of commodities would not be abolished thereby. The monopoly price of certain commodities would merely transfer a portion of the profit of the other producers of commodities to the commodities with a monopoly price. A local disturbance in the distribution of the surplus value among the various spheres of production would take place indirectly, but they would leave the boundaries of the surplus value itself unaltered. If a commodity with a monopoly price should enter into the consumption of the laborer, it would increase the wages and thereby reduce the surplus value if the laborer would receive the value of his labor power the same as before. But such a commodity might also depress wages below the Value of labor power, of course only to the extent that wages would be higher than the physical minimum of subsistence. In this case the monopoly price would be paid by a deduction from the real wages (that is, from the quantity of use values received by the laborer for the same quantity of labor) and from the profit of other capitalists.[3]

Here Marx treats monopoly price not as a mere "empirical exchange relation" but as a modification of value and/or price of production which in no sense transcends "the limits imposed by the value of commodities." But this does <u>not</u> mean what many of today's younger Marxist economists seem to assume, that the presence or absence of monopoly makes no difference to the accumulation process. I believe it can be shown that in this crucially important respect, the modification of values brought about by the introduction of monopoly is quite different from the modification of values brought about by the introduction of unequal organic compositions of capital.

Marx does not analyze the effects of monopoly on the accumulation process, but the above passage provides valuable guides. Monopoly does not change the total <u>amount</u> of value produced - except indirectly to the extent that it affects the total volume of employment - but it does bring about a <u>redistribution</u> of value. Marx indicates that this can take two forms: first, a transfer of surplus value from competitive to monopolistic capitals; and second, a transfer of value from wages to surplus value. If we are talking about an isolated instance of monopoly, as Marx seems to be doing in the quoted passage, these effects would be obviously be of negligible importance in relation to the economy as a whole. In this case it is not only justified but necessary to abstract from monopoly in the analysis of the accumulation process, which of course is what Marx does. But as soon as monopoly seizes hold of quantitatively significant sectors of the economy, this is obviously no longer so. Then, following Marx's line of reasoning, we would have to say that the total of surplus value increases relative to the total of wages (this is also equivalent to an overall rise in the rate of surplus value), and that more of this larger total of surplus value is concentrated in fewer hands. Both of these changes would obviously tend to raise the rate of accumulation.

If we leave the matter there, however, we would be guilty of treating the problem in a static, and hence completely un-Marxian, way. We know that a fundamental aspect of the accumulation process is the concentration and centralization of capital which, at a certain stage, brings about the transformation of competitive capitalism into monopoly capitalism. But concentration and centralization do not cease at this point: both theory and historical experience teach that they form an integral and inseparable part of the whole accumulation process from beginning to end. What we have to deal with, therefore, is not simply an economy which contains <u>elements</u> of monopoly but an economy which is becoming <u>increasingly more monopolized</u>. And this creates powerful tendencies, which are not present in competitive capitalism, for the rates of surplus value and accumulation to rise (the latter not only because of the rising rate of surplus value but also because of the concentration of surplus value in larger and larger units).[3a] These tendencies of course operate along with other tendencies of a social and technological character, and there is no <u>a priori</u> way to say which one or which combination will predominate. But I for one have no hesitation in saying that to refuse to take account of these "monopolistic" tendencies and the forces which generate them can only have the effect of paralyzing Marxian theory at a time when what is most needed is further to strengthen and develop it to cope with situations and problems which Marx did not and could not analyse a hundred years ago.

Let me now turn to another aspect of the literature typified by the works of Cogoy and Yaffe cited above, i.e., a tendency toward what I consider to be the fetishization of the falling tendency of the rate of profit. Cogoy for example speaks approvingly (p. 398) of "a theory of accumulation which rests on (<u>s'appuie sur</u>) the tendential fall of the rate of profit," a formulation which obviously transforms a deduction from the theory of accumulation into its foundation. And while the other authors in question may not be quite so specific, they nevertheless all treat the falling tendency of the rate of profit as the pivot around which the whole Marxian theory of accumulation and crises revolves. This subject deserves much fuller treatment than can be accorded to it in a brief essay: I will try only to indicate some of the main points which need elaboration.

Basically there are two issues here. The first has to do with the logic and interpretation of the theory of the falling tendency of the rate of profit as such. The second concerns its role in the overall theory of accumulation.

If we denote the rate of profit (the ratio of surplus value to total capital) by p, the rate of surplus value (the ratio of surplus value to variable capital) by s', and the organic composition of capital (the ratio of constant to variable capital) by o, then we have $p = \frac{s}{c + v}$, $s' = \frac{s}{v}$, and $o = \frac{c}{v}$. Dividing the numerator and denominator in the expression for the rate of profit by v, we get

$$p = \frac{\frac{s}{v}}{\frac{c+v}{v}} = \frac{\frac{s}{v}}{\frac{c}{v} + \frac{v}{v}} == \frac{\frac{s}{v}}{\frac{c}{v} + 1} = \frac{s'}{o + 1}$$

from which it follows that the rate of profit varies directly with the rate of surplus value and inversely with the organic composition of capital.

The theory of the falling tendency of the rate of profit is given formal expression by Marx in Part III of Volume 3 of Capital, but the essential elements are worked out much more fully and satisfactorily in Part IV ("Production of Relative Surplus Value") and Part VII ("The Accumulation of Capital") of Volume 1. The kernel of the argument is that capitalists in pursuing their unchanging goal of increasing the amount and rate of surplus value progressively mechanize the processes of production. The consequence is twofold: the amount of machinery per worker increases, and each worker operating machines processes more raw and auxiliary materials than a worker using more primitive methods. Both effects contribute to increasing the amount of constant capital relative to the amount of variable capital, i.e. to raising the organic composition oc capital. At the same time, of course, the productivity of the worker is increased, which means that he now reproduces the value of his labor power in less time and therefore has more time left over to work for the capitalist, which is only another way of saying that the rate of surplus value rises. The law of the falling tendency of the rate of profit asserts that in the long run there is a strong and persistent tendency for the rise in organic composition of capital to outweight the rise in the rate of surplus value in their opposite effects on the rate of profit, hence for the rate of profit to fall.

Why did Marx feel so sure that the organic composition of capital must rise relatively faster than the rate of surplus value? For my part I have no doubt that the reason is that this is precisely what happened during the period of the industrial revolution beginning in the eighteenth century and still continuing at the time in the 1850s and 1860s when he was working on Capital.[4] The transition from manufacture to machinefacture manifestly represented a quantum leap forward in the relative importance in industry of constant capital (or dead labor) compared to variable capital (or living labor). The rate of surplus value of course also increased sharply - this indeed is what the introduction of machinery was all about - but it was obvious to Marx, who was an extremely close student of all aspects of capitalist reality, that the relative increase in the organic composition had been the dominant trend in the preceding century. It was only natural, therefore, for him to assume that this would continue to be the case in the future.

What has to be emphasized, in contrast to the views of the present-day Marxist economists with whom we are here concerned, is that while it was perfectly natural for Marx to make this assumption - indeed, given what he knew, what other assumption could he possibly have made? - it was not something which was logically dictated by his theory of accumulation. From the point of view of the capitalist there is obviously no inherent virtue in increasing the organic composition of capital: he does it only because that is the way to increase the rate of surplus value. But if he can see ways to increase the rate of surplus value while at the same time economizing on constant capital, he will of course be delighted to avail himself of them. And whether or not this is possible depends not at all on the "concept of capital" (as Yaffe seems to believe[5]) but on the direction and potentialities of technological change. And in this respect the situation of an already mechanized economy is significantly different from that of the mechanizing economy of Marx's day. The problem for the capitalist is no longer so much that of substituting machines for hand labor but rather of substituting more productive machines and processes for less productive machines and processes all along the line.[5a] And there is no a priori reason whatever for supposing that this must involve an increase (or a decrease either for that matter) in the organic composition of capital.

The only way this question can be decided is through the empirical study of capitalist practice, such as this view may offend those like Yaffe who wish to deduce everything from "pure" theory. And in this respect there are available by now numerous studies which demonstrate beyond a reasonable doubt that while the organic composition of capital rose in accordance with Marx's assumption through the nineteenth and into the twentieth century, for the last half century the tendency has been in the other direction. Most of these studies have been carried out by bourgeois researchers using non-Marxian concepts and categories, with a consequent problem of translating their findings into the language of Marxism. But at least one, that of Joseph Gilman, is the work of a Marxist economist, and its findings are unequivocal: the organic composition of capital in the United States rose up to 1919, levelled off in the 1920s, and thereafter declined (except for the early 1930s when the trend was temporarily obliterated by the unprecedented severity of the Great Depression).[6] Gilman's statistical procedures have been justifiably criticized, but so far as I am aware no one has suggested that his basic findings would have been different had all the criticisms been fully met.

It is no part of my intention in these brief notes to suggest that from now on the organic composition of capital in the advanced capitalist countries can only fall, still less to undertake a comprehensive critique of Marx's law of the falling tendency of the rate of profit. But I do want to contend, emphatically, that underlying the entire argument of Cogoy, Yaffe, and others who think like them is an absurdly untenable notion, i.e., that the capital accumulation process necessarily implies a runaway organic composition of capital, increasing without assignable limit and much more rapidly than the rate of surplus value.[7] Whatever else may be said about Gilman's statistics, they are surely accurate enough in indicating orders of magnitude to demolish this notion as totally unfounded. They show that in the United States during the three decades 1923-1952 the organic composition (c/v) fell from 4.2 to 3.6 (by 14 percent), while the rate of surplus value s/v) rose from 121 to 132 (by 9 percent). Not only do these results not conform to the expectation of the falling tendency law; even more important from our present point of view, these ratios move within quite narrow limits and so cannot possibly sustain the grand generalizations which our authors wish to rest upon them.

In this connection - and here we come to the second point noted on p. 27 above for subsequent analysis - it is necessary to understand the argument which is being deduced from the theory of the falling tendency of the rate of profit in this recent literature. A comparison with the classics and Marx may prove helpful.

The classical theory of the falling rate of profit rested on two supposed natural laws, the law of diminishing returns and the Malthusian population law. With wages relatively fixed at or near the subsistence minimum and with population expanding under the stimulus of capital accumulation, it is necessary to have recourse to progressively inferior land. The consequence is that more and more of the surplus product (over and above that which goes to the laborers) must be paid out by the capitalists to the landlords. Rent rises and the rate of profit falls, eventually to the point where total profit also begins to decline. At some point in this process the rate of profit falls so low that the incentive to further accumulation is extinguished. This was the nightmare which haunted the classical economists who, no less than Marx, regarded capitalism as quintessentially a process of capital accumulation. To be sure, John Stuart Mill tried to soften the blow by picturing the "stationary state" which would emerge when capital accumulation stopped as a rather more attractive condition than the frantically expanding capitalism of Victorian England, but in taking this tack Mill really only revealed his incipient apostatism from the ranks of loyal bourgeois ideologists. For them there was no doubt that the end of accumulation would be effectively the end of capitalism, and this is why classical political economy earned for itself the name of the "dismal science."

It is clear that Marx was fascinated by this aspect of the thought of the classical political economists. In one passage he wrote:

> Those economists who, like Ricardo, regard the capitalist mode of production as absolute, feel nevertheless that this mode of production creates its own limits, and therefore they attribute this limit not to production but to nature (in their theory of rent). But the main point in their horror over the falling rate of profit is the feeling that capitalist production meets in the development of productive forces a barrier which has nothing to do with the production of wealth as such; and this peculiar barrier testifies to the finiteness and the historical, merely transitory character of capitalist production. It demonstrates that this is not an absolute mode for the production of wealth, but rather comes in conflict with the further development of wealth at a certain stage.[8]

And again:

> The rate of profit is the compelling power of capitalist production, and only such things are produced as yield a profit. Hence the fright of the English economists over the decline of the rate of profit. That the bare possibility of such a thing should worry Ricardo shows his profound understanding of the conditions of capitalist production. The reproach moved against him, that he has an eye only to the development of the productive forces regardless of "human beings," regardless of the sacrifices in human beings and capital <u>values</u> incurred, strikes precisely at his strong point. The development of the productive forces of social labor is the historical task and privilege of capital. It is precisely in this way that it unconsciously creates the material requirements of a higher mode of production. What worries Ricardo is the fact that the rate of profit, the stimulating principle of capitalist production, should be endangered by the development of production itself. And the quantitative proportion means everything here. There is indeed something deeper than this hidden at this point, which he vaguely feels. It is here demonstrated in a purely economic way, that is, from a bourgeois point of view, within the confines of capitalist understanding, from the standpoint of capitalist production itself, then it has a barrier, that it is relative, that it is not an absolute but only a historical mode of production corresponding to a definite and limited epoch in the development of the material conditions of production.[9]

Much of Marx's discussion of the falling tendency of the rate of profit is in a similar vein. He regarded it as a significant and striking contradiction of capitalism that the increase in the productive power of labour should express itself in a manner tending to obstruct the unfettered development of the system. But he did not formulate a specific theory of crises, let alone capitalist breakdown, on this basis; and he was careful to make the point that he was not _predicting_ an actual fall in the rate of profit but was dealing only with a _tendency_ which, like other tendencies, was opposed by various counteracting causes. For Marx, the falling tendency of the rate of profit was a manifestation of only one of capitalism's many contradictions, and I see no reason to believe that he would have considered the system to be any more viable had he foreseen that the future direction of technological change would mitigate or even eliminate this particular contradiction in the form which it assumed in the period of the transition from manufacture to modern industry.

Matters are different in the case of the theorists with whom we are here dealing. For them, the falling tendency of the rate of profit is the central contradiction of the accumulation process. Problems of realization and underconsumption (and/or overproduction) are _derived_ from the theory of the falling tendency of the rate of profit and have _no independent existence_. The following passage from Cogoy's article is representative of the position held by all these authors:

> If the increase in the organic composition is not counterbalanced by an increase in the rate of exploitation, the rate of profit will have a tendency to fall. If exploitation does not increase, it is no longer possible to produce a sufficient quantity of surplus value for the continued expansion of capital (_pour la mise en valeur du capital_), and the conditions case to be fulfilled which alone permit, in a regime of capitalism, production for consumption.
>
> As Mattick demonstrates, Marx was not an underconsumption theorist, because the overproduction of goods and the decline of consumption are manifestations of the contradiction of capitalism rather than its causes. For Marx, in effect, the result of the process described above is certainly also a fall of consumption, but this effect is produced by a path different from that described by Joan Robinson. The starting point of the depression process is not, for Marx, on the side of consumption but on the side of the expansion (_valorisation_) of capital which cannot take place because of the tendential fall in the rate of profit.[10]

It would seem to follow from this line of reasoning that any questioning of the general and universal validity of the falling tendency of the rate of profit for all capitalist societies in all stages of their development is tantamount to saying that capitalism's contradictions are only relative and under certain conditions may even disappear. Since the authors in question obviously do not want to be forced into this position, they are obliged to assert the validity of the law of the falling tendency of the rate of profit in the most absolute way possible. And in the course of doing so they have recourse to some rather strange arguments. I quote Cogoy again:

> The formula for the rate of profit ... shows that the fall in the rate of profit can be checked by raising the rate of exploitation or by maintaining the same organic composition. In other words, capitalist development cane take place on condition that it seizes all opportunities to brake the fall in the rate of profit. Empirical data purporting to prove the maintenance of the rate of exploitation or of the organic composition therefore do not prove either the truth or the falsity of this law. They are rather the provisional result of the effort put forward by the system to maintain its variables in a constant relation or to make them vary according to precise proportions with a view to avoiding the fall in the rate of profit. Marx does not consider these variables as data which should be the starting point of the analysis, but rather as the resultants of the

> social forces which underlie them and which it is the task of analysis to reveal. In this sense the central task of modern Marxist political economy is to analyze how, up to a point, the social system of production provisionally organizes itself with a view to maintaining certain variables at the required level in conditions of rapid technological development with strong capital intensity...
>
> The Marxist law of accumulation and of the tendential fall of the rate of profit ... does not express empirically verifiable relations from which the analysis can begin. The fall of the rate of profit, seen as a tendency of the system to depart from the narrow path of growth can never manifest itself empirically except in crises. It is the negative rule of capitalism; it represents the shoals to be avoided if capital is to be able to continue to be accumulated without shocks.[11]

It will be seen that Cogoy sets up a strawman by introducing the notion of the rate of exploitation and the organic composition as "empirically verifiable relations from which the analysis can begin." Those of us who question the universal (for capitalism) validity of the law of the falling tendency of the rate of profit obviously entertain no such ridiculous idea. Moreover, I imagine that most if not all of us would agree that these variables "are the resultants of the social forces which underlie them and which it is the task of analysis to reveal." But Cogoy should ask himself what these social forces are before assuming, as he evidently feels entitled to do, that they naturally and normally operate in such a way as to produce a falling rate of profit, for it is precisely this assumption which we maintain cannot be justified.

What, then, are these forces? They are many and interrelated in complicated ways: here we can do no more than mention the most important. First, there are the forces (including, according to Marx, historical and moral elements) which determine the value of labor power. Second, there are science and technology which govern the productivity of labor and the composition of capital. And third there is the class struggle which controls the length of the working day and the intensity of labor, and which is also of course a co-determinant of the value of labor power. Marx studied all these forces, historically and empirically, on the basis of the data available to him more than a hundred years ago. He reached certain conclusions which he formulated as capitalism's "laws of motion," including the law of the falling tendency of the rate of profit and its counteracting causes. The question I would like to put to Cogoy and the others who think like him is this: Do you maintain that these laws were established once and for all by Marx, and that they are invariant to changes in the forces which underlie them, and that there is therefore no reason for us to follow Marx's example in studying capitalist reality and drawing our own conclusions from our studies?

If the answer is yes, if these theoriests really believe that Marx said the last word on capitalism's laws of motion, then I for one can only say that I cannot take them seriously. Their Marxism has degenerated into a sterile orthodoxy which cannot help us to understand and deal with the problems of capitalism in the last third of the twentieth century.

On the other hand if one rejects the notion that all of Marx's laws are as valid as they were in his time, and if one concluded on the basis of the data available to us today that the law of the falling tendency of the rate of profit is no longer operative, then one must conclude that an analysis of accumulation which, in Cogoy's expression, "rests on the tendential fall of the rate of profit" is doomed from the outset to futility. And it follows of course that one must pursue a different course in seeking to unravel the contradictions of the accumulation process. How this can be done was indicated very clearly by Marx himself in the same part of Volume 3 which is devoted to the falling tendency of the rate of profit. Here is the relevant passage:

> The conditions of direct exploitation and those of the realization of surplus value are not identical. They are separated logically as well as by time and space. The first are only limited by the productive power of society, the last by the proportional relations of the various lines of production and by the consuming power of society. This last-named power is not determined either by the absolute productive power or by the absolute consuming power, but by the consuming power based on antegonistic conditions of distribution, which reduces the consumption of the great mass of the population to a variable minimum within more or less narrow limits. The consuming power is furthermore restricted by the tendency to accumulate, the greed for an expansion of capital and a production of surplus value on an enlarged scale. This is a law of capitalist production imposed by incessant revolutions in the methods of production themselves, the resulting depreciation of existing capital, the general competitive struggle, and the necessity of improving the product and expanding the scale of production for the sake of self-preservation and on penalty of failure. The market must therefore be continually extended so that its interrelations and the conditions regulating them assume more and more the form of a natural law independent of the producers and become ever more incontrollable. This internal contradiction seeks to balance itself by an expansion of the outlying fields of production. But to the extent that the productive power develops, it finds itself at variance with the narrow basis on which the condition of consumption rests. On this self-contradictory basis it is no contradiction at all that there should be an excess of capital simultaneously with an excess of population. For while a combination of these two would increase the mass of the produced surplus value, it would at the same time intensify the contradiction between the conditions under which this surplus value is produced and those under which it is realized.[12]

Some people have called the kind of theory toward which this passage points "underconsumption." the designation is perhaps unfortunate since it singles out for emphasis one strand of a complex whole. A better description might be to call it a theory which centers on the contradiction between the capacity to produce and the capacity to consume of a society organized on capitalist lines. <u>This</u> contradiction - but not the falling tendency of the rate of profit - is in fact already implicit in the concept of capital as self-expanding value. Capitalism's utopia in a sense is a situation in which workers live on air, allowing their entire product to take the form of surplus value and in which capitalists accumulate all their surplus value. This would represent the maximum conceivable rate of expansion of capital. But, alas, it would also represent the total abolition of value as such, since the aggregate of commodities produced, not entering into human consumption, would lack use value without which there can be no value.[13] The ultimate contradiction of capitalism is that it strives with might and main to reach this utopia, acting in the process as though use value were only an obstacle to its success; but the closer it seems to approach, the more imperatively does use value assert its character as the alter ego of the very value which is the object of the frantic efforts at expansion.[14]

This contradiction between the power of production and the power of consumption, between self-expanding value and contracting use value, vents itself in crises and stagnation which capitalism seeks to overcome not through producing what the workers need to live decent lives (that would be to negate its own nature), but by creating irrational and inhuman modes of consumption more in keeping with the spirit of capital.

I believe that it is along these lines that a fruitful analysis of the accumulation process must proceed. It will be noted that the central contradiction between the power to produce and the power to consume grows in severity with the increasing productivity of labor and the rising rate and volume of surplus value which characterize advanced capitalist societies. It is in this context that the monopolistic tendencies discussed above - acting to raise both the rate of surplus value and the rate of accumulation - take on their greatest significance. It is only under conditions of fully developed monopoly capitalism that lagging consuming power threatens to plunge society into a profound and permanent stagnation and hence gives rise to the most monstrous and destructive forms of forced consumption.[14]

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REFERENCES

1. Mario Cogoy, "Les Theories Neo-Marxistes, Marx et l'Accumulation du Capital," Les Temps Modernes, Septembre-Octobre 1972, pp. 396-427. Another recent example is David S. Yaffe, "The Marxian Theory of Crisis, Capital and the State," Bulletin of the Conference of Socialist Economists, Winter 1972, pp. 5-58. Both Cogoy and Yaffe pay tribute to the work of Paul Mattick who perhaps deserves to be called the dean of this school of thought.

2. For a demonstration of this, see my Theory of Capitalist Development (first published in 1942), pp. 125-130. Only if there were a systematic tendency for the organic composition of capital to develop differently in different sectors of the economy (means of production, wage goods, luxury goods) would it be possible to argue that the accumulation process in an economy of prices of production would differ significantly from that in an economy of values. I know of no suggestion, let alone proof, that there is any such systematic tendency for the organic composition to differ in different sectors. Unfortunately, some Marxist economists have never understood what is involved in the transformation of values into prices of production and have continued to treat it as a real process with important consequences for the functioning of the system. See, e.g., James F. Becker, "On the Monopoly Theory of Monopoly Capitalism," Science & Society, Winter 1971; and Michael A. Lebowitz, "The Increasing Cost of Circulation and the Marxian Competitive Model," Science & Society, Fall 1972.

3. Capital, Kerr ed., Vol. 3, pp. 1003-1004.

3a It might be objected that monopoly prices cannot raise the rate of surplus value except through depressing wages below the value of labor power, and that this would be an essentially unstable and temporary effect. This objection, however, fails to view monopolization as a process which must be considered historically and as an integral part of the accumulation process as a whole. While at any particular time the value of labor power can be treated as a given, over a period of time it tends to rise. (There are several reasons for this, the most important of which are increasing costs of production of labor power and the workers' struggle to improve their standard of living.) In this context growing monopolization must be seen

not as depressing the value of labor power but as impeding the rise in the value of labor power. To this extent it favors capital against labor by raising the rate of surplus value above what it otherwise would have been.

4. On Marx's relation to the industrial revolution, see "Karl Marx and the Industrial Revolution," in P. M. Sweezy, Modern Capitalism and Other Essays, New York, 1972, pp. 127-146.

5. Cf. the following statement: "What we have tried to show from an examination of the concept of capital is the necessity of ... replacing on an increasing scale living labor by objectified (dead) labor. It follows from this that both the technical composition of capital and the organic composition of capital must increase in the process of capitalist production." Yaffe, Op. Cit., p. 19. There is not the slightest justification for this view. Nothing follows from the concept of capital except that capital is self-expanding value. This is the beginning of any serious analysis of capitalism, but no deductions or conclusions can be drawn from it without the introduction of further assumptions which are either dreamed up out of nowhere (in the manner of present-day neoclassical economics) or are historically and empirically based, as in the case of Marxism. Yaffe and others who pride themselves on their Marxian orthodoxy are simply accepting and attributing universal validity to assumptions derived from nineteenth-century reality. That this is the way to stultify rather than develop Marxism as a social science seems to have escaped them altogether.

5a Marx was of course aware of this and if he had lived to complete Volume 3 it is quite conceivable that he would have incorporated it into his analysis of the tendency of the rate of profit. See, for example, the following passage from Volume 1 (which, it must be remembered, was completed after the texts which make up Volume 3): "A part of the functioning constant capital consists of instruments of labor such as machinery, etc., which are not consumed, and therefore not reproduced or replaced by new ones of the same kind until after long periods of time ... If the productiveness of labor has, during the using up of these instruments of labor, increased (and it develops continually with the uninterrupted advance of science and technology), cheaper machines, tools, apparatus, etc., replace the old. The old capital is reproduced in a more productive form ... Like the increased exploitation of natural wealth by the mere increase in the tension of labor power, science and technology give capital a power of expansion independent of the given magnitude of the capital actually functioning. They react at the same time on that part of the original capital which has entered upon its stage of renewal. This, in passing into its new shape, incorporates gratis the social advance made while its old shape was being used up." (Volume 1, pp. 663-664.)

6. Joseph M. Gilman, The Falling Rate of Profit, New York, 1958. See especially the chart on p. 57 and the fold-out statistical table facing p. 61.

7. Yaffe, for example, attempts to support this notion in Op. Cit., pp. 24-26.

8. Capital, Vol. 3, p. 283.

9. Ibid., pp. 304-305.

10. Cogoy, op. cit., p. 406. There is a problem of translating into English such expressions as mise en valeur and valorisation. I assume that they are used as equivalents of Marx's Verwertung which is generally best rendered as "expansion of value" or in some cases "self-expansion of value."

11. _Ibid_., pp. 407-408.

12. _Capital_, Vol. 3, pp. 286-287. Cf. also the powerful passage a few pages later which begins: "_The real barrier of capitalist production is capital itself_. It is the fact that capital and its self-expansion appear as the starting and closing point, as the motive and aim of production, that production is merely production for _capital_, and not vice versa, the means of production are means for an ever-expanding system of the life process for the benefit of the _society_ of producers." p. 293.

13. To quote the opening paragraph of the _Critique of Political Economy_: "At first sight the wealth of society under the capitalist system presents itself as an immense accumulation of commodities, its unit being a single commodity. But every commodity has a twofold aspect, that of _use value_ and _exchange value_."

14. It is important to understand the radical difference between this theory and the shortage-of-effective-demand theory of the left Keynesians. Cogoy correctly cites Joan Robinson as an exponent of the latter theory, quoting her (_op_. _cit_., p. 403n) as follows: "The maldistribution of income restricts consumption, and so increases the rate of investment required to maintain prosperity, while at the same time it narrows the field of profitable investment, by restricting the demand for the consumption goods which capital can produce." (The quotation is from _An Essay on Marxian Economics_, 2nd ed., London, 1966, p. 71.) The crux of the matter here is what the Keynesians consider to be a maldistribution of income, clearly implying that matters can be put right by a suitable redistribution of income and thus opening the way for all sorts of reformist illusions. Apart from matters of formulation, this places the Keynesians squarely in the tradition of such liberal and social democratic reformers as Hobson in England and Conrad Schmidt in Germany. Marxism, on the other hand, has no place at all for the concept of maldistribution of income: the root of the problem lies in the very nature of capital as self-expanding value, and this cannot be changed except through the overthrow of the system and the establishment of entirely new relations of production.

VALUE THEORY

THE TRANSFORMATION PROBLEM AGAIN

Ian Steedman

Marxist economists are currently wasting a great deal of time and energy in the discussion of an intrinsically unimportant problem, the so-called transformation problem. While the question is not really of great interest, it must nevertheless be sorted out, first to end the waste of time of Marxist economists and secondly because the latter are severely handicapped in converting non-Marxist economists by having to explain away the large amount of nonsense to be found in Marxist literature on this question. Our aim in this note is to pose some of the central points as starkly as possible, making no use of arithmetic or algebraic arguments, in order to push the discussion towards, though doubtless not to, a conclusion.

I MARX'S "SOLUTION" IS LOGICALLY INCONSISTENT

As is well known, Marx's "solution" to the transformation problem can be found both in Capital and in Theories of Surplus Value. A minor problem with Marx's "solution" is that he failed to transform the prices of inputs (see below) but this is easily dealt with and is not the central objection to Marx's approach. The central objection, as we pointed out in a recent issue of the Bulletin,[1] is that, even if input prices are transformed, Marx's solution is internally inconsistent.

It may be worthwhile to state at some length why Marx's "solution" is internally inconsistent. In a given economy (in a given year) there will be a bundle of commodities going to the capitalists (which constitute net investment and capitalists' consumption), a bundle of commodities which replace produced means of production (the physical aspect of constant capital) and a bundle of commodities going to workers as wages (the physical aspect of variable capital). In order to form a rate of profit it is clear that we must "value" these three bundles in a consistent way. Marx "values" them in terms of embodied labour, to obtain aggregate surplus values, constant capital C and variable capital V, and then defines the rate of profit in value terms as S/(C+V). To obtain the rate of profit in money terms, however, we have to "value" the three bundles in terms of prices and then divide profit by total capital.[2]

If all prices were proportional to values, i.e. quantities of embodied labour, then, it will be clear, the two rates of profit (in value terms and in money terms) would be the same. In general, however, the two rates of profit must differ once prices diverge from values, which is precisely the situation that Marx was concerned with.

Now if these two profit rates differ, which is the significant one? which will affect capitalists' decisions and actions? and which will tend to be made uniform, as between industries, in a competitive economy? The answer is self-evident; it is the money rate of profit which affects decisions and tends to be equalised. The "value rate of profit", used by Marx, is of no concern to capitalists, it is unknown to capitalists and there is no force acting to make it equal as between industries. The implication is clear; S/(C+V) is not a significant rate of profit in a capitalist economy, and it does not equal the actual, money, rate of profit. Furthermore, one cannot assume that it will be a "close approximation" to the actual rate of profit; one can easily construct sensible numerical examples in which S/(C+V) is very different from the rate of profit. It is easy, furthermore, to construct an example of two economies having the same V and the same S but different C's, such that the economy with the higher C, and hence the lower S/(C+V), has the higher money rate of profit. Thus even the ranking of economies by S/(C+V) can differ from their ranking by profit rate. (Hence a rising (C/V), with constant (S/V), is consistent with a rising rate of profit!)

Marx's argument, then, is internally inconsistent. He assumes that S/(C+V) is the rate of profit but then derives the result that prices diverge from values, which means precisely, in general, that S/(C+V) is not the rate of profit.

The above criticism, it may be noted, is quite independent of the question whether or not input prices should be transformed (see below). Even more important to notice is the fact that adherents to Marx's "solution" never attempt a direct reply to the above criticism. The reason for this is quite simple; the criticism is sound and cannot be answered.

II TRANSFORMATION OF INPUT PRICES

It was stated above that a minor problem with Marx's solution is that he failed to transform input prices. It has been argued, however, that this is no problem at all and that it is quite proper not to transform input prices. Thus, e.g., David Yaffe, in discussing v. Bortkievicz's solution (C.S.E. Bulletin, Winter 72, p. 52) has written,

> The fundamental error lies in the attempt to change C and V into prices of production. It is the value that is transferred to the product.

Two points need to be made; first that input prices have to be transformed in any sensible solution and second that Marx was fully aware of that fact.

That input prices have to be transformed follows quite simply from the fact that capitalists take decisions in price terms, purchase their inputs at money prices and aim to maximise the money rate of profit. A "theoretical system" in which a given commodity has different prices according to whether it is being sold or being purchased just does not correspond to any real capitalist economy. It is perhaps because the idea of not transforming input prices is so patently absurd that David Yaffe, in the above quotation does not argue a case for not transforming them. He simply states, correctly that value is transferred but does so in a way that suggests that price is not. Of course value is transferred but that in no way affects the fact that capitalists purchase inputs at price and, by adding a uniform rate of profit, make the price of inputs a component of the price of their outputs. If we do not transform input prices then we commit the absurdity of assuming that the price paid for a commodity by the immediate purchaser can differ from the price received by the immediate seller!

That input prices must be transformed in any sensible solution is clear. No less clear is the fact that Marx was perfectly well aware of this, even though he failed to take account of it in the solutions he left (in unfinished manuscripts, it must be remebered).

The following three quotations from Capital, vol. III, part II, will suffice to show that Marx was well aware that input prices must in principle be transformed. (Page references are to the Moscow, 1966 edition).

i) ... the fact that under capitalist production the elements of productive capital are, as a rule, bought on the market, and that for this reason their prices include profit which has already been realised, hence, include the price of production of the respective branch of industry together with the profit contained in it, so that profit of one branch of industry goes into the cost-price of another. (p. 160)

(Marx goes on to argue, incorrectly, that in aggregate this makes no difference but that does not affect our point here).

ii) We had originally assumed that the cost-price of a commodity equalled the value of the commodities consumed in its production. But for the buyer the price of production of a specific commodity is its cost-price, and may thus pass as cost-price into the prices of other commodities. Since the price of production may differ from the value of a commodity, it follows that the cost-price of a commodity containing this price of production of another commodity may also stand above or below that portion of its total value derived from the value of the means of production consumed by it. It is necessary to remember this modified significance of the cost-price, and to bear in mind that there is always the possibility of an error if the cost-price of a commodity in any particular sphere is identified with the value of the means of production consumed by it.
(pp. 164-5, italics in original)

iii) We have seen how a deviation in prices of production from values arises from:
1. adding the average profit instead of the surplus-value contained in a commodity to its cost-price;
2. the price of production, which so deviates from the value of a commodity, entering into the cost price of other commodities as one of its (sic) elements, so that the cost-price of a commodity may already contain a deviation from value in those means of production consumed by it, quite aside from a deviation of its own which may arise through a difference between the average profit and the surplus-value.
(pp. 206-7)

It is beyond comprehension that anyone should attribute to Marx the idea that it is wrong to transform input prices.

III ALTERNATIVE SOLUTIONS

As is well-known, such writers as Dmitriev, v. Bortkievicz and Sraffa have presented solutions to the question of what equilibrium prices and profit rate will rule in an economy, with given wage and given technical conditions. These solutions are internally consistent, they are quite simple to understand (especially the Emitriev and v. Bortkiewicz solutions) and they show that profit rates and prices depend on real wages and on technical conditions, just the things that Marx emphasised. Indeed, in the simple case without fixed capital, these solutions determine profit rates and prices directly in terms of known quantities of embodied labour (see Bulletin, Winter 72, pp. 104-9). These solutions are well-known and there is no need to rehearse them here. We need only note two points. First, these solutions, unlike that of Marx, are logically coherent. Secondly, that those who oppose such solutions never attempt any direct logical criticism of them. Instead they attempt to dismiss them by a process of labelling (e.e. "neo-Ricardian"), by implying, incorrectly, that the acceptance of such solutions leads inexorably to the acceptance of subjective value theory or by merely asserting that solutions making profit different from surplus value must be unacceptable (see below). This kind of "non-argument" cannot be allowed respectability amongst socialist economists any longer. No-one has presented a direct logical criticism of these solutions and that for the simple reason that there is not logical criticism to be made. So far as they go, these solutions are logically sound - and that is that.

The above does not, of course, prevent one from saying that these solutions do not go far enough. The point has been made, for example, that equilibrium solutions are only a first step and that a theory of disequilibrium prices and profits needs to be developed. This is certainly so and needs to be said but it must not be allowed to obscure the point that on the first step of equilibrium solutions. Marx's is just wrong while the others are correct. Furthermore, there is no reason at all to expect that Marx's "solution" can be developed into a dynamic theory; an approach which fails the simpler test is not likely to meet the harder one.

IV WHY ARE PEOPLE AFRAID OF THE ALTERNATIVE SOLUTIONS?

Why is it that some Marxist economists shy away from the fact that Marx's "solution" is incoherent, while the alternative solutions are perfectly logical, ignoring the direct, logical criticisms of the former and shutting their eyes to the fact that they have no direct, logical criticisms to make of the latter? One major reason (there may be others) is, perhaps, the following.

If one adopts Marx's "solution" then it follows inevitably both that total price equals total value and that total profit equals total surplus value. The latter equality appears to give strength to the view that profit is simply surplus value allocated in a certain way, in other words that exploitation is the source of profit, the latter not being the result of "profit on alienation" or any other process in the sphere of circulation.

If, on the other hand, one adopts one of the logically coherent solutions then, in general, one finds that neither the total price/total value nor the total profit/total surplus value equality will hold. Our hypothesis is that people are afraid of these coherent solutions beause they fear that if total profit can diverge from total surplus value then the way is open to all sorts of theories attributing the existence of profits to circulation processes, "contributions" made by capitalists, etc. This fear is completely unjustified. It is simple, within these alternative solutions, to show how profits will be positive if and only if there is surplus value, i.e. capitalist exploitation. That is all that matters; any question of total profit and total surplus value being equal in magnitude is trivial, as may be seen from the fact that their relative magnitude depends on the standard of value used.

The alternative, and coherent, solutions do not undermine the idea that exploitation is the source of profit; on the contrary, they provide a simple means of demonstrating how the existence of surplus value is a necessary and sufficient condition for the existence of profit. Indeed if we allow the wage to vary, with the various commodities entering the wage in fixed proportions, then we can easily show that the rate of profit is an increasing function of the rate of surplus value. More generally, the alternative solutions bring to light the fact that the determinants of the profit rate are precisely the determinants of the rate of surplus value, which Marx analysed so intensively in *Capital*, vol. I, namely the daily wage, the length of the working day and the technical conditions of production of wage commodities. (We mean of course, conditions of direct and indirect production of wage commodities). Thus these approaches mesh the analyses of rate of surplus value and rate of profit more closely together than Marx was able to do, which is obviously fortunate in a framework designed to show that capitalist exploitation is the source of profit. Marx's (incorrect) approach appears to show that the rate of profit depends on the use which capitalists make of surplus value (i.e. which commodities they produce for their own consumption and investment) and not only on the conditions of production of surplus. The alternative (correct) approaches show that this is not so; the rate of profit depends on the conditions of production of surplus value and not on the use made of that surplus, which is precisely the conclusion most consonant with an analysis emphasising production.

That these formal solutions take as given the real wage and the conditions of its production must not be misinterpreted to mean that they are asocial, ahistorical solutions; it means only that they form merely one part of a full analysis. One is perfectly free to go further and analyse the social, historical, factory-floor and political struggle determinants of the real wage and of technical conditions. Indeed one is precisely in a better position to do this properly once one has adopted a coherent solution to the transformation problem, for such a solution shows one which factors affect the rate of profit and prices of production and which do not.

V CONCLUSION

The "solution" of the transformation problem offered by Marx is quite unacceptable; it is internally incoherent, even when input prices are transformed. Alternative and coherent solutions exist which, in their own, limited, terms are perfectly acceptable. They are logically sound and they provide a simple way of making a basic Marxist point; capitalist exploitation is the source of profit. Marxist economists must stop wasting their time (and making themselves look ridiculous) by indulging in incompetent debates on simple matters of logic. When they have freed themselves from the incubus of the "transformation problem" they will perhaps be able to devote their energies to worthwhile Marxist theoretical work.

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NOTES

1. See C.S.E. Bulletin, Winter 72, pp. 104-9. We may perhaps take this opportunity to correct a mistake made in that paper. One p. 108 it was stated that only one pattern of net output going to capitalists will make S/(C+V) equal to the rate of profit. That statement is too restrictive (unless there should be only two commodities) but the basic point is sound - only certain special patterns of net output going to capitalists will make S/(C+V) equal to the profit rate.

   In the Spring '73 issue of the Bulletin (pp. 56-7) S. R. Broadbridge appears to argue that our results were quite consistent with those of Marx. He reaches this false conclusion by making the silly step of defining C, V, S in money terms. Once one does that, of course S/(C+V) is the rate of profit, whether C, V, S refer to the wage good industries, or any other set of industries. In <u>money terms</u> S/(C+V) is just a <u>definition</u> of the profit rate! The whole point of Marx's approach is that he wanted S/(C+V) to be the profit rate, where S, C, V are defined in <u>value terms</u>. This he could not properly do, as we showed in our paper. All that Broadbridge "shows" is that the rate of profit is equal to money profit divided by money capital!

2. Since we are concerned here only with the <u>ratio</u> of profits in terms of prices to capital in terms of prices, it clearly does not matter what standard of prices we adopt, since the <u>ratio</u> will be independent of the standard chosen.

VALUE, PRICE, AND THE NEO-RICARDIANS: AN INTRODUCTORY NOTE

David Jaffe

In recent times it has become fashionable on the left to 'correct' Marx with the help of the work of the neo-Ricardian L. von Bortkiewicz. Indeed a radical form of Ricardianism has, in the work of many claiming to be in the Marxist tradition, replaced Marxian political economy both in content and method. Recent examples include the work of Glyn and Sutcliffe, Hodgson and Steedman.[1] What all these contributions have in common is a rejection of certain of the basic propositions of Marx's <u>Capital</u> and a substitution of others having more in common with the work of Ricardo. The justification for this change is an appeal to the 'facts', to empirically given <u>real</u> processes. So that the falling rate of profit is not connected with the rising organic composition of capital but with a falling rate of exploitation due to rising wage costs or some other phenomina. The proof of this is in the 'facts' of modern capitalism whether taken from Mage's or Gillman's statistics for the American economy or Glyn and Sutcliffe's 'facts' of the British economy. Ernest Mandel has correctly pointed out the weaknesses of Mage's calculations and a similar criticism can be directed against the calculations of Glyn and Sutcliffe.[2] Similarly, in arguing for the rejection of Marx's solution to the 'transformation problem' the neo-Ricardians appeal to the fact that the capitalist bases his investment decisions on the magnitude of the rate of profit in <u>price terms</u> and argue for the priority and reality of this rate of profit if our intention is not to construct empty tautologies. In all the cases mentioned we are dealing with a rejection of Marx's method and a substitution of 'empiricism' of one variety or the other. What is forgotten is the fact that value relations for Marx are the expression of definite social relations of production and are not mere quantities. Further it is just the money-form of the world of commodities that actually conceals the social character of private labour and the social relations of production as well as the laws of motion of capitalist production. The value categories of <u>Capital</u> have no <u>direct</u> empirical counterpart, yet the value analysis is essential if we are to penetrate the 'veil of appearances' to understand the laws of motion of capitalist production. Far from accepting the immediate <u>reality</u> of the rate of profit in price terms it is just this which needs to be explained on the basis of the value analysis. Marx makes this point very clearly:

> The final pattern of economic relations as seen on the surface, in their real existence and consequently in the conceptions by which the bearers and agents of these relations seek to understand them is very different from, and indeed quite the reverse of, their inner but concealed essential pattern and the conception corresponding to it.[3]

It is just the method Marx adopts that enables him to grasp the essential relationships of capitalist production and it is precisely the rejection of this method that leads the neo-Ricardians to reject as dogma some of the basic propositions of Marxian political economy.

THE METHOD OF POLITICAL ECONOMY

It is the particular form which social relations take under capitalist production, their fetishistic form, which makes it necessary for political economy to start from simple (abstract) conceptions such as labour, division of labour, need, exchange-value and move by a process of increasing concretisation to grasp the concrete reality. 'The method of advancing from the abstract to the concrete is only the way in which thought appropriates the concrete, reproduces it as concrete in the mind'.[4] This method is regarded as the scientifically correct method and the structure of Capital clearly conforms to this. In Volume 1 the nature of value and the origin of surplus-value are discussed and developed. This is followed by the examination of capital, of value which generates surplus-value (value in process[5]), which presupposes a definite historical relationship, the wage-labour relationship (labour power as a commodity). Throughout the analysis it is assumed that commodities exchange at their values and the General Law of Capitalist Accumulation is developed on this basis. Similarly, in the analysis of the process of Circulation of Capital in volume II and in particular in the reproduction schema the same assumption is made. It is only in Volume III of Capital that Marx begins to 'locate and describe the concrete forms which grow out of the <u>movements of capital as a whole</u>' ... and ... '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'.[6] It is here that the categories of price of production, profit and the average rate of profit become central in beginning the explanation of the concrete forms of capitalist production. To confuse any intermediate stage of the analysis with the concrete empirical reality, as Rosa Luxemburg did in the case of the reproduction schema or, as I shall argue, the neo-Ricardians do in the case of prices of production, is to make a fundamental methodological mistake.

If commodities do not exchange at their value but as a first approximation at their prices of production which are quantitively different from values then this fact has to be explicable on the basis of the value-analysis. Whereas bourgeois economics takes this fact as datum Marx points out that prices of production must themselves be deduced from values. 'Without such a deduction the general rate of profit (and consequently the price of production of commodities) remains a vague and senseless conception'.[7] If this is agreed, then as Marx points out total value of commodities must be equal to total price and total surplus-value equal to total profit. Anything else makes nonsense of Marx's theory of value. What remains is to show where the neo-Ricardians are mistaken and the roots of their mistake.

VALUE AND PRICE OF PRODUCTION

A price of production for Marx is a modified <u>value</u>. It is the cost price of a commodity, the quantity of paid labour contained in it, plus a share of the unpaid labour, of the annual average profit on the total capital invested in its production.

When a capitalist sells his commodities at their price of production, therefore, he recovers money in the proportion to the value of the capital con-

> sumed in their production and secures profit in proportion to his advanced capital as the aliquot part in the total capital. His cost prices are specific. But the profit added to them is independent of his particular sphere of production.[8]

That we are only dealing with modified values is even clearer in this passage;

> In Books I and II we dealt only with the value of commodities. On the one hand, the cost price has now been singled out as a part of this value, and, on the other, the price of production of commodities has been developed as its converted form.[9]

The reason why inputs are not converted into prices of production in the transformation of values into prices is that it is the value of the capital consumed in production that is decisive. Likewise, the capitalists receive a share of profits according to the aliquot part his capital represents in the total capital. Capital is a social relationship, not a mere quantity. This is fundamental to the whole value analysis. The secondary disturbances relate to the cost price of a commodity in any particular sphere, and the value of the means of production consumed.[10] They relate to the secondary changes within the circulation process of commodities. Certainly they would alter the relationships and distribution of commodities between the two or more departments of the reproduction schema. These schema are concerned, as anybody with the slightest familiarity with Volume II of Capital will know, with the circulation process of capital. But they do not change anything so far as the reproduction of value and surplus value in the period discussed is concerned. The average rate of profit is the result of the complex process of redistribution of surplus value. Its limits are determined by the production of value and surplus value. The Ricardian confusion, therefore, between the value of capital consumed in production, and value of the means of production consumed (they are not the same thing) is a confusion between the process of production of value and surplus value, M - C - M' and that of the circulation of commodities, C - M - C.[11] It is because the neo-Ricardians have no concept of capital as a social relation that they fall into these errors. As Rowthorn has correctly put it, the neo-Ricardians regard capital as 'a social relationship only when it concerns the appropriation of the product, or as they put it, "the distribution of income". For them all social relations are focussed in the process of circulation.'[12] Despite their protestations to the contrary, they merely assume exploitation as a 'direct experience' but they do not explain it in any scientific manner. It is for this reason that they do not see that the attempt to explain the average rate of profit and prices of production on the basis of the value analysis is either necessary or desirable. It is not surprising that they neither accept Marx's transformation of values into prices of production, nor realise the significance and importance of this stage in the analysis.

The first major mistake of the neo-Ricardians is to confuse prices of production with money prices and the general rate of profit with the empirically given rate of profit. To begin to explain the empirically given rate of profit would require a further process of concretisation, taking into account many other factors in the real world such as the existence of merchant capital, rent and banking capital. The price of production is an 'intermediate link' in the process of explaining the empirically given reality on the basis of value relations, and the law of value. Marx did speak of the price of production being the centre around which the daily market prices fluctuate,[13] but he, unlike the neo-Ricardians, did not stop there. At this stage of the analysis merchant capital had been left out of consideration[14] and so had banking capital and rent.

Merchant capital, for example while creating no new value, participates in levelling surplus-value to average profit. The general rate of profit therefore contains a deduction from surplus-value due to merchant's capital, and therefore a deduction from the profit of industrial capital.[15] Marx indicates very clearly his method;

> In the course of scientific analysis, the formation of a general rate of profit appears to result from industrial capitals and their competition, and is only later corrected, supplemented, and modified by the intervention of merchant's capital.[16]

Similar considerations would be involved with rent and banking capital including the production of the money commodity itself. The process of analysing the actual intrinsic relations of capitalist production is a very complicated matter[17] and it is only the kind of method adopted by Marx that can lead to any deep understanding of the real concrete relations. A necessary stage in this analysis is the transformation of values into prices of production and surplus-value into average profit. The method Marx adopted is the only one which makes it possible to grasp the fact of a general rate of profit on the basis of the value analysis developed in volume I of Capital.

> If the limits of value and surplus-value are given, it is easy to grasp how competition of capitals transforms values into prices of production and further into mercantile prices, and surplus-value into average profit. But without these limits, it is absolutely unintelligible why competition should reduce the general rate of profit to one level instead of another, e.g. make it 15% instead of 1,500%. Competition can at best only reduce the general rate of profit to one level. But it contains no element by which it could determine this level itself.[18]

The second error of the neo-Ricardians is in thinking that the definition of the price unit is an arbitrary matter. They forget what money is, i.e. the universal equivalent of exchange value.[19] The neo-Ricardians confuse the content of money with its nominal value. By merely regarding money price as an index of exchange they deny to money its real content i.e. as a socially recognised symbol of labour-time as such.[20] In this they follow L. von Bortkiewicz but inexplicably fail to draw the logically necessary consequences of this approach. Price for von Bortkiewicz is, like value, the index of an exchange relationship and both are purely theoretical structures. Marx was in error because he did not pay the slightest regard to the conditions of production of the good serving as the measure of values and prices. His assertion that total price equals total value is therefore not only unproven but false.[21] But then von Bortkiewicz draws the obvious conclusion which clearly the neo-Ricardians do not want to accept;

> We are thus driven to reject Marx's derivation of price and profit from value and surplus-value.[22]

To reject von Bortkiewicz's conclusions is to reject his method. That means to accept Marx's method. It is their failure to understand the method of Marxian political economy as we have indicated above that leads the neo-Ricardians to their erroneous conclusions.

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NOTES

1. A. Glyn and B. Sutcliffe, British Capitalism, Workers and the Profits Squeeze, Penguin, 1972, G. Hodgson, 'The Permanent Arms Economy', International, Vol. 1 no. 8 p. 54-66 and 'Marxism: Science or Dogma? - A Reply to Ernest Mandel'. International, forthcoming issue. Also, Ian Steedman's and Geoff Hodgson's written and verbal contributions to the Value Conference held at Brighton June 1973. I shall refer to this school of thought as Neo-Ricardian in this article. In general I shall not refer specifically to their writings but to the general point of view they represent. They might have differences in emphasis on a whole number of issues, but it is what they share in common that is the concern of this article.

2. E. Mandel, 'Value, Surplus Value, Profit, Prices of Production and Surplus Capital - A Reply to Geoff Hodgson', International, Vol. 2 no. 1 p. 64. For a critique of Glyn and Sutcliffe see my forthcoming article in New Left Review, 'The Crisis of Profitability: A Marxist View'. Mage criticised Gillman's statistics in his, The Law of the Falling Tendency of the Rate of Profit, its place in the Marxian theoretical system and relevance to the US economy, Columbia University Ph.D. 1963, Univ. Microfilms Inc, Ann Arbour, Michigan.

3. K. Marx, Capital Vol. 111, Moscow Ed. 1962, p. 205. This does not mean to say that Marxists reject empirical evidence. On the contrary, it is the way they critically examine and explain such evidence that distinguishes them from bourgeois economists.

4. Marx, Grundrisse, Penguin, 1973, pp. 100-101.

5. Capital, Vol. 1 Moscow, 1961, p. 154.

6. Capital, Vol. 111 op. cit. p. 25.

7. Ibid. p. 155.

8. Ibid. p. 157.

9. Ibid. p. 161

10. Ibid. p. 162

11. Mage (S.H.). Op. cit. p. 239-243

12. C.S.E. Bulletin Spring 1973, p. 9.

13. Capital, Vol. 111. Op. cit. p. 176.

14. Ibid. p. 204.

15. Ibid. p. 281.

16. Ibid. p. 282.

17. Ibid. p. 307.

18. Ibid. p. 308. For an excellent analysis of Value and Price and Crisis in Marx, see; Henryk Grossmann, 'Die Wert-Preis-Transformation bei Marx und das Krisenproblem' in Aufsaetze zur Krisentheorie, Archiv sozialistischer Literatur 20 Verlag Neue Kritik, Frankfurt.

19. I am treating money here as commodity money.

20. Marx, Grundrisse, op. cit. p. 144. This section on money in the Grundrisse is really very instructive and shows how wrong it is to regard the 'symbol of labour time as such' as merely arbitrary. Marx brings out very clearly the contradiction in a particular commodity representing the general commodity, and indicates the real difference and contradiction between money-price and value, op. cit. pp. 136-153.

21. L. von Bortkiewicz, 'Value and Price in the Marxian System', International Economic, Papers, 2, 1952, p. 6 and 11.

22. Ibid. p. 13.

MARXIST EPISTEMOLOGY AND THE TRANSFORMATION PROBLEM

Geoff Hodgson

"The good Christian should beware of mathematicians."

St. Augustine

No controversy has racked the Marxist school of political economy more than its dispute with orthodox economic theory on the question of values and prices. Associated with this dispute is the well known 'transformation problem' which deals with the relationship between values (i.e. quantities of embodied labour) and prices. It is well known that in the first volume of Capital Marx assumes that prices are strictly proportional to values, in other words commodities of equal value exchange at the same price on the market. Often this assumption is mistaken for the labour theory of value, but Marx was well aware that this proportionality operated under only exceptional conditions.

It is clear from his correspondence with Engels that Marx had already formed some thoughts on the more complex relationship between values and prices before the first volume of Capital was published in 1867. His solution to the transformation problem was to be presented in the third volume. However, Marx did not live to prepare this volume for the publisher, and Engels was left to edit the manuscript. It was eventually published in 1894.

Ever since that date debate on the issue has periodically erupted, but significantly there is no consensus of opinion on this question within the Marxist movement. This has led to different formulations of the labour theory of value, and a controversy on the meaning of the Marxist concepts of value, price, and the rate of profit. As a result the debate has now entered the realm of epistemology. A serious examination of the problem is necessary if Marxist political economy is to develop, particularly in relation to P. Sraffa's rehabilitation pf classical economic theory.[1]

I shall commence with Marx's solution to the problem of transforming values into prices, and some criticisms of his approach. An alternative solution will be presented with a minimum of mathematics, but the discussion does not end there. The matter will not be resolved until the methodological and theoretical issues are clarified. The aim of this essay is to interpret Marx's epistemology, and to outline the relevance of this to the concepts of price and value.

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*I am indebted to Ian Steedman for useful comments and criticisms of an earlier draft of this paper.

MARX'S SOLUTION

It is not until the third volume of Capital that Marx discusses the formation of a general rate of profit. Capitalists, Marx explained, tend to invest in those industries with a higher profit rate until there is relative overproduction of goods, their prices and profits fall, and investment diminishes. From the point of view of the ebb and flow of investment funds the only equilibrium solution in a perfectly competitive environment is where the rate of profit is equal to some general rate of profit in each firm.

At this stage it is necessary to define some basic variables:

y = net output in value terms.

This is the magnitude of the living labour time expended in the economy in a given time period. It corresponds to a part of the value of the gross output.

v = variable capital.

A portion of y is expropriated by the capitalist class. The remainder, known as the variable capital, is the quantity of labour embodied in the wage goods received by the workers.

s = surplus value.

This is the expropriated portion of y.

Obviously, by definition: $v + s = y$.

c = constant capital flow

This is the value of the raw materials used up in production, plus the depreciation of means of production, in value terms.

k = constant capital stock (i.e. fixed capital).

This is the value of the means of production that remain at the end of a production period. It does not contribute to the value of the social product.

Evidently: gross output = $c + v + s$.

Many Marxists have the strange habit of always ignoring k in their formulation of the rate of profit. Marx, however, was insistent that the latter is the ratio between surplusvalue realised and total capital invested.[2] Hence, according to Marx,

$$p = \frac{s}{k + c + v},$$

where p is the rate of profit in value terms. It is a ratio between amounts of embodied labour, as k, c, v and s are all in value terms. It is assumed, for simplicity, that the turnover period, or time period of production, is unity. If this assumption is not made the latter must be included in the formula for the rate of profit.[3]

Marx's approach will be explained by means of an example where the economy consists of three firms. Here the letters k, c, v and s have subscripts to denote the particular firm:

Firm 1: $k_1 = 60$ $c_1 = 30$ $v_1 = 10$ $s_1 = 10$

Firm 2: $k_2 = 40$ $c_2 = 30$ $v_2 = 30$ $s_2 = 30$

Firm 3: $k_3 = 30$ $c_3 = 50$ $v_3 = 20$ $s_3 = 20$

(In order to simplify the arithmetic $k_i + c_i + v_i = 100$ in each case.) The above data have two important characteristics. Firstly, the rate of exploitation (s/v) is equal in each firm. This would be a result of perfect competition and mobility in the market for labour power. Secondly, the ratios k/v and c/v are not equal between firm. As a consequence the rates of profit in value terms in each firm are clearly different:

Firm 1: $\dfrac{s_1}{k_1 + c_1 + v_1} = \dfrac{10}{60 + 30 + 10} = 10$ per cent.

Firm 2: $\dfrac{s_2}{k_2 + c_2 + v_2} = \dfrac{30}{40 + 30 + 30} = 30$ per cent

Firm 3: $\dfrac{s_3}{k_3 + c_3 + v_3} = \dfrac{20}{30 + 50 + 20} = 20$ per cent

The transformation problem pertains to this general situation, illustrated by the above example: the rate of exploitation is equalised in each firm, but the ratios k/v and c/v are not consistent throughout the economy. The problem is to form the general rate of profit and determine what Marx calls the "prices of production". In short the transformation problem expresses the essential unity of the antagonistic capitalist phenomena of a competitive labour market, and competitive capital movements subject to the influence of the rate of profit.

In order to find the magnitude of the general rate of profit Marx makes a crucial assumption; he treats the whole economy if it was one giant firm, to use his words: "a single capital".[4] In this case

$$p = \frac{60}{300} = 20 \text{ per cent.}$$

The assumption is equivalent to the assertion that this average rate of profit is identical to the general rate of profit. In all of Marx's writings, however, no argument to support this assertion may be found.

According to Marx the aggregate amount of surplus value is distributed amongst the firms in proportion to the size of their capitals (i.e. k + c + v) to form the profits. These amounts of profit, plus the value of the capital used up in production (c + v), constitute the prices of production.

In our example total surplus value is 60, and the profit distributed to each firm is 20 units. Hence the prices of production are as follows:

Firm 1: 30 + 10 + 20 = 60
Firm 2: 30 + 30 + 20 = 80
Firm 3: 50 + 20 + 20 = 90

Note that in the first two firms the price of production deviates from the value of the gross output. We shall define the price coefficient as the price of an output of value one unit, in each firm. It is the ratio between the price of production and the value of the gross output:

$$\text{Firm 1:}\quad \frac{60}{50} = \frac{6}{5}$$

$$\text{Firm 2:}\quad \frac{80}{90} = \frac{8}{9}$$

$$\text{Firm 3:}\quad \frac{90}{90} = 1$$

It is clearly evident that, as a result of Marx's assumptions, total price of production equals total value, and total profit equals total surplus value.

MARX'S DOUBTS

Close consideration of Marx's solution reveals an inconsistency. The price coefficients are not necessarily unity, yet the rate of profit is computed on the basis that the cost or supply prices of the various elements of the aggregate capital (k, c, v) are proportional to their values. There is thus a difference between the rate of profit calculated in terms of prices of production and in terms of values. Marx seemed aware of the difficulty, for he wrote:

> Aside from the fact that the price of a particular product, let us say capital B, differs from its value because the surplus value realized in B may be greater or smaller than the profit added to the price of the products of B, <u>the same circumstance applies also to those commodities which form the constant part of capital B, and indirectly also its variable part</u>, as the labourers' necessities of life. So far as the constant portion is concerned, it is itself equal to the cost price plus the surplus value, here therefore equal to the cost price plus profit, and this profit may again be greater or smaller than the surplus value for which it stands. As for the variable capital, the average daily wage is indeed always equal to the value produced in the number of hours the labourer must work to produce the necessities of life. But this number of hours is in its turn obscured by the deviation of the prices of production of the necessities of life from their values. However, this always resolves itself to one commodity receiving too little of the surplus value while another receives too much, so that the deviations from the value which are embodied in the prices of production compensate one another. Under capitalist production, the general law acts as the prevailing tendency only in a very complicated and approximate manner, as a never ascertainable average of ceaseless fluctuations.[5]

In other words Marx admitted that the constituent values in the rate of profit must themselves be transformed into prices before the general rate of profit is formed; as well as the value of the gross output the values of the inputs k, c and v must also be transformed into prices. In the penultimate sentence, however, he evades the problem by asserting, without proof, that the constituent variations of price from value will cancel each other out and the result will be the same. But this does not banish the nagging doubt in his mind, for in the final sentence he states that this cancellation will only work in an "approximate manner", and instead of a stable rate of profit we have "ceaseless fluctuations".

There is no basis to suggest that the fluctuations of price from value cancel each other out, as prices can deviate from values in an irregular and disproportionate manner. It is easy to conceive of a situation where the price coefficients in the wage and capital goods industries are both greater than unity, and the price coefficient for luxury goods is less than one. In this situation all the inputs have a price greater than their value, and deviations of price from value in the denominator of the rate of profit fraction do not cancel each other out.

Hence the true general rate of profit that takes account of the deviation of price from value is not

$$\frac{s}{k + c + v}.$$

Furthermore, if we use Marx's prices of production to transform each element in the denominator there is no reason to suppose that the rate of profit will remain equal in each firm.

THE BASIC FLAW IN MARX'S SOLUTION

It must be remembered that the capitalists are primarily concerned to increase their profit in money terms. This is essentially the meaning of Marx's well known diagram

$$M - C - M'.$$

Money capital M is invested in constant and variable capital, production takes place, commodities C are produced, and finally they are sold to reap an enlarged money revenue M'. It was Marx's aim to explain the source of the profit, the difference between M and M'.

The capitalists will calculate their rate of profit on capital invested in terms of prices, not values. Money capital movements between firms will be in equilibrium when the rate of profit in price terms is equal in each firm. The rate of profit that is equalised to form a general rate of profit is in terms of prices: as this is the rate of profit that the capitalists themselves 'perceive', and upon which they base their investment decisions. The goad to accumulate takes the form of prices as the capitalists are not aware of, or disposed towards, a calculation in terms of values.

Marx's error stems from his arbitrary assumption that we may treat the social capital as a whole, regarding the capitalist economy as one giant firm. Hence he avoids the main problem: to determine the general rate of profit that pertains to separate firms. The interaction of different capitals is a necessary feature of capitalism. Without separate capitals, capital itself ceases to be a commodity, and no longer exists as capital. Marx, himself, was well aware of this for he wrote in the Grundrisse: "Capital does not exist and cannot exist except in the form of a number of capitals, and its self-determination thus appears as the interaction of these many capitals one with another".[6]

The inability of Marx to formulate a correct solution to the transformation problem is easy to explain: he was not well versed in mathematical technique. Engels made statements to the contrary, but none of Marx's writings give testimony to support these assertions. The absence of the use of mathematical functions, a crude predisposition towards averages, and a clumsy mathematical discussion of reproduction schemes, are all symptomatic of a lack of mathematical experience and knowledge.

On the issue of the transformation problem Marx's arbitrary use of overall average values has led to an implicit methodological error. It must not be overlooked, however, that Marx's general methodological capabilities have been hardly surpassed in generations.

BORTKIEWICZ'S SOLUTION

Thirteen years after the publication of the third volume of Capital one L. von Bortkiewicz, an experienced mathematician, attempted to correct Marx's solution.[7] He considered an economy in simple reproduction, and assumed that all the constant capital was used up in one production period, i.e. the constant capital stock was nonexistent. These assumptions are not at all necessary and they are not adopted here. However, the basic approach is the same.

The rate of profit in the Bortkiewicz solution is in price terms. It is the ratio between the amount of profit and the price of total capital invested. We shall assume that the economy produces three types of good: capital goods, wage goods to be consumed by the workers, and luxury goods to be consumed by the capitalists. This is a rather severe assumption as in reality output is a great deal more heterogeneous. The assumption is adopted to simplify matter,s and if the reader wishes to consult a more general solution it can be found in Sraffa's work,[8] and an article by Ian Steedman.[9] In the usual manner we shall call the capital goods industry Department 1, the wage goods industry Department 2, and the luxury goods industry Department 3. We shall let the price coefficients of the three types of good be x_1, x_2 and x_3 respectively.

The price of the total capital invested in Department i is as follows:

$$k_i x_1 + c_i x_1 + v_i x_2$$

The values that appear in Marx's solution have in each case been multiplied by their price coefficient to transform them into prices. Similarly the revenue from the sales of the product of department i is

$$(c_i + v_i + s_i)x_i.$$

The cost of producing this product is

$$c_i x_1 + v_i x_2.$$

The profits in Department i are the difference between revenue from sales and costs:

$$(c_i + v_i + s_i)x_i - (c_i x_1 + v_i x_2).$$

The general rate of profit, denoted by p*, is given by this equation:

$$p^* = \frac{(c_i + v_i + s_i)x_i - (c_i x_1 + v_i x_2)}{k_i x_1 + c_i x_1 + v_i x_2}$$

This gives us three price equations for the three firms:

$$p^*(k_1x_1 + c_1x_1 + v_1x_2) + c_1x_1 + v_1x_2 = (c_1 + v_1 + s_1)x_1$$

$$p^*(k_2x_1 + c_2x_1 + v_2x_2) + c_2x_1 + v_2x_2 = (c_2 + v_2 + s_2)x_2$$

$$p^*(k_3x_1 + c_3x_1 + v_3x_2) + c_3x_1 + v_3x_2 = (c_3 + v_3 + s_3)x_3$$

From the first two equations it is possible to obtain a quadratic equation in p^* by eliminating x_1 and x_2:

$$(v_2(k_1 + c_1) - v_1(k_2 + c_2))p^{*2} -$$

$$((k_1 + c_1)(c_2 + s_2) + (k_2 + 2c_2 + v_2)v_1 + v_2s_1)p^*$$

$$+ c_2s_1 + (v_1 + s_1)s_2 = 0$$

The solution of the quadratic equation is a matter of school algebra. There are two numerical solutions, but only the lower yields positive price coefficients. The actual solution need not concern us. The important point is that the first two price equations are sufficient to give a solution for the rate of profit. This means that the latter is determined in thos industries which directly or indirectly produce the wage goods received by the workers. Department 1 produces capital goods which in turn are required to produce wage goods. Department 2 produces wage goods directly. Department 3 produces luxury goods and these play no role in producing any other commodity. Ricardo thought that the rate of profit was determined by the conditions of production in the wage goods industry, but unlike Marx and Bortkiewicz he did not directly consider constant capital in his argument.

Once the general rate of profit is determined it is possible to derive the ratios between the price coefficients; their absolute magnitude cannot be determined by the price equations, as it obviously depends upon the choice of unit for the prices. It is possible to assume that one of the price coefficients is unity and then derive the others. Bortkiewicz, for example, set the price coefficient in the third department to unity. This matter has been the subject of some dispute and we shall return to it later.

It is important to realise that the Bortkiewicz solution does not contradict, in general terms, Marx's theory of the origin of profit. If surplus value is zero the only feasible solution for p^* is zero. If surplus value increases, all other values being constant, then the mass of profits will rise. In mathematical terms, profit is an increasing function of surplus value passing through the origin, according to Bortkiewicz. In Marx's view profit is an increasing linear function of surplus value.

THE HISTORICO-LOGICAL OBJECTION

One objection to the Bortkiewicz solution centres on a consideration of an approach to analysis often attributed to Marx; he sometimes develops a logical sequence of concepts in the same order as their real counterparts developed in history. For instance he discusses pre-capitalist commodity production before he develops the concept of capital. In this case it is both a necessary and a historical order of exposition. In volume one of Capital Marx did not deal with the formation of the general rate of profit, and this allows him to assume that prices are proportional to values. It has been argued that in the early stages of capitalist development a general rate of profit was not formed, and prices were more or less proportional to values. Capital existed, but the exchange ratios of simple commodity production prevailed. Hence Marx's order of exposition is supposed to correspond to actual historical developments.

There seems to be no historical basis for this argument. Feudal relations of production did not allow perfect commodity competition to prevail, and there is no reason to suppose that the prices of goods offered for sale were proportional to their values. Of course the vast bulk of produced goods were not offered for sale at all: they were consumed directly. This did not mean that accounting in terms of labour time was unimportant or nonexistent in production. But in exchange, on the limited feudal market, prices did not reflect proportional amounts of labour embodied. The fact that rent, in many forms, was such a large component of the national income adds weight to this assertion.

hardly

When capitalist production began to emerge from the interstices of feudal society there was already a rate of profit in price terms in existence: it was the merchant's rate of return from investment. Columbus, Magellan, and Marco Polo did not traverse unknown seas and deserts in a spirit of pure adventure; their expeditions were designed to help realise profits from mercantilism. Consequently, there was a tendency for a general rate of profit on investment to form before capitalism became the dominant mode of production.

not competitive

It is clear that Marx's method was historical in character: he studied definite historical modes of production. But that does not mean that he develops categories in the order they appeared on the historical stage. There are obvious didactic and methodological reasons why Marx did not deal with the formation of the general rate of profit in the first two volumes in Capital. These volumes deal with the production and circulation of value under capitalism, the question of prices of production and the general rate of profit are conveniently left to the third volume where the system is discussed as a whole. Capital is historical, but it is not history.

Another version of the historico-logical objection to the Bortkiewicz solution is that it does not show the short term process by which prices and profits are formed. Marx's solution is regarded as the actual process by which these amounts are formed from one production period to the next, in contrast to the above view that it pertains to stages of capitalist development.

The logical way of regarding Marx's solution according to this conception is as follows: Prices of production are formed at the end of one period, and they are used to transform the component terms in the expression for the rate of profit in each firm. It so happens that, in general, the transformed rates of profit are no longer equal in each firm, and a general rate of profit is not formed. This is not a situation of economic equilibrium. Furthermore there is no reason to believe that Marx's transformation reflects the actual process of capitalist development.

If we assume that the values in an economy are being reproduced according to a certain pattern, such as simple reproduction, or expanded reproduction with constant growth rates, we may then use Marx's transformation at the end of each production period to form the price coefficients, and form the rates of profit in price terms. The prices and profit rates will gravitate towards an equilibrium solution which is precisely the same as that provided by the Bortkiewicz transformation.

Marx's solution does not provide a means of computing constant price coefficients and equal profit rates in a situation of equilibrium; at most it is an iterative solution to this problem. It may be argued that profit rates have never been exactly equal, and prices are never constant, hence Marx's solution is valid as it embodies ceaseless fluctuations. There are two objections to this argument. Firstly, it is still necessary to examine equilibrium situations; what else are the reproduction schemes found in capital? The transformation problem covers the limited and abstract ground of economic equilibrium. Secondly, there is no reason to suppose that Marx's solution provides us with a suitable model of the dynamics of the capitalist system. The dynamic interaction between values and prices can only be explained by theoretical and empirical research into the concrete situation.

It is precisely on the limited ground of economic equilibrium, in the sense that the rate of profit is equal in each firm, that the recent attack on bourgeois capital theory has been located. To reject the Bortkiewicz-type transformation is to reject almost the entire attack, and shun the recent important developments in the theory of capital.[10]

PRICE AND PRICE OF PRODUCTION

It has been argued that the Bortkiewicz solution is at fault because it deals with market prices. There is a confusion here. The fluctuations in price that are observed on the market are a result of differences between supply and demand, and they are not the concern of any solution to the transformation problem. The latter deals with theoretically observable prices in the situation where supply and demand balance and the market is in equilibrium. Prices in the Bortkiewicz solution are not everyday market prices; they are theoretical equilibrium prices.

The usual orthodox reply is to go one stage further and argue that Marx's prices of production are not prices in the usual sense at all; they are not observable, even in an equilibrium situation. However, it is doubtful if this position is 'orthodox' at all, for Marx wrote: "The price of production is regulated in each sphere and likewise regulated by special circumstances. And this price of production is, in its turn, the centre around which the daily market prices fluctuate and tend to equalize one another within definite periods."[11]

What else is this but a definition of price of production in terms of market equilibrium? The "centre around which the daily market prices fluctuate" is nothing but the equilibrium price as determined by a Bortkiewicz-type transformation. The contradictory definitions of price of production to be found in Capital can only be reconciled if it is admitted that Marx was attempting to formulate an equilibrium solution. For reasons of consistency the latter definition of price of production can command no support amongst proponents of Marx's solution.

In addition it is important to note that Marx was not afraid of associating prices of production with surface appearances. They are defined in terms of "daily market prices". Hence at this point it is important to discuss the nature of appearances and essences in Marx's work.

THE EPISTEMOLOGICAL IMPLICATIONS

At the root of the debate over the meaning of prices of production and the validity of the various solutions to the transformation problem are epistemological differences of crucial importance.[12] The assertion that equilibrium prices are theoretically observable on the market has led to the accusation that the Bortkiewicz transformation is confined to outward appearances and is empiricist in its method. In contrast, it is argued, Marx did not deal with surface appearances but with the essential nature of capitalist reality.

It is well known that Marx insisted that a minimum necessary condition of a scientific analysis was to probe beneath immediate outward appearances, and find the essential laws that govern the physical and social world. And "all science would be superfluous if the outward appearance and the essence of things directly coincided".[13]

This, of course, is not a sufficient characterisation of scientific method in political economy. The necessity to shatter the obviousness of immediate appearances is a rule that must be common to all forms of scientific enquiry, regardless of the subject matter under investigation. It must form part of the equipment of all sciences, whether social or physical, except possibly mathematics. Marx's method is in fact enriched with additional methodological injunctions of crucial significance.

In certain passages Marx indicates the further features of his method. For example, in the Grundrisse, he contrasts his approach to political economy with the incorrect methods of many other economists. The passage is worth quoting in full:

> The economists of the seventeenth century, for example, always started out with the living aggregate: population, nation, state, several states, etc., but in the end they invariably arrived by means of analysis at certain leading abstract general principles such as division of labour, money, value, etc. As soon as these separate elements had been more or less established by abstract reasoning, there arose the system of political economy which start from simple conceptions such as labour, division of labour, demand, exchange value and conclude with state, international exchange and world market. The latter is manifestly the scientifically correct method. The concrete is concrete because it is a combination of many determinations, i.e. a unity of diverse elements. In our thought it therefore appears as a process of synthesis, as a result, and not as a starting point, although it is the real starting point and, therefore, also the starting point of observation and conception. By the former method the complete conception passes into an abstract definition; by the latter the abstract definitions lead to the reproduction of the concrete subject in the course of reasoning. Hegel fell into the error, therefore, of considering the real as the result of self-co-ordinating, self absorbed and spontaneously operating thought, while the method of advancing from the abstract to the concrete is but the way of thinking by which the concrete is grasped and is reproduced in our mind as concrete. It is by no means, however, the process which itself generates the concrete. The simplest economic category, say, exchange value, implies the existence of population, population that is engaged in production under certain conditions; it also implies the existence of certain types of family, clan or state, etc. It can have no other existence except as an abstract one-sided relation of an already given concrete and living aggregate.[14]

The epistemological significance of this passage will be raised in various places below. At this stage it is sufficient to make the following points. Firstly, Marx identifies the key importance of a correct structure and sequence of analysis. (Elsewhere he reproached Ricardo for a faulty theoretical structure in his Principles.) Secondly, the aim of scientific analysis is not mere definition, but to move from certain abstract principles and definitions to a synthesis of the concrete. Thirdly, despite this, the concrete is the real starting point of all observation and conception. And finally, the process of analysis may reproduce, but it does not create, concrete reality. In order to examine these points in more detail it is first necessary to characterise and discuss the prevailing empiricist method of modern economics.

EMPIRICIST VULGAR ECONOMY

Today, even macro-economic textbooks start with the theory of consumer behaviour. The current fashion is to extend the subjectivisit value theory of neoclassical economics into this sphere, in which individual consumption levels are seen as the result of persons maximising their own satisfaction or "utility". Hence vulgar economy regards utility maximisation as the 'essence' of consumer behaviour. The theory regards individuals as separate atoms, and unlike marxism, consumption is not seen as being inextricably entwined with production; production is not just the manufacture of things, it is the reproduction of social relations and the creation of all but the most elemental consumer desires. Demand does not originate from the subjective wishes of the indivial: it is socially determined in production.

The professed ability of utility theory to make correct predictions is regarded as adequate verification of the theoretical analysis. But the concept of utility is not established in a scientific manner; it is an arbitrary construct. A whole multitude of theories could be invoked to "explain" consumer behaviour, just as the early physicists developed many theories to explain the phenomena of heat and light. But none of these theories can be disproved by recourse to the empirical data alone. Validity does not lie in the correspondence with a given body of facts; something else is involved.

The empiricist method of vulgar economy is clearly illustrated by the manner in which modern econometric techniques are employed. Vulgar econometrics attempts to understand statistical economic data by constructing mathematical functions that can reproduce the same data by changing various inbuilt parameters. The criterion of validity is the degree of correspondence or "fit" between the observed data and that produced by the mathematical function. What is wrong with this approach is not the use of mathematical or econometric techniques in themselves. The error is epistemological; the degree of correspondence between the two sets of data is regarded as the only criterion of validity. An arbitrary model of the economy is created in thought. The conceptual structure that is employed is not previously validated at another level.

At the root of the empiricist method is the crude notion that the immediately given facts contain the truth. The role of science is to construct models and theories which explain these facts, and truth lies in the correspondence between the observed data and the theoretical results. The supreme aim of science is to make correct predictions; this is the ultimate test of any model or theory, according to the empiricist.

But it is wrong to suppose that vulgar economy does not attempt to find a kind of essential reality behind outward appearances. Empiricism is not just the assertion of facts. Vulgar economy also attempts to break through appearances and discover laws located in the essence of reality. A crucial difference with scientific Marxism lies in the method of validation of the essence: the result being that vulgar economy uncovers a false, mystical essence, a false consciousness is produced. For this reason vulgar economy remains trapped in outward appearances, its attempted excursions towards the real essence are arbitary and unscientific. In other words, vulgar economy does not synthesis the concrete as an understandable whole; it does not "lead to the reproduction of the concrete subject in the course of reasoning."

The notion that there is such a thing as a hard crust of facts, in which all truth is embodied, independent of the tools of scientific enquiry, has been exploded by criticism on previous occasions. Before facts are recognised, selected, arranged, and imbued with meaning the observer must utilise a conscious or unconscious system of concepts. There is no vision of the world that is free from an implicit conceptual structure. The belief in a given body of facts existing independently of the concepts and theories used to provide an interpretation is one of the most preposterous fallacies of bourgeois common sense.

THE IDEALIST REACTION AGAINST EMPIRICISM

The recognition of the limitations of a philosophy based upon immediate appearances led to the formation of an equally simplistic reaction against empiricism. But in more recent years this reaction has taken a more sophisticated form, leading, in the Marxist movement, to the philosophy of Marcuse. In his book Reason and Revolution Marcuse gives a useful account of the Hegelian dialectic. To be found in this book is the type of assertion that characterises all of his works; it consists of the statement that "the facts" possess no authority. For example, he writes: "...the given facts that appear to common sense as the positive index of truth are in reality the negation of truth, so that truth can only be established by their destruction."[15]

This negativist attitude to "the facts" frequently appears in the Marxist movement. Consider the example of a well known British revolutionary grouping that still refuses to accept that capitalism has passed through an unprecedented twenty year boom. If an objection to this blindness is raised on the basis of the available data then it is dismissed as "empiricism". Another widespread tendency on the left is the frequent appeal to the analyses of great Marxist theoreticians, which masquerades as a substitute for an analysis of the concrete developments under modern capitalism. These appeals to authority also, implicitly, can lead to a revolt against facts and appearances.

For a number of political and historical reasons Marxism has developed at a slow pace in the last thirty years. But the substitution of appeals to authority for analysis, and the negative attitude to the facts of immediate experience, have reinforced the theoretical stagnation. In place of an effective revolt against capitalist social relations has been a refuge in the idealist rebellion against the oppressive power of "the facts".[16]

The approach has philosophically more in common with Hegel than with Marx. In the quotation from the Grundrisse cited above Hegel's method is rejected precisely on the grounds that it regarded the real as the result of "self-absorbed and spontaneously operating thought, while the method of advancing from the abstract to the concrete is but the way of thinking by which the concrete is grasped and reproduced in our mind as concrete".

ELEMENTS OF A MARXIST EPISTEMOLOGY

Both empiricism and its idealist reaction share a common notion of "the facts". Both these approaches implicitly or explicitly accept the existence of a given hard mass of facts, without understanding that any perception of the world is forced into the mould provided by the conceptual structure of the observer. The empiricist finds truth in the "immediate facts", the idealist anti-empiricist finds truth in their complete negation. In contrast, the marxist asserts that the journey from the abstract to the concrete continually reconstructs the "given facts" and the nature of appearances, as a result of a developing conceptual structure.

A necessary feature of a Marxist epistemology is a complete rejection of the notion of "the facts". This is not to be confused with a rejection of facts themselves. Any apparent facts are a moment of the ever changing vision generated by scientific enquiry. Some categories, such as social relations, are never immediately obvious, but they have a direct manifestation in appearance or factual data.

The construction of theory, however, is not an arbitrary matter. We cannot simply mould the world to our own preconceptions. A necessary aspect of a scientific theory is that it contains certain statements that can be checked, and feasibly refuted, by an appeal to factual data. If a theory contains no basis upon which it can be refuted, then it is merely a tautology; it is a logical consequence of definition and it is not a meaningful statement about the world. In Marx's words: it will not reproduce the concrete.

In order to be meaningful every concept must have some form of apparent manifestation in reality. Otherwise it is purely a product of thought and it is powerless to further the cause of scientific enquiry. This is precisely the fault of the bourgeois concept of utility; it has no measure or expression in reality, it has not been previously verified by an appeal to the concrete. The ability of a theory to make correct predictions is not a sufficient criterion of its scientific status. The conceptual structure of the theory must, in addition, by subject to the acid test of empirical verification.

This preliminary appeal to the concrete is clearly evident in Marx's work. When, for example, he develops the central concept of abstract labour it does not appear simply as a result of his own imagination. Under capitalism there is a tendency for more and more types of specialised labour to be reduced to the type of task that can be accomplished by a much larger proportion of the proletariat. This is a result of the continual revolutionising of management and production techniques, and the socialisation of the productive forces under capitalism. Hence the idea of abstract labour has a counterpart in reality: the creation of a versatile and mobile mass proletariat.[17]

VALUE AND PRICE

In Capital Marx embarks on his analysis at the most abstract level, with investigations of the production and reproduction of value. According to Marx, value is a social relation between producers, but it takes the form of a quantity of socially necessary labour time embodied in a commodity, i.e. it has a representation in concrete fact. Hence statements about the magnitude of value in a certain commodity can be tested empirically. Value is a highly abstract concept, and it is not immediately apparent, but it is an aspect of concrete circumstances.

Having started the analysis at this abstract level, Marx is then able to show that prices are determined by quantities of embodied labour - he uncovers the true essence beneath the surface phenomena of price. But that does not mean that prices have no significance in a Marxist analysis. On the contrary the concept of price is reconstructed in a scientific manner. Marx's aim is not to disregard the categories that preoccupy bourgeois economy, for he writes: "The categories of bourgeois economy...are forms of thought expressing with social validity the conditions and relations of a definite, historically determined mode of production".[18]

Once the concept of price is de-mysified and reconstructed it becomes possible tostudy the capitalist system as a whole, and that is the aim of the third volume of Capital. The significance of prices in the capitalist system is that they interact with their value basis in such a way that he dynamic behaviour of the capitalist system is determined. For example, the rate of profit, which is a price expression, partly determines the level of investment in different sector of production. An alteration in investment levels means a re-allocation of labour time, i.e. value, in the economy. In turn these new value relationships determine new prices, and so on. Consequently the dynamic behaviour of the capitalist system can be explained by a two-tiered quantitative model, with a price tier interacting with the more abstract value tier. But significantly this model is open to empirical testing at both levels, the value relations are not just a convenient rationalisation of observed phenomena.[19]

TOTAL PRICE AND TOTAL VALUE

Having established the empirical aspect of the concepts of value and price it is now possible to return to the Bortkiewicz transformation. Sometimes it is maintained that the latter solution, unlike that of Marx, cannot be correct as total value is no longer necessarily equal to total price. A great deal of importance is attached to this assertion, as it is regarded as a necessary proposition in the labour theory of value. However, the total value = total price proposition has an ambiguous meaning; it is either a definition of prices or production, or a statement about the behaviour of observed prices in some sense.

If prices of production are defined as the logical product of Marx's method of transforming values into prices, then the assertion that total value equals total price of production is a mere tautology. The assertion then ceases to become a meaningful theory; it contains no basis upon which it can be verified or disproved empirically. This is a complete mystification of Marx's concept of price of production. It has already been shown that Marx regarded the latter as the "centre around which the daily market prices fluctuate". He was mistaken to believe, however, that this definition in terms of observed phenomena was compatible with his solution to the transformation problem.

In 1948, J. Winternitz adapted the Bortkiewicz transformation so that total value was set equal to total price. He tried to avoid a tautological interpretation of the total value=total price proposition. He wrote: "This is not a tautological or meaningless thesis. It says that the sum of all prices changes only if and in so far as the number of hours necessary to produce the aggregate output or the value of the money commodity changes. As a matter of fact, the price level goes up and down in the trade cycle at variance with the sum of values and the equation holds true only in the average over a whole cycle."[20]

Here Winternitz seems to assert that the sum of all prices divided by the price of the money commodity changes in proportion to the total value of output. In this case the proposition reaches the status of a theory; it can be refuted or verifited by an appeal to argument or data. Unfortunately for Winternitz it turns out to be clearly and unambiguously false. Consider what happens when the rate of surplus value falls, and, according to the Bortkiewicz transformation, a new lower general rate of profit is formed. A new set of price coefficients is formed and there is no reason to suppose that the sum of all prices will change in proportion to the sum of all values, even if the newly formed prices are all divided by the price of the money commodity. In fact changes in distribution or the technical conditions of production will, in general, alter total price and total value in a disproportionate manner.

A more crude version of the total price equals total value thesis consists of the assertion that prices, without being divided by the price of the money commodity, keep in step with values. However, the phenomenon of price inflation completely invalidates this idea. There is no reason to suppose that prices have, on the aggregate, kept in proportion to total values. But is this thesis correct if we deflate prices according to some index of price inflation? The answer is no. A price index is calculated according to the actual price of a chosen bundle of goods. In the terms of the previous paragraph this bundle of goods is the "money commodity" and the thesis falls for the same reasons.

It is also argued that total surplus value must be equal to total profit. Again this proposition is open to two interpretations. Is profit defined as redistributed surplus value? If so, the proposition is a tautology once more; it follows logically from the definition of profit. The proposition, on the other hand, becomes meaningful if profit is defined as the difference between revenue from sales and production costs, ignoring for simplicity rent and interest. This is not a theory of the origin of profit, it is just the usual meaning of the word. It is in fact possible to adjust the Bortkiewicz price coefficients so that the equality holds. But we cannot have total profit equal to total surplus value, and total value equal to total price at the same time. Furthermore, any change in distribution or the technical conditions of production is likely to violate the equality.

To state that total surplus value and total profit are, in general unequal is not to assert that either profit or surplus value can be either created or destroyed in circulation. Indeed competition can only redistribute surplus value that is created in production. But surplus value is not the same thing as profit. The former is the value form of the surplus, the latter is the price form. In Capital there are two separate accounting systems, a value system in terms of hours of embodied labour, and a price system. These must not be confused.

The distinction between price and value, and between profit and surplus value is entirely in accord with Marx's criticisms of Ricardo for confusing these categories. The trite dismissal of Bortkiewicz as a "Ricardian" ignores the fact that his solution eradicates a faulty part of the Ricardian heritage to be found in Marx.

ON THE LABOUR THEORY OF VALUE

If the labour theory of value is not a mere tautology it must uncover relations that exist in concrete reality. It must pass beyond the bounds of mere definition. Unfortunately the theory is often misunderstood. Its most ancient and enduring misinterpretation is that commodities exchange at prices which are proportional to their values. Often this is modified and it is asserted that the proportionality holds only in the long run average sense, or only for total output. There is no basis for these proposition.

Even a cursory examination of Marx's solution to the transformation problem will show that he was aware that prices permanently deviate from values. He frequently attacked Ricardo's failure to accept this fact completely. There is no evidence to suggest that when Marx assumed that prices were proportional to values in volume 1 of Capital he was proposing a theory of relative prices: it was a simplifying assumption. The misinterpretation of the labour theory of value as a theory of relative prices is more a creation of hostile bourgeois critics than of Marx himself.

The analysis of embodied labour and abstract labour time is a central feature of Marx's analysis because he sees the economy of all societies as being reducable, in the last analysis, to the economy of time.[21] But the labour theory of value is specific to capitalism, because it asserts that under this system of production the mechanisms for distributing living and dead labour, i.e. profits and prices, are themselves determined by amounts of labour time. The labour theory is not a mere definition of value in terms of labour time. It consists of the meaningful and non-tautological proposition that prices and profits are determined by amounts of labour time, i.e. values, in a certain manner.

Bortkiewicz's transformation is both a demonstration and a re-inforcement of the labour theory of value. In the above presentation it was shown that the rate of profit (p*) and the ratios between the price coefficients (x_1:x_2:x_3) are determined by the magnitude of all the values in the first two departments (k_1, k_2, c_1, c_2, v_1, v_2, s_1 and s_2) by means of an unambiguous solution to a quadratic equation. The analysis can be extended to cover the general situation with numerous firms.[22] These transformations are, therefore, all demonstrations of the labour theory of value based on assumptions that can be shown to correspond to the concrete situation under capitalism.

However, these transformations only demonstrate, they do not prove or construct the labour theory of value. The theory can only be formulated on the basis of an abstract analysis of the key concepts that pertain to the capitalist mode of production.

Bortkiewicz re-inforced the labour theory of value by showing that the rate of profit is determined by the conditions of production in those industries which directly or indirectly produce the wage goods that are received by the workers. Hence the luxury goods sector (department 3) does not directly influence the rate of profit. This thesis has been contested on the grounds that all the elements in a reproduction scheme are closely related to each other, therefore the elements of value in the luxury goods sector effect the magnitude of the other entries in the reproduction scheme. However, all attempts to demonstrate this are based on the assumption that constant capital stock (k) is zero in each department. If this assumption is dropped then the magnitude of the constant capital stock in the luxury goods industries is independent of the conditions of production in the other sectors of the economy. Therefore, in general Bortkiewicz's thesis is correct.

(In the book Western Capitalism Since the War, M. Kidron draws the implication that since the conditions of production in the luxury and arms goods industries do not effect the rate of profit, then accumulation in those industries has prevented a fall in the general rate of profit. This is false because technical changes in the arms goods sector have diffused into other spheres of production, and there is nothing to prevent 'normal' technical progress occuring in the wage and capital goods sectors. There is no reason to suppose that arms production will impede the general march of technical progress, and the implication that Kidron draws is false. However, there is no necessary reason to suppose that technical progress leads to a rise in the organic composition capital and a fall in the rate of profit. But that is a different and more complex matter.)

IN CONCLUSION

Ever since the publication of Sraffa's Production of Commodities by Means of Commodities in 1960 bourgeois economic theory has suffered a number of traumatic shocks as the implications of Sraffa's work have been drawn out. Other social sciences too have experienced convulsions in recent years, and the signs are that there is about to be a scientific revolution in the social sciences in the next few years. If Marxism is to take advantage of this crisis it must emerge from thirty years of almost complete stagnation.

In the past, disputes have been settled by a mere appeal to the authority of the texts of the founders of scientific socialism. Parallel to this has developed a basically idealist reaction to empiricism which allows no empirical data to bear upon the analysis. As a result there is a stultifying tendency to quote rather than to reason, to repeat rather than to prove. Marx's Capital is not the end point in the development of political economy. Some of Marx's formulations require revision or even rejection. Marxism is not a dogma but a living science.

The confusion of value and price in many works has severely hindered the development of Marxist theory. As a result, many developments in the capitalist system have not been understood. Marxists have taken refuge in a rejection of the facts that indicate these developments; price has, for example, tended to become a mystical rather than an empirical category.

The rejection of both an idealist and an empiricist epistemology is a necessary precondition of revival in Marxist science. On this basis it becomes possible to adopt a scientific solution to the transformation problem. Regarding a concrete analysis of modern capitalism the transformation problem is of little direct assistance; it is only the first hurdle.

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NOTES

1. P. Sraffa, The Production of Commodities by Means of Commodities, Cambridge University Press 1960. See also M. Dobb's excellent discussion of this work in A Critique of Economic Theory, edited by E. K. Hunt and J. G. Schwartz, Penguin 1972.

2. K. Marx, Capital, volume 3, Moscow 1962, pp. 47, 70-6, 111, 222 and 224.

3. Ibid., chapter 4, (written by Engels).

4. Ibid., p. 153.

5. Ibid., p. 159, (my emphasis - G.H.).

6. K. Marx, Grundrisse, Berlin 1953, p. 317.

7. L. von Bortkiewicz, On the Correction of Marx's Fundamental Theoretical Construction in the Third Volume of Capital, in Bohm-Bawerk, Karl Marx and the Close of his System, New York 1949. See also the important work by Bortkiewicz, Value and Price in the Marxian System, in International Economic Papers, volume 2, London 1952.

8. P. Sraffa, op. cit.

9. I. Steedman, Marx on the Rate of Profit, in C.S.E. Bulletin, Winter 1972.

10. See E. K. Hunt and J. G. Schwartz, op. cit.

11. K. Marx, Capital, volume 3, p. 176.

12. See a study by N. Geras entitled Marx and the Critique of Political Economy, in Ideology in Social Science, edited by R. Blackburn, Fontana 1972.

13. K. Marx, op. cit., p. 797.

14. K. Marx in Marx's Grundrisse, edited by D. McLellan, Macmillan 1971, pp. 34-5.

15. H. Marcuse, Reason and Revolution, New York 1963, p. 27.

16. L. Colletti, From Rousseau to Lenin, NLB 1972, p. 130.

17. See P. Sweezy, The Theory of Capitalist Development, MR Press 1968, pp. 30-2.

18. K. Marx, Capital, volume 1, Moscow 1961, p. 76, (my emphasis - G.H.).

19. This model has been constructed in an unpublished work by the author.

20. J. Winternitz, Values and Prices: A Solution to the So-Called Transformation Problem, in the Economic Journal, June 1948, pp. 276-280.

21. Marx's Grundrisse, pp. 75-6.

22. See F. Seton, The Transformation Problem, in the Review of Economic Studies, June 1957.

THE LAW OF VALUE AND MARXIST METHOD

Patrick Goode

The central point of contention in the Law of Value Conference (Brighton June 1st) and the papers submitted to it (in particular that of cde. Hodgson) was surely the relation of the empirical and the theoretical in Marxist political economy. In order to explain the post-war boom in world capitalism, and the nature of the present crisis, one must know which propositions in the Marxist schema cannot be immediately, empirically verified, as they form the keystones of the marxist structure, without which the whole edifice would collapse: and how one can build on this foundation, the particular analysis of the present crisis. The foundation adequately laid down by Marx in Capital consists of a proof of the following: that the nature of the capitalist system is to ensure a continually rising productivity of labour, this being however a contradictory development (the rising organic composition of capital (Volume One); that capitalism is able to solve the problem of proportionality (Volume Two); and that the transformation of values into prices is explainable too on the basis of the law of value (Volume Three). What I aim to do here is to show the character of the proof Marx offered for these propositions, which is different from the conception of proof normal to bourgeois methodology. The proof of particular questions is taken up in other papers (e.g. by cde. Yaffe); here they will only be used as illustrations.

"FREEING MARXISM FROM DOGMA"?

It is a great step forward for the revolutionary movement to re-examine the fundamentals of marxism, i.e. political economy. For the last thirty years, Marxist theorists have been more preoccupied by superstructural questions, such as the nature of culture in bourgeois society (e.g. the Frankfurt School). It was perhaps inevitable that when marxist political economy should be rediscovered, it would be in the bowdlerised form of Baran and Sweezy. The cdes. who derive their inspiration from this source, oppose the views put forward here on these grounds. It is necessary to free Marxism from dogma, and to turn it into an empirical science. Marxism is said to be still tainted by its Ricardian heritage, but a knowledge of modern mathematical techniques, denied to an allegedly innumerate Marx[1] can overcome this in the framework of Marxism. The importance of this is:

> ...bourgeois economic theory has suffered a number of traumatic shocks as the implications of Sraffa's work have been drawn out. Other social sciences too have experienced convulsions in recent years, and the signs are that there is about to be a scientific revolution in the social sciences in the next few years. If Marxism is to take advantage of this crisis, it must emerge from thirty years of almost complete stagnation.[2]

The 'dogmatist' position, defended here, and by cdes. Yaffe, Pilling, Parker, Murray and others, is supposedly unwilling to admit that this kind of investigation into Marxism is necessary, and wishes to settle disputes by appeals to the authority of the founders of scientific socialism.

Thirty years of complete stagnation certainly express themselves in the kind of questions (e.g. the transformation problem) raised by those who wish to "free Marxism from dogmatism", Actually this debate was never important in the earlier political movement. Lenin was able to say without qualm:

> The sum total of the values of all the commodities in a given society coincides with the sum total of the prices of the commodities...[3]

as was Trotsky:

> ...great as may be the divergencies between the prices and the values of commodities in individual instances, the sum of all prices is equal to the sum of all values...[4]

The methodological characteristic of our 'dogmatist' position is said to be a merely idealist reaction to empiricism.[5] This is quite untenable.

IS IDEALISM MERELY A REACTION AGAINST EMPIRICISM?

Idealism in its classical expression in Kant and Hegel is much more than a mere reaction against empiricism. It is quite incorrect to say that idealism does not understand that:

> ...any perception of the world is forced into the mould provided by the conceptual structure of the observer.[6]

Here we must distinguish between the subjective idealism of Kant and the objective idealism of Hegel. Kant's criticism of the empiricists was precisely that they accepted ideas as being merely reflections of a given external world, whereas the mind had a part in actually shaping the world. Hegel took this activist principle in idealism further in arguing that the constructions which were necessary to interpret the world were not merely the subjective creation of the mind, but actually grasped in thought as something objective. It is this activist principle which is important in idealism. Marx's advance on idealism consisted in showing that this was not a question of active thought, but active practice. In doing so, Marx completely accepted the transcendence of the empiricists by Kant, and Hegel's transcendence of Kant.

The significant results for the problems here are: (1) That the structure of the Marxist system is different from that of an empiricist one - that is, there are propositions in it which are based on experience, but are not in themselves immediately falsifiable (e.g. about the organic composition of capital). This does not mean to say that Marx's system as a whole is not susceptible of empirical validation. (2) That for science to be empirical, Marx asserts not only that it is necessary to go beyond appearances, but that the appearances themselves have an objective character - they are the mediation between the subject and the world. We will now try and relate these basic methodological points to some of the problems raised.

WHAT IS THE STRUCTURE OF MARX'S SYSTEM?

The empiricist conception of a system is that which formulates laws to cover a mass of factual data. From these laws can be deduced predictions concerning the nature of empirical reality. To show whether such a system is valid or not, one compares one's predictions directly with reality. This is essentially the structure behind all attempts to verify Marx's law of the falling rate of profit directly.[7] Marx's system has a much more complex structure than this. The law of value is merely the conclusion, the external expression of the central category of capital. It cannot be abstracted from the system as a whole; the law is a deduction from the fundamental, contradictory category. This deduction is not a formal deduction, but follows the law of dialectical logic. In this sense, the three volumes of Capital exhibit the logic of capital. Nor can they be separated: for example, the solution of the transformation problem in volume Three is only the working out of what is already implicit in volume One. One cannot eclectically pick parts of Capital which seem sound - it stands or falls as a complete and integral structure.

The fundamental category is for Marx, not an individual capital but total social capital. What has to be analysed first of all is what all capitals have in common - their property of self-expansion. Before one can examine the actions of many capitals on one another, one must show how the consumption of human labour produces surplus-value, and, how this production of surplus-value leads to the reproduction of the capital relation. Marx begins at this level of abstraction, and moves towards the determination of the actions of capitals one one another in volume Three as part of the explanation of the general laws of movement of capital. It is quite incorrect to say that:

> Marx's error stems from his arbitrary assumption that we may treat the social capital as a whole, regarding the capitalist economy as one giant firm.[8]

On the contrary, one has to treat the social capital as a whole. The necessity of so doing relates to a crucial point in Marx's analysis - that of socially necessary, and not individual labour time. Value is the socially necessary labour-time embodied. It does not consist of inputs of labour-time. This was Ricardo's mistake: to see labour-time in merely quantitative terms, and fails to see it in qualitative terms. Before values are commensurable, a change in quality was necessary - i.e. labour and wealth had to be transformed into commodities. To achieve this, a relation of a specific kind between producers and the means of production had to obtain. It is this social relation, a relation of quality which is the basis for quantitative relations, which constitutes capital. It would be impossible to understand this, if we approached the question from the standpoint of the individual capital. By itself, it has no criterion of socially necessary labour time.

The expression of the nature of capital (self-expanding value production) is the rising organic composition of capital. One cannot detach this conception from the basic idea of capital nor its obverse external expression, the falling rate of profit. The necessity of the rising organic composition of capital is derived from the fundamental category of capital. Two objections have been made against this. Firstly, is this not simply a tautology, true by definition, and (presumably therefore) uninteresting. This objection rests on a mistaken conception of the nature of the deduction. The logic of the deduction is not formal, but dialectical. That is, it consists in working out the fundamentally contradictory character of the commodity. The commodity is not use-value and exchange-value side by side: it is the unity of these opposites. The rising organic composition of capital is not to be understood as a once and for all event, which can be simply observed, disproved or proved by reference to immediate empirical facts. It is above all a question of the tendency of development. It is a tautology in that it is derivative on some more basic proposition - but the important point is how this is derived. The second objection is: how can one say that the organic composition of capital rises, and yet one cannot measure it? The answer to this relates to the explanation we have just given, that the organic composition of capital is the expression of a contradiction. Surely it is quite legitimate to say that a ratio has a tendency to increase, without being able to measure that ratio in absolute terms. But the deeper fallacy lies in the notion that somehow it is possible to measure capital. This clearly relates to the idea that value is somehow measurable in labour-time units. But as we have already argued, capital is a social relation, and the determinant of value is socially necessary labour-time.

VALUES AND PRICES

Only if one grasps the point that the structure of Marx's system is different from that of an empiricist system, can one understand what is meant by the necessity of the rising organic composition of capital. In order to illustrate the second methodological point, that Marx considered that appearance had an objective necessity, let us consider the question of values and prices. This is a very difficult question, as one must always be very clear about what is meant by 'price'. This caution is not observed by cde. Hodgson, as Mandel has pointed out:

> In Marx's theory, 'prices of production' are not 'prices' in the current sense of the word at all, i.e. they have nothing to do with money or monetary units. It is therefore a red herring to bring in inflation and changes of monetary units to question the 'realism' of the theorem that the sum of the prices of production must equal the sum of values. By definition abstraction is made of monetary fluctuations in the analysis of prices of production. To deal in that context with monetary units is to start a useless quarrel with Marx.[9]

The methodological status of prices in the Marxist system is that they are not merely appearances. Empiricism is not only confined to the level of appearances, it is also unable to grasp the point that appearances are not mere illusions, but are objectively necessary manifestations of the underlying essence. It is a mistake to see the idealist criticism as merely consisting in the 'destruction' or 'shattering'[10] of the immediate appearances. In this context, this leads one to have two parallel systems, values and prices, which never meet:

> In Capital, there are two separate accounting systems, a value system in terms of hours of embodied labour, and a price system. These must not be confused.[11]

In Marx's system, prices are transformed values. Prices are mystified values, just as profit is a mystified form of surplus-value. But neither are complete illusions:

> The way in which surplus value is transformed into the form of profit by way of the rate of profit is however a further development of the inversion of subject and object that takes place already in the process of production.[12]

The problem that Marx is taking up in volume Three is how the equalisation of profits into a general rate of profit takes place, while at the same time capitals are of different organic composition. It clearly does take place - and yet it is not consciously organised. His solution is that prices of production are a mediation between the capitalist and the inner workings of capitalism. They provide a signal for the capitalist to move his investment - and at the same time, they have an objective basis: they too are ruled by the law of value:

> The law of value dominates price movements with reduction or increases in required labour-time making prices of production fall or rise...[13]

The law of value governs not only the inner workings of capital (which could not be understood from a scrutiny of its outward appearances only) and its appearances, which are the basis for the partly conscious intervention of the capitalist.

CONCLUSIONS

Our argument has been that any attempt to prove certain parts of Marx's system in a directly empirical way, or to offer mathematical solutions in place of solutions Marx indicated, are mistaken in principle. The basic mistake lies in misconceptions of Marx's method, and a substitution for it of empiricism. In order to analyse the present crisis, it is necessary for revolutionaries to ground their analysis on an acceptance, not a rejection of the basic theoretical conquests of Marxism.

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NOTES

1. G. Hodgson, Marxist epistemology and the transformation problem, p. 51.
2. ibid, p. 63.
3. V. I. Lenin, Article on Karl Marx: in Marx-Engels-Marxism, Progress, Moscow, 1968, p. 31.
4. L. Trotsky, Marxism in our time, Pathfinder Press 1972, p. 12.
5. See Hodgson, op. cit., p. 58.
6. ibid, p. 59.
7. E.g. A. Glyn and B. Sutcliffe: British Capitalism Workers and the Profit Squeeze, Penguin 1972.
8. Hodgson, op. cit. p.
9. E. Mandel, Discussion - A reply to Geoff Hodgson, International, volume 2, no. 1, p. 63.
10. Hodgson, op. cit., p. 56 and 58.
11. Hodgson, op. cit., p. 61.
12. K. Marx, Capital, Vol. 3, Progress, Moscow 1966, p. 45.
13. K. Marx, op. cit., p. 179.

U N P R O D U C T I V E   L A B O U R

PRODUCTIVE AND UNPRODUCTIVE LABOUR IN MARX'S POLITICAL ECONOMY[1]

John Harrison[2]

INTRODUCTION

Marx devotes over 300 pages of 'Capital' and 'Theories of Surplus Value' to the question of unproductive labour. Fully half of the main text of Vol. I of 'Theories of Surplus Value' is a discussion and criticism of other political economists' writings on the subject. A substantial appendix then sets out Marx's own views on productive and unproductive labour within the sphere of production. In addition there are substantial sections in 'Capital' Vol. II (The costs of circulation) and Vol. III (Merchant's capital) where Marx discusses what he means by the sphere of circulation and why all labour engaged in circulation activities should be regarded as unproductive.

In sharp contrast to this the various introductions to the theoretical system of 'Capital', or 'textbooks' of Marxist economics, devote very little space to unproductive labour. Paul Sweezy's 'Theory of Capitalist Development', for example, only mentions it when dealing with the effect of the growth of monopoly on the laws of motion of capitalism, that is after dealing with the whole of value theory, accumulation and the transformation problem and then devotes only three pages to it. Ernest Mandel's "Marxist Economic Theory" contains less than two pages on unproductive labour. Almost the only Marxist writers who devote much attention to the problem are those who explicitly revise the concept and define unproductive labour in a different way to Marx. The best known of these reinterpretations is Paul Baran's in "The Political Economy of Growth".

Secondly, and more importantly, there are substantial problems in integrating the concept of unproductive labour into Marx's theoretical system. Apart from people, like Baran, who have explicitly revised the concept, no Marxists have achieved any real integration. Unproductive labour is usually mentioned briefly, loosely defined, and then ignored when discussing such things as the role of competition and the transformation of values into prices. This is clearly unsatisfactory.

This paper is in Four parts. The first part presents a summary of Marx's definition of unproductive labour. The second discusses the theoretical implications of a category of unproductive labour employed directly by capital - this constitutes the main body of the paper. The third part presents some speculative remarks about why Marx wanted to regard some labour employed by capital as unproductive, and the final part discusses unproductive labour performed outside the capitalist sector.

1. MARX'S DEFINITION OF UNPRODUCTIVE LABOUR

Marx's basic definition of productive labour, which he repeats in similar words on a dozen or more occasions, is labour which produces surplus value. Thus he says:

> From the capitalist standpoint only that labour is productive which creates surplus value. (TSV I, 153)[3]

and again

> Productive labour, in its meaning for capitalist production, is wage labour which, exchanged against the variable part of capital ... reproduces not only this part of capital (the value of its own labour - power), but in addition produces surplus value for the capitalist. (TSV I, 152)

He makes it clear that a necessary condition for this is that the labour produces a use-value (i.e. "something capable of satisfying a want of some sort" Vol. I p. 177). It is not necessary that the labourer individually produces a use-value. It is sufficient that his labour contributes to the collective production of use-values.

Thus he says:

> As the co-operative character of the labour-process becomes more marked, so, as a necessary consequence, does our notion of productive labour, become extended. In order to labour productively, it is no longer necessary for you to do manual work yourself; enough if you are an organ of the collective labourer. (Vol. I, p. 508).

The specific nature of the use-value is not relevant. As Marx says:

> ... the designation of labour as productive labour has absolutely nothing to do with the determinate content of that labour, its special utility, or the particular use-value in which it manifests itself. (TSV I, 401)

Thus the use-value maybe either a material object or a service. Further no criteria of the "social usefulness" of a use-value are to be applied.

> The use-value of the commodity in which the labour of a productive worker is embodied may be of the most futile kind. (TSV I, 158)

It appears then that a labourer is productive if he works under capitalist production relations, produces use-values of any kind, in either an individual or a collective manner, and produces surplus value for the capitalist.

Marx's basic definition of unproductive labour, which he again repeats on a large number of occasions, is labour which is exchanged against revenue. Thus he says:

> This also establishes absolutely what unproductive labour is. It is labour which is not exchanged with capital, but directly with revenue, that is wages or profits (including of course the various categories of those who share as co-partners in the capitalist profit, such as interest and rent) TSV I p. 157)

In order to establish clearly the criterion for deciding whether labour is exchanged against capital or against revenue it is necessary to examine closely the various examples Marx gives us of groups of workers who are to be regarded as unproductive.

Consider, first of all, labour performed outside the capitalist sector. Workers who are not employed directly by capital clearly do not produce value or surplus value directly for capital. Thus they are not productive workers. Are they all to be regarded as unproductive, however, or is there a third group of workers who are neither productive nor unproductive?

Marx is clear that there is. When discussing petty commodity producers he says:

> They confront me as sellers of commodities, not as sellers of labour, and this relation therefore has nothing to do with the exchange of capital for labour, therefore also has nothing to do with the distinction between productive and unproductive labour, which depends entirely on whether the labour is exchanged for money as money or money as capital. They therefore belong neither to the category of productive or unproductive labourers, although they are producers of commodities. But their production does not fall under the capitalist mode of production. (TSV I, 407).

Thus clearly not all workers outside the capitalist sector are to be regarded as unproductive. Indeed the last part of the quotation suggests that the distinction - between productive and unproductive labour - does not apply to any work which is not performed under the capitalist mode of production. The earlier part of the quotation, however, suggests that the criterion for establishing whether or not the distinction can be applied is, not whether or not the labour is performed under capitalist production relations, but whether or not it is <u>wage labour</u>.

These two criteria - whether the labour is performed under the capitalist mode of production, and whether it is wage labour - are not identical. A domestic servant for example, who is employed directly by a household, (i.e. works directly for the household, not for a capitalist firm of 'household cleaners' who 'rent' him or her out to the household) performs wage labour but does not work under the capitalist mode of production. The products of his labour are not commodities, since they are not sold, and therefore his labour does not take a value form. Similarly his surplus labour is appropriated directly as use-values and does not take the form of surplus value. State employees are also wage earners who do not work directly for capital.

Marx gives examples, elsewhere, of wage labour performed outside of the capitalist sector which is to be regarded as unproductive. He uses both the example of a domestic servant and that of a jobbing tailor (TSV I p. 157). Thus clearly some wage labour which is not performed under capitalist production relations is unproductive. It is not clear whether all such wage labour is to be regarded as unproductive however. The criterion is presumably, given Marx's definition of revenue as income generated in the capitalist sector but not used as capital, whether or not the wage is financed out of income generated in the capitalist sector. This would mean that a domestic servant employed by a capitalist (or by a worker in the capitalist sector) would be unproductive, whereas a servant employed by a petty commodity producer would be neither productive nor unproductive. State employees financed out of a tax on the capitalist sector would be unproductive, whereas the distinction would not apply to an employee of a nationalised industry which broke even.

The second important question is whether there are any workers <u>within the capitalist sector</u> who should not be regarded as productive labourers. Marx's view is certainly that there are. He cites two groups of labourers who work directly for capital but do not create value or surplus value. The first of these are workers engaged in the field of <u>circulation</u>. Marx says:

> The pure functions of capital in the sphere of circulation ... the acts of selling and buying - produce neither value or surplus value. (Vol. II p. 281)

The second group are some of those workers engaged in supervisory labour. In the case of these workers Marx gives us a clear criterion for distinguishing productive supervisory workers from unproductive ones.

> The labour of supervision and management is naturally required wherever the direct process of production assumes the form of a combined social process ... However, it has a double nature. On the one hand, all labour in which many individuals co-operate necessarily requires a commanding will to co-ordinate and unify the process ... this is a productive job, which must be performed in every combined mode of production. (Vol III p. 383)

However,

> One part of the labour of superintendence merely arises from the antagonistic contradiction between capital and labour ... and belongs to the incidental expenses of production in the same way as nine-tenths of the "labour" occasioned by the circulation process. (TSV III 505)

The test is, then, whether the supervisory work would be essential under any mode of production utilizing these techniques to produce a given bundle of output or whether it is required only under capitalist production relations.

Marx is unfortunately less clear about what constitutes "pure circulation" activities. He appears to say at times that all transport and storage, which alter use-values temporaly and spatially, are to be regarded as branches of production, which add value to the commodities being moved or stored. At other times he says that only some transport and storage are to be regarded as production. As Gough says "at times the text (the section of Vol III dealing with the costs of circulation) is so unclear that certain passages will always be open to doubt". (NLR 76 p. 57)

The most coherent position which can be attributed to Marx is that pure circulation costs are those costs which are occasioned solely by the fact that the goods are being produced and distributed under the capitalist mode of production.

He certainly appears to hold this view at times:

> Whatever may be the social form of the product-supply its preservation requires outlays for buildings, vessels, etc. ... also for means of production and labour, more or less of which must be expended, according to the nature of the product, in order to combat injurious influences ... It may now be asked to what extent these costs enhance the value of commodities ... Insofar as the formation of a supply entails a stagnation of circulation, the expense incurred thereby does not add to the value of commodities ... The costs are the same, but since they now arise <u>purely out of the form</u>, that is to say, out of the <u>necessity of transforming commodities into money</u> ... they do not enter into the values of the commodities. (Vol. II 147-51 emphasis added)

The criterion here is the same as for unproductive supervisory labour. Thus we have a general definition of unproductive labour employed by capital which is that labour which would not be required to produce and distribute the same use values, produced with the same techniques, under a different, more rationally organised, mode of production.[4]

To recap; labour is productive if it is exchanged with capital for the purpose of augmenting surplus value. For this it is necessary that the labourer produces, either individually or collectively, a use-value. A use-value is anything which satisfies a want and may be 'of the most futile kind'. The labourer is only regarded as contributing towards the production of a use-value if his labour is technically indispensible to its production and distribution and not if it is required only because the production takes place under capitalist relations.

All other labour exchanged directly with capital is unproductive. Further, all wage labour not performed under the capitalist mode of production but financed out of revenue generated in the capitalist sector is unproductive. To distinguish this group of workers from unproductive workers within the capitalist sector let us call them non-productive workers.

2. THEORETICAL IMPLICATIONS OF THE CONCEPT OF UNPRODUCTIVE LABOUR

This section is concerned only with unproductive labour employed by capital, that is the labour designated in the last section as unproductive rather than non-productive. A discussion of how to treat labour outside the capitalist mode of production is postponed till part 4.

The first set of problems with Marx's concept of unproductive labour concerns his criterion for distinguishing unproductive labour from productive labour - the comparison with a different mode of production utilizing the same techniques to produce the same output.

Why assume that the same output is produced? Certain use-values are by their nature specific to a society based on commodity production. Thus cash registers, for example, would have no use-value in a non-monetary economy and would clearly not be produced. More generally the demand for certain commodities is clearly influenced, and indeed often produced, by capitalism.

It is this difficulty that led Baran to redefine unproductive labour to cover all labour engaged in the production of "wasteful" use-values. This makes the concept explicitly critical in that its function is to contrast how things are with how they could be.

In contrast to Baran, however, Marx did not formulate his concept of unproductive labour for use in a moral critique of the wastefulness of capitalism. He was concerned to derive a concept which would be helpful in understanding the way things are, rather than in comparing them with the way things could be. Thus Marx regarded his concept of unproductive labour as a scientific, rather than a critical one. He believed it was useful for analysing the capitalist mode of production and thereby understanding the "laws of motion of modern society".

He was concerned to maintain a distinction between the labour necessary for the production of a use-value under any social system and that necessary only under the capitalist mode of production, not because he saw labour necessary only under capitalism as wasteful from the point of view of society as a whole, but because he regarded it as unproductive from the viewpoint of capital. The point of the comparison with a hypothetical mode of production producing the same use-values was that it showed a maximum potential level of output for a given technology, and hence, with the subsistence level also given, a maximum potential rate of accumulation. Unproductive labour constitutes a reduction in the level of output and rate of accumulation actually possible under capitalism.

However, even if it is possible to maintain the distinction between labour technically necessary for the production of a use-value and the 'necessity' of the use-value itself (and as was argued above it is extremely difficult to see how this can be done with use-values which are by their nature specific to a monetary economy) then it is not at all clear what is gained by treating unproductive labour separately from the other features of capitalism which affect productivity, output levels, and the rate of accumulation, and hence the "laws of motion".

For example why assume the same techniques are used? Capitalists will choose the technique of production which minimizes, for a given output level, the sum of dead labour expended (constant capital) and the paid part only of living labour (variable capital). Thus, even with a given technology, the actual techniques chosen for the production process depend on capitalist production relations - if the aim was to minimize total past and present labour a different technique would be chosen. In other words the amount of 'productive' labour involved in the production of a commodity under a non-capitalist mode of production with the same available technology would be different. This means that the comparison of capitalist production with a hypothetical system utilizing the same techniques is uninteresting. It does not establish the difference between the maximum technologically possible rate of accumulation, for a given subsistence level, and the maximum actually possible under capitalism.

All this is not meant to imply that questions about how much social labour could be saved by doing away with supervisory labour that is required only in a class society or, to take an example from Baran's extension of Marx's concept, by replacing private cars by a public transport system, are either meaningless or uninteresting, but merely that Marx did not succeed in formulating a concept of 'unproductive labour' which is helpful in an analysis of "the laws of motion" of capitalism.

The second, and far more serious, set of problems with the concept of unproductive labour concerns its relation to the law of value. The existence, in Marx's theoretical system, of a category of labour employed directly by capital but yielding neither value nor suplus value throws into confusion various aspects of his explanation of the operation of the law of value under capitalism. The rest of this section considers two important examples.

(a) The Rate of exploitation

Consider a 'corn/corn' economy in which all labour is productive. 100 hours of socially necessary labour are performed, which yield 100 units of corn. No non-labour means of production are used. For every hour's labour the worker receives ½ a unit of corn. In this situation v = 50, s = 50 and the rate of exploitation s/v = 100%. This measures the part of the working day worked for the capitalist divided by the part worked for the workers. Assume next that 10 hours have to be devoted to 'unproductive' circulation activities in order to realise the corn (salesmen, advertizers, etc.). Now only 90 units of corn are produced, 45 units go as wages to the productive workers, 5 as wages to 'unproductive' workers and 40 remain for the capitalists to accumulate (or consume). The ratio of profits to wages (profits calculated as revenues minus costs) and the proportion of the working day worked for the capitalist divided by that worked for the workers, by the working class as a whole, is 40/50 or 80%. This is the 'natural' measure of the rate of exploitation.

On Marx's argument, that only productive labour creates value and any unproductive labour employed by capital is financed out of the surplus, the rate of exploitation is measured as the surplus product of unproductive labour divided by the wages of productive labourers i.e. 45/45 or 100%.

It should be noted that either way of looking at the rate of exploitation will yield the same rate of profit (expressed in value terms). In the example above on my way of looking at it the rate of profit is equal to the rate of exploitation defined as the ratio of surplus to necessary labour performed by both productive and unproductive workers, i.e. $p^1 = \frac{s}{v} = \frac{40}{50} = 80\%$. On Marx's definition of the rate of exploitation the rate of profit is equal to surplus labour minus the wages of unproductive workers all divided by the wages of both productive and unproductive workers i.e. $p^1 = \frac{s - u}{v + u} = \frac{45 - 5}{45 + 5} = \frac{40}{50} = 80\%$, where u = the wages of unproductive workers. The difference is that the move from the first situation, where 100 units of corn is that the move from the first situation, where 100 units of corn are produced, to the second, where only 90 are produced, is seen by me as involving a change in the absolute size of the surplus and in the rate of exploitation and by Marx as involving a change in both the absolute size of the surplus and the way the surplus is utilized (as capital or as revenue expended on unproductive workers) but not in the rate of exploitation.

Marx's approach is a less satisfactory way of viewing the rate of exploitation for three reasons. Firstly it means that the identity between the rate of exploitation and the ratio of the part of the working day worked for the capitalist and the part worked for the working class itself, is lost. Thus the rate of exploitation no longer measures the ratio of total labour performed to labour involved in the production of means of subsistence for the working class as a whole.

In addition it means it is not possible to derive the rate of profit from a knowledge of the rate of exploitation and the organic composition of capital alone. The amount of unproductive labour must also be known. It should be noted that this is of considerable importance for the question of how far empirical observation can tell anything about movements at the value level. All observation takes place at the level of market prices. If all labour employed by capital is considered to be productive then, over reasonable time periods, market prices are a close approximation to price of production (see section (b)). This means that, although values can never be measured directly, it is possible to specify fairly accurately what charges would have to occur at the value level for prices to move in a contrary direction to values.[5] If, however, price movements are a function of both value movements <u>and</u> charges in the ratio of productive to unproductive labour and this ratio is difficult to estimate empirically (and under Marx's definition it certainly is), then it is far more difficult to make estimates of even the <u>direction</u> of value movements from price data. It should be clear that what this is saying is that value defined in one way (including all labour time) is more easily "measurable" than value defined in another way (exclusive of 'unproductive' labour).

Secondly there is the question of how the unpaid labour of the unproductive workers is to be treated. They perform unpaid labour in that the addition to the capitalists revenue that their work produces exceeds their wages (otherwise the capitalist would not hire them). It seems extremely tortuous to say as Marx does that, while both productive and unproductive workers labour under capitalist production relations and add more to the capitalist's revenue than he pays them in wages, productive workers are exploited because they produce more value than the value of their labour power whereas their unproductive co-workers are not exploited because they produce no value, but perform unpaid labour because they reduce the cost of realising values by more than the cost of their wages.

Thirdly and most importantly, treating the rate of exploitation as the surplus labour divided by the necessary labour of <u>productive workers</u> destroys the unity of what can be called the quantitative and qualitative aspects of the notion of exploitation. Exploitation, in Marx, includes not only the idea that the worker receives the equivalent of less than he produces (something which is common to a wide variety of different modes of production) but also the specific characteristics of the labour process under capitalist production relations, most notably the fact that once the worker had sold his labour-power he is under the direct control of the capitalist who dictates the nature, pace, etc. of his work.[6] This latter, qualitative, aspect of exploitation applies just as much to unproductive workers as to productive ones.

(b) The transformation of values into prices of production

Further problems occur with the concept of unproductive labour when looking at the transformation of values into prices of production and of surplus value into profit.

If prices equalled values in a situation where the organic composition of capital (ratio of constant to variable capital) varied between industries then differential rates of profit would exist and accumulation would cease in those industries with a high organic composition (since capitalists could obtain a higher return by investing in industries with a lower organic composition of capital). It is therefore necessary for the reproduction of the capitalist mode of production that rates of return are equalized between industries. This means that commodities do not tend to exchange in direct proportion to values but as functions of values which give an equal rate of return between industries (prices of production). This tendency towards equalization of the rate of profit means a transfer of value from industries with a low organic composition to those with a high organic composition.

If only productive labour yields value then prices of production no longer bear any determinate relation to values (except under extremely restricting and highly unrealistic assumptions about the relative distribution of unproductive labour between industries), since profit is equalized as a rate of return on total costs and some of these costs are unproductive labour. There is no longer a bridge between the essence of the capitalist mode of production (value and surplus value) and the phenomena experienced by the bearers of the production relations (prices, wages and profits).

Marx seems half aware of this problem. When he originally produces his solution to the transformation problem he says both that prices of production bear a unique determinate relation to values and that they are the trend rate around which actual market prices fluctuate. Later in Vol. III when he introduces merchant capital he says that his earlier comments on prices of production are now subject of modification. Prices of production should be considered as the trend prices at which merchant capital buys commodities. Trend market prices are then prices of production plus the profit earned by merchant capital.

This is a satisfactory solution only if all labour involved in the production and handling of commodities prior to their being sold to merchant capital is productive and all labour employed by merchant capital is unproductive. In this case prices of production bear a determinate relation to values and represent trend wholesale prices. On Marx's definition of unproductive labour, however, this is a highly unrealistic assumption. It is much more likely that there will be significant quantities of unproductive labour distributed unevenly between capitals. Industrial capitals will employ differing quantities of unproductive labour engaged in supervisory tasks and the like and merchant capitals will employ different proportions of productive labour, engaged in transport, storage, etc., and unproductive labour, engaged in pure buying and selling operations. In this case prices of production, as modified values, bear no simple relation to any (wholesale or retail) observed prices. Nor do they correspond to any internal accounting prices (since capitalist make no distinction between productive and unproductive labour).

In such a situation there are two possible positions to adopt if the concept of unproductive labour is to be retained. One is to reject the essence and stay in the realm of phenomena and ideology. This clearly represents a complete break with the labour theory of value and Marxism.

The other is to remain at the level of essence. This involves saying that prices of production are modified values which do not bear any relation to market prices, and that the concept of profit is modified surplus value which bears no relation to the capitalists' conception of profit. This is a system that is incapable of touching concrete reality at any point. Moreover it is internally inconsistent in that the mechanism it postulates for bringing about the transformation of values into prices of production is competition, and competition between capitalists must take place in the plane of appearances. They do not seek to maximise the rate of return on money advanced for productive activity only, but on total advances. In concrete terms, capitalists will tend to invest in industries where the rate of return on total advances is higher than average and to refrain from investing in industries where it is lower. This affects the supply of the different commodities and, with a given pattern of demand, brings about a change in relative prices to effect the equalization of the rate of profit. It is thus not possible to argue, in the general case, both that there is a category of 'unproductive' labour employed by capital which does not yield value and that prices of production bear any determinate relation whatsoever to values.

The central conclusion to be drawn from this section can be summarized as follows. Marx's attempt to formulate a scientific category of unproductive labour employed by capital was fundamentally misconceived. His brilliant analysis of the working of the law of value under capitalism - his demonstration both of the way production is regulated by socially necessary labour time, and of the way the operation of the law of value itself produces the appearances which conceal its true nature - entails a different definition of value to the one stated by Marx. The category of value implicit in Marx's analysis is the socially necessary equivalent of all labour performed under capitalist production relations. Actual labour time exceeds socially necessary labour time if too much labour is engaged in the production of a commodity, relative to a given state of demand, or if the technique of production is relatively inefficient. Actual labour time does not exceed its socially necessary equivalent solely because it would not be required to produce the same use-values under a different mode of production. This latter definition of value - the socially necessary equivalent of 'productive' labour only - the one explicit in Marx's writings, does not correspond to the realities of capitalist production.

3. WHY DID MARX WANT TO DISTINGUISH PRODUCTIVE AND UNPRODUCTIVE LABOUR?

Marx asserts on a large number of occasions that the distinction between productive and unproductive labour is a crucial one. He argues that, since the capitalist mode of production is based upon the appropriation and accumulation of surplus value, it is vital to distinguish labour which yields surplus value from labour which does not. Thus he rails against people who confuse useful labour, or labour productive of a use-value, with productive labour from the standpoint of capital, or labour productive of surplus value.

> Only bourgeois narrow-mindedness, which regards the capitalist forms of production as absolute forms - hence as eternal, natural forms of production - can confuse the question of what is productive labour from the standpoint of capital with the question of what labour is productive in general ... and consequently fancy itself very wise in giving the answer that all labour which produces anything at all ... is by that very fact productive labour. (TSV I p. 393)

This is clear as regards labour performed outside of the capitalist mode of production - what we earlier called non-productive labour - since such labour clearly cannot yield surplus value for the capitalist directly. However, it does not help in explaining why Marx regarded certain labour performed under the capitalist mode of production as being unproductive. Marx nowhere makes clear his reasons. We can only speculate as to why chose to do so.

The distinction features a great deal in the classical political economists that Marx admired, especially Smith and Ricardo. One of the ways Marx evolved the theoretical system of "Capital" was to take the central concepts of classical political economy and, by thinking through the inconsistencies and unanswered questions that they left, create a radically new problematic in which the concepts were redefined in a more scientific manner. The work of previous political economists constituted a good deal of the raw material, so as to speak, which Marx transformed into his theoretical system. (Consider, for example, the relation between Ricardo's value theory and Marx's, and especially Marx's formulation of the concept of the value of labour power - which he regarded as one of his major theoretical achievements since it explains how all commodities can exchange at their values and profit still be generated).

It is noticeable that much the largest section on unproductive labour in Marx occurs in 'Theories of Surplus Value' Vol. I, where he is discussing other economists views on the subject. The distinction also features very little in Vol. I, which is the only part of the planned four volume 'Capital' which Marx wrote a final version of himself. All he says in Vol. I is that productive labour under capitalism should not be confused with useful labour, and that it is labour which yields surplus value. This is consistent with treating all labour performed under the capitalist mode of production as productive. He then refers the reader to "Book Four which treats of the history of the theory".

His unusual lack of clarity in a number of passages, included in later volumes by Engels, has already been mentioned. As Sweezy says

> Marx's treatment of these expenses (unproductive costs of circulation) is not altogether unambiguous; the relevant passages have the ear-marks of a rough first draft in which he was working his way through the problems without a clear picture at the outset of the conclusions which would emerge. (Theory of Capitalist Development p. 279)

I would suggest that if Marx had worked his way through the problems he would have realized that any category of unproductive labour that included workers employed directly by capital was fundamentally inconsistent with his analysis of the working of the law of value.

4. NON-PRODUCTIVE LABOUR OUTSIDE THE CAPITALIST SECTOR

All the problems outlined in Section 2 apply only to the category of unproductive labour within the capitalist sector - that is to the group of workers we earlier called unproductive, as opposed to non-productive labourers.

It makes a lot more sense to describe wage labour performed outside the capitalist sector, but financed from income generated within the capitalist sector, as nonproductive. Such labour is clearly exchanged against revenue rather than capital, since it is not employed directly by capital, and hence cannot yield value or surplus value for the capitalist. It represents an immediate drain on the accumulatable surplus and hence reduces the amount of accumulation possible. In this sense it is analogous to capitalists' consumption.

This immediate effect of a drain on the accumulatable surplus need not be compensated for in any way. Domestic servants, for example, who were by far the largest component of nonproductive labour in Marx's day, do not yield any benefits for capital qua capital. If a capitalist employs a servant he pays him out of profits i.e. out of that part of the surplus appropriated by his capital, and thereby has less available for accumulation. The servant's labour is embodied in use values which the capitalist consumes. The capitalist's living standards are improved at the expense of the expansion of his capital.

Not all nonproductive labour is of this type however. Although the immediate effect of all labour financed out of capitalist revenue is a reduction in the mass of profit available for accumulation there may be counteracting benefits for capital. If the labour financed out of revenue is employed in a way which benefits capital then the overall, or net, effect may be beneficial to capital. This can be illustrated by means of two brief examples.

Consider a system of state education financed by a tax on capital. The education service uses simple labour only (i.e. no skilled labour and no non-labour inputs). Its sole purpose is imparting skills to the capitalist labour force. Workers who are being trained in this sector acquire their skills effortlessly (i.e. at no cost in terms of time, etc. to themselves). The proximate effect on capital of the existence of this sector is a reduction of accumulatable surplus equivalent to the wages of the workers in the educational sector. In return for this outflow, however, capital receives a more skilled labour force. Providing the outflow for wages represents less labour time than the educational workers put into teaching (i.e. providing workers in the educational sector perform surplus labour) then capital receives more labour time, via an increase in the complexity of the labour it employs than it pays out to finance the educational sector. The outflow from the capitalist sector represents the paid labour of educational workers and the inflow represents their total labour time, embodied in the skilled worker. The net effect, is therefore, a gain for capital.[7]

Consider next housework. Take a husband and wife with no children. The husband works 10 hours a day in the capitalist sector and the wife works 10 hours in the home, dividing her time equally between the production of use-values for herself and for her husband. The husband is paid a wage representing five hours labour time. He gives half of this to his wife. His subsistence consists of $2\frac{1}{2}$ hours worth of good produced in the capitalist sector and five hours worth produced in the home. Providing it would take the same amount of labour to produce the 'housework use-values' in the capitalist sector then the value of the husband's labour power is $7\frac{1}{2}$ hours - since that is the labour time required to produce his subsistence. Capital, by paying out the equivalent of $2\frac{1}{2}$ hours labour time to the wife avoids paying out the equivalent of 5 hours to the husband. The proximate effect is a loss of $2\frac{1}{2}$ hours labour time for capital but the net effect is a gain of $2\frac{1}{2}$ hours.[8]

These two examples should not be taken to imply that all non-productive labour benefits capital. Nor that all state expenditure does - some state expenditure clearly has no such counter-acting beneficial effects for capital (e.g. state pageantry). However, the examples do illustrate the dangers of regarding all state employees as analogous to domestic servants from capital's point of view. They also illustrate the need for examining both the immediate and the net effects on capital of labour performed outside the capitalist sector.

CONCLUSIONS AND SUMMARY

For unproductive labour to be used as a scientific concept it must be demonstrated both that it can be defined in a scientific manner and that it can be successfully integrated into the general theoretical framework of Marxist political economy. Unless and until this can be done the concept should not be used.

All labour performed under the capitalist mode of production should be treated as 'productive'. That is all wage labour employed by capital should be regarded as collectively engaged in the production and realization of use-values, and as producing value and surplus value. All employees of capital are thus variable capital and, by derivation, the entire wage fund is variable capital. Similarly all constant capital is 'productive' constant capital.

The rate of exploitation is thus the part of the entire social working day worked for the capitalist, divided by the part worked for the workers. This is surplus labour over necessary labour and could be measured, in a pure autakic capitalist system using simple labour only, as value-added minus the wages bill all divided by the wages bill, or as profit interest and rent divided by the wage bill.[9] Prices of production, derived from any of the corrected versions of Marx's solution to the transformation problem, represent both modified values (i.e. bear a unique determinate relation to values[10]) and the trend rate, or equilibrium level, of market prices.

Labour performed outside the capitalist mode of production should be examined, from the standpoint of capital, in terms of both its proximate effect on the size and rate of profit and its overall or <u>net</u> effect. The proximate effect of labour which is financed out of capitalist revenue (e.g. by a tax on capital) is clearly a reduction in profit available for accumulation. If this labour is employed in a way which benefits capital, however, then the net effect may be beneficial.

The argument of this paper can be summarized as follows. The concept of unproductive is far from clear in Marx's writings. The definition most consistent with the spirit and letter of the texts is as follows. All labour employed by capital which is required only because of the specific characteristics of the mode of production and, hence, which would not be required in a hypothetical more rational system of production utilizing the same techniques, is unproductive. The concept of unproductive labour, thus defined, does not appear to be of any value (sic) in understanding the laws of the motion of the capitalist mode of production. Further there are a number of fundamental problems involved in incorporating the concept into Marx's general theoretical system in a consistent way. The concept should therefore not be used in political economy. To insist on retaining a concept <u>solely</u> because it is in Marx's writings is to reduce Marxism from the status of a science to that of a dogma.

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REFERENCES

1. This paper takes off, as it were, from Ian Gough's article "Marx's theory of productive and unproductive labour" (NLR 76). Gough provides an excellent reconstruction of Marx's definition of unproductive labour based on the relevant passages in 'Capital' and 'Theories of Surplus Value'. What he does not do, however, is to analyse satisfactorily the implications of the concept of unproductive labour for Marx's overall theoretical framework.

2. I should like to thank Andrew Glyn, Bob Sutcliffe and Phil Armstrong for helpful comments and suggestions.

3. All references to 'Theories of Surplus Value' (TSV) and 'Capital' (Vol. I, II or III) are to the Lawrence and Wishart editions.

4. For similar conclusions see Ian Gough NLR 76 and Ernest Mandel "Marxist Economic Theory". Merlin 1972.

5. See, for example, the discussion of the conditions which would have to hold for a movement in the bourgeois measure of the "capital/output" ratio, in price terms, to misrepresent the direction of the movement in the organic composition of capital, measured in value terms, in Andrew Glyn, "Capitalist Crisis and the Organic Composition". C.S.E. Bulletin, Winter 1972.

6. See Bob Rowthorn, "Vulgar Economy" Pt. II C.S.E. Bulletin Spring 1973.

7. See Bob Rowthorn, "The reduction of skilled to unskilled labour" (mimeo).

8. For a development of this argument see my forthcoming paper on the political economy of housework.

9. This is not strictly accurate because the sum of wage goods in price terms need not equal the sum in value terms. See e.g. Bortkiewitz 'Value and Price in the Marxian System' or any of the standard literature on the transformation problem.

10. For minor exceptions to this see Morishima "Marx's Economics" C.U.P. 1973.

CATEGORIES OF LABOUR POWER FOR CAPITAL

Paul Bullock

It has recently been suggested that the concept of unproductive labour should not be used in political economy,[1] whilst some months ago Mr. Gough, in an article in the New Left Review, stated what appears to me as the generally accepted interpretation of the concepts of productive and unproductive labour.[2] The present article will attempt to deal with some problems ignored by Gough, whilst reaffirming the explanatory use of these concepts.

I will first express the generally accepted interpretation of what productive and unproductive labour are, and then develop this interpretation by refering to Marx's own notes collected in the Theories of Surplus Value. I regard an adjustment to the type of exposition found in Gough's work as necessary if we are to understand the later development of Marx's thought in this respect, and if any contemporary progress is to be made in the analysis of labour's relations to Capital.

LABOUR POWER: THE RELATIONS WITH CAPITAL

In Marx's exposition of the accumulation of Capital, he uses the concept of variable capital. This concept is the 'appropriation' of live, human labour power, in its relation to constant capital.[3] It expresses the commodity found in the market by capitalists, which alone has the capacity, when set to work, to produce more value than is required to produce it. This capacity of course, will only be realised under certain conditions of production, it must be drawn out. The variable capital, "wage labour in its scientific meaning",[4] in Marx's exposition is clearly that of a productive kind, that is to say it is paid a wage in exchange for which it is applied in conditions which ensure that surplus value is produced by it.[5]

Productive labour for capital is then,

> wage labour which, exchanged against the variable part of capital (the part of capital that is spent on wages) reproduces not only this part of capital (or the value of its own labour power), but in addition produces surplus value for the capitalist. ... Only that wage-labour is productive which produces capital.[6]

Since Marx goes over this point again and again, we wish here only to clarify the meaning of 'productive for capital', in a way which is generally ignored. This clarification follows Marx's own adjustments which are to be found in the Theories of Surplus Value Volume I. We will follow this development through.

(i) Productive Labour in General

> For Marx, the concept of productive labour was an historically specific concept, and for this very reason it was necessary to distinguish at the outset productive labour under capitalism from 'productive labour in general'. [7]

Productive labour in general is merely useful-labour, and is a necessary condition of human existence. This condition must hold for the development of particular, and consequently, generalised commodity production, i.e. capitalist production. Labour only reproducing itself is productive for itself, not for capital, whether or not it works for capital. Labour is productive for capital when it produces value over and above that average, socially necessary value, required by labour for its self reproduction.

> ... capital, depends on the productivity of labour: not however on its absolute, but on its relative productivity.[8]

Labour that is simply productive of use value, or productive for itself, may be said to be productive labour in general, but not productive labour for capital, and is not the variable capital of Marx's diagram of accumulation.

> The method of determining, from the standpoint of the labour process alone, what is productive, is by no means directly applicable to the case of the capitalist mode of production.[9]

Productive labour for capital does not face the conditions of production as labour in general that has no specific social character.

(ii) Necessary Labour

Labour power, residing in the labourer, can only be continually expended if the labourer consumes use values necessary for the reproduction of that labour power. Now under capitalism the value of labour power as a commodity, is like every other commodity, determined by the quantity of labour time required to produce it. This requirement may be conceived of as a social average, a subsistence lèvel. This should not be equated with a life giving minimum consumption, for it is not absolutely but socially determined.

Now a labourer may produce value equal to his own 'necessary' consumption, and as such he will be productive for himself, but not for capital.

> Necessary labour is not necessarily productive but is the selling of the labour-power as a use value until the 'wage' returns the equivalent of power expended.[10]

Necessary labour may be performed by both productive and unproductive labour. If the labourer does not expend his labour power upon commodities, but merely produces use-values for direct consumption by the capitalist dass, he is to be termed unproductive. In this case his labour is exchanged against revenue. It is of no matter, in this case, whether or not the labourer produces less, the same amount of, or more use values than he must necessarily consume to reproduce his own labour power, he remains unproductive for capital.

If only necessary labour time is expended by labourers upon commodities, that is to say labour is exchanged against capital, no surplus is yet created and this relation is also unproductive for capital. Necessary labour (average social labour time and intensity necessary for the reproduction of labours' powers), may be performed both by labour that is productive for capital, and that which is not. This may be the case either when the latter is or, is not, part of capitalist social relations.

The concept of necessary labour is thus more precise than that of 'productive labour in general', for it specifies the production of a certain amount of use values, within any specific mode of production. We should be careful not to confuse 'necessary labour' with labour which might be said to perform a necessary function.

(iii) Productive Labour for Capital

Before I develop the definition, it should be noted that apart from the need to define variable capital as productive labour for accumulating capital, and thence as a critical concept for analysing the work of his contemporaries and predecessors, it is not clear what further uses Marx had in mind for this concept. The Theories of Surplus Value are unfinished, that is to say finally uncorrected by Marx for publication, and this shows clearly in the looseness of the work. However I believe that it is possible to use the concepts of productive and unproductive labour, in a fashion which contributes to the value analysis of the movement of the capitalist social formation. This involves criticising and developing Marx's work.

Productive labour for Capital, is a category predicated by the general abstract concept 'productive labour in general'. It requires furthermore that at least necessary labour be performed, for we have already noted that the worker who produces "vendible commodities",

> ... but only to the amount equivalent to his own labour power[11]

is unproductive for capital.

The concept of labour is here treated not in terms of cost, but in terms of its contribution to expanding capital. Productive labour is that labour which expends labour power in the production of commodities, which contain value over and above that value (expressed in average social labour time and intenity of production) required to reproduce the labour power expended.

> ... the excess of the value of the product over the value of its constituent elements, is equal to the expansion of the capital advanced or to the surplus-value produced.[12]

At this stage, and as normally interpreted, the definition is not derived from the material characteristics of lbour,

> ... but from the definite social form, the social relations of production, within which the labour is realised.[13]

Neither can the question be reduced to one of the returns, by type or amount, to labour.

> This definition has nothing to do with the speciality of the worker.
>
> The use-value of the commodity in which the labour of a productive worker is embodied may be of the most futile kind. The material characteristics are in no way linked with its nature which on the contrary is only the expression of a definite social relation of production. It is a definition of labour which is derived not from its content or result but from its particular form.[14]

The morals and the merits of any two goods have nothing to do with the conceptual distinction we are establishing.[15] Their corporial state, have at this time in the scientific process, nothing to do with the definition of the concept, for as in the case of transportation, the labour involved may leave no actual trace in the product.

It is clear then that productive labour is exchanged against money as capital; it.is the process by which labour produces commodities for the capitalist over and above those necessary for its own subsistence. The commodity, as materialised labour power - in the sense of its exchange value - is a concept of a social mode of existence of that materiality. It is conceived of as a definite quantity of social labour time, or of money.

> The explanation of "productive labour" as labour which produces 'commodities' also corresponds, therefore, to a much more elementary point of view than that which defines productive labour as labour which produces capital.[16]

When discussing commodities Marx distinguished between labour power, and all other commodities,[17] and this brings us to our first development.

The distinction between labour power and other commodities is made for two reasons. Labour which produces labour power directly, that is to say produces, trains, develops, maintains or reproduces labour power itself[18]

is left out of account (although it is seemingly possible to categorise such labour power as productive or unproductive for capital) because to include it

> ... would open the flood-gates for false pretensions to the title of productive labour.[19]

Unless we are able to determine exactly, what labour produces labour power in each stage of capitalist development, and in so doing move away from the more abstract formulations of Marxist science, it would seem well to continue to leave that labour which produces labour power as a commodity, out of account when defining productive labour.

Nevertheless, in specific cases, where labour power is expended in augmenting labour power as a commodity, it may serve an important development if we no longer leave it out of account. For this, initially didactic, reason and as a consequence of further observations outlined below, we will shortly investigate the cases of Transport and Education.

There is of course one objection to treating the world of commodities as one; Marx clearly points out that labour power differs from all other commodities inasmuch as it is not part of the fund from which the labourer is paid. I do not think that this distinction vitiates any attempt to define as productive or unproductive the labour power which produces labour power. Furthermore Marx was working within a specific period of capitalist development and it might well be argued that contemporary monopoly capitalism can be theoretically reconstructed by treating labour power as part of the fund from which labour is paid. I mean by this that in the contemporary period services as commodities, are an increasing proportion of the socially necessary consumption of labourers. This is a further reason why we will examine a concrete example, education.

A suspicion may already have formed in the minds of readers of the Theories of Surplus Value that by leaving labour power out of account, Marx was ignoring the problem of labour power as part of the fund from which labour is paid, and that consequently the problem of certain services as commodities is belittled and the 'mental' aspect of labour power left to one side. It might be inferred from this that in fact, the way in which labour power is expressed in a commodity form does have some previously neglected bearing upon the definition of productive and unproductive labour. It is this problem which has prompted this investigation of the generally accepted definitions.

Until now however, the general position is that it is the social relation within which the commodity is set to work which is alone definitive.[20] Any reference to the type of commodity produced in the definition of productive labour is wrong. J. S. Mill's statement that,

> ...labourers which produce labour power itself are also productive,[21]

is clearly at odds with Marx's definition. We can see that Mill is indicating 'labour productive in general', not productive for capital. The terms which are used to construct the concept of 'productive labour', for example, socially necessary labour time, are social averages, ideal generalisations. So it is with the specific concepts under discussion.

> As the co-operative character of the labour process becomes more and more marked, so, as a necessary consequence, does our notion of productive labour, and of its agent the productive labourer, become extended. In order to labour productively, it is no longer necessary for you to do manual work yourself; enough of you are an organ of the collective labourer, and perform one of its subordinate functions. The first definition of the productive labourer ... still remains correct for the collective labourer considered as a whole. But it no longer holds good for each member taken individually.[22]

To attempt to explain a single worker's position with respect to capital is thus made inadmissable. As Poulantzas reminds us, the collective labourers are productive labourers.[23]

(iv) Unproductive Labour

We have seen that what interests the capitalist is that labour power is the only commodity which can create value. Productive labour is that which is directly exchanged against capital; labour power is transformed into capital. Productive labour is wage labour in its scientific meaning. This labour is variable capital, and must produce at least its necessary value.

Now all workers under capital receive a wage, but we should not confuse the general term 'wage' with scientific meaning of the word. Despite the clarity of this point in Marx, Harrison has attempted to dismiss the concept of unproductive labour by confusing the two. He insinuates that productive labour is 'wage' labour,[24] (wage being money received for working for the capitalist!) and that this 'wage' be accepted as being equivalent to that sum paid to variable capital.[25] Money paid by Capital to labour is not wage in its scientific meaning. It is clear that unproductive labour receives a 'wage', in every day terms, but this is different from that paid to variable capital.

> ... labour which is not exchanged with capital, but directly with revenue, that is, with wages or profit (including of course the various categories of those who share as co-partners in the capitalists' profit, such as interest and rent.)[26]

The unproductive labourer then, does not produce a commodity which is sold by the capitalist on the market, and which thereby realises surplus labour time for the capitalist. As with the definition of productive labour, the concept is not derived from the type of use - value produced, skill of the labourer, the costs of labour power, or the corporial state of the use value.

The unproductive labourer produces a mere use value for the capitalist, not a commodity; an imaginary or real use value. It is characteristic of the unproductive labourer,

> that he produces no commodities for his buyer, but indeed receives commodities from him.[27]

The capitalist qua capitalist purchases labour power with which to create surplus value. The industrial capitalist (or any holder of money revenue - rentier, wage earner, finance capitalist) qua consumer, purchases labour power for the direct use value that it provides. This is merely the circulation of money.

THE QUALIFICATION OF THE GENERAL DEFINITION

The Difficult Case of 'Services'

We have already indicated that our interest in the concepts of productive and unproductive labour is presently provoked by the lack of consideration Marx gave to Services. For him, services could generally be regarded as those personal services rendered to the bourgeoisie or aristocracy, and as such never took the form of commodities. They were useful acts, paid out of revenue. Whether these were domestic or not is irrelevant.

I wish to argue that if we examine the case of services closely, we are forced to qualify the generally accepted definition of productive and unproductive labour, which relies upon the specific social relation and not on the characteristics of the labour. Marx spent a great deal of time demonstrating that Smiths distinction between productive and unproductive labour, particularly based as it was on the material characteristics of the product, was inadequate for the purposes of explaining the accumulation of capital. We shall see here that Marx, in treating the particular case of immaterial production, is forced to refer back to the content of the labour to clarify and qualify the relationship of productive labour and the accumulation of capital.

For Marx productive labour is defined by the position that labour power takes in the social relations of production. It follows that the same kind of labour may be productive or unproductive.[28] Nevertheless it sometimes appears that Marx regarded certain services, that is to say certain 'activities'[29] rather than 'things' rendered as commodities, as productive only for individual capitals, and not for capital as a whole. In this case the word productive would take on a different meaning for the individual capitalist. It is a specific qualification to the definition of productive labour.[30]

This 'double meaning', which the word productive takes on, appears when reading the Addenda to Volume 1 of the Theories of Surplus Value. It concerns immaterial production. Marx generally saw this as a service. The first problem is clarify the idea of service. What we might currently consider to be a service, involving material effect, for example repair work,[31] is easily dealt with by the definitions previously given. The service is unproductive for the capitalist if applied to his own machines. A use-value is paid for, but no commodity is produced, and the cost of labour must be paid from revenue. The labourer may expend surplus labour time which the capitalist enjoys gratis but he is unable to transform it to surplus value realised as money. If the repairs take place on some machine other than the capitalists, he is able to realise the surplus labour time expended by his labourer. This does not mean, as we shall see, that such labour is productive for Capital as a whole, but only that money is transfered from the revenue of one capitalist to the wage and revenue of the worker and his boss, another capitalist, respectively. The repair service is not embodied in a commodity which the owner or the repaired machine can sell. In any case he pays the full value of the labour-embodied to the capitalist who sold him this service.

This type of 'service' however, differs from the 'services' which can be scientifically expressed as Immaterial production. It is this particular branch of 'services' to which we are refering when we talk of the weakness in the generally accepted definition of productive labour.

Using the definitions we have been given so far, we are certainly able to define whether immaterial production is productive or unproductive for capital, but these concepts do not seem to explain 'appearances' clearly. Marx gave every indication in the last pages of Volume I of the Theories of Surplus Value, that he was not satisfied with his failure to work the thing through thoroughly. By calling services unproductive, and immaterial production services, he could avoid making the conclusion that immaterial production can in some sense be called productive. No better reasoning was supplied.

As we pass through this volume we come upon formulations which deal with the matter in a manner consistent with the generally accepted definition. Any impression that productive labour is labour producing commodities of a specific labour content is dispelled by the recollection that,

> When we speak of the commodity as a materialisation of labour - in the sense of its exchange value - this itself is only an imaginary, that is to say, a purely social mode of existence of the commodity which has nothing to do with its corporal reality.[32]

It is at this apparently satisfactory position that many writers, for example Gough and Cogoy[33] halt their enquiries in this direction. We find that labour which is not materialised as a material good, i.e. labour power expended upon immaterial products, must still be regarded as productive as long as it results in the realisation of surplus value for the entrepreneur. It must seem clear to all however, that immaterial products cannot be accumulated, despite the fact that individual capitalists may accumulate money capital through their control of the production and sale of such commodities.

Since the products of the labourers producing 'immaterial' commodities 'vanish' upon realisation the conditions of 'productive labour' previously defined are not fully met. The labourers "make money", apparently directly (through a service has been sold as a commodity) for the owner of the material conditions necessary for their performance, e.g. the playhouse. Surplus value has been realised for the organiser of the production, but the product has vanished instantaneously, only the circulation of money marks the event in any material way. Now in this case commodities are not changed into capital as commodities, but apparently directly into money. This vanishing trick, as it were, results in an expenditure of commodities with no material result. How precisely are we to deal with such a case? It is to be noted that before Marx used the term immaterial production, as an equation with services, he rated against Say's use of the term.[34] Since in a certain sense only the circulation of money results from this production, the labour involved in it could be seen as unproductive. However, if we insist that leaving aside the 'vanishing' nature of the product, the whole relationship falls squarely into the category which Marx called productive, we are able to take a contrary view. The whole thing needs clarifying, and this, if we read carefully, is exactly what Marx is forced to do. It is clear that the nature of the product is the difficulty.

The accumulation of immaterial commodities is not possible, and the definition of productive labour for capital as a whole needs some reference to the content of the labour power put to work. Now Marx is forced to turn to a Smithian addition to his definition.

> Only (the) definite relation to labour transforms money or commodities into capital, and that labour is productive labour which through its relation to the conditions of production - to which corresponds a definite condition in the actual process of production - transforms money or commodities into capital; that is to say which maintains and increases the the value of the materialised labour rendered independent in relation to labour power.[35]

It is clearly impossible to "maintain and increase" (i.e. accumulate) immaterial products, and it seems that we must now accept that Marx's definition of productive labour for capital does include a reference to the nature of the commodity. He realised the necessity for such a reference, as his work progressed. He provides a supplementary definition of productive labour, so that labour which creates immaterial commodities cannot be viewed as productive for Capital as a whole.

> Supplementary definition of productive labour as labour which is realised in material wealth.[36]
>
> 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.[37]

The sale of immaterial commodities, results in no accumulation of material products for capital as a whole, but merely the transfer of money. When Marx talks of productive labour as that labour which is exchanged for capital, he has already implied that the commodities must be material, it is only that at a later stage he feels forced to clarify the point.

> The phrase; labour which is directly exchanged for capital, implies that labour is exchanged for money as capital and actually transforms it into capital.[38]

In the case of immaterial 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.

We are able to conclude then that unless we are clear that productive labour for Capital as a whole is defined as excluding a certain type of product, i.e. immaterial products, a confusion will exist between what labour is productive of commodities for Capital, and what labour is productive of money for the individual entrepreneur. Labour working to produce immaterial products merely enables the circulation of money.

Both Gough and Harrison stress the definition which fails to explicitly refer to the 'accumulatability' of the product, and ignore Marx's 'supplementary' definition, which excludes immaterial production as an acceptable output of labour truly productive for Capital as a whole. To reiterate the distinction, the first definition which we find in Marx's work, and which ignores the nature of the product, is correct for individual capitalists. The supplementary definition is correct for capital as a whole; such productive labour is,

> socially determined labour implying a quite specific relation between the buyer and the seller of the labour.[39]

What exactly are immaterial products?

Unless we can be clear about the definition of such a product, a series of interpretive mistakes are likely to occur. This is common difficulty. The transformation of the theoretical premises, as they are compounded into a set of relations which can appropriate the concrete (ever in thought), is always a difficult task, and considerable reflection is often necessary before appearances are satisfactorily explained. Immaterial products are not to be equated with invisible products, that is to say products with a particular sensuous effect. Immaterial products are those which have no lasting, or accumulative effect. Since they cannot be used up in a further round of production we see that immaterial production is luxury good production. They are non-basics. Since we have distinguished between this type of 'service', and other services which have material effects, we are no longer treating all services as products of unproductive labour. This follows from our decision, made earlier in the paper, to take labour power into account as a commodity, when defining productive labour. For once we have done this we can examine such 'services' as education, which may be said to have an 'accumulative' effect (knowledge can be 'stored and by this means and others changes the quality of labour power),[40] and thus be seen as productive labour for Capital as a whole, and not simply as possibly productive of money for some individual agency, as was considered possible by Marx. Naturally we should expect some forms or education to fall under one heading, and other forms to come under the other. The result will depend upon the specific historical conditions of the social formation under discussion, that is to say the social and specifically, technical relations dominant at any particular time.

The problem of 'Services' then, was ignored by Marx, though this is not surprising. He researched in a specific period, and proposed from his observations that as the capitalist mode of production spreads, it gradually conquers the field of material production, but impinges very little on non-material production. He observed that labourers producing material goods were generally productive labourers employed by capitalists, and labourers providing 'services' were often paid for out of revenue, and so were 'unproductive'. He remarked that in the realm of immaterial production,

> the capitalist mode of production is met with only to a small extent, and from the nature of the case, can only be applied in a few spheres.[41]

He exampled private education, and then with some finality states,

> All these manifestations of capitalist production in this sphere are so insignificant compared with the totality of production that they can be left entirely out of account.[42]

Immaterial production then, as a sub-section of 'services' would have seemed unworthy of much comment.

We have seen however, that immaterial production may be productive of money for any individual capital, or capitals, and the labour that worked these products may accordingly be called productive, but such a definition does not hold for capital as a whole. Separate definitions evolve. Marx came to see that

> ... productive labour, along with its determining characteristics - which takes no account whatever of the content of labour and is entirely independent of that content - would be given a secondary, different and subsidiary definition.[43]

For both individual and total capital, any definition of productive labour which excludes reference to the material nature of the commodity, may result in the inclusion of instantly vanishing products, as results of such labour. Since individual capitalists advance money to receive an increased return of the same, they are, least of all, likely to see whether the general level of activity is turning from the accumulation of material commodities towards a struggle over the distribution of money capital by extended production of immaterial commodities. An interesting aspect of fetishism reveals itself here, for periods determined by the availability of surplus, the bourgeoisie could well become involved in struggles of distribution associated with the production of immaterial commodities, e.g. amusements. The availability of surplus for such expenditures might well be encouraged by State activity, the immaterial products might in this case be seen as part of an ideological superstructure. We provide such an example here to demonstrate the relationships between the relations of production and the other relations within the social formation.

Let us examine the position of labourers of immaterial commodities. We see that a

> singer commissioned by an entrepreneur to sing in order to make money for him is a productive labourer, for she produces capital.[44]

Here we see, quite clearly, the use of the term 'productive' for labour involved in producing immaterial products, a process which has the material effect only of circulating money capital. This definition of productive labour is the "secondary, different and subsidiary one". Yet it will be remembered that it is such a definition which ignores the content of the labour which is taken as the generally accepted definition by Gough, Cogoy, Harrison, and all the others I have read. It is clear that Marx has worked out a more satisfactory definition with the construction of the "supplementary" one, for in bourgeois society,

> The means of production become capital only in so far as they have become separated from labourer and confront labour as an independent power.[45]

Since the labourer who produces immaterial commodities, may be said to embody the direct means of production of immaterial commodities, e.g. the skills of the artist, such as a singer, instrumentalist or actor, he can never become separated from those means of production in a way typical of material production. This is yet another distinction between labour expended upon material commodities, and that upon immaterial commodities.

In the case of immaterial production, the independent power of capital is derived from the control over the other material necessary (which becomes socially necessary with the development of a specific cultural mode), for the production of immaterial commodities, e.g. a play or musical concert. As a whole the labourers of the realm of immaterial production then, do not directly create the material capital which comes to confront them as an independent power, for their products' perish' upon production. Consequently they do not come to be subordinated to capital in the same order as the material producer. The rate of accumulation in the material realm determines the availability of commodities which stand over against the labourers of the immaterial realm.

We may further note that the capitalists of the realm of immaterial production are not as independent from their labourers as are industrial capitalists. This follows from the manner in which surplus value is extracted, where generally it is simultaneously produced and realised. We might expect that in a liberal bourgeois society the production regime within which surplus is extracted, is materially less oppressive than that of material labourers, since the consumer is present at extraction which may force the capitalist to accept a certain moral idea 9 which might take a political form of pressure) of the conditions of extraction.

There is less reason, from our historical perspective, to see immaterial production as as limited as viewed by Marx. The analysis of this form of production has provided us with an interesting distinction between labour productive for Capital, and that labour productive for the individual capitalists. Consequently we may wish to examine the development of immaterial production, the use of unproductive labour for Capital, upon the accumulation of Capital. It seems presently, that labour which appears to be productive for the individual capitalist, cannot be equated with labour that is productive for capital. This is only to be expected since Marx strove to explain the movement of Capital as a whole. His use of individual examples, tends to obscure the idea of these examples as personifications[46] of Capital and Productive Labour, and in the case we have considered here the example does not accord with a personification of Productive Labour. The labourer who produces immaterial products, who at first appears as productive, is seen to be unproductive for capital after investigation. The results of this investigation can be seen to develop. In the early parts of the TSV volume I, Marx appears adamant that,

> These differences (between productive and unproductive labour J.P.B.) are therefore not derived from the material characteristics of labour (neither from the nature of its product nor from the particular character of the labour as concrete labour) but from the definite social form, the social relations of production, within which the labour is realised.[47]

But we know now that Marx qualified this definition with his "supplementary". It seems that we have here ample justification for extending to another area. Baran's judgement upon Marx's treatment of unproductive costs of circulation, that is that it appears as though Marx's papers are a rough draft in which no clear picture of the outcome is clear at the outset.[48] We have stressed the qualification, but the important distinction between productive and unproductive labour is that pertaining to the different social relations of which each is a part.

The discussion of immaterial products is important. It gives us an opportunity of discussing a specific type of luxury good, a non-basic. Such a discussion brings to light the relationship between accumulation and certain cultural forms of capitalist society. The development of such forms of production, which result in the redistribution of 'capital' in money form, (it would be better to talk of the redistribution of revenue, since we have now determined that such labour is unproductive for Capital as a whole) without involving material accumulation for Capital, leads to a situation where material is exhausted in the production of mere cultural and ideological expressions.

SERVICES WITH MATERIAL RESULTS

Transport

What I am doing here is to develop Marx. The argument up to now has proposed that we should examine services more closely, with the result that we have distinguished between services with material results and services with immaterial results. The former can be produced by productive or unproductive labour. The latter are produced by unproductive labour for Capital, but in a certain sense are productive for individual entrepreneurs, since they bring in money for him. Now we know that Marx left labour which produced labour power as a commodity, out of account when defining that labour which is productive for Capital. In a sense this is consistent with treating all services as unproductive for capital. Once we begin to consider labour power as a commodity alongside all other commodities, and not separate from them, we see that some services contribute to the production, training, maintenance, and reproduction of labour power. The effect of such services changes the use-value of the labour power in question, and can be said to have a material effect. Once this is clear, we can see that such services involve labour expenditures which can be denominated productive or unproductive of Capital. A qualitative change is experienced by the labour power available to capital. Naturally when discussing this problem we have to be absolutely careful not to open the floodgates to a series of superficial claims by apologists of various kinds, over the value of certain services in the production of labour power. There are however some reasonably clear claims that should be discussed. The first that springs to my mind is that of transport.

Transport is one of the four spheres of production for Marx. The others being the extractive industries, agriculture and manufacture. These terms however, are descriptive, categories of the realm of appearance. We can show that when the theoretical distinctions here discussed are applied to the transport industry, we are able to see which relationships within the transport industry are productive for capital and which are not.

From Marx's position the transport of people is a service which is unproductive for capital. It may enrich the individual capitalist with money, but no commodity (supplementary definition) has been produced, and Marx is correct in saying that,

> But this relation between buyer and seller of this service has nothing to do with the relation of the productive labourer to Capital, any more than has the relation between the buyer and seller of yarn.[49]

In this case the labour of transportation is seen as part of the sphere of circulation, and is unproductive for capital.

But we have introduced labour power as a commodity into the argument and Marx's conclusion must be modified accordingly. It can now be said that if these 'people' are seen as labourers being transported to the workplace, (as in the 'rush hour', a specific time of production) they are to be regarded as commodities in transit. The conclusion is now altered, for

> If on the other hand we consider the process in relation to commodities, in this case there certainly takes place in the labour process a change in the object of labour, the commodity. Its spatial existence is altered, and along with this goes a change in its use value, since the location of this use value is changed.[50]

We now qualify Marx's generalisation that the labour involved in transport services rendered to 'people' is unproductive for Capital. We definitely treat those passengers travelling <u>to</u> labour, as commodities. The end of the journey results in a transformed commodity, its use-value to the industrial capitalist is increased, and is expressed in its exchange value, in the enhanced price of the commodity. The commodity may be said to contain more value as a result of its changed position in the space of capitalist production. The commodity retained the effect of the labour of the transport workers and the constant capital worn away in transit, for the day, or month, or whatever period of time before labour power as a commodity necessitates further transport if it is to become available for the use of this or other capitalists. Transit of labour power results in a material change in the commodity. If this process is a necessary adjunct to production, it must be regarded as productive consumption on the part of the labourers. All this hold whether or not the labourers in transit, are themselves productive labourers for capital.

Of course, even if it can be accepted that when 'people' travel to labour, they can be treated as commodities (labour-power in transit), it only opens the way to treating the labour of the transport worker as possibly productive. The case for treating such labour as simply unproductive is incorrect. Whether such labour is to be regarded as productive or not further depends upon whether the value added to the commodity in transit is greater than that value paid by the transport capitalist to the transport labourers. Again, this has nothing to do with the rate of profit in the industry, we are working on the value side.

In viewing the industry in toto, we can see that if the surplus value realised by the transport industry, as it carries commodities - of all types - is greater than the revenue expended by that industry to workers in different space-times of the industry producing services to 'people, and involved in other circulation activities, then the industry can be said to be productive for capital. I don't think this is a very good way of putting it, for the labour-power expended in the industry is the commodity which stands in an unproductive or productive social relation with capital, not 'THE INDUSTRY'. Of course this leaves out of account the amount of constant capital to be replaced, and the question of whether the material services are sold at their values and so on.

It may be objected that the transport capitalist is not paid for the value added to the commodity (labour power) which passes through his hands, by another capitalist, thus proving the status of the traveller as a carrier of labour power, but this is irrelevant. We may, if we like, regard the 'value as money' paid to the transport capitalist for the service rendered to the commodity as if it were paid by the capitalist who consequently consumes the transported commodity. It must be remembered that we are constructing an analysis that does not require a one to one relationship with the categories of immediate appearance. This treatment forces us to reconsider appearances, and shortly we discover that it is common practice for capitalists to pay additions to wages to cover transport. This sum is often calculated exactly (meanly), and may be said to be the amount paid to the transport capitalist from the entrepreneur for whom the commodity (labour power) is to be a use-value in production. Unless we make this clear, critics might quickly point out that the service is paid from 'wages' and so the transport labourers effort is exchanged against revenue, not capital, and "is thus unproductive".

Education

Now we have entered along the tricky path of taking labour power into account, we feel that we should touch upon education. I do not mean simply the education obligatorily imposed by the state until the age of 16, but all formal education which is deemed necessary by capitalists, before labour power can be put to work within a certain technical nexus. This is not a subjective decision. Clearly a welder needs training to attain his position. This is also the case for the bus driver or conductor, the transport workers. The discussion is a difficult one, for specific illustration of what is necessary labour to transform the quality of labour power leads us into contention. If accumulated effects can be proven, and these effects are directly relevant in changing the use value of the commodity to one required by capital, then this education will fulfil completely the definition of a commodity productively consumed. The labour involved in educating, will be productive given that surplus value is realised by the capitalist who sells the educational service. Once again the proposition that labour power is a commodity to be included when defining productive labour, only opens the door to defining an hitherto excluded range of labour expenditure as productive for capital. It must then be shown that surplus value is realised from the labour so expended.

This discussion was broached by Marx shortly before he decided to leave labour power out of account.

> As to the purchase of such services as those which train labour-power, maintain or modify it etc., in a word, give it a specialised form or even only maintain it - thus for example the schoolmaster's service, in so far as it is "industrially necessary" or useful; the doctor's service insofar as he maintains health and so conserves the source of all values, labour-power itself - these are services which yield in return "a vendible commodity, etc", namely labour-power itself, into whose costs of production or reproduction these services enter.[51]

Now Marx showed that the development and consumption of this type of service was either minimal, or as with the doctors services could be called repairs in their most important role. With developments in technology, the specialisation of the labour force, the rapidity of changes in these respects, there has been a development of the material service sector.

The exact manner and causes of this development within certain areas where the capitalist mode of production is most developed have yet to be satisfactorily explained. It immediately appears however as if this is the case. So services have to be re-examined. We have shown that the type of service, immaterial production, involves the use of unproductive labour for Capital, but that with services that have material effects on labour power as a commodity may involve productive labour. Much 'education' will have no material effect upon labour power, no 'industrially necessary' effect; some will, and part of this will form part of such a relation that the labour power exhausted in the administration of the education may be called productive for capital.

This brings us back to a problem raised above, where we noted Marx's reasons for leaving labour power out of account. (our page17) One was that these services with material effect upon labour power, need to be paid out of a fund to which these services do not contribute. Workers are paid out of a material fund, material separate from labour power.[52] If we cannot supply an answer here the foregoing work is almost useless, It strikes me that the development of services, immaterial and material, has become so developed, and capital has impinged in this area to such a great extent (I do not here talk of the unproductive services of circulation workers), that such services do now serve as part of the wage fund. Again this brings into account a qualitative movement in monopoly capital, and in times of crises this sphere will undoubtedly contract as what is socially necessary as a subsistance level, is reshaped in the crisis. For those interested specifically in the 'transformation problem', it may appear that a fourth sector 'services with material effect upon labour power' should be added to those of Bortkiewicz's. Such services are 'wage' goods in a certain sense, but they can only exist once a certain material level has been reached, and are dependent upon the material wage good sector. Immaterial production is a luxury good and is already catered for in this scheme. However this is merely a suggestion. I have not thought it through.

SOME CONCLUSIONS

This paper may appear somewhat adventurist, but I do think that it is vital that the problem of services, and the question of productive and unproductive labour be pushed further than it has gone so far. There seems to be a lot more to be said along the lines suggested here. The clear application of this theoretical knowledge can have shattering effects upon the way in which we view the world of appearance with its familiar, ideological categories. We can now see that if railway workers are productive for capital when freight and workers are being transported, they are unproductive when carrying holiday makers. What then happens to the definition of class? It is no longer as simple a problem as Gough or Poulantzas seem to assume. Cooperating workers may labour productively in the morning and unproductively in the afternoon (this of course is true for the workers who produce material wealth standing over against labour, as well as the workers who produce a material result in other labour power). Do they swap 'classes' for these periods? Of course not, we do not intend to present such a mechanistic idea, but the problem as posed does underline the need to consider relations other than those of production in the definition of class. The problem can be avoided by treating all labour in a particular industry, and determining its position, productive or otherwise, by a generalisation over some period of time. What period of time however, would have to be theoretically constructed.

In any case it should be an easier matter to categorise labour employed in various industries now that we have made the distinction between labour productive for Capital, and labour productive for the individual entrepreneur, for without a doubt there are two definitions in the Theories of Surplus Value. I am tempted to discuss other examples, technicians, various workers in the sphere of circulation, issues such as State expenditure, but I will stop here. It is clear however that if it is accepted that labour power as a commodity be brought into the discussion of the definition of productive and unproductive labour, a redefinition of the place of many workers will be required. In the contemporary period this could have important results in the understanding of the class struggle. If it is discovered that certain groups of workers are productive for capital, where previous Marxist analysis had dismissed them as unproductive, a change in understanding which may effect political decisions on the part of working class movements may have been provoked.

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1. J. Harrison, "Productive and Unproductive Labour in Marx's Political Economy". A paper distributed at the Law of Value Day Conference, held at the University of Sussex, June 2nd 1973.

2. I. Gough, "Marx Theory of Productive and Unproductive Labour". N.L.R. 76.

3. Hegel characterises 'Begreifen' as appropriation, (Logic II. Werke. VI. p. 255) To have a concept (Begriff) means, to grasp the thing mentally.

4. T.S.V. I p. 157. Lawrence and Wishart 1969.

5. see D. Yaffe, Bulletin of the Conference of Socialist Economists. Winter 72 p. 13, 14.

6. T.S.V. 1969, Vol. I, p. 152.

7. I. Gough, op. cit.

8. T.S.V. 1969 Vol I. p. 152.

9. Capital 1961 Vol I. p. 181.

10. Capital 1961 Vol II. p. 132. - see also T.S.V. 1969 Vol I. p. 406.

11. T.S.V. Vol I. 1969. p. 406.

12. Capital Vol I. 1961. p. 212.

13. T.S.V. Vol I. 1969. p. 157. See the same point p. 165.

14. T.S.V. Vol I 1969, p. 158.

15. see T.S.V. Vol I. 1969. p. 185.

16. T.S.V. Vol I. 1969. p. 173

17. see TSV Vol I. 1969. p. 167.

18. TSV Vol I. 1969. p. 172

19. ibidem.

20. see TSV. Vol I. 1969. p. 172.

21. J. S. Mill "Essays on Some Unsettled Questions of Political Economy" 1844. p. 83.

22. Capital. Vol I 1961. p. 508-9 (or p. 517 in Torr's edition)

23. N. Poulantzas, 'Marxism and Social Classes' N.L.R. 78.

24. J. Harrison, op. cit., p. 3. He takes Marx to be saying that "the criterion for whether or not the distinction between productive and unproductive labour can be applied is, not whether the labour is performed under the capitalist mode of production (?) or not, but whether it is wage labour." Much of Harrison's paper is extraordinarily confused.

25. Harrison, p. 11. Where he says, "<u>All</u> labour performed under the capitalist mode of production should be treated as 'productive'. That is all wage labour employed by capital should be regarded as collectively engaged in the production and realisation of use-values, and as producing value and surplus value."

26. TSV. Vol I p. 157.

27. TSV. Vol I. p. 160.

28. TSV. Vol I p. 404.

29. TSV. Vol I. p. 404.

30. The question is first touched on in this volume, under the heading "Say's Conception of 'Immaterial Products', Vindication of an Unrestrained Growth of Unproductive Labour". TSV I. p. 266-69.

31. TSV. Vol I. p. 187.

32. TSV Vol I p. 171.

33. I. Gough, op. cit. Mario Cogoy, "Les Theories Neo-Marxistes, Marx et L'Accumulation du Capital". in Les Temps Modernes. Sept-Oct 1972. No. 314-15. He says here ... "Marx explique que la distinction entre travail productif et improductif n'a rien a voir avec la forme de la valeur d'usage que prend le produit du travail, mais uniquement avec sa nature d'element d'un rapport social de production".

34. See TSV. Vol I. pp. 266-67.

35. TSV. Vol I. p. 396.

36. TSV. Vol I. p. 409.

37. TSV. Vol I. p. 410.

38. TSV Vol I. p. 397.

39. TSV. Vol I. p. 396.

40. A typical observation is E. Leach's, that "Capitalism has sponsored universal literacy as an aid to industrial efficiency". In 'IQ's and Race' 'The Listener' 28 June 1973. p. 849. Vol 89. NO. 2309.

41. TSV. Vol I. p. 410

42. TSV Vol I. p. 411.

43. TSV Vol I. p. 410.

44. TSV Vol I. p. 401.

45. TSV. Vol I. p. 408.

46. Capital Vol I. ed. Torr. p. 141.

47. TSV Vol I. p. 157, see also p. 165.

48. P. Baran. Theory of Capitalist Development, p. 279.

49. TSV. Vol I. p. 412.

50. TSV. Vol I. p. 412.

51. TSV. Vol I. p. 167.

52. TSV. Vol I. p. 167-8.

A NOTE ON PRODUCTIVE AND UNPRODUCTIVE LABOUR

Ben Fine

Two recent papers[1] have explored in Marx's writings the distinction between productive and unproductive labour. Both have suffered from placing insufficient emphasis on Marx's structural analysis of the capitalist mode of production as presented in greatest detail in Volume II of Capital. Here the spheres of production and circulation are identified and distinguished, the pure process of capital flows defined by the transformation of capital through its money, industrial and commodity forms. This scheme itself excludes labour from outside the operation of capital, whether it arises out of another mode of production (e.g. peasantry, artisans, housewives) or as a result of wage-labour employed by revenue (e.g. domestics, state employees). This labour is termed non-productive by Harrison. However, Marx also designates as unproductive, that labour engaged in the sphere of circulation. He does this in volume II, most significantly immediately after completing his analysis of the circuits of capital. It is baldly stated, as if self-evident, that circulation activity creates no surplus value since it creates no value. As this proposition is not only not self-evident, but in no way a logical consequence of previous analysis, it must be taken as a definition motivated by what has gone before. Further, it is not the distinction between productive and unproductive labour that is being defined directly by Marx, but the definition of value itself. It is only at this point that this can be done more specifically than before, since the definition of the value of a commodity depends upon the distinction being drawn between the spheres of production and circulation. The value of a commodity is the labour embodied in it during its stay in the sphere of production. Excluding non-productive labour, labour is productive that adds value, i.e. is engaged in the sphere of production.

Having laid this basis, two modifications are made by Marx; to include distributive labour (e.g. transport) as productive although it may be spent during the time of circulation, and to categorise some supervisory labour as unproductive insofar as it arises out of antagonism between capital and labour, even though it be performed during the time of production. This is the source of the principal ambiguity in Marx's theory "the distinction between the use of a historical perspective to distinguish the labour necessary to produce a given use-value, whilst rigorously denying the use of such a perspective to distinguish the 'necessity' of the final 'use-value' itself".[2] It is agreed that Marx uses no historical perspective to define use-value, but that the perspective for defining necessary labour is from the standpoint of capitalism, just as that for value is. The strain in the distinction between productive and unproductive labour lies precisely in the distinction between the spheres of production and circulation. In Marx's pure model of circulation this distinction can be met by a chronological pursuit of the process. When production enters into the sphere of circulation, it can be considered that Marx constructed a hypothetical society in which the process of circulation, but not distribution, has been eliminated. There is no question of rational reorganisation of society.[3] This is not simply a circular dismissal of the problem. What appear as distribution activities lie within the sphere of production insofar as it is technically possible for them to follow on after the production process proper, even though, in practice, sale may have begun before transportation. Labour-time for distribution and circulation may become intertwined, but their actual separation, not needed for conceptual purposes, remains a technical problem akin to the case of a joint production technology.

Given production within the sphere of circulation, it occurs naturally to consider the possibility of circulation within the sphere of production. Despite Baran and Sweezy, it is difficult to conceive of the sale of commodities, beginning before production is completed, being important in developed capitalism. This phenomenon seems best exemplified by custom built articles uncharacteristic of mass production.

However, there remains the treatment of supervisory labour. This is most unclearly analysed in Marx simply because little space is devoted to it. Firstly, one would expect labour expended in the sphere of circulation for the supervision of labour-power purchase to be categorised as unproductive (i.e. personnel recruitment). Secondly one could interpret the following passage as defining circulation labour within the sphere of production.[4]

> One part of the labour of superintendence merely arises from the antagonistic contradiction between capital and labour, from the antagonistic character of capitalist production, and belongs to the incidental expenses of production in the same way as nine-tenths of the "labour" occasioned by the circulation process.[5]

An alternative interpretation of this passage is that Marx is concerned with incidental labour problems of an individual capitalist, which detract from his surplus value but are not uniform social conditions. This would leave the need to categorise unproductive supervisory labour that is socially necessary uniformly. Marx's intention seems to be to designate supervisory labour as productive only if it is management of workers, but he does not give any indication whether unproductive supervisory labour is non-productive or circulation activity. This would depend upon the form this labour takes.

To summarize: there is an intimate link between Marx's characterisation of the structural flow of capital and his concepts of productive and unproductive labour. Discounting non-productive labour, labour is productive (unproductive) that is applied in the sphere of production (circulation). For distribution (supervision) one can identify productive (unproductive) labour operating within the sphere of circulation (production).

II The value of Marx's distinction between productive and unproductive labour is to preserve his description of the circulation of capital[6] (and vice-versa). There are other consequences of this (e.g. for the accumulation process and political analysis of conflicting capitals and groups of workers). However, Harrison concludes his article by suggesting that the distinction between productive and unproductive labour should be dropped. This is based upon the arguments that the distinction is unclear, adds nothing to an understanding of capitalism, and poses fundamental difficulties of incorporation into Marx's general theoretical system. The confusions thrown on the transformation problem[7] are technical, a matter of equations.[8] This is recognised by Marx who made extensive efforts at modifying the transformation problem which were not entirely logical but were suggestively perfect. Further it is in no way argued, other than in the distinctions themselves, that productive, unproductive or even non-productive workers cannot share the capitalist relations of production in common.

Section I attempted to clarify Marx's concept of unproductive labour and reveal its three-sided integral relation to his value theory and structural analysis of the circulation of capital. Harrison wishes to destroy this relationship by collapsing it to a point. Circulation then becomes a use-value which labour produces. The peculiarity of this relative to Marx's schema is expressed by conceiving of production as a use-value rather than a product, production being the other sphere of capital's circuit. It would be dogmatic to assert that the distinction between productive and unproductive labour must be maintained regardless of society's development. The important conclusion of this paper is that taking the step of rejecting the distinction destroys Marx's schema of capital's circulation. This necessitates the construction of a new schema to capture the mode of production in depth i.e. to go beyond analysis of class conflict, surplus appropriation and consequently, without a schema, superficial phenomenon.[9]

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REFERENCES

1. Ian Gough, Marx and Productive Labour, NLR 76 1972 and John Harrison, Productive and Unproductive Labour in Marx's Political Economy. The first is recommended for an understanding of this note. The second is essential.

2. Harrison, p. 74 quoting Gough.

3. Harrison, p. 73.

4. Following analogously the treatment of production within the sphere of circulation, by eliminating the production process to leave the circulation process uninterrupted by production, is counter-intuitive, although it highlights the need for labour, possibly within the sphere of production, to circulate labour-power. This is because production is a necessary feature of any society, unless hypothetical, whereas circulation is not.

5. Theories of Surplus Value Part III, p. 505.

6. For the importance of this in perceiving social relations under capitalism see Rowthorn in Spring 1973 C.S.E. Bulletin.

7. Harrison, points (a) and (b) on pp. 75 and 77 respectively.

8. See Rowthorn, op. cit.

9. The most striking example of this is the state capitalist analysis of Russia. Presumably the argument of the paper corresponds to Mandel's that Russia does not exhibit universal commodity production. Note that if the distinction of non-productive labour is dropped and we analyse "all labour from both its proximate effect on the size and rate of surplus value and profit and its overall or <u>net</u> effect" (as Harrison correctly suggests for the treatment of non-productive labour), there is great danger of losing a class analysis altogether.

PRODUCTIVITY, ORGANIC COMPOSITION AND THE FALLING RATE OF PROFIT - A REPLY

Andrew Glyn

Robin Murray (CSE B Spring 1973) disputes my argument (CSE B Winter 1972) that whether the ratio of dead to living labour [c/(v+s)] rises, along with an increase in the technical composition of capital, depends on the rate at which the growth of productivity depresses the unit value of physical capital. He wants to measure constant (and variable) capital at its 'historic value' - the amount of socially necessary labour time actually expended in its production - rather than at its 'replacement value' - the amount of socially necessary labour time required to produce it at the current productivity level. But the value of a commodity must be the amount of socially necessary labour required in its production given the existing techniques, including the labour required to replace constant capital at the existing productivity level.[1] The confusions which arise if you try and add values representing different productivity levels are clearly shown in Robin Murray's example. He is forced to construct a new category called 'surplus from depreciation' reflecting the fact that less hours of socially necessary labour are required to replace the capital used up in production than were required to produce it at the original productivity level. To get the total value available for accumulation this is then added to 'surplus value' which on his definition is the hours the workers would work for the capitalists if they were producing wage-goods at the old productivity level (which they are not). So the rate of profit which he measures-surplus value (reckoned with the value of labour power calculated at 'historic value') divided by the historic value of capital - is a completely artificial and arbitrary construction. If you calculate the corn rate of profit (output of corn less corn used as capital, divided by corn used as capital) not only does the rate of profit actually rise in his sequence I-XX (tending in fact to 100%), but it is also different in the two cases (II and IIa) which have an identical rate of profit on his measure. Only by valueing the input and output of corn consistently (i.e. at the current level of productivity) is it possible to secure a rate of profit in value terms equal to the corn rate of profit, equal in fact to what the 'real' rate of profit quite unambiguously <u>is</u>. It seems obvious that this is also the approach to be followed where there are many commodities when the notion of a 'physical' rate of profit (the corn rate in the one commodity model) is meaningless.

I think the root of Robin Murray's objection lies in the following: "The capitalist advances a quantity of money capital which he exchanges for commodities. These commodities are necessary to set in train a new process of production. The fact that this new production lowers the value of the inputs used up in the process can make no difference to the original value of the commodity inputs prior to the circulation of the new output" (p. 53). This suggested the following position: it does the capitalist no good if the 'value' of the capital employed falls because he laid out money enough to purchase the capital at the <u>old</u> productivity level (old values) and it is on this sum of <u>money</u> that the rate of profit must be calculated. In short it is necessary to measure the 'money' rate of profit rather than the real rate.

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[1] "If in consequence of a new invention, machinery of a particular kind can be produced by a diminished expenditure of labour, the old machinery becomes depreciated more or less, and consequently transfers so much less value to the product". Capital Vol. 1, p. 210, Lawrence and Wishart edition

Taking his case II the total output of corn is 250 tons, and constant and variable capital sums to 150 tons. So the physical or real rate of profit is $66\frac{2}{3}\%$ - the same answer you get using a consistent unit value of corn for both inputs and outputs. If the money price of corn remained unchanged this is obviously the money rate of profit as well. But if the money price of corn fell from £1 per ton (when the inputs were bought) to say 80p per ton when the output is sold (because of a slower rise in productivity in the gold than corn industry) then the money rate of profit will only be $33\frac{1}{3}\%$ (profits of £50 on a capital outlay of £150). The real rate of profit of $66\frac{2}{3}\%$ must be adjusted by the fall in the money price of corn of 20% in order to secure the money rate of profit ($0.333 = \frac{1.666 - 1}{1.20}$). It is important to point out that the rate of profit, when calculated consistently in terms of values, is a 'real' rate of profit and that changes in the money prices of commodities must be taken account if the object is to measure the money rate of profit. It could be argued that the money rate of profit is decisive since capitalists are interested in the exchange value of the surplus and not its use value. But from this point of view the money rate of profit is presumably compared with the money rate of interest; and <u>both</u> may be equally affected by price changes leaving the shifts real rate of profit as a determinant of capitalists' willingness to invest. Further it is the real rate of profit which determines the potential expansion of the system. But in any case the only way of arriving at the money rate of profit is to calculate the rate of profit in real terms (i.e. using consistent values for inputs and outputs) and then adjust it for changes in money prices. Robin Murray's calculation gives the money rate of profit only in a special case to which no significance can be attached.[1]

My original note argued that whether the organic composition of capital rose depended on how fast productivity in the industries producing constant capital rose relative to the rate at which the mass of capital was accumulated and the extent to which the value of labour power was maintained (real wages rose) as productivity increased. I think the central importance of the behaviour of real wages in determining the long-run tendency of profitability is emphasised by the following argument that any technique willingly introduced by capitalists will raise the general rate of profit unless there is a resulting rise in real wages.[2]

Starting off with a simple corn model, any new technique which it is worthwhile for a capitalist to introduce must economise on corn inpu per unit of output (for example, by substituting some additional constant capital for a greater amount - or value - of variable capital). This inevitably leads to an increase in the corn rate of profit when introduced generally (and an equal increase in the rate of profit measured in value or price terms) unless corn input later rises as a result of real wage increases. When there are two or more industries the situation is more complicated. For a technique to be introduced by any one capitalist it must economise on costs for (with prices set by the rest of industry using the old technique) only then will its rate of

[1] When the money price of commodities changes in such a way that the total of commodities are sold for a sum of money which exceeds the money cost of inputs in proportion to the ratio of current labour expanded to the 'historic value' of constant and variable capital.

[2] Samuelson has said that this is the case (Journal of Economic Literature March 1972, p. 54) but his dismissal of the argument that, while the new technique may increase the profitability of the innovating capitalist it may still reduce the rate of profit when introduced generally, is just assertion.

profit be increased. When the technique is introduced generally throughout the industry however it is perfectly possible that the increase in the rate of exploitation which results from the higher level of productivity will be less than sufficient to compensate for the rise in organic composition. So if the new technique involves a substitution of dead for living labour the overall rate of profit measured in terms of value can fall. A simple example may help to clarify the point.

	c	v	s
Dept I	100	50	50
Dept II	100	50	50

Suppose an individual firm in Dept II (producing say one tenth of the output of consumer goods with initial value of 20) can introduce a new technique which saves it 6 hours of current labour - only 3 of which are paid at the rate of exploitation of 100% - at the cost of an extra two hours of constant capital. At the existing price in department II (fixed by the unit value of the commodities using the old technique) the innovating firm's rate of profit goes up from $33\frac{1}{3}\%$ to 3/7 (c = 12, v = 2 's' (profits) = 6). But when the technique has become generalised throughout the industry the value scheme will be as follows (noting that (a) the unit value of consumption goods has fallen by 20% and so the value of labour power is correspondingly adjusted downwards in order to maintain the assumption of constant real wages, (b) for simplicity no account is taken of the fact that by implication employment has fallen though Dept I has been enlarged to maintain the assumption of simple reproduction):

	c	v	s
Dept I	120	48	72
Dept II	120	16	24

Here the overall rate of profit has fallen from $33\frac{1}{3}\%$ originally to only 96/(240 + 64) = 31.6% - the rise in the rate of exploitation (from 100% to 150%) resulting from the increased productivity and constant real wages, has not been sufficient to offset the increase in organic composition (from 2 to 3.6). So the rate of profit has fallen. The process of equalising the rate of profit as between the two departments actually drives down the average rate of profit. This had initially increased above $33\frac{1}{3}\%$ as some firms in department II were making supernormal profits out of the new invention (and thus extracting more than their share of the surplus value).

This argument appears to vindicate the notion that the techniques introduced profitably by one capitalist may cause a fall in the general rate of profit even if real wages are constant. It is incorrect however, relying as it does on the assumption that the overall rate of profit can be arrived at by comparing total surplus value with the value of capital rather than by the simultaneous solution for prices of production and the rate of profit after the manner of Bortkiewicz. The following argument (which is due to Phil

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[1]It should be noted that the average rate of profit calculated in this way must lie between 31.6% when all surplus value is consumed and 37.5% if all the surplus was accumulated. All the example seeks to show is that a technique which is willingly introduced <u>may</u> lower the overall rate of profit calculated in this way.

Armstrong) demonstrates that any technique introduced by capitalists in order to cut costs will in fact increase the rate of profit if real wages are unchanged, regardless of whether it saves dead or living labour (at least in a two-sector, unit turnover period model).

Suppose the equations for the prices of production of department 1 and 2 are as shown below:

$$(1)\qquad (l_1wp_2 + k_1p_1)(1 + r) = p_1$$

$$(2)\qquad (l_2wp_2 + k_2p_1)(1 + r) = p_2$$

where l_i are the labour inputs into 1 unit of the i'th commodity, k_i are the inputs of constant capital (in physical terms) per unit of the i'th commodity, w is the number of consumer goods paid as wages to each unit of labour, r is the rate of profit and p_i the price of production of the i'th commodity (it is convenient to work in physical rather than value terms as this saves having to work out the change in values consequent on the productivity change).

Dividing through by p_2 we have:

$$(3)\qquad (l_1w + k_1p)\ (1 + r) = p$$

$$(4)\qquad (l_2w + k_2p)\ (1 + r) = 1 \text{ where } p \text{ is } p_1/p_2$$

If a new technique is to be introduced in industry 2 then we know that at <u>existing prices and wages</u>, costs must be reduced, i.e.

$$(5)\qquad (\bar{l}_2w + \bar{k}_2p) < (l_2w + k_2p) = \frac{1}{(1 + r)}$$ where $\bar{l}_2$ and $\bar{k}_2$ are the new input coefficients (on Marx's assumption about technical progress overwhelmingly taking the form of a replacement of living by dead labour then $(\bar{l}_2 - l_2)$ would be negative and $(\bar{k}_2 - k_2)$ positive and the net result is a saving in costs to the capitalists at existing prices.)

Now suppose the equilibrium rate of profit was lower in the new situation. We know from equation (3) - which is unaltered - that p must fall (or else the RHS would rise proportionately more than the left). But if the rate of profit falls the RHS of (5) rises while the LHS must fall with the fall in p. This would imply a movement further away from the new equilibrium values of p and r, for the new equilibrium values $(\acute{p}\ \acute{r})$ must satisfy

$$(6)\qquad (\bar{l}_2w + \bar{k}_2\acute{p}) = \frac{1}{1 + \acute{r}}$$ as well as satisfying (3).

We know that the rate of profit must in fact be higher in the new situation, as the rise in the rate of profit pulls down the RHS of (5) and the rise in p pushes up the LHS until (6) is satisfied.

An exactly analogous argument holds if the innovation is in the capital goods industry. If it is profitable to introduce the new technique at existing wages and prices, we have:

$$(7)\qquad (\bar{l}_1w + \bar{k}_1p) < (l_1w + k_1p) = \frac{p}{(1 + r)}$$

Now suppose the equilibrium rate of profit was lower after the technique was introduced. From (4), which in this case is unaltered, we know that p must be higher. But if p rises and r falls the RHS of (7) will increase more than the LHS, implying a further movement away from the new equilibrium values. So in this case as well the rate of profit must rise (and p fall), implying a greater fall in the RHS of (7) than in the LHS, until the equilibrium values are reached.

A slightly more intuitive explanation of this argument would run as follows. In the industry where the technical change takes place the rate of profit will increase if all prices are maintained since unit costs have been reduced. But the fact that the rate of profit would then be higher in that industry than in other industries would tend to force down the relative price of the output of that industry. However any fall in the relative price of that commodity must increase the rate of profit in all other industries into which it enters as an input - whether as a component of constant or variable capital. So that the general rate of profit must rise in all the other industries and its new equilibrium value will therefore be above that applying initially. So a necessary condition for the overall rate of profit to fall after a cost saving invention is that real wages rise somewhat, as this will force down the rate of profit generally.

This argument suggests that it is impossible to treat the question of wages as subsidiary when analysing the long-run tendency of profitability. It also adds importance to current controversy in the CSE concerning the transformation problem, since it suggests that certain important results which may follow if inputs are not reckoned at their prices of production cannot be deduced if the Bortkiewicz approach is followed (If the Bortkiewicz solution is followed in the example used earlier the rate of profit in fact rises to 36.1% while comparing surplus value and the value of capital the rate of profit was found to decline from $33\frac{1}{3}$% to 30.4%. There is nothing mysterious about this; the capitalists are receiving the same use - values and values however the rate of profit is calculated. But if money profits are compared with constant capital estimated in money, deviations of prices of production from values mean that you only get the same answer for the rate of profit as in the value calculation in special cases).

All these comparisons of course refer to equilibrium situations when the rate of profit really has been equalised through competition. They say nothing about the behaviour of the rate of profit over a period in which techniques etc. are continually changing. This question of how to examine disequilibrium situations is surely where effort should be concentrated in the future.

"THE LABOUR GOVERNMENT'S ECONOMIC RECORD 1964-1970", edited by W. Beckerman (1972) (IDEOLOGICAL DILEMMAS: THE CONVERGENCE OF LABOUR AND CONSERVATIVE ECONOMIC POLICY)[1]. Bill Warren

I THE LEFT'S FAIRY TALE

Utterly confused by the entirely predictable policy of the 1964-70 Labour Government of maintaining and promoting imperialism, legitimising racialism and attempting to destroy trade union rights, while modernising the economy along capitalist lines, sections of the left have attempted to rally their confused followers yet again under the banner of converting the Labour Party to socialist policies and subsequently electing a socialist Labour Government. Reinforcing this Sisyphean effort, there has developed a courageous attempt to characterise the succeeding Conservative Government as the most rabidly reactionary government since the 1930's and as one pursuing economic and social policies radically different from the mild capitalist reformism of earlier postwar governments. Such policies because of their backwardness are, it is alleged, bound to land the British economy in greater difficulties than before, even in capitalist terms.[2]

This remarkable view, although now widely recognised by the responsible bourgeois press[3] to be completely false, still prevails in the Left, partly as a result of traditional emotional reactions lacking a basis in serious analysis and partly as a result of deliberate Labour-inspired lies and distortions of the historic record.

II FALSIFYING THE RECORD - LABOUR AND EQUALITY

A useful example of such distortion, which incidentally vividly illustrates some of the current ideological dilemmas of British capitalism is "The Labour Government's Economic Record 1964-1970", edited by W. Beckerman (1972), consisting of a number of chapters by economists all of whom at some time were employed by the Labour Government. Here the central theme argued on politico-philosophical grounds is that the basic difference between Conservative and Labour parties is that the latter is a party of equality whereas the former is not. This is backed up by assertions (especially by the Editor) that a principal orientation of the 1964-70 Labour Government was towards economic policies promoting equality, that such policies actually produced more equality, despite their partial frustration by balance of payments difficulties, and that the record of Conservative governments is socially and economically the reverse, i.e. inegalitarian.

It needs no extensive argument to show that this is intellectually dishonest whitewashing of a somewhat marked order. Wilson was elected in 1964 on a platform and with an ideology in which equality scarcely figured. On the contrary, it was widely noted by political commentators at the time that the traditional Labour rhetoric of equality and social justice had been largely abandoned[4] in favour of emphasis on efficiency, dynamism, the technological and scientific revolution as applied to Britain and so on. Alongside this went oratorical broadsides against grouse-shooting amateurs. Tory backwoods squires etc.[5] which again emphasised efficiency rather than justice as the crux of the difference between Labour and Tory. Unfortunately for Labour, events were rapidly to demonstrate that the party of dynamic efficiency could, with remarkable ease, do even worse than the backwoods grouse-shooters at running the economy - even with the help of Beckerman et. al.

Nor does the statistical evidence assembled in the volume (by Michael Stewart in Ch. 2) provide any support for Beckerman's belief in "the much neglected fact (sic!) that ...the Labour Government did go quite a long way towards achieving its egalitarian objectives". The major defects and omissions in the evidence as presented by Stewart for significantly greater equality as a result of Labour policies may be briefly summarised. Changes in the overall distribution of income between corporate profits and wages are shown before tax but not after tax. This is strange since Stewart assumes that the distribution of income before tax was largely unaffected by Labour policies[6] and the main redistribution impact of such policies was via taxes and expenditure (presumed benefits). Had Stewart made the appropriate after-tax calculation he would have found that Labour tax policies reversed the trend towards a greater share of wages so that the share of corporate profits post-tax actually rose under Labour. This can be seen from the following table.

Total corporate profits as a percentage of aggregate wages and salaries - 1949 - 1968[7]

	Before tax	After tax
1949-52	41.6	25.0
1953-56	39.7	26.1
1957-60	39.5	28.7
1961-64	37.6	28.6
1965-68	37.2	30.2

Stewart's basic evidence, however, for his egalitarian contentions are tables presenting evidence (from Economic Trends) to show that for fourteen different income groups the percent changes in original income (i.e. income before tax) resulting from all taxes and benefits under Labour were such as markedly to favour the lower income groups as opposed to the higher. However this is completely misleading since the procedure ignores the effect of the upward movement of earners to higher income groups as a result of rising money incomes which meant that large numbers of low-paid workers entered the tax net for the first time.[8]

Moreover the tax system is such that at the lower end of the income scale (especially just after entry into the income-tax range) tax-payers as they move-up the income range pay a more rapidly increasing proportion of their income than do those moving up at the higher end of the scale, even though those at the higher end of the income scale are paying a greater average proportion of their incomes in tax. The result of these effects, plus changes in tax policies (concerning personal tax - exemption allowances and reduced rate structure) was over the period of the Labour Government, to reduce the proportion of retained income after tax of the lower income groups to a significantly greater extent than that of the higher income groups - exactly the opposite of Stewart's claims. Nor does this inegalitarian trend seem to have been reversed by changes in benefits since for all householders together the ratio of benefits received to taxes paid was falling during the 1960s[9] and "since the great majority of householders in the survey concerned are those of employees, it is virtually certain that the same falling trend of benefits to taxes was experienced by wage-earners".[10] It is, incidentally, an interesting commentary on Labour's allegedly progressive social policy that a prominent characteristic of Labour's policy concerning the distribution of benefits was its increasing reliance under Wilson on the use of the means test e.g. over rent rebates, rate rebates, prescription charges, supplementary benefits and so on.[11]

Another, and particularly ridiculous consequence of analysing income distribution in given income groups while ignoring movement between groups in that the effect of reducing the difference between the net income of the average wage-earner when employed and that of the average wage-earner at work (due to increases in sickness or unemployment benefits) is treated as a victory for equality while the massive increase in the number unemployed under Labour (unprecedented in the postwar period) with its attendant reduction in labour income and insecurity is wholly ignored. Indeed, it is too often forgotten that the Wilson Government's deliberate use of unemployment as an economic policy weapon was more vicious than that of any previous postwar government so that, for example, the unemployment rate over the years 1967 to 1969 inclusive (2.5% for the U.K.) was higher than for any previous postwar consecutive three-year period.[12]

Not only, however, did the tax system under Labour, redistribute income away from wages towards profits but its regressive effects were sufficiently strong both to discriminate in favour of higher-paid workers as against lower paid and increasingly in favour of single men and smaller families as against larger families (specially during the period of the Labour Government).[13] As the authors of the Cambridge study remark" a major argument for a progressive direct-tax system (as opposed to other methods of taxation) is distributional: that it changes the allocation of income after tax in an egalitarian direction. It cannot, however be held that this was the effect of increasing British incidence of personal income taxation after the 1950s".[14]

Nor is this all. Stewart assumes that any increase in expenditure on education and health automatically benefits lower income groups more than higher, making no allowance for the well-established fact that in some respects middle class groups are better equipped to benefit from such expenditures than the working class. Indeed the calculations of Howard Glennester[15] have shown that during the 1960s the middle class generally and especially the highest-paid professional and managerial groups benefitted most from considerably expanded educational expenditures and much more proportionately than the working class.

It remains to add, however, that Stewart very frankly discusses the most serious omission of all in Labour's alleged egalitarianism - its total failure to alter or to attempt to alter the distribution of wealth (wealth is much more concentrated into a few hands in Britain than in the United States[16] even though, as he remarks, "It is the most fundamental measure of the way that command over resources is distributed between different groups of the community, and it can be a very significant indication of how egalitarian a society's values really are".[17]

Furthermore, it is important to note that had the Wilson Government actually succeeded in its economic strategy the gains which the working class actually did make at the expense of profits before tax through its own militancy would have been partially or completely reversed as output expanded while Labour's incomes policy kept wages but not prices pegged. As it happened, Labour's economic strategy failed, so that some pre-tax working class gains were made, and although taxation eliminated these gains it is probable that the decline in the post-tax wage share of national income would have been even greater had wage-earners not managed to raise their pre-tax share.

Finally, although tremendous weight is rested by Beckerman on the alleged difference between Labour and Conservative policy concerning equality no comparative evidence is adduced to substantiate the view that the Conservatives have been significantly less egalitarian. The major social achievements in health, education, housing and social benefits wrought by the Attlee Government (partly a continuation of the policies of the wartime coalition Government) were not reversed by the Conservatives and the broad similarity of the two major parties' social and economic policies gave use to the term "Butskellism". The only evidence Prof. Beckerman does produce to substantiate his Conservative/Labour contest is the first budget of the current Conservative Government. It ought not, of course, to be necessary to point out that one budget does not make a summer - as indeed subsequent events have more than adequately demonstrated. However, the evidence adduced in the Cambridge study by Jackson, Turner and Wilkinson shows either little difference between the redistributional effect of the policies of the two parties while in power, or, if anything, a more regressive policy by Labour. As the authors of the study remark, "It seems to be the fate of Labour Governments in Britain to tax employees more heavily (or restrain their real wages more effectively). Indeed, it almost appears ...as if the objective economic-historical role of the British Labour Party is to do (no doubt despite itself) those things to the workers that Conservative Governments are unable to do" (p. 76)

III HEATH AS RIGHTIST MAVERICK

Despite all this, the early statements and policies of the newly-elected 1970 Conservative Government undoubtedly represented an initial and major attempt to change the pattern of economic policy and political life. Incomes policies and statutory wage control gave way to old-fashioned "financial discipline" and industrial confrontation as means of restraining wage increases; subsidies to industry were to be drastically cut or phased out as the Government would no longer support "lame ducks", the Government mechanism for selective intervention to improve the industrial structure, the Industrial Reorganisation Corporation, was dismantled and the banking system was made more competitive. The whole complex of policy changes was designed to reduce the government's direct role[18] in the economy, to strengthen the role of competition and in general to change the phsychology of both workers and businessmen so that the traditional laissez-faire virtues of independence and initiative were revived - as against the sloth and irresponsibility built into the subsidised and managed economy of the welfare state.

No doubt a major causal element in the policy change was the disastrous failure of Labour's interventionist policy of close government management of the economy[19] but it could just as well have been argued that Labour's failure was not due to government interventionism per se but to inefficient intervention or to insufficient intervention. However, the new Tory philosophy of economic policy was so obviously doomed to failure and was correspondingly so heavily saturated in ideological rather than technical economic justification that it can be adequately explained only with reference to profound ideological currents brought to the surface by inexorable and inresolvable contradictions in capitalist society.

For, as had already been proved at least as long ago as 1957-58, wages cannot be adequately controlled by doses of unemployment and modern oligopolistic economies cannot be operated to be internationally competitive without intelligent and widespread government leadership of and intervention in the economy. Nor, equally importantly, can [illegible] the postwar setting of new [illegible] of working [illegible] and of full employment (which the working class has come to regard as a right) stand up to the strains which would be imposed on it by continuous and growing insureconomy. Nor, equally importantly, can bourgeois parliamentary democracy in its postwar setting of new levels of working class aspirations and of full employment (which the working class has come to regard as a right) stand up to the strains which would be imposed on it by continuous and growing industrial battles fought to a finish, alongside massive unemployment unknown to postwar experience and unknown to a whole younger generation of workers. Bourgeois democracy implies a certain give and take and willingness to make appropriate concessions to the working class which the new Tory policy took major steps towards ruling out.

For these reasons then, Conservative economic policy was completely reversed, the process beginning no more than a year after they came to office. But what were the ideological forces which led to this strange, atavistic and short-lived episode? They reflected profound economic changes in postwar capitalism. The bourgeoisie and its representatives while in general showing great pragmatism and adaptability in matters of economic and social policy have nevertheless in various countries historically associated state intervention ideologically with socialism and increasing state intervention with the growing power of the working-classes. More specifically, direct state intervention in the wage determination process on a semi-permanent basis necessitated by the inflationary postwar economy[20] has created new apprehensions that such policies in parliamentary democracies with, as in the British case, a massive, majority working class vote inevitably develop a kind of creeping socialism. Controls over wages are felt to lead eventually to controls over prices and profits (as indeed they do) and finally to working class pressure to use profit controls to eat into the very heart of the capitalist system. It was for this reason that, despite its economic rationality in helping British capitalism become more competitive, the Conservatives for a long time in the 1950s resisted incomes policy and statutory wage control and instead relied largely on unselective deflation. Throughout the whole postwar period most Western ruling classes, and especially those of the United States and Britain, have feared inflation not only for competitive or reserve currency reasons, important as these were, but also because, with strong working classes, inflation inexorably brings in its wake social unrest, more state intervention of an ideologically disruptive character, and increasing realisation of, and opposition to, the income inequalities and thus social injustice of capitalist society. Thus the sometimes apparently irrational emphasis on financial discipline, stability etc. That the Nixon regime should have followed exactly the same path of initial backwoods laissez-faire economic policy followed by a reversal towards direct state interventionism and a more expansionist policy underlines yet further the impossibility of permanent reversal of the dirigiste trend of the modern capitalist state.

IV HEATH AS ORTHODOX SOCIAL DEMOCRAT

The choice for Heath quickly became apparent - increasing disruption of bourgeois political democracy together with even faster relative economic decline - or, on the other hand, a reversal towards social democratic policies operated more efficiently and purposefully than under the Labour Government. Apart from anything else, entry into the Common Market alone was a major barrier to the former option since the social philosophy of the Common Market is increasingly in the direction of rationalised, expanded and humanised social concessions to take the edge off the growing social tensions of modern capitalism,[21] a philosophy much more in harmony with Heath Mark II than Heath Mark I. In the event the Conservative Government displayed remarkable flexibility. Unemployment ("financial discipline") as a wage policy was abandoned in mid-72 and[22] major efforts were made to expand employment. (In early 1972 Barber stated that the growth of the economy would not be hindered by the exchange rate and was as good as his word) At the same time the lame duck policy was sunk. UCS was saved and following it the whole ship-building industry received massive financial aid. In a complete turn-round the nationalised industries, too, had their deficits financed by the Government. Regional development was given financial aid to an even greater extent than under the Labour Government. Currently the Department of Trade and Industry under Peter Walker is assuming the extremely positive interventionist, modernising role in industry formerly belonging to Labour's Industrial Reorganisation Corporation.[23]

Most important and symbolic, the policy of deliberate confrontation with the trade unions was abandoned[24] and determined attempts were made in autumn 1972 to produce an incomes policy acceptable to the trade unions - something inherently difficult for any Conservative government. It was, moreover, Sir Frank Figgures, Director General of the National Economic Development Council under the Tories who stated only recently that the next major step for British economic policy was the direct involvement of the trade unions in the management of the economy[25] - something Labour never contemplated while in power. Major concessions were offered by the Tories which, however the workers and the trade unions were disinclined to accept as being inadequate - especially over the Industrial Relations Act. Nevertheless the effort was made and has not been abandoned. Meantime there was no reversion to laissez-faire economics. Instead, failing the achievement of an agreed incomes policy, a statutory wages and price freeze (initially regarded by Heath as bureaucratic and semi-socialist anathema) was introduced in November, 1972 which is being followed up by the establishment of agencies (the Price Commission and the Pay Board) and policies designed to establish for at least a 3-year period - and probably longer - a system of control which is the strictest ever enforced in Britain outside of wartime. So much for the laissez-faire of 1970.

In every important respect the Conservatives proved themselves more flexible and able to learn than Labour,[26] equally as willing to plan, direct and where necessary subsidise the capitalist economy and equally responsive to the need to make concessions to the working class. Even in the field of social policy, where the Conservatives have been slower to change their spots there has nevertheless been a switch towards policies more acceptable to the working class, e.g. the expansion of nursery education[27] and tax concessions. We may anticipate yet more changes in direction in social policy. (It is already clear that under the first two years of Mr. Heath's government, expenditure on health and education have continued to rise as a proportion of GNP.[28]

V CAPITALISM WITH NO JUSTIFICATION

There is now little substantive difference between Conservative and Labour economic philosophy and policy and declining differences between their social policies. There has always, of course, been a basic core of agreement between the two main parties - the system could not otherwise work. Despite this, however, there have been important differences of emphasis and substance between them and sometimes one Party has acted as innovator while the other has later accepted its rival's innovations and on occasion developed, elaborated or modified them. Occasionally it has reversed or partially reversed them. Thus the system has maintained considerable flexibility. However, the difference is now less than ever before (apart from rhetorical differences) in that in contrast to the Party differences of 1945-51 the Tory Party is now as much (or as little) a party of reform as the Labour Party - one reason why electors have become much more ready in recent years to switch their votes between Parties. In the 1950s the Conservatives could carry out a deflationary policy for several years and thus differentiate themselves from Labour Governments and Opposition before, during and after. It is a measure of the narrowing of the range of options that in the 1970s such a difference was possible for only a few months.

The reasons for this convergence are not hard to find. Initially, the major achievements of the Attlee government in renovating British capitalism by elements of physical planning; advanced social policy measures, nationalisation and other policies so obviously strengthened the system economically and politically that the Conservatives did not in the main reverse them - and, these achievements substantially reduced the number and type of future major capitalist reforms which could have differentiated the two Parties. More generally, British capitalism is caught between the hammer of working class strength and the anvil of international competition[29] and both these factors are not static but operating with increasing force. The result has been a marked decline in Britain's international competitive position and her share of world markets, together with substantial inroads into the rate of profit as international competition has made it increasingly difficult to react to rising money wages in excess of the slow rise of productivity by raising prices to the same extent. Working class strength has grown not only as a result of improved organisation but also because increased militancy due to the social discontent arising from prolonged inflation has combined with new levels of aspirations as the younger generation of workers develop their own standards, more advanced than, but based on, the achievements of their fathers. The postwar increase in international competition, due in part to the lowering of tariff barriers, (itself running up against increasing obstacles as capitalist nationalism grows and international contradictions become more acute) will intensify for Britain as the effects of Common Market entry are felt. The hammer and the anvil have thus markedly reduced and will continue to reduce the range of options open to British capitalism. The more critical the condition of capitalism the more does it find it necessary to borrow some of the armoury of socialism. State intervention (capitalist planning) in every sphere become the irresistable force. The immovable obstacle of Heath's initial laissez-faire ideology gives a deep groan - and moves.

But this poses profound problems for capitalist ideology, in at least three dimensions. First, the fundamental economic rationale of capitalism, i.e. the benefits of the market, of competition, of individual enterprise, of the profit motive and so on, is deeply corroded by the irreversible secular trend towards increasing state intervention.

Second, the moral rationale of capitalism as an economic system, that it is socially just as it tends (after some tinkering) to distribute rewards in some approximately fair relationship to skill, effort, savings ("abstinence") etc. becomes gravely undermined as inflation, together with state action against inflation[30] acts to expose the realities of injustice and exploitation under capitalism - and continuing inflation and state action to ameliorate it are permanent features of the state-managed postwar capitalist economies. It is no accident that the social tensions of inflation have produced in the Labour and Conservative Parties, the main bourgeois newspapers, the EEC and the OECD, increasing attention to "equality" as the major growing point of discontent with modern capitalism that has to be tackled.[31]

And third, the political rationale of capitalism is weakened both because the ideology of democracy demands that the people take the decisions about how their lives are run - and the more the state does, the more is the hollowness and falsity of this ideology as applied to capitalism exposed; and also because the two-party system increasingly loses credibility as the two major parties seem to offer less and less choice in the solution of urgent and acutely felt social problems. The problem of differentiating itself from its rival has been particularly difficult for the Labour Party[32] because it is in opposition and the memories of its recent performance in Government are still strong. In addition, the contradiction between Labour's function of integrating the working class into capitalism and guiding the trade unions and working class along safe lines and its function of providing a responsible potential or actual governing party for capitalism has sharpened as a result of growing working class discontent. The net result is that, without moving towards socialism, the Labour Party has currently relapsed into demagogic "leftist" opportunism and for the moment dropped serious pretensions to being a "responsible" potential government party.[33] As a result, a bitter dispute has arisen between the unprincipled opportunists apparently willing to promise everything to the trade unions (Wilson, Barbara Castle[34] par excellence) when out of power, and the more responsible, "statesmanlike", capitalist managers (Roy Jenkins, George Thomson).

Postwar economic contradictions based on and sharpened by ever-increasing working class industrial strength and of a character quite different from prewar have thus sent British capitalists reeling from the never-ceasing pressure of economic and ideological problems, the worst effects of which on the system can perhaps be evaded indefinitely if the working class is not capable of advancing and enforcing its own solutions but which in any case can never be solved. Economically and socially, and in some respects, culturally, Britain is ripe for socialism. The <u>political</u> task, however, remains to be done.

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REFERENCES

1. I have benefitted from helpful comments by Mike Prior and Reagen Scott in preparing this article.

2. Robin Blackburn, "The Heath Government" <u>New Left Review</u>, Nov-Dec 1971, constituted an exception to this general position by arguing that while the Heath government represented a major new turn of capitalist policy, this was actually a more efficient capitalist policy than Labour's. On the contrary, both politically and economically, the initial 1970 Conservative economic strategy was not merely inefficient but impossible (see below pp. 111, 112).

3. E.g. the <u>Financial Times</u>, the <u>Sunday Times</u>.

4. Michael Stewartin Chapter 2 of the Beckerman volume notes that the theme of equality was more in existence in the 1959 Labour election manifesto than in that of 1964, <u>Ibid</u>., p. 78.

5. This childish propaganda is not only repeated by Beckerman, (p. 45) in the teeth of the clear evidence that Conservatism will rule with anyone who can do the job irrespective of social background (e.g. Heath and Peter Walker) but is theorised by him in the somewhat remarkable statement that the privileged classes are opposed to economic growth (p. 45). It should not require to be said that the income, wealth and other privileges of the capitalist class are positively related to the growth and thus competitiveness of the British economy.

6. This assumption is itself questionable. A considerable body of thought subscribes to the view that the Labour Government's statutory controls over wages did in fact have a significant and measurable effect in limiting the rise of money wages, the subsequent acceleration from 1969 being due largely to the effects of devaluation and tax changes in reducing average real disposable income of the workers - and not to any reaction against statutory measures as such.

7. Taken from D. Jackson, H. A. Turner and F. Wilkinson. Do Trade Unions Cause Inflation? University of Cambridge Department of Applied Economics, Occasional Paper 36, CUP, 1972, p. 81. By taking into account more dimensions of the taxation system and tax policy than Stewart this careful study achieves a much clearer picture of distributional changes under Labour. The Jackson, Turner, Wilkinson stidy's conclusion concerning the direction of income distribution under Labour are broadly confirmed by the Fabian Society's study - also published in 1972 - Labour and Inequality, Sixteen Fabian Essays edited by P. Townsend and N. Bosanquet. The Cambridge study is the basis of much of the argument of this section.

8. At one point (Beckerman, op. cit., p. 88) Stewart appears to argue that rising money incomes, within the structure of a progressive tax system, automatically lead to greater equality since it permits "a substantial increase in the proportion of personal income paid in direct taxes". This non sequitur ignores the fact that new income recipients caught in the tax net are not a representative sample of all earners but precisely those at the lower end of the income scale. It also takes no account of the high marginal incidence of direct taxation on lower income earners specially just after the point of entry into the tax-paying range.

9. Jackson, Turner and Wilkinson, op. cit., pp. 83-84.

10. Ibid., p. 84.

11. Labour and Inequality, op. cit., p. 19.

12. Beckerman, op. cit., p. 58.

13. Jackson, Turner and Wilkinson, op. cit., pp. 76-80.

14. Ibid., p. 76. Analysis in percentile terms instead of by fixed income groups would have produced a more accurate picture in the Beckerman volume.

15. "Education and Inequality" in Ch.6 of Labour and Inequality, op. cit., especially pp. 96-97.

16. Labour and Inequality, p. 186.

17. Beckerman, op. cit., p. 84.

18. The government retained a major indirect role in wage determination but this had quite different economic, political and ideological effects from the direct methods of incomes policy and statutory controls.

19. In particular it was frequently argued that the Conservative Government abandoned incomes policies and statutory wage control because they would not work or were inefficient.

20. Itself a reflection of the political power of labour is achieving full employment and the shift in the balance of power in the labour market in favour of the working-class.

21. Financial Times, Feb 28, 1973.

22. Exactly the reverse was the case with Labour who after pledges to the contrary, halted the growth of the economy to maintain the existing exchange rate. Greater flexibility or adjustability of exchange rates creates new contradictions because resulting greater fluctuations in the cost of living mean that continued growth is paid for by greater social unrest.

23. The Sunday Times, Feb 25, 1973.

24. Given the declining profitability and competitiveness of British capitalism continuing attempts at wage control and therefore industrial confrontation were inevitable. But the Tories now tried to avoid it and use it only as a last resort.

25. This is clearly the long-run strategy also of Vic Feather, General secretary of the TUC.

26. This is not to deny the Tories' many blunders in the economic field or their frequent political ineptitude, e.g. the massively costly scandal of North Sea oil, the failure to make any serious attempt to control food prices.

27. A type of educational expenditure which unlike expenditure on University education, particularly benefits the working class.

28. See Public Expenditure White Paper, Dec, 1972.

29. Productivity in British industry has grown so slowly that money increases here raise prices more than elsewhere. The slow growth of productivity is the direct result of capitalist postwar policy and its costs, specially policies of containing national liberation movements and maintaining Britain's financial role in the world economy.

30. State action against inflation while it may temporarily alleviate certain injustices in the longer run serves to expose even more openly the fundamental injustices of capitalism.

31. It is for this reason that the Beckerman volume combines praise for Labour's totally fictitious egalitarian policy with ardent recommendations for basically anti-egalitarian wage policies.

32. The Conservatives too have had their crosses to bear. Apart from the necessarily unfavourable publicity attendant on being forced completely to abandon their announced policy as being unworkable they have caused confusion among the business classes too. See, for example the heading in the Financial Times of 18th March, 1973 "Business 'is dismayed and bewildered' by policy reversals".

33. A classic sign of disintegration, [illegible]

34. According to Beckerman (p. 43) "famed as the conscience of the Left".

THE STATE AS ENTREPRENEUR, edited by Stuart Holland. REVIEWED BY GIOACCHINO GAROFOLI

The increased interest in the IRI public enterprise "formula" in the last years, leading to the introduction of State Holding or State intervention agencies modelled directly or indirectly on Italian IRI, in Britain, France, Canada, Australia, Sweden and West Germany, explains the analysis written by a group of scholars under the auspices of the Centre for Contemporary European Studies at Sussex University.

The reason of this interest is evident enough, says Stuart Holland, because IRI has been, in the postwar period, a concrete example of "state enterprise as efficient and dynamic as leading private enterprise groups, yet still directly serving the ends of government economic policy and the interests of society as a whole". It has done this moreover, "with a financial 'formula' whereby the bulk of its external finance is secured on the open market rather than from government capital grants". (p. 1).

I will only consider the parts referring to the role IRI had and could have, in the Author's opinion, in the solution of structural and regional problems in the Italian economy.

Stuart Holland stresses the necessity of direct State intervention in the economy. This is because "the competitive impulse of the growth process in a capitalist economy is restricted in many cases by monopolistic tendencies" and "may be restricted by structural deficiences which the market mechanism alone is inadequate to overcome, so that the rate of growth of an economy may fall below its feasible growth potential. ...Even in a relatively developed economy, there will tend to be factors of production which are under-employed 'not from an insufficiency of disposable resources, but from the manner in which the decisions are taken which employ and utilise these resources'". (pp. 5-6).

He says also:

> The increasing attention paid by national governments to the IRI formula in part reflects increasing awareness of the limitations of Keynesian demand management policies in solving structural and social problems. It also may partly reflect the more purposive use to which IRI itself has put the 'formula' in recent years, especially in meeting the challenge to national control of key firms or sectors by multinational companies. (p. 242)

The IRI contribution to Italian economic growth, in the postwar period, is considered by the authors in the following points.

1. <u>Intervention in the basic sectors</u> (modern steel plant, modern services and the big part of the motorway network). Nevertheless, this is a necessary but not sufficient condition for fast growth: rather the growth of these sectors, generally, depends on the growth of manufacturing sectors.

2. <u>Increasing multi-sectoral policy</u>, intervening in the modern sectors with advanced technology, high capital-output ratio and long-pay off. In fact, Stuart Holland, "one of the principal problems for governments concerned to raise the rate of growth of industrial investment through public enterprise expenditure is the inter-sectoral composition of public enterprise itself". (p. 19)

For this it is necessary to extend public ownership to other sectors than basic ones, and particularly to Perroux's 'entirely new' sectors.

This intervention has been realized through the shareholding formula in the sectors' leading firms and joint ventures with the biggest private firms, especially in the advanced technology sectors. The importance of the 'formula' is in the fact that it is not necessary to have total participation in the capital of the firms to control their decisions. At the same time, given the oligopolistic structure of the markets in which the state firm operates, its influences also the decisions of the other firms in the sector without using nationalization, which implies a major financial exposure, a lack of incentive to improve the management efficiency and a set of bureaucratic restrictions (cfr. pp. 45-47). In this case, in other words, there is an intrasectoral 'follow-my-leader' effect, because, under these conditions, "the remaining firms in the sectors concerned stand to be penalised through loss of market share if they do not increase their rate of investment in line with the sector-leaders"" (p. 21). At the same time given the productive integration of state firms operating in different sectors it is likely to have intersectoral spread effects. "If the government simultaneously employs a multi-sectoral package of State firms in the main manufacturing sectors as spearheads or pace-setters for the private firms with which it competes, it also can thereby contribute to ensuring a 'broad wave' of investment throughout manufacturing as a whole". (p. 21) And this is crucial in ensuring the expansion of investment and employment in the basic sectors, whose demand depends from the manufacturing sectors.

This mechanism is very important in the stagnant economies, because scale economies and technical progress are highest in the innovative sectors. So it could stimulate a demand for new capital goods and, via increasing profits, a virtuous growth mechanism.

3. <u>Group's response to the multinational challenge to Italian companies</u>, so to secure control of the firms threatened with takeover by US companies. In this case IRI benefited in part from the desire of firms to remain Italian (IRI utilised most of the existing senior management, in other words an IRI takeover means a longer survival rate for existing management than takeover by a US company). And also from the concern of their unions that the companies should not pass outside Italian control.

This is very important considering the conflict situation between the macro-economic interest of governments and the micro-economic interests of multinational companies (transfer-pricing, monopolistic position derived from the investments in R & D already amortised and used so to gain supernormal profits which improve more and more their advantage position, by financing for example a price-war to inhibit new entries).

4. <u>Contribution to the industrialisation and to the productive modernisation of the backward areas in the Mezzogiorno</u>. Stewart Holland stresses the insufficiency of the government policy for the South, via the 'Cassa per il Mezzogiorno' and investment grants and fiscal incentives, to push the North enterprises towards the southern areas. This objective was not fulfilled, also, for psycological motives ('fear of unknown' in a major investment project away from the home area, manager's or his wife's preference for the home area in which they have already established social connections, but especially from the fact that a firm's market position depends essentially on its current profit position in relation to the past profits and in

relation to the other firms. If profits have not actually declined or declined relatively to other competing firms the firm has not an immediate incentive to locate new plant in a less-developed area with higher labour availability and lower wage costs). But what really made unnecessary the location of new areas were three real factors: the great scale economies in the plants already operating, the labour migration from the South to the North and the european economic integration.

The labour migration (increasing the labour supply for the North firms enough to match the demand) caused a lower rate of increase in the wages than in the labour productivity so that the labour costs at North could remain lower relatively to the other european countries. In this way the international competitiveness, that was increased with the constitution of the european economic integration, was guaranteed. At the same time because of the high increase in the North firms' profits (at least until the beginning of 60s) the question of locating new plant in the South simply did not arise.

The situation in the South was not good when IRI began to operate an industrialisation policy in those areas. The beginning of this stage was in 1957 (before this date IRI was only involved in the 'reconstruction' of its existing plants, prevalently localized in the North) when the 634 Law (approved after a big political fight in the Parliament and with the left parties' support) imposed upon IRI and other state enterprises to locate in the South at least 40% of their total investments and 60% of their investments in new plant.

As evidence of the IRI's quantitative impact in the South industrialisation, Kevin Allen recalls that this agency contributed for 18% to the increase in the South industrial employment between 1960 and 1968 (cfr. p. 177). But this means that IRI created, during this period, only 11,300 new jobs. It is useful to recall, to understand the IRI's real support to the South economy, that in the same period - without considering that a part of these new jobs determined a loss of jobs in small sized firms - 1,200,000 people emigrated from the South! Kevin Allen himself recognizes, further on, that "IRI can only play a limited role in Southern development. As a result of its structure, it can do little to encourage directly the development of small-sized firms" (p. 183).

From the previous argument, then, it follows that it is necessary, if the private firms are not able to react to the government incentives to locate in the South, the state firms go to the backward areas, forcing the big private firms in the modern sectors to do the same. This is necessary because as different categories of firms are localized in different regions, the oligopolistic mechanism within sectors will widen the interregional dualism problem. The backward areas problems could be resolved only by the firms of national importance, that are able to impose a development virtuous mechanism to their economy.

This could happen, in Stuart Holland's opinion, via the 'follow-my-leader' mechanism, in fact "it is in such circumstances that initiative taken by state firms (or firms with partial state shareholding) may alter national location patterns and make a major contribution to equalisation of regional employment and income levels. Provided that the state firm is already significant within the sector or sectors in which it operates, and as efficient in cost terms as other firms with which it is in competition, the benefits which it can secure through location in a lower cost area will pose a serious challenge to those competitors, and tend to stimulate them in their own self-interest to follow suit through the similar location of plant in these areas. If they do not do so they will stand to lose market share to the state firm to the extent that it lowers its prices in line with cost reductions" (p. 25).

This mechanism should produce indirect income and employment effects greater than the direct effects of the state firm's own investments. To guarantee this result the state firm must constitute less than a monopoly for the sector concerned, in other words, it must be a 'primus inter pares' in relation to private firms. If this policy instrument is used with other regional policy measures, as firms location control (of the kind of Industrial Development Certificates) and financial incentives, it could, Stuart Holland says, lessen regional disequilibria.

The author's optimism derives from considering the decisions taken by Fiat and Pirelli to locate new plant in the South after the decision by IRI owned Alfa Romeo company to produce a new car in a plant near Naples. Stuart Holland, in fact, justifies the little follow-my-leader effects after the location of Italsider state firm at Taranto with the group's great predominance among national steel producers (cfr. p. 26).

The Authors, also, believe in the possibility of spontaneous formation of ancillary firms. This belief has been augmented by plans of state firms (SME and EFIM) to undertake shareholding in small and medium-sized companies (cfr. pp. 178-179).

It is clear that Stuart Holland agrees with the 'contrattazione programmata' ('programme contacts') system elaborated by Giorgio Ruffolo, of Italian Budget and Economic Programming Ministry. This plan attempts to reconcile the government macro-economic interests with micro-economic interests of the large private firms. This should take the form of a national programme plan that takes into consideration the investment programmes planned by the large firms, especially by the firms operating in the most dynamic sectors.

Stuart Holland recognizes as a crucial factor in the "success" of the IRI formula the necessity of leaving its management free to manage, which would not be possible under nationalisation. This freedom enabled IRI to operate with an increasing multi-sectoral approach, to enter the modern sectors, to match the big private firms' competition and therefore to realize high efficiency from the point of view of costs. It has been, in other words, a management "able to operate very much as it would in private enterprise ... buying in the cheapest or best markets independently of whether or not they included Group companies, and taking the initiative in new products and new markets ..." (p. 2). The crucial factor is, then, "a degree of entrepreneurship notably lacking in some other state enterprise" (p. 2).

This competitive character is linked, nevertheless, with the necessity of obtaining a high proportion of its finance directly from the market (the increases in the endowment fund supplied only the 7.8% of the total investments in the period 1958-1969) (cfr. Table 11).

Some concluding points will now be raised for consideration.

The first one concerns the possibility of realizing the 'contrattazione programmata': this requires a 'social pact' the basis and conditions of which do not exist at this moment, and will not exist because it would necessitate the working class abandoning demands for the improvement of its conditions.

The second one concerns the Authors' (especially Stuart Holland's) great optimism about the function that the IRI formula had in the process of Italian economic growth. Stuart Holland's interpretative framework is based more on the future possibilities of the 'formula' than in the actual realizations. Reference has been made earlier to IRI's small contribution to Southern industrial increases in employment intended to act as brake to the labour outflow. This was due to the high investment concentration in the basic sectors, which are characterized by high capital-labour ratios and with little spread effects on the economy. At the same time the regional disequilibria widened in spite of IRI's intervention in the South. This shows that the dualism problem is too great to be resolved only by IRI's investment in the backward areas.

Another point to which we must direct attention is the IRI's supposed character of competitiveness in relation with the big private firms. I think it is likely that the opposite hypothesis holds, in the sense that there is a convergence of interests or at least each side's interventions complement the other's.

The state firms contributed, with their big investments to supply a set of basic services that reduced the big firms' production costs. One only needs to remember the motorway network investments that greatly reduced the transport costs enabling the further widening of the size of the markets supplied by the Northern firms, increasing their competitiveness in relation to the small and medium-sized Southern firms, resulting in the latter's high mortality. The state firms, moreover, supplied cheap intermediate goods to the private firms, took over the big firms' capitals in the sectors in which they were no longer able to receive a satisfactory rate of profit (very recently there have been some state firm takeovers in the food sectors and there is great likelihood of some takeovers in the paper sector).

This point is very important if seen in the light of recent interpretations of the theory of large firms. These argue that the managers, and not the capital owners, decide the firm's objectives: we have already seen the managers' interests are not disturbed when the firms are taken over by a state agency, because they retain their appointments. This point is clear also when it is realized that the managers both in the private and in the state firms belong to the same class.

The result of this kind of mechanism should be, then, a division of roles between private firms and state firms: the big private firms can remain in the sectors in which it is likely to obtain a sure and satisfactory rate of profit, where it is not necessary to introduce risky new productive processes (they introduce new processes only where they are labour saving or they guarantee high scale economies), where it is not necessary to invest with a high capital-output ratio and where there is a large and increasing demand; in the other sectors the state firms can replace them bearing the costs.

Finally, a point on the faith that the Authors put on the realization of the follow-my-leader effects (location of new plant of big private firms in the South after a state firm's previous location), supported by the announced decision of Fiat and Pirelli to locate new plant in the South. To what extent are these decisions, due rather to the increasing cost of the labour inflow into the congested areas, that have as a consequence a strong demand for increased wages, and to the increasing working class struggle especially in the biggest firms, than to this oligopolistic effect or to the agreement of these firms with the 'contrattazione programmata'?[1]

In conclusion I think the Authors' optimism concerning the IRI's 'formula' is due to their objective to support the reintroduction of the Industrial Reorganisation Corporation, with a more entrepreneurial characteristic and with a wider multi-sectoral involvement. The Labour Party (of which Stuart Holland is an economic adviser) has, in fact, prepared a plan to take over 24 of the largest British firms by a State Holding Corporation. This proposal is currently being debated within the Labour Party.

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[1] This phenomenon perhaps is explained by the increasing labour homogeneity, determined by the particular kind of technical progress introduced into the industrial sectors in the form of assembly-line work, that eliminated the previous conflict-inducing factors inside the working class, determined by the different interests of workers with different qualifications, functions and gradings.

BOOKS RECEIVED

I SAW SIBERIA, Hugo Portisch. (George G. Harrap & Co., London 1972) ISBN 0245 50441 9 - £4.85.

*STUDIES IN THE LABOUR THEORY OF VALUE, Ronald L. Meek. (Lawrence & Wishart London 1973) SBN 85315 273 X - £4.00.

*CAPITALISM AND THE NATIONAL QUESTION IN CANADA, Gary Teeple, Editor. (University of Toronto Press, 1973) LC 91690 - £6.75.

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*THEORIES OF VALUE AND DISTRIBUTION SINCE ADAM SMITH, Maurice Dobb. (Cambridge University Press 1973) 0 521 20100 4 - £3.60.

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David Yaffe
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Radical Philosophy is the journal of the Radical Philosophy Group. It is published three times a year. The academic practitioners of philosophy have all but abandoned the attempt to understand the world, let alone to change it. They have made philosophy into a narrow and specialised academic subject of little relevance or interest to anyone The Radical Philosophy Group exists to challenge this situation, to question the institutional divisions that cut philosophers off from important philosophical work done by sociologists, psychologists and others; to challenge the divisions that isolate the universities and other educational institutions from social life as a whole. Radical Philosophy No. 6 will be out in November 1973. Articles in previous issues include:

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COMMON DISSATISFACTIONS WITH THE ECONOMICS taught and practiced in this country led to the formation of URPE as an organization. For some of us, although the tools of formal economics appear to have their uses, the basic questions of neoclassical economics appear wrong. They take for given in their parameters the very institutions of society and the attitudes imposed on the individual by society which we are challenging. The American celebration implicit in the notion of a "grand neoclassical synthesis" seems to us a cruel sham. Some members of URPE furthermore consider that traditional economics is not merely more limited in its uses than most curricula imply: it may be a distinct social evil, in that it trains students to avoid the larger questions relating to capitalist institutions and modes of decision making, and inhibits the challenging of these institutions and their operations

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URPE PROVIDES A VEHICLE FOR OUR MEMBERS and chapters to experiment with new ideas and new forms of action which will enable us as political economists to effect fundamental social and institutional change. URPE does not seek to impose a unified political line. Rather we base our organization on our shared concerns.

SEMI-ANNUAL NATIONAL CONFERENCES are held in August and December and regional conferences have been held in New England, Upper New York State, California, Michigan, Ohio, and Washington, D.C. Various local chapters are organized around the country. The organization publishes the *Review of Radical Political Economics,* which appears quarterly, as well as a Newsletter and Occasional Papers. URPE members have participated in the development of radical courses, in political organizations, in advocacy economics work, and have offered their specialized knowledge to local groups who are working toward social and political change.

WE INVITE ALL WHO SHARE OUR CONCERNS TO JOIN URPE AND BEGIN WITH US TO DEVELOP THE TOOLS AND THE PROCESSES FOR OUR COLLECTIVE LIBERATION.

MEMBERSHIP BLANK

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