# Is Marx's Theory of Value Still Relevant?

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### **Abstract**

This paper assesses the internal consistence of four views of Marx's theory of value, the 'traditional Marxism' associated with Dobb, Meek and Sweezy, Sraffian interpretations of Marx, value-form theory (especially the Rubin tradition) and the 'new interpretation' of value theory. On the basis of a critique of these approaches, a class interpretation of this theory is outlined, in which value theory is structured in and through the primacy of class relations in capitalism. Finally, the potential relevance of the class interpretation of Marx's value theory is briefly

assessed in the light of contemporary political, economic and social problems.

The title of this paper is deliberately provocative, on at least three grounds. First, it implies that the 'relevance' of social theories needs to be assessed historically, and it may change as the subject of analysis is transformed over time. Second, it suggests that Marx's theory of value may have been relevant in the past – perhaps when it was first developed, or maybe under what became known as competitive capitalism – but it may no longer be tenable in the phase of 'global capitalism'. Third, if this is the case, what are critics of capitalism supposed to do? – is there another theory that may offer a similarly powerful denunciation of capitalism as Marx's, with the same scientific rigour, and the same degree of commitment to the search for post-capitalist alternatives?

It is impossible to address these issues in the confines of a single paper. This essay answers these questions unevenly and only partially, in three sections. The first reviews the strengths and shortcomings of different interpretations of Marx's theory of value, the 'traditional Marxism' associated with Dobb, Meek and Sweezy, Sraffian interpretations of Marx, value-form theory (especially the Rubin tradition) and the 'new interpretation' of value theory. The second offers an interpretation of value theory based on the primacy of class relations. This interpretation is not entirely original, as it draws on an extensive literature developed over several decades. However, this section aims to present the principles of this interpretation of Marx's theory of value briefly and consistently, in order to highlight its most important claims and implications. The conclusion indicates how this interpretation can offer useful insights for the analysis of several important problems of our age. It should be pointed out that this paper does not survey the entire field of value theory, or deal with all important or polemical aspects of this theory, or offer an orderly exposition of the theory for beginners.1

# 1 Interpretations of Marx's Theory of Value

The concept of value has been interpreted in widely different ways.2 Two interpretations of Marx's theory of value have become especially prominent, the 'embodied labour' views, including 'traditional Marxism' and Sraffian approaches, and value form theories, including those associated with Rubin and the 'new interpretation'. Although these interpretations of value theory have contributed significantly to our understanding of capitalism, they are not entirely

<sup>&</sup>lt;sup>1</sup> Readers unfamiliar with Marx's theory of value theory may wish start from Fine and Saad-Filho (2004), Foley (1986), Harvey (1999) or Weeks (1981). This paper draws extensively on Saad-Filho (2002).

<sup>&</sup>lt;sup>2</sup> '[V]irtually every controversy within Marxist economics is at bottom a controversy concerning the nature and status of value theory' (Mohun 1991, p.42).

satisfactory for several reasons, discussed below.3

#### 1.1 Traditional Marxism

According to the 'traditional' interpretation,4 Marx's theory of value is not essentially different from Ricardo's. It may be summarized as follows:

The main subject of the theory of value is the analysis of capitalist exploitation. The categories developed in the first three chapters of Capital 1 (commodity, value and money) are only indirectly related to this issue, because they belong to a broader set of modes of production, where capitalist exploitation does not necessarily exist.

The concept of value is necessary for the determination of the rate of exploitation. This reading focuses upon the magnitude of value, defined as the quantity of abstract labour embodied in each commodity. The substance and form of value and the links between value and money are largely neglected.

The analysis of profit requires the determination of commodity prices, including the wage rate. This is done through a set of assumptions that usually includes general equilibrium (simple reproduction). Consequently, prices are only relative to a numéraire. It follows that a theory of money is unnecessary, and money is effectively a veil.

The determination of relative prices has two stages; first, it is assumed that all capitals have equal value compositions, in which case the exchange ratios are determined by embodied labour alone. Second, the value compositions are allowed to vary; in this case, relative prices differ from the embodied labour ratios, but it is presumed that the latter determine the former algebraically.

The conceptual apparatus is elementary. Commodities are use values put out for sale; value is often conflated with exchange value, and the articulation between value and price is left unclear (even though they are presumed to be quantitatively comparable).

There is little concern with the distinction between levels of analysis and the interaction between tendencies, counter-tendencies and contingency. Theory arguably captures the basic

<sup>&</sup>lt;sup>3</sup> For a detailed review of these interpretations of Marx, see Saad-Filho (2002, ch.2).

<sup>&</sup>lt;sup>4</sup> This section is based on Dobb (1940, 1967), Meek (1973) and Sweezy (1968).

tendencies of capitalism, and they should be translated unproblematically into empirical outcomes.

The traditional approach has important virtues, especially the focus on the mode of exploitation. This emphasis concurs with Marx's own concerns, and it highlights some of his most distinctive contributions; it is also conducive to the critique of the structures of circulation and distribution, such as private property and the market. However, traditional Marxism suffers from two significant shortcomings. First, it disconnects the analysis of the mode of production from the circulation and distribution of the output, which grossly exaggerates their independence. Second, traditional Marxism wrongly claims that Marx's analysis of commodities, value and money addresses a broad set of commodity modes of production, especially simple commodity production, and that his analysis of capitalism proper starts only in chapter 4 of Capital 1. In this case, two sets of relative prices exist. One is based on embodied labour, and it rules precapitalist exchange, while the other is based on equal profitability, and it regulates capitalist exchanges. 5 Presumably, the transition between these stages is a historical process, in which case the transformation between the two types of relative prices (values and prices of production) can be analysed historically as well as algebraically.6

This approach is misguided both logically and historically. Generalised exchange at value has never existed because, in general, products become commodities only under capitalism. Moreover, although Marx often draws on historical studies in order to explain difficult points or trace the evolution of important categories, the only mode of production that he analyses systematically in Capital is capitalism. Hence, although commodities, value and money may have existed for millennia, Capital focuses upon their capitalist determinations only, and no systematic inferences may be drawn about their meaning and significance in other modes of production (see section 2.2). Finally, the traditional approach fails to explain the relationships

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<sup>&</sup>lt;sup>5</sup> 'Under certain conditions which prevailed between independent small producers in pre-capitalist societies (what Marx calls "simple commodity production") exchange of equal values was the rule. If under capitalist conditions there are other more complicated relations determining the quantitative exchange relations, this does not make an economic theory based on the determination of value by socially necessary labour inconsistent, provided there is a clear and consistent method of deriving prices from values' (Winternitz 1948, p.277).

<sup>&</sup>lt;sup>6</sup> 'The "derivation of prices from values" ... must be regarded as a historical as well as a logical process. In "deriving prices from values" we are really reproducing in our minds, in logical and simplified form, a process which has actually happened in history. Marx began with the assumption that goods sold "at their values" under capitalism (so that profit rates in the various branches of production were often very different), not only because this appeared to be the proper starting-point from the logical point of view but also because he believed that it had "originally" been so. He proceeded on this basis to transform values into prices, not only because this course appeared to be logically necessary but also because he believed that history itself had effected such a transformation' (Meek 1956, pp.104-105). This view draws upon Engels (1981).

between money and commodities and between abstract labour and value, and it explains only imperfectly and superficially the mode of labour and the relations of exploitation under capitalism.7

## 1.2 Sraffian Analyses

Dissatisfaction with the shortcomings of traditional Marxism led to the development of two alternative approaches, the Sraffian (or neo-Ricardian) and value form theory (see section 1.3). The Sraffian approach is developed and explained by, among others, Pasinetti and Steedman, drawing upon works by Bortkiewicz, Dmitriev, Seton, Sraffa and Tugan-Baranowsky. Sraffians attempt to develop the traditional model, focusing upon the articulation between the value and the price systems.8 The main features of this approach are the following:

Only the magnitude of value is discussed in detail; its substance and form are almost completely disregarded. The analysis usually involves two sets of equations; one represents the value system, and the other the price system.

The value system is described by  $\lambda = \lambda A + l = l(I - A)^{-1}$ , where  $\lambda$  is the (1xn) vector of commodity values, A is the (nxn) technical matrix and l is the (1xn) vector of direct labour.

The price system is described by p = (pA + wl) (1 + r), where p is the (1xn) price vector, w is the wage rate, and r is the profit rate.

As the analysis is primarily concerned with the relationship between the value and price systems, money has no autonomous role and, when considered at all, it is merely a numéraire.

<sup>7</sup> '[T]o regard Marx's theory of value as a proof of exploitation tends to dehistoricise value, to make it synonymous with labour-time, and to make redundant Marx's distinction between surplus labour and surplus value. To know whether or not there is exploitation, we must examine the ownership and control

of the means of production, and the process whereby the length of the working day is fixed ... Marx's concern was with the particular form that exploitation took in capitalism ... for in capitalism surplus labour could not be appropriated simply in the form of the immediate product of labour. It was necessary for that product to be sold and translated into money (Elson 1979, p.116).

<sup>&</sup>lt;sup>8</sup> Early Sraffian developments were welcomed by traditional Marxists: 'I would ... wish to urge that this enquiry should be conducted within a rather different conceptual framework – that provided by Sraffa in his Production of Commodities by Means of Commodities ... I shall try to ... show how certain basic elements of this system could conceivably be adapted and used by modern Marxists' (Meek 1973, p.xxxii); see also Dobb's (1943) expression of support for Bortkiewicz's interpretation of the transformation of values into prices of production.

These definitions of value and price are the basis for a wide-ranging critique of alleged inconsistencies in Marx, leading to the conclusion that the traditional Marxist project of determining value from embodied labour is flawed. Very briefly, first, the price system has two degrees of freedom, because it has n equations, one for each commodity, but n+2 unknowns, the n prices and the wage and profit rates. Therefore, while the value system can usually be solved (as long as the matrix A is well-behaved), the price system can be solved only if additional restrictions are introduced, for example, the identity of the value of labour power with the value of a bundle of goods (the wage is the price of this bundle), and a normalization condition such as one of Marx's aggregate equalities (either total prices equal total values, or total profits equal total surplus value). However, the other aggregate equality is not generally possible, which is allegedly destructive for Marx's analysis. Second, the Sraffian representation of Marx cannot distinguish between the role of labour and other inputs, in which case it cannot be argued that labour creates value and is exploited, rather than any other input, e.g., corn, iron or energy. Third, even if labour does create value and is exploited, the only meaningful relationship between labour and prices is through the proposition that a positive rate of exploitation is necessary and sufficient for positive profits, which has little empirical significance.

Sraffian analyses have contributed significantly, even if indirectly, to Marxian studies of the relationship between the mode of production and the structures of distribution. However, the Sraffian approach is insufficient in several respects, and its critiques of Marx have been rebutted convincingly by a vast literature.9 In what follows two aspects of the Sraffian critique of Marx are briefly assessed, the shortcomings of the value equation and the Sraffian inability to represent capitalist relations of production satisfactorily.

The value equation,  $\lambda = \lambda A + l$ , states that commodity values are equal to the input values ( $\lambda A$ ) plus the living labour necessary to process them (l). Although this equation represents correctly Marx's definition of value (see section 2.2), it is unsuitable for the calculation of commodity values. To see why, suppose that the matrix A represents the average production technologies, however they may be determined. Suppose, also, that the vector l represents the average number of concrete labour-hours necessary to transform the inputs into the output. Even under these generous assumptions, the vector l cannot be directly used to calculate the value produced because it measures concrete rather than abstract labour. Since these labours are qualitatively distinct, any operation across them is meaningless.10 By the same token, labour employed in

<sup>&</sup>lt;sup>9</sup> See, for example, Fine (1980), Fine and Harris (1979, ch.2), Gleicher (1985-86), Rowthorn (1980, ch.1) and Shaikh (1977, 1981, 1982, 1984).

<sup>&</sup>lt;sup>10</sup> 'The point is not that no abstraction is involved in the concept of embodied labour; rather it is not a

distinct activities, whether or not vertically integrated, may produce distinct quantities of value per hour because of training and other differences. Suppose, instead, that I is a vector of abstract labour. Although this would avoid the problems outlined above it would still not allow the value vector to be calculated. For this assumption implies that, in order to calculate the abstract labour necessary to produce each commodity  $(\lambda)$ , one needs to know how many hours of abstract labour are necessary to produce each commodity (I). Because it involves a tautology, the assumption that I is abstract labour does not allow the quantitative determination of value.11

The Sraffian system is such that production resembles a purely technical process, not necessarily capitalist, in which case capital is merely a collection of use values rather than a social relation of production, and the substance of value, abstract labour, is undistinguishable from average units of concrete labour time. Finally, the social aspect of production is either assumed away or projected upon the sphere of distribution, through the rate of exploitation.

The Sraffian model is not even based on consistent assumptions. It presumes that the technical relations of production are given independently of the value and price systems, and implies that, for Marx, calculation of the price vector would necessitate value magnitudes, but not the converse. Since this is not the case, value analysis is allegedly redundant. This is wrong because, first, it misrepresents Marx's argument.12 Second, in the real world the structure of production is socially, rather than technically, determined. Under capitalism, competition determines the allocation of labour and means of production, the quantities produced and the technologies, in which case value relations are causally determinant vis-à-vis technologies and prices.13 Consequently, 'the labour theory of value is not redundant, but rather provides the explanation of price lacking in Sraffa's own account.'14 In sum, Sraffian analyses cannot define capitalism other than through the equalisation of rates of return, which makes it impossible to explain consistently the capitalist social relations, exploitation, the distribution of income, the sources of economic data, the process of competition and, most damagingly, the price form.

*social* abstraction corresponding to particular historical process, but it is *arbitrary*, a mental convenience: an assumption that labour is homogeneous *when it is plainly not*' (Himmelweit and Mohun 1978, p.81).

The search for a privileged technological input in the labor process, which determines the value of the product, comes from a misunderstanding of what value is. Abstract labour is not a privileged input into production because abstract labour is *not an input into production at all* ... It is attached to the product (as a price tag) only because of the particular social relations in a commodity producing society' (Glick and Ehrbar 1986-87, p.472).

<sup>&</sup>lt;sup>12</sup> See Saad-Filho (2002, chs. 2, 5, 7).

<sup>&</sup>lt;sup>13</sup> See Shaikh (1982, pp.71-72).

<sup>&</sup>lt;sup>14</sup> Gleicher (1985-86, p.465).

#### 1.3 Value Form Theories

Value form theories (VFT) were developed in the seventies, partly as a reaction against the insufficiencies of traditional Marxism and the excesses of Sraffianism.15 The development of VFT was supported by the rediscovery of the works of the Soviet economist Isaak Illich Rubin (1896-1937) in the West in the early seventies. In what follows, VFT is analysed critically through Rubin's work. Subsequently, a contemporary approach drawing upon VFT is examined, the 'new interpretation' of Marx's value theory.

The Rubin tradition departs from the social division of labour. It claims that the essential feature of the capitalist division of labour is the commodity relation, or the production of commodities by 'separate', or independent, producers. The commodity features of capitalism are so important that Rubin frequently refers to the subject of his analysis as the 'commodity-capitalist' economy. The counterpart to the independence of the producers is the need to produce a socially useful commodity or, in other words, one that is sold (the imperative to sell has been called the 'monetary constraint'). Because of separation and the monetary constraint, this tradition argues that commodities are produced by private and concrete labours that, at best, are potentially or only ideally abstract and social. Private and concrete labour is converted into social and abstract labour if and when its product is exchanged for money.16

The Rubin tradition has contributed in at least two important ways to the development of

<sup>&</sup>lt;sup>15</sup> Different versions of value form analysis are proposed by, among others, Backhaus (1974) de Brunhoff (1973, 1976), Eldred (1984), Eldred and Hanlon (1981), Reuten and Williams (1989) and de Vroey (1981, 1982, 1985).

<sup>16 &#</sup>x27;In a commodity economy, the labour of a separate individual, of a separate, private commodity producer, is not directly regulated by society. As such, in its concrete form, labour does not yet directly enter the social economy. Labour becomes social in a commodity economy only when it acquires the form of socially equalized labour, namely, the labour of every commodity producer becomes social only because his product is equalized with the products of all other producers ... [A]bstract labour ... [is] labour which was made equal through the all round equation of all the products of labour, but the equation of all the products of labour is not possible except through the assimilation of each one of them with a universal equivalent ... [The] equalization of labour may take place, but only mentally and in anticipation, in the process of direct production, before the act of exchange. But in reality, it takes place through the act of exchange, through the equalization (even though it is mentally anticipated) of the product of the given labour with a definite sum of money' (Rubin 1975, pp.96-97, 142; 1978, pp.118-119). For de Vroey (1981, p.176), 'Labour is first performed as private labour, initiated by an independent decision. It is transformed into social labour through, and only through, the sale of its product. When social labour is formed in this context, it is called abstract labour, the adjective referring to the operation of homogenization or abstraction achieved by exchange on the market.' Therefore, 'rather than being linked to a mere embodiment of labour - a technical process - value refers to the validation of private labour through the exchange of commodities against money ... private labour becomes validated (ie reckoned as a fraction of social labour, serving effectively this reproduction) only in so far as its product is sold. Otherwise, private labour is a waste' (de Vroey 1982, p.40).

Marxian value analysis. First, the claim that abstract labour is social labour indirectly formed through sale is applicable to commodity economies only, and it provides the springboard for a forceful critique of ahistorical embodied labour views. This critique has helped to shift the focus of Marxian studies away from the calculation of values and prices and towards the analysis of the social relations of production and their forms of appearance. Second, this tradition has emphasized the importance of money for value analysis, because value appears only in and through price. Since money plays an essential role in commodity economies, non-monetary or general equilibrium interpretations of Marx's theory are fundamentally wrong, the search for an unmediated expression of abstract labour is futile, and attempts to calculate embodied labour coefficients are rarely meaningful. Emphasis on the importance money has facilitated the resurgence of interest in Marxian monetary analysis, and the critique of embodied labour views has opened avenues for the development of more cogent interpretations of Marx.

However, the claim that 'separation' and the monetary constraint are the essential features of 'commodity-capitalist' production has led the Rubin tradition to subsume capitalist relations of production under simple value relations. Consequently, in spite of its significant contribution to the analysis of value, this tradition has added little to our understanding of capital and capitalism. Focus on the value relation implies that commodity economies are essentially a congregation of producers that, in principle, do not belong in the social division of labour. Because of separation and specialisation, the producers must sell their own goods or services in order to claim a share of the social product for their own consumption. In other words, in this type of society production is essentially for consumption, and private and concrete labour is analytically prior to social and abstract labour, which exist only ideally before sale. The equalisation, abstraction and socialisation of labour are contingent upon sale, and commodity values are determined by the value of the money for which they are exchanged. The inability to sell shows that the decision to produce was wrong, the good is useless, and the labour did not create value.17

This approach is misguided. In capitalist economies, the essential separation is between the wage workers and the means of production, monopolised by the class of capitalists (see section

wage workers and the means of production, monopolised by the class of capitalists (see section

<sup>&</sup>lt;sup>17</sup> Rubin (1975, p.147) realised that this argument is untenable: 'Some critics say that our conception may lead to the conclusion that abstract labour originates only in the act of exchange, from which it follows that value also originates only in exchange'. He attempts to evade this difficulty through the distinction between exchange as the social form of the process of production, and exchange as one phase of reproduction, alternating with production, claimin that his argument that value is determined in exchange refers to the first meaning of the term, rather than the second. However, this distinction is invalid, and Rubin himself states that the relationship between the producers is established through the *act*, rather than the social structure, of exchange (see Rubin 1975, pp.7-9, 61, 64, 70, 80-88, 143; 1978, p.114).

2.2). Production takes place when capitalists hire workers in order to supply goods for profit. Since the performance of labour is conditioned by this social form, the output is necessarily a commodity; it has a use value, and it is a value (if the commodity is not sold its use value is not realised, and its value is destroyed). In sum, whereas the labour of independent commodity producers is relatively free of social determinations and its social character is contingent upon exchange, under capitalism the mode of labour is socially determined (see section 2.2).

These limitations of the Rubin tradition are largely due to the conflation between capitalist production (the systematic production of commodities for profit) and simple commodity production (the socially unregulated production of commodities by independent producers). This is flawed both historically and theoretically:

[In] the case of individual producers who own their own means of production and ... where none of the inputs used in production is bought, but all are produced within a self-contained labor process ... only the final product of the labor process is a commodity. Each article of the means of production is produced in social isolation by each producer, never facing the discipline of competition. There is no social mechanism for bringing about a normal expenditure of labor time in the products that are the means of production. In such a situation, competition's only function is to impose the rule of a uniform selling price in the market place ... The only objective necessity is that his or her total labor expenditure ... be sufficient to allow for the reproduction of the family. Should some producers be able to deliver their commodities with less expenditure of effort than others, the more "efficient" producers will enjoy a higher standard of living. This higher standard of living of some in no way pressures the less efficient to raise their efficiency.18

The Rubin tradition's sharp focus upon the value relation has contributed to important advances in Marxian value analysis. However, its relative neglect of the wage relation and the mode of labour have limited its ability to distinguish capitalism from other (commodity) modes of production. The Rubin tradition wrongly presumes that commodity exchange is the determinant aspect of capitalism, conflates money with the substance of value, and eschews the mediations that structure Marx's value analysis. Lack of analytical depth explains its failure to illuminate important real relations identified by Marx, for example, the capitalist monopoly of the means of production, the subordination of the workers in production, the social regulation of production through competition, mechanisation and deskilling, and the mediations between value and price. Because of these limitations, the Rubin tradition is poorly equipped to explain

<sup>&</sup>lt;sup>18</sup> Weeks (1981, pp.31-32, emphasis added).

the main features of capitalism and to analyse their social, economic and political consequences empirically.

## 1.4 The 'New Interpretation'

In the early eighties Gérard Duménil and Duncan Foley independently outlined a 'new interpretation' (NI) of Marx's value theory,19 drawing upon works by Aglietta and Rubin.20 The growing popularity of the NI among Marxists in the last two decades has helped to shift the value debate away from the relatively sterile polemics against the Sraffian critics of Marx and the highly abstract analyses of the Rubin tradition, and into more substantive issues. The distinctive contribution of the NI is based on its emphasis on the net, rather than gross product, and its distinctive definitions of value of money and value of labour power.

The NI stems from a value form interpretation of Marx, whence labour becomes abstract, and is socialised, through sales.21 Two implications follow; first, money is the immediate and exclusive expression of abstract labour and, second, the value created by (productive) labour is measured by the quantity of money for which the output is sold. This interpretation bypasses the conceptual difficulties involved in the relationship between values and prices by remaining at the aggregate or macroeconomic level. At this level, money is essentially command over newly performed abstract labour. There is no necessary relationship between individual prices and values, and this theory cannot discriminate between alternative price systems. This allegedly increases its generality in the light of potentially pervasive imperfect market structures.

Algebraically, the total (abstract) labour performed, lx, creates the gross product, x, but only the value of the net product, y = x - Ax, where x is the (nx1) gross output vector, and y the (nx1) net output vector.

The value of money is the ratio between the total labour performed and the price of the net product,  $\lambda m = lx/py$ . It measures the quantity of labour represented by the unit of money, or the abstract labour time that adds one pound sterling (or dollar or whatever) to the value of the

<sup>&</sup>lt;sup>19</sup> Duménil (1980) and Foley (1982). This section draws upon Fine, Lapavitsas and Saad-Filho (2004) and Saad-Filho (2002, ch.2). See also Moseley (2000a).

<sup>&</sup>lt;sup>20</sup> See Aglietta (1979) and Rubin (1975, 1978).

<sup>&</sup>lt;sup>21</sup> For Foley (1982, p.37), the labour theory of value is 'the claim that the money value of the whole mass of net production of commodities expresses the expenditure of the total social labor in a commodity-producing economy ... The concept of value as a property of the whole mass of the net commodity product in this approach is analytically prior to the concept of price, the amount of money a particular commodity brings on the market.'

product. For the NI, the definition of the value of money represents Marx's equality between total value and total price, and the newly produced money-value is allocated across the net product as the price of these commodities.

The value of labour power, V, is defined as the wage share of the national income, and surplus value, S, is the residual. If w is the hourly wage rate and wlx is the wage mass, V is the wage rate times the value of money,  $V = wlx/py = w \lambda m$ . It follows that  $S = 1 - V = 1 - wlx/py = \Pi$ , where  $\Pi$  is total profit. Therefore, Marx's equality between total surplus value and total profit also holds by definition. Finally, the rate of surplus value is  $e = S/V = \Pi/W$ . This ratio is determined when commodities are priced and wages are paid. It is unaffected by the use of wage revenues, which may include the consumption of necessaries or luxuries, saving or hoarding. For the NI, this relationship shows that profit is merely redistributed surplus value.

Let us consider the contribution of the NI more closely, starting with the operation in the net product. There are two ways to conceptualise the economy's net product. In use value terms, it comprises the means of consumption and net investment, or that part of the gross output over and above that necessary to maintain the productive system, or to repeat the same pattern and level of production. In value terms, it is identical with the newly performed labour. This raises the problem of the value of the gross product, since labour creates the entire gross product but only part of its value. The NI implies that the conventional definition of Marx's equalities in terms of the gross product is inconsistent because the value of the means of production is counted twice in the value of the gross product. It counts, first, as the value of the newly produced means of production and, again, as the new value of the means of production used up. However, the latter does not correspond to labour actually performed either in the current period or previously; this is merely a reflection of labour carried out and value created elsewhere. These insights are persuasive. However, the NI's exclusive focus on the net product may be misleading, for two reasons. First, empirically, the net product is defined over a time period other than the turnover period of capital. Net national product, for example, is defined for a year or a quarter. In consequence, the two components of net capital value (variable capital and surplus value) are aggregated over several turnovers, and conceptually one loses sight of the fundamental aspect of circulation, which is the recapture of capital advanced through sale of commodities and the replacement of the material components of production.22

Second, and more importantly, focus on the net product eliminates the production of the means of production (other than that required for expanded reproduction). As a result, a significant

<sup>&</sup>lt;sup>22</sup> Weeks (1983, p.220).

proportion of current production is rendered invisible as if it were redundant, and the largest proportion of commodity exchanges, those between the producers, vanishes as if it were inconsequential. The use of money as capital and as means of payment, and the role of the credit system, are inevitably minimised unwarrantedly.

Because of the alleged double counting of the input values in the value of the gross output, the NI defines the value of money on the net, rather than the gross product. This definition of value of money is seductive for three reasons; first, it avoids the simplifying assumptions that encumber the traditional and Sraffian approaches. Second, it appeals to the contemporary experience with inconvertible paper currencies and the perceived importance of the macroeconomic determinants of the value of money, especially through fiscal and monetary policy. Third, it facilitates the analysis of imperfect market structures and monopoly power, which can hardly be achieved by the traditional approach.

In spite of these significant advantages, this concept of value of money is limited in two important ways. On the one hand, it is merely the ex post reflection of the relationship between (abstract, productive) labour performed and the money-value added in the period. It is known only after labour is performed, commodities are produced and priced, and the technologies are determined. In this respect, it is unrelated to the Marxian concept of value of the money-commodity, that is determined before circulation. On the other hand, this concept of value of money cannot capture the distinct levels of complexity of the value relation, including the social relations of production and distribution, the labour performed, the relations between supply and demand, monopoly power, the quantity and velocity of money, and the credit system. Each of these factors can affect the price system in different ways, but the NI is unable to distinguish systematically between them, or to ground them analytically and explain their implications.

In short, the value of money short-circuits the real structures and relations between social labour and its representation in money, in order to address the extant macroeconomic relationships. Unfortunately for the NI, these mediations inherently contain the possibility of disequilibrium and crisis. To collapse the mediated expression of value as price into the simple division of the total hours worked over the price of the total net product is to set aside the complexity of the real processes involved and to obscure the inherent potential for disequilibrium in the economy, which weakens the theory's ability to address the very relations which it wishes to confront.23

<sup>&</sup>lt;sup>23</sup> In his ground-breaking paper on the NI, Foley (1982, p.41) invites the reader to 'Suppose ... we have a commodity-producing system in which, for one reason or another, the money prices of commodities are not proportional to labor values. One reason might be that prices deviate from labor values so that profit

The NI concept of value of labour power suffers from similar shortcomings. For the NI, the value of labour power is the workers' share of the national income, which is determined by class struggle. However, this definition of the value of labour power does not extend beyond one of the effects of exploitation, the inability of the workers to purchase the entire net product.24 This notion of value of labour power can be misleading, first, if it dilutes the ability of theory to explain the primary form of class conflict in capitalism, that takes place in production rather than distribution. Second, it may create the illusion that the net product is somehow 'shared' between workers and capitalists at the end of each production period, or that exploitation is due to the unfair distribution of income. Third, it may support the Classical dichotomy between ordinary commodity values, determined by labour embodied, and the value of labour power, given by supply and demand.

In sum, there are two distinct aspects to the contribution of the NI for the development of value analysis. On the one hand, it bypasses the transformation problem (especially the spurious debate about the 'correct' normalisation condition), and it rightly rejects the equilibrium framework in which value theory and, especially, the transformation problem, were discussed in the past. These important contributions are part of a broader reconsideration of Marx's value theory, providing the foundation for a new, critical macroeconomics. These achievements are important, and the objective is worthwhile. On the other hand, the NI is open to criticism on several grounds. This approach has been developed in order to address the appearances directly, through empirical studies, but this important objective exacts a heavy toll. The NI has little analytical 'depth', emphasizes exchange and distribution at the expense of production, and it eliminates the mediations and the complex relationship between value and price and surplus value and profit, treating them as if they were identical. As a result, the NI becomes unable to incorporate some of Marx's most important insights into the analysis, including technical change, accumulation, the credit system and crises, other than as exogenous accretions. These limitations are due to the internal structure of the NI, and they explain why it has been accused of tautology (because of the way in which it validates Marx's equalities) and empiricism (because it does not highlight the structures whose development underpins value analysis). Therefore, it is difficult to develop the NI further without making use of arbitrariness in the

rates can be equalized when invested capital per worker varies over different sectors. Other reasons might be monopoly, government regulations, the exploitation of information differentials in markets by middlemen, and so on.' Collapsing categories at distinct levels of complexity in order to employ macroeconomic identities may be useful for policy analysis, but it can be unhelpful analytically because it obscures the structures of determination of the mode of production.

Marx was heavily critical of theories of exploitation that focused primarily upon the distribution of income, see Marx (1974, pp.344-345) and Saad-Filho (1993).

choice of phenomena to be explained, the judgement of their importance and their relationship with the other features of reality.

## 2 Value Theory and Class Analysis

The previous section has shown that the capitalist economy can be approached in two ways. From the viewpoint of circulation (exchange), it appears as an unco-ordinated collection of competing activities, distinguished from one another by the commodities produced in each firm and their possibly distinct technologies. This approach tends to emphasize the processes that bring coherence to decentralised economies and ensure that needs are satisfied, subject to constraints, in which case the relative prices and the distribution of labour and income become prominent. The inquiry may be extended subsequently into why the 'invisible hand' can fail, in which case there are disproportions and crisis. These issues are worthy of detailed study and bring to light important aspects of capitalism. However, they do not directly or easily lead to the analysis of the mode of production. This is a severe limitation, because the essential differences between capitalism and other modes of production stem primarily from the relationship between the workers and the owners of means of production and the mode of labour associated with it.

In contrast, analyses that emphasise production at the expense of exchange tend to impose equilibrium conditions arbitrarily, in order to focus upon the technologies of production. In this case, it can become difficult to grasp the significance of money, the relationship between concrete and abstract labour, the meaning of competition, the process of technical change, capital migration and class conflicts. More generally, this approach obscures the historical limits of value analysis.

These shortcomings imply that value analysis ought to consider both production and exchange, and the mediations between these spheres and the different levels of analysis. While it can be appropriate, or even indispensable, to short-circuit certain mediations in order to focus upon specific aspects of capitalism, this can be risky because it could become difficult to know where and how to introduce important structures or tendencies into the analysis. In this case, it may be necessary to resort to arbitrariness, or to plug into value analysis unrelated studies uncritically, which smacks of eclecticism and is rarely fruitful.

In what follows, this view is developed into a class interpretation of Marx's theory of value, which attempts to address the shortcomings identified above. This interpretation is based on three principles.

## 2.1 Principles

(a) Subject: Marx's theory of value is a theory of the class relations of exploitation in capitalist society. It explains systematically the process of production of the material conditions of social reproduction in capitalism or, alternatively, the reproduction of the capitalist relations of exploitation through the process of material production.25 This includes such issues as the social form of the property relations, labour, labour control and exploitation, the social form of the products of labour, and the objective of social production. They are studied in relation to the form of interaction between different classes, the material (objective) form of the process of economic and social reproduction, and the revolutionary action necessary to overthrow this mode of production. Therefore, value theory is not limited to the description of events, the study of individual behaviour, preferences or objectives, or the analysis of disparate aspects of contemporary society – it is a holistic and dialectical theory.26

The exclusive focus of Marx's value theory on capitalism has been disputed. For example, the focus of traditional Marxism, Sraffianism and the abstract labour version is broader, encompassing (as was explained in section 1) commodity societies or economies subject to rules of equalisation of rates of return regardless of the employment of wage labour. These approaches do not correspond to Marx's. Capital 1 opens with the following statement (p.125):

The wealth of societies in which the capitalist mode of production prevails appears as an "immense collection of commodities"; the individual commodity appears as its elementary form. Our investigation therefore begins with the analysis of the commodity.

The expression 'in which the capitalist mode of production prevails' is essential, because it situates the subject of Marx's analysis and the historical limits of its validity. Although

<sup>25</sup> 'Interpreted on very narrow terms, social reproduction includes the processes necessary for the reproduction of the workforce, both biologically and as compliant wage-labourers. More generally

reproduction of the workforce, both biologically and as compliant wage-labourers. More generally, social reproduction is concerned with how society as a whole is reproduced and transformed over time' (Fine 2001, p.32).

<sup>&</sup>lt;sup>26</sup> '[V]alue theory is not primarily a theory of exchange or allocation, but a theory that reveals the class relations underlying a commodity-producing society ... The theory of value that Marx developed provides at the same time (1) the revelation that capitalism is merely one form of exploitative (class) society; (2) the explanation of the historical transition from precapitalist to capitalist society; (3) a theory of the concrete operation of a capitalist economy; and (4) an explanation of why others would explain the workings of a capitalist economy in an alternative theoretical framework' (Weeks 1981, pp.8, 11).

commodities have been produced for thousands of years, and commodity production and exchange are historical premises of capitalism, commodities produced under capitalism are essentially distinct from those produced in other modes of production. This difference arises because, under capitalism, the social output typically takes the commodity form and, more importantly, labour power also takes this form:

Two characteristic traits mark the capitalist mode of production right from the start ... Firstly. It produces its products as commodities. The fact that it produces commodities does not in itself distinguish it from other modes of production; but that the dominant and determining character of its product is that it is a commodity certainly does so. This means, first of all, that the worker himself appears only as a seller of commodities, and hence as a free wage-labourer – i.e., labour generally appears as wage-labour ... [T]he relationship of capital and wage-labour determines the whole character of the mode of production ... The second thing that particularly marks the capitalist mode of production is the production of surplus-value as the direct objective and decisive motive of production. Capital essentially produces capital, and does this only as long as it produces surplus-value.27

(b) Methodology: The class interpretation of value theory is firmly grounded on a materialist dialectic understanding of Marx's method, eschewing methodological individualism and formal logic.28 Marx's theory of value is structured by the articulation of concepts at different levels of analysis, departing from relatively high levels of abstraction and moving, dialectically, to increasingly concrete levels. At the relatively abstract level of analysis where the key theoretical categories (commodity, value, capital, labour power, surplus value, and so on) are initially posited, individuals are only the representatives of economic categories. The study of the structural motives underpinning the behaviour of different classes - large groups of people playing key roles in the process of economic and social reproduction – permits the systematic development of Marx's materialist dialectic analysis of capitalism, the orderly introduction and development of the essential analytical categories, that are recognised as forms of existence of social relations in capitalism. Finally, it permits the integrated study of problems that are often treated separately or inconsistently in other interpretations, especially abstract labour, money, prices, exploitation, the labour process and the critique of technology. These categories are explained primarily from the aggregate, or at the level of class, rather than starting at the individual level or from purely arbitrary deductions.

<sup>&</sup>lt;sup>27</sup> Capital 3, pp.1019-1020.

This methodological approach is explained in Saad-Filho (2002, ch.1).

(c) The Role of Value: The concept of value expresses the systematic features of exploitation in capitalism. Value analysis helps to overcome the fragmented perception of exploitation through individual experiences, and the misleading appearances fostered by market exchanges.29 It also relates the basic principles of Marx's theory to the dynamic outcomes of accumulation, including technical progress, crises, fluctuations in the levels of unemployment, credit and inflation and, more broadly, with the possibility of eliminating these relations of exploitation. This interpretation can also help to understand the historical transition from non-capitalist societies to capitalism, and offer a critique of social theories that assess these processes differently. Finally, this interpretation implies that the relevance of Marx's value theory depends upon the prevalence of capitalist relations of production and exploitation in any particular society. Since these relations have become increasingly widespread and dominant during the last century and a half, Marx's theory of value has, correspondingly, become more relevant for understanding modern society.30

### 2.2 Implications

Marx's critique of the capitalist mode of production departs from human labour in general. For Marx, labour is the process of transformation of given natural and social conditions in order to achieve predetermined outcomes – the goods and services necessary for social reproduction (use values). In every society, the social labour power (the capacity to work of all individuals, including their knowledge, ability and experience) is a community resource employed according to cultural, natural and technological constraints. Labour is always divided according to such principles as gender, age, lineage or class, and the product of social labour must be similarly divided. In addition to this, in most societies, groups or classes of non-producers live off transfers due to the exploitation of the producers.31

Modes of production and class relations of exploitation are determined by the form of extraction

<sup>&</sup>lt;sup>29</sup> '[T]he theory of value enables us to analyse capitalist exploitation in a way that overcomes the fragmentation of the experience of that exploitation ... it enables us to grasp capitalist exploitation as a contradictory, crisis-ridden process, subject to continual change ... [and] it builds into our understanding of how the process of exploitation works, the possibility of action to end it' (Elson 1979, p.171).

<sup>&</sup>lt;sup>30</sup> The scientific relevance of this (or any other) theory is determine by its ability to illuminate the phenomena belonging to its areas of concern. This is entirely unrelated to the 'popularity' of the theory, or the recognition of its potential usefulness by large numbers of people. This paper is concerned with the former, rather than the latter, which belongs to the realm of ideology.

<sup>&</sup>lt;sup>31</sup> There is exploitation if some people are compelled to act in ways that are systematically advantageous to others: 'To exploit a person is to use them toward the exploiter's ends. Exploiter status differs qualitatively, not quantitatively, from being the one exploited' (Naples 1989, p.149).

of surplus labour from the direct producers, and the mode of appropriation of the surplus in each of them.32 These relations include the structures and processes that compel the producers to produce more than they consume or control, and the mechanisms of appropriation of the surplus by the exploiters. Even when narrowly defined in purely economic terms exploitation is a totality, including several aspects of social life, among them the property relations, the distribution of labour, control over the production process, and the distribution of the output. The existence of necessities and the surplus, and the division of social labour time between necessary and surplus labour, are consequences of exploitation in all modes of production. However, the existence of the value of labour power and surplus value, and their manifestation as wages and profits, are typical of capitalism, because only in this mode of production exploitation is mediated by the value form.

Capitalism is a mode of production, social reproduction and exploitation with four essential features: the diffusion of commodity production, the separation between the workers and the means of production (monopolised by the capitalist class), the commodification of labour power and the generalisation of the wage relation, and the subordination of production by the profit motive. These features, and their relations of mutual implication, mean that capitalism is a totality: it exists only at the level of society. It is meaningless to speak of capitalism at the 'individual' level (e.g. in a small number of farms or factories submerged in a sea of non-capitalist social relations) or of 'wage relations' between isolated employers and temporary workers producing small quantities for largely closed communities, in which most needs are not satisfied by commodity exchanges.

Capital is a relation of exploitation between two social classes, through which the capitalists compel the wage workers, as a class, to produce more than the working class consumes or controls. The capitalist class absorbs the surplus value produced by the class of wage workers and, through it, commands part of the social product (the surplus).33 This class relation is established when the means of production (the buildings, machinery, tools, vehicles, land, and so on) are monopolised by a class (the capitalists) that employs wage workers in the production of commodities for profit.34 In contrast with pre-capitalist modes of production, wage workers

<sup>&#</sup>x27;What distinguishes the various economic formations of society – the distinction between for example a society based on slave-labour and a society based on wage-labour – is the form in which surplus labour is in each case extorted from the immediate producer, the worker' (*Capital 1*, p.325).

<sup>&</sup>lt;sup>33</sup> 'Marx's starting point in the treatment of capital is conceiving capital as a social totality, capital representing a *class* opposed not so much to the individual laborers as to the wage laborers as a *class*' (Chattopadhyay 1994, p.18).

The transformation of labour power into a commodity is the historical result of the primitive capital accumulation (see *Capital 1*, chs.26-32 and Perelman 1999). This process includes the elimination of the

under capitalism are forced – by structural-economic coercion, rather than personal-political relations – to sell their labour power regularly and continually because they do not own means of production, cannot produce independently, and need money to purchase part of the use values that, as a class, they have produced previously.35 Therefore, capitalist exploitation is not determined primarily at the level of the individual farm, firm, or office, and it would be meaningless to seek to analyse it at the individual level. It is determined at the social level, and mediated by the market-led distribution of labour and its products.36 The capitalists' ownership of the means of production and their command over the production process allows them to control the level and composition of the output (including the relations between consumption and investment) and the allocation of labour in the economy. It also determines the mode of exploitation of the wage workers, through the extraction of surplus value.

The value relation can be analysed at different levels. At a relatively abstract level of analysis, or in non-capitalist societies where commodity production and exchange are marginal, value is significant only as exchange value, a mental generalisation that expresses the rate of exchange of one commodity for another.37 At this level, or at this stage in history, abstract labour is also a mental generalisation because, first, production aims primarily at the creation of specific use values, rather than the valorisation of capital. Second, the labour markets are thin, highly fragmented and often absent. Third, the division of labour across society and within the workplace remains relatively undeveloped. Fourth, the exchange values are highly dependent upon non-market relations, rather than being determined primarily by the forces of production and competition, as in developed capitalism. Consequently, the labour process has few social determinations, the products of labour take the form of commodities only if they find their way into exchange, and the abstraction of labour is contingent on their sale.

In capitalism, the social product has the form of value, and the value relation is expressed

capacity of the workers to satisfy their own needs except through commodity exchanges, and the establishment of a pliant and reliable wage labour force.

<sup>&</sup>lt;sup>35</sup> 'Exploitation is a matter of structural coercion. Circumstances are so arranged that a large mass of people must agree to do as they are told by others in order to support themselves and their families' (Nell 1992, p.66).

<sup>&</sup>lt;sup>36</sup> 'To Marx ... the essence of capitalist property is the control of the productive process and therefore the control over laborers. Forced labor rather than low wages, alienation of labor rather than alienation of the product of labor are, according to Marx, the essence of capitalist exploitation' (Medio 1977, p.384).

<sup>&</sup>lt;sup>37</sup> In this case, '[t]he category of exchange-value leads an "antediluvian existence". One can find exchange-values in ancient Rome, in the Middle Ages and in capitalism; but different contents are hidden behind each of these forms of exchange-value. Marx stresses that "exchange-value" detached from the concrete relations under which it has arisen is an unreal abstraction, as exchange-value "can never exist except as an abstract, one-sided relation to an already given concrete and living whole" (Grossman 1977, p.46).

through the exchange value of the products of social labour.38 In order to explain the capitalist mode of exploitation, Marx starts from its most abstract feature, the value relation. Value is the general form of human intercourse in capitalism, and its creation in production is a social process determined by the mode of division of labour and the social form of labour.39 In capitalism, commodities are produced by a co-ordinated set of concrete labours usually performed at the farm, factory or office. These labours are performed with varying degrees of efficiency, diverse skills and distinct technologies, and at different points in time. In spite of these differences, all commodities of the same kind (with the same use value) have the same value, which appears through their price. The labour time that determines value is socially, rather than individually, determined, and commodity values express the abstract labour time necessary to produce each kind of commodity, rather than the concrete labour time required by any individual worker or firm to produce a sample of the object. Output values cannot be identified at the firm or sectoral levels for two reasons. First, value creation is a social process determined by the predominance of specific relations of production, in which case individual production has meaning and significance only as part of the whole. Second, values and prices are determined by the abstract labour time necessary to reproduce each type of commodity, including its inputs. In sum, the value form of the product is due to the social division of labour, values are quantitatively determined by the collective effort and the productive potential of society, and prices are determined for the mass of commodities rather than good by good or at the level of the firm or sector.

Values are determined quantitatively by the normalisation, synchronisation and homogenisation of labour.40 Normalisation is the subsumption of the labours performed in each firm and sector under the social process of production of each type of commodity, by which individual labours

<sup>38</sup> 'For Marx the value of a commodity expresses the particular historical form that the social character of labour has under capitalism ... This suggests first, that the generalisation of the commodity form of human labour is quite specific to capitalism and that value as a concept of analysis is similarly so specific. Secondly, it suggests that value is not just a concept with a mental existence; it has a real existence, value

relations being the particular form taken by capitalist social relations' (Mohun 1991, p.564).

<sup>&</sup>lt;sup>39</sup> For Marx, the value relation and its grounding upon the social division of labour do not need to be demonstrated; they are indisputable *facts*: 'even if there were no chapter on "value" at all in my book, the analysis I give of the real relations would contain the proof and demonstration of the real value relation. The chatter about the need to prove the concept of value arises only from complete ignorance both of the subject under discussion and of the method of science. Every child knows that any nation that stopped working, not for a year, but let us say, just for a few weeks, would perish. And every child knows, too, that the amounts of products corresponding to the differing amounts of needs demand differing and quantitatively determined amounts of society's aggregate labour ... And the form in which this proportional distribution of labour asserts itself in a state of society in which the interconnection of social labour expresses itself as the private exchange of the individual products of labour, is precisely the exchange value of these products' (Marx 1988a, p.68).

<sup>40</sup> See Lee (1990) and Saad-Filho (2002, ch.5).

are averaged out within each capitalist firm and sector, including not only those labours performed in the last stage of production but also the labours that produced the inputs used up. Because of normalisation, commodities with identical use values have the same value whatever their individual conditions of production. The simultaneous sale, at the same price, of commodities produced in different moments shows that individual concrete labours are synchronised across those that have produced the same kind of commodity at other times, or with distinct technologies. Because labours are normalised and synchronised, all commodities of a kind have the same value, regardless of how, when and by whom they are produced. Normalisation explains why the labour time necessary to produce a type of commodity is socially determined, and includes that necessary to produce the inputs. Synchronisation implies that this labour time is indistinguishable from and, therefore, is equivalent to living labour.41 The equivalence between labours producing the same commodities at different points in time or with distinct technologies is due to the fact that value is a social relation established by, and reproduced through, capitalist production, rather than a substance ahistorically embodied in the commodities by concrete labour. The social reality of value implies that only living labour creates value or, alternatively, that Marx's value theory is based on social reproduction costs.42 More specifically, values are determined by the current ability of society to reproduce each kind of commodity, or the reproduction socially necessary labour time (RSNLT).43 Qualitatively,

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<sup>&</sup>lt;sup>41</sup> 'All the labour contained in the yarn is past labour; and it is a matter of no importance that the labour expended to produce its constituent elements lies further back in the past than the labour expended on the final process, the spinning. The former stands, as it were, in the pluperfect, the latter in the perfect tense, but this does not matter. If a definite quantity of labour, say thirty days, is needed to build a house, the total amount of labour incorporated in the house is not altered by the fact that the work of the last day was done twenty-nine days later than that of the first. Therefore the labour contained in the raw material and instruments of labour can be treated just as if it were labour expended in an earlier stage of the spinning process, before the labour finally added in the form of actual spinning' (*Capital 1*, pp.294-295).

<sup>42</sup> Somewhat counter-intuitively, the original value of the inputs used up, and the money-capital spent

Somewhat counter-intuitively, the original value of the inputs used up, and the money-capital spent buying them, are *irrelevant* for the determination of the output value: 'the values of the material and means of labour only re-appear in the product of the labour process to the extent that they were preposited to the latter as values, i.e. they were values before they entered into the process. Their value is equal to the ... labour time necessary to produce them under given general social conditions of production. If later on more or less labour time were to be required to manufacture these particular use values ... their value would have risen in the first case and fallen in the second ... Hence although they entered the labour process with a definite value, they may come out of it with a value that is larger or smaller ... These changes in their value, however, always arise from changes in the productivity of the labour of which they are the products, and have nothing to do with the labour process into which they enter as finished products with a given value? (Marx 1988), pp 79-80)

products with a given value' (Marx 1988b, pp.79-80).

43 'The value of any commodity ... is determined not by the necessary labour time that it itself contains, but by the *socially* necessary labour-time required for its reproduction. This reproduction may differ from the conditions of its original production by taking place under easier or more difficult circumstances. If the changed circumstances mean that twice as much time, or alternatively only half as much, is required for the same physical capital to be reproduced, then given an unchanged value of money, this capital, if it was previously worth £100, would now be worth £200, or alternatively £50' (*Capital 3*, p.238). For similar statements, see *Capital 1*, pp. 129-130, 317-318, 676-677, *Capital 2*, pp. 185-188, 222-223, 366-368, *Capital 3*, p.522, *Theories of Surplus Value 1*, pp.232-233, *Theories of Surplus Value 2*, p.416,

values are not set in stone when the commodities are produced; rather, they express the conditions of social reproduction, including the ability of society to re-start production in the next period. Quantitatively, they are socially determined continuously, and they can shift because of technical change anywhere in the economy. Normalised and synchronised labours in distinct sectors of the economy generally create different quantities of value in a given time, for example, in window cleaning and computer programming. The homogenisation of labour translates the different value-productivities of normalised and synchronised labour into distinct quantities of abstract labour (RSNLT). Labours are homogenised for all commodities simultaneously as they receive a price, or when money fulfils the function of measure of value. At this level of analysis, the law of value ensures that commodity prices correspond to their RSNLT. Although homogenisation is conceptually clear, the assessment of the value produced is uncertain because prices are affected by a wide range of variables at distinct levels of complexity. For example, price reductions may be due to technical progress, the possibility of capital migration, excess supply, industrial, financial, tax, trade or exchange rate policies, and other variables. Value determination through RSNLT, its expression as price through normalisation, and the possibility of differences between the value production and realisation because of the misallocation of social labour or economic crises, belong to distinct levels of analysis. The latter is more complex, because it includes not only the production conditions, but also the circumstances of exchange, the distribution of labour and the possibility of crisis. Finally, firms whose profit rates are lower than the average are always penalised. Within each branch, inefficient firms produce less value than their competitors, and may go bankrupt or become the target of takeover bids. These pressures can become stronger if the sector produces in excess of demand, which depresses the profit rate of all firms. Differences between individual and sectoral profit rates vis-à-vis the average are the capitalist mechanism of reallocation of labour across the economy and, simultaneously, the main lever of technical change.

Abstract labour, value and price can be viewed at distinct levels. At a highly abstract level, value is a social relation that derives from the mode of production; therefore, labour performed within the relations of production typical of capitalism produces value regardless of the circumstances in exchange or distribution. The quantity of value produced is determined by RSNLT, and it appears initially as 'value', 'direct' or 'simple' price. The relationship between value and price can be analysed more concretely, but there is often a trade-off between conceptual detail and quantitative determinacy. For example, the transfer of the value of the means of production

*Theories of Surplus Value 3*, p.280, *Grundrisse*, pp.135, 402, 657, and Marx's letter to Engels dated 14 September 1851 (cited in Rosdolsky 1977, p.318n3). For an exhaustive survey of Marx's texts, see Moseley (2000b).

introduces a quantitative indeterminacy in the output value and, correspondingly, arbitrariness in the price level, because the rate of technical depreciation of the fixed capital is unknowable. By the same token, price can be seen as the mode of existence of value, as the condition of supply, or as the money that can be commanded on sale, which are, prima facie, unrelated to the mode of labour. In addition to these difficulties, discrepancies between supply and demand and economic crises blur the relationship between values and prices even further. In sum, shifts in the level of analysis modify the relationship between value and price and, therefore, the homogenisation of labour. In contrast, normalisation and synchronisation remain unaffected, because they are determined exclusively in production. These limitations show that attempts to calculate values independently of prices through estimates of the vector of abstract labour are limited both conceptually and empirically, because they presume that value can appear in two different ways, both directly (as if it could be measured by concrete labour time) and through price. Simply put, the value analysis developed here does not allow the quantitative determination of long-run prices better than alternative approaches. Its main advantage is theoretical; it explains the social relations underlying economic activity more clearly than alternative views.

In capitalist societies wage labour is the form of social labour, and the products, other assets and social relations generally have the commodity form. Consequently, wage labour employed by capital in the production of commodities for profit produces value regardless of the form or destination of the product, or whether or not it is sold. Under capitalism, labour has a double determination; it is both concrete and abstract. As concrete labour, work is a transformative activity; as abstract labour, work is subsumed by, or exists in and through, a specific social form, wage labour employed for profit. The generalisation of the value form, wage labour and production for profit - i.e., the performance of concrete labour generally depends upon the extraction of surplus value rather than, for example, need for the output – establish in practice (rather than simply conceptually) the primacy of abstract over concrete labour. 44 The abstraction of labour and the commodification of the social product can be analysed at two levels. First, in production, the wage workers are typically hired on the labour market and compelled to work in order to produce goods and services primarily for profit (surplus value) rather than need (use value), using commercially available inputs. Consequently, the products are commodities since their inception, and abstract labour predominates over concrete labour in production. Second, the exchangeability of the products demonstrates, in the sphere of exchange,

<sup>&</sup>lt;sup>44</sup> This is not always accepted by different interpretations of Marx; for example, it was shown in sections 1.1 and 1.2 that traditional approaches claim that absolute and concrete labour are merely distinct aspects of labour, existing in parallel.

the substantive identity (i.e., abstraction) of all types of labour, regardless of the concrete form of the output.45

Surplus value is the difference between the value produced by the working class and the value of labour power. From the point of view of the extraction of surplus value, capital is a class relation of exploitation defined by the capitalist's ability to compel the working class to produce more value than it consumes or controls (which Marx calls 'necessities', produced by necessary labour, and whose value is the value of labour power), and the capitalist command of the surplus in value form.46 Alternatively, the workers are exploited because they produce more value than they control or receive as wages.47 Surplus value is the part of the social value product appropriated by the capitalist class. It appears as profit, the residual left after the payment of the production costs.

The ratio between the surplus value and the value of labour power (or between surplus and necessary labour time) is the rate of exploitation (rate of surplus value). From the point of view of distribution, capitalist exploitation can be conceptualised and measured at three levels, the physical, macro-monetary and value levels. For the physical or surplus approach, associated with traditional Marxism and Sraffian views, there is exploitation when the producers (individually and, by aggregation, as a class) are compelled to produce more than they

<sup>&</sup>lt;sup>45</sup> Marx contrasts the determinations of labour in simple commodity exchange and in capitalism as follows: 'what is it that forms the bond between the independent labours of the cattle-breeder, the tanner and the shoemaker? It is the fact that their respective products are commodities. What, on the other hand, characterizes the division of labour in manufacture? The fact that the specialized worker produces no commodities. It is only the common product of all the specialized workers that becomes a commodity ... The division of labour within manufacture presupposes a concentration of the means of production in the hands of one capitalist; the division of labour within society presupposes a dispersion of those means among many independent producers of commodities ... Division of labour within the workshop implies the undisputed authority of the capitalist over men, who are merely the members of a total mechanism which belongs to him. The division of labour within society brings into contact independent producers of commodities, who acknowledge no authority other than that of competition' (*Capital 1*, pp.475-477).

<sup>46</sup> The primacy of surplus value over the extraction of material surplus in capitalist exploitation is

The primacy of surplus value over the extraction of material surplus in capitalist exploitation is grounded on the motivation of the labour process (profit rather than goods) and the form of the appropriation of the surplus (monetary profit). Obviously, capitalists only acquire command over commodities (and over future production cycles) through their money-capital, rather than directly through their use of leftovers from the previous production cycle.

<sup>&</sup>lt;sup>47</sup> 'The wage-form thus extinguishes every trace of the division of the working day into necessary labour and surplus labour, into paid labour and unpaid labour. All labour appears as paid labour. Under the *corvée* system it is different. There the labour of the serf for himself, and his compulsory labour for the lord of the land, are demarcated very clearly both in space and time. In slave labour, even the part of the working day in which the slave is only replacing the value of his own means of subsistence, in which he therefore actually works for himself alone, appears as labour for his master. All his labour appears as unpaid labour. In wage-labour, on the contrary, even surplus labour, or unpaid labour, appears as paid. In the one case, the property-relation conceals the slave's labour for himself; in the other case the money-relation conceals the uncompensated labour of the wage-earner' (*Capital 1*, p.680).

themselves consume or control, the residual being appropriated by their masters, lords or employers by custom or law, or under the threat or use of force, or because refusal to comply might disorganise the social reproduction. This approach is not wrong but it is transhistorical and excessively general. It is valuable because it highlights the similarities between different modes of exploitation. However, this generality is also a source of weakness, because the analysis is unable to distinguish clearly between different modes of exploitation.48 At the macro-monetary level of analysis, associated with value-form theories, capitalist exploitation is revealed by the existence of profits (including interest, rent and other forms of profit), and the rate of exploitation is measured by the profit-wage ratio.49 This approach is useful because it lends itself to empirical studies. However, it suffers from two shortcomings: it focuses on the symptoms (the inability of the workers to command the entire net product) rather than the cause of exploitation, and it can be misleading because the profit-wage ratio is an imprecise measure of exploitation.50 Finally, value analysis can identify the essence of capitalist exploitation, distinguish it from other modes of exploitation, and facilitate empirical studies. In common with the surplus approach, value analysis implies that the workers are exploited because they work for longer than what is necessary to produce the commodities that they consume or control. However, it claims that the rate of exploitation cannot be measured directly because it is determined by abstract rather than concrete labour.

The value of labour power is a quantity of value, the labour time spent by the working class producing necessities (the goods and services appropriated or controlled by the workers). This value is determined at the aggregate (class) level through the exchange between capital and labour as a whole and, subsequently, the performance of labour and exploitation in

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<sup>&</sup>lt;sup>48</sup> 'The specific economic form in which unpaid surplus labour is pumped out of the direct producers determines the relationship of domination and servitude, as this grows directly out of production itself and reacts back on it in turn as a determinant ... It is in each case the direct relationship of the owners of the conditions of production to the immediate producers ... in which we find the innermost secret, the hidden basis of the entire social edifice' (*Capital 3*, p.927).

<sup>&</sup>lt;sup>49</sup> There are significant difficulties for the empirical estimation of the rate of exploitation because of the influence of the accounting conventions, taxes, savings, unproductive labour, and so on.

First, empirically, profits and wages are originally assessed at the firm level, then aggregated for the entire economy. This does not correspond to the actual process of exploitation, that is determined by the class structure of society, the mode of production that corresponds to it, and the appropriation of part of the social product by the capitalist class. In other words, exploitation takes place at the level of capital in general and it is mediated by generalised commodity relations, in which case wage workers are exploited qua workers, regardless of the profitability of the firms where they are currently employed. Second, transfers create systematic discrepancies between commodity prices and values. As a result, the profitwage ratio may be different from the ratio between the abstract labour required to produce the necessities and the surplus, which Marx called necessary and surplus labour time. Third, wages, prices and profits are determined at market prices, and they can fluctuate widely regardless of changes in the conditions of production, especially after the development of the credit system.

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production.51 This form of conceptualising the value of labour power is distinct from the traditional and Sraffian views, where it is a quantity of goods, and from the abstract labour version or the 'new interpretation' definition of value of labour power as a quantity of money. The class concept of value of labour power implies that the working class is exploited because part of what it produces is appropriated, through money, by the capitalists, and it acknowledges that capitalist exploitation includes an irreducibly monetary and macroeconomic aspect (rather than being encapsulated by the transhistorical inability of the workers to command the entire net product). However, it does not presume that a fixed bundle must be consumed in order to obtain specific outcomes and, consequently, it avoids the conflation between the workers and draught cattle, machines or electricity. The level of wages and the workers' norm of consumption are part of the conditions of reproduction of the working class. They should be understood starting from the aggregate, rather than as the ex post average across firms or labour market segments.52 The levels of consumption and wages, and the incidence of needs, are the outcome of dynamic socio-economic processes including the structure of the labour market, struggles within them, and the social processes of production and satisfaction of wants. What those wants and patterns of consumption are, and how they are determined, can be very different from one commodity to another and from one section of the working class to another. Distinct commodities are not only differentially consumed across the working class but their patterns and levels of consumption derive from very different structures and processes of causation, including the structure of employment, the role of the state, the structure and content of housework, (changes in) skill levels, the role of trade unions and the political leverage of each section of the working class.

As a totality engaged in self-expansion through the employment of wage labour, capital is primarily capital in general – this is the general form of capital. Capital in general is represented by the circuit of industrial capital, M-C-M', where M is the money advanced to buy commodities (means of production and labour power), C, for processing and, later, sale for more money M'. The difference M' – M is the surplus value, which is the foundation of industrial and commercial profit and other forms of profit, including interest and rent. The circuit of industrial capital represents the essence of capital, valorisation through the production of commodities by

The value of wages has to be reckoned not according to the quantity of the means of subsistence received by the worker, but according to the quantity of labour which these means of subsistence cost (in fact the proportion of the working-day which he appropriates for himself), that is according to the *relative share* of the total product, or rather of the total value of this product, which the worker receives' (*Theories of Surplus Value 2*, p.419).

<sup>&</sup>lt;sup>52</sup> The value of labour power provides the clearest example of *reproduction* SNLT: the value of labour power is determined by the workers' reproduction needs, rather than the concrete labour time embodied in the workers or in the goods that they consume, or have consumed in the past.

wage labour.53 In this circuit, capital shifts between different forms, money, productive and commodity capital, as it moves between the spheres of exchange, production and, upon its completion, exchange. Although this movement is critical for the process of valorisation, profit is due to the surplus labour performed in production only.54 But profit is not the only thing that capital produces; the social outcome of its circuit is the expanded reproduction of capital, the renewal of the separation between capitalists and wage workers. In this sense, 'Accumulation of capital is ... multiplication of the proletariat.'55

Capitalist production is necessarily mass production. Pre-capitalist production is characterised by small scales and market fragmentation. In contrast, in developed capitalism firms produce an extraordinarily varied assortment of goods and services, in large quantities. Mass production necessitates the employment of millions of workers. Even when individual firms are small, or downsize, or spin-off independent companies, or if the products are made to order, capitalist production - including finance, accounting, design, planning, logistics, hiring, training and managing the workforce, manufacturing, marketing, distribution, and so on – remains tightly integrated vertically into systems of provision employing large numbers of workers in largescale and continuous operations managed professionally, often by large organisations. Each stage of this process is closely intertwined with the others, and with production carried out elsewhere. In these systems of provision, the labour of individual workers exists, and can be analysed, only as part of the whole. This labour is performed according to the rhythm dictated by technology, management, machinery and competition, limited by collective resistance on the shopfloor. Mass production and collective (co-operative) work harnessed by capital raise the productivity of labour, and this power is appropriated by the capitalists. At the same time, the organisation, integration and mechanisation of mass production for profit tends to average out

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<sup>&</sup>lt;sup>53</sup> 'Industrial capital is the only mode of existence of capital in which not only the appropriation of surplus-value or surplus product, but also its creation, is a function of capital. It thus requires production to be capitalist in character; its existence includes that of the class antagonism between capitalists and wage-labourers ... The other varieties of capital which appeared previously, within past or declining conditions of social production, are not only subordinated to it and correspondingly altered in the mechanism of their functioning, but they now move only on its basis, thus live and die, stand and fall together with this basis. Money capital and commodity capital, in so far as they appear and function as bearers of their own peculiar branches of business alongside industrial capital, are now only modes of existence of the various functional forms that industrial capital constantly assumes and discards within the circulation sphere' (*Capital 2*, pp.135-136).

Interest-bearing capital (IBC), whose general form is M-M' (money that becomes more money), does not *produce* profit, any more than money left inside a mattress begets more money simply by lying there. The expansion of IBC is due to transfers from productive capital, see Fine and Saad-Filho (2004, ch.12). 

\*\*Capital 1\*, p.764\*. In other words, 'The capitalist process of production, therefore, seen as a total, connected process, i.e. a process of reproduction, produces not only commodities, not only surplus-value, but it also produces and reproduces the capital-relation itself; on the one hand the capitalist, on the other the wage-labourer' (*Capital 1*, p.724).

the labour of the wage workers, creating the 'collective worker'. The averaging out of labour in production, rather than on the market as is the case under simple commodity production, is due to the organised, integrated and mechanised character of capitalist production.56 This process subsumes the labours performed in each firm and sector under the social (class-based) process of production of each type of commodity. The tendencies towards averaging out labour in production and creating the collective (class) worker does not imply unambiguous outcomes, because they are counteracted by workers' resistance, changes in work practices, technical innovations within firms, demand shifts, and other factors.57

Capital controls the workers in three ways. First, capital owns the means of production, whereas the workers must seek paid employment in order to survive. Second, having purchased labour power, capital claims the right to control the labour process in its entirety, and machinery helps management to dictate the structure and pace of the labour process. Third, ownership of the means of production and control of the labour process allow capital to influence the state, economic policy, the legislature, interpretation and enforcement of law, and other social institutions. In other words, exploitation is a class relationship with two aspects, the capitalist command over part of the output, and their exclusive control over its composition, including the investment goods and the sources of growth. Both aspects of exploitation derive from the capitalist monopoly of the means of production, the transformation of commodities into the general form of the product, and the capitalist control of the labour process.

Capitalist domination is invariably contested, and capitalist production invariably involves conflicts in production and in distribution. These conflicts are unavoidable, because they spring

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<sup>&</sup>lt;sup>56</sup> '[E]ach worker, or group of workers, prepares the raw material for another worker or group of workers. The result of the labour of the one is the starting-point for the labour of the other. One worker therefore directly sets the other to work ... [T]he direct mutual interdependence of the different pieces of work, and therefore of the workers, compels each one of them to spend on his work no more than the necessary time. This creates a continuity, a uniformity, a regularity, order, and even an intensity of labour, quite different from that found in an independent handicraft or even in simple co-operation. The rule that the labour-time expended on a commodity should not exceed the amount socially necessary to produce it is one that appears, in the production of commodities in general, to be enforced from outside by the action of competition: to put it superficially, each single producer is obliged to sell his commodity at its market price. In manufacture, on the contrary, the provision of a given quantity of the product in a given period of labour is a technical law of the process of production itself' (*Capital 1*, pp.464-465).

<sup>&</sup>lt;sup>57</sup> 'Capitalist production only really begins ... when each individual capital simultaneously employs a comparatively large number of workers, and when, as a result, the labour-process is carried on an extensive scale, and yields relatively large quantities of products ... This is true both historically and conceptually ... The labour objectified in value is labour of an average social quality, it is an expression of average labour-power ... The law of valorization therefore comes fully into its own for the individual producer only when he produces as a capitalist and employs a number of workers simultaneously, i.e. when from the outset he sets in motion labour of a socially average character' (Capital 1, pp.439-441, emphasis added).

from the relations of production that define this social system. For example, the workers constantly strive for alternatives to paid employment and subordination in the workplace, seek higher wages and better working conditions, and may engage in collective activity in order to defend their interests in the production line and elsewhere. The distributive conflicts resemble those in other class societies, for they involve disputes about how the cake (the national product) is shared among competing claims, while maintaining systemic stability. In contrast, conflicts in production derive from the class relations that distinguish capitalism from other modes of production. They are due to disputes about how much wage labour is performed and under what conditions, and their outcome plays a limiting role upon the distributive conflicts.

Capital always exist in and through competition, or as many capitals. Two types of competition are especially important. Intra-sectoral competition (between capitals producing the same use values) compels firms to minimise costs in order to maximise its profit rate. The most important tools available to capitalist firms are, on the one hand, the extension of the working day, increasing labour intensity, and increasing the training and discipline of the workforce, leading to the extraction of absolute surplus value. On the other hand, firms can introduce new technologies, raising the value-productivity of their employees.58 These innovations will be copied or emulated elsewhere, eroding the advantage of the innovating firm while preserving the incentives for further technical progress across the economy. This process tends to reduce the value of all goods, including those consumed by the workers and, all else constant, it permits the extraction of relative surplus value. This type of competition tends to disperse the individual profit rates, because more profitable capitals can invest larger sums for longer periods, select among a broader range of production techniques and hire the best workers, which reinforces their initial advantage. Important counter-tendencies are the diffusion of technical innovations among competing firms, the potential ability of smaller capitals to undermine the existing technologies through invention and experimentation, and foreign competition. In contrast, intersectoral competition (between capitals producing distinct use values) creates a tendency towards the convergence of profit rates, because capital migration redistributes the productive potential of society and increases supply in the more profitable branches, thus reducing excess profits. The financial system plays an important role in both processes. In sum, competition within sectors explains the sources of profit rate differences between capitals producing similar goods with distinct technologies, the necessity of technical change, and the possibility of crisis of disproportion and overproduction. Competition between capitals in different sectors explains the possibility of capital migration to other sectors due to profit rate differentials, the tendency

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New technologies allow firms to introduce new goods or to improve existing goods. The latter is ignored here because it merely replicates the same type of competition across new markets.

towards the equalisation of the profit rates of competing capitals, and other equilibrating structures and processes associated with competition and market relations.

Intra-sectoral competition leads to mechanisation, or the introduction of new technologies and new machines. Mechanisation increases the degree of integration between labour processes within and across firms, and the potential scale of production. Mechanisation can fulfil three capitalist objectives: higher profitability, socialisation of labour, and social control. At the level of individual capitals, mechanisation reduces unit costs, increases the value-productivity of labour, and raises the profit rate of the innovating capitals. At the level of capital in general, mechanisation facilitates the extraction of relative surplus value. Mechanisation also allows increasingly sophisticated goods to be produced with higher investment, which tends to reduce the scope for competition by independent producers, and their ability to survive except as wage workers or dependent contractors. Within firms, mechanisation socialises production because it imposes production norms that reduce the scope for worker control over the expenditure of their labour power. However, and contradictorily, mechanisation can also give workers more control over their job conditions and reduce the drudgery associated with difficult and repetitive tasks. Finally, the socialisation of production is closely associated with capitalist control of the production process. Underneath their seemingly neutral, scientific and productivist guise, machines are despotic dictators of the rhythm and content of the labour process.59 Machines dilute the workers' individuality through collective labour, and they have been often deployed deliberately in order to wrestle both the knowledge and the control of production away from the workers. Machinery is often introduced even at the expense of profitability.60 On the shopfloor, capital appears in its simplest form, as a conflict-ridden social relation of production and exploitation, in which machinery, law, and the threat of unemployment and social exclusion play

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<sup>&</sup>lt;sup>59</sup> '[T]echnology is not merely control over Nature, it also provides control over Man. The division of labor and the factory system provided ways of *controlling* the pace and quality of work, as do modern assembly-line methods. Technology provides for social control and discipline in the workplace. So the development of technology is not socially neutral; it will reflect class interests and sociopolitical pressures' (Nell 1992, p.54).

<sup>&</sup>lt;sup>60</sup> '[M]machinery does not just act as a superior competitor to the worker, always on the point of making him superfluous. It is a power inimical to him, and capital proclaims this fact loudly and deliberately, as well as making use of it. It is the most powerful weapon for suppressing strikes, those periodic revolts of the working class against the autocracy of capital ... It would be possible to write a whole history of the inventions made since 1830 for the sole purpose of providing capital with weapons against working-class revolt' (*Capital 1*, pp.562-563). For modern accounts of the role of technology in social conflicts, see Levidow and Young (1981, 1985) and Slater (1980). In general, '[a]s the case studies proliferate, the evidence accumulates against a technological-determinist reading of organizational history and in favor of a conflict approach that views organizational structures as embodiying strategies for controlling workers' behavior' (Attewell 1984, p.119).

an essential role in its reproduction. In spite of the widespread perception that capitalism and productivity growth are inseparable (because of competition within sectors), this relationship is not straightforward for two reasons. First, firms do not select the technologies that are most productive of use values, but those that are most profitable, and these criteria may lead to distinct outcomes. Second, the imperative of social control, in the production line as well as in society, introduces biases in the choice of technology, systematically favouring control and profitability rather than the imperatives of health, safety and social welfare.

The existence of two types of competition does not lead to static outcomes, for example the equalisation of profits rates across the economy or the relentless concentration of capital, as may be expected in mainstream microeconomics. Rather, both types of competition interact continually within and between sectors, and they are among the most important factors responsible for the dynamics of capitalism. Attempts to 'add up' the impact of competition within and between sectors are analytically illegitimate, because of their distinct levels of abstraction: competition within sectors is relatively more abstract, and more important, than competition between sectors, for two reasons. First, profit must be produced before it can be distributed and equalised, in which case analysis of technologies, strategies and work practices should precede the study of outcomes, both at the level of the firm and the sector. Second, although migration can raise the profit rate of individual capitals, for Marx changes in the profitability of capital as a whole are contingent upon technical progress. Capital accumulation and competition are normally conflicting processes, tending to generate instability, crisis, overwork, unemployment and poverty. For these reasons capitalism is not only a highly efficient system of production: it is also the most structurally unstable and systematically destructive mode of production in history, because of the conflicting forces of extraction, realisation, and accumulation of surplus value under competitive conditions. Capitalist instability in the social, economic and ecological domains is systemic and structural, and the ensuing destructiveness affects both peoples and nature. They cannot be entirely avoided whatever the combination of economic policies.

Competition destroys the capitalist basis of production.61 Intra-sectoral competition creates a

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<sup>&</sup>lt;sup>61</sup> '[C]apital ... increases the surplus labour time of the mass by all the means of art and science ... It is thus, despite itself, instrumental in creating the means of social disposable time, in order to reduce labour time for the whole society to a diminishing minimum, and thus to free everyone's time for their own development. But its tendency always, on the one side, *to create disposable time, on the other, to convert it into surplus labour*. If it succeeds too well at the first, then it suffers from surplus production, and then necessary labour is interrupted, because *no surplus labour can be realised by capital*. The more this contradiction develops, the more does it become evident that the growth of the forces of production can no longer be bound up with the appropriation of alien labour but that the mass of workers must

tendency towards rising labour productivity and increasing technical and organic compositions of capital. They objectively permit living standards to increase, and labour time to decline simultaneously.62 However, there is are severe contradictions between the workers' desire to reduce working time to a minimum, while demanding the highest possible wages, and the capitalists' demand for the longest possible working days with (in their own firms) the highest possible levels of productivity, and the highest possible rates of productivity growth. Systemically, excessively low rates of exploitation lead to high unemployment and low productivity growth, while excessively high rates of exploitation render the economy prone to overproduction crises. These contradictions between the classes of workers and capitalists, and within the capitalist class, make it difficult to implement (through the state) the collective capitalist interest in regulating the length of the working day in order to preserve economic stability. In the absence of this regulating mechanism, other policies must be used even if they achieve this objective only indirectly. Limitations such as these make it unlikely that maximum rates of exploitation and rapid economic growth can be compatible for long periods. Over the long term, rising labour productivity reduces the significance of living labour for the production of use values and, consequently, its importance for the determination of value. In spite of its potential welfare implications, under capitalism technology is unlikely to eliminate drudgery and long hours of work. Their perpetuation is due to social, rather than technical, barriers. More specifically, technical progress facilitates the satisfaction of needs through non-market processes, the reduction of labour time, and the automation of repetitive, dangerous and unhealthy jobs. However, they are anathema for capitalism, because they conflict with the valorisation of capital and the reproduction of the relations of exploitation. At some stage, Marx believes that the majority will no longer be prepared to accept these limits to the achievement of their individual and collective potential, and they will revolt against capitalism and build another social and economic system, communism.

themselves appropriate their own surplus labour ... Labour time as the measure of value posits wealth itself as founded on poverty, and disposable time as existing in and because of the antithesis to surplus labour time; or, the positing of an individual's entire time as labour time, and his degradation therefore to mere worker, subsumption under labour. The most developed machinery thus forces the worker to work longer than the savage does, or than he himself did with the simplest, crudest tools' (Grundrisse, pp.708-709).

This has been the case historically in the rich countries. However, reductions in the working week generally fail to keep pace with technical progress, because the capitalists tend to resist against measures that reduce the rate of exploitation. Experience shows that the success of attempts to curtail labour time depends upon the strength and political leverage of the working class, whilst the state of technology is an important, but secondary influence.

## 3 Concluding Remarks

The interpretation of Marx's theory of value outlined above can be summarised as follows. Marx's theory departs from the principle that human societies reproduce themselves, and change, through labour. Labour and its products are socially divided and, under capitalism, these processes and their outcomes are determined by the monopoly of the means of production by the class of capitalists, the commodification of labour power and the commodity form of the products of labour. In these circumstances, the products of labour generally take the value form, and economic exploitation is based on the extraction of surplus value. Hence, the capital relation includes the monopoly of the means of production, wage labour, and the continuous reproduction of the two large and mutually conditioning social classes, the capitalists and the workers. When analysed from this angle, the theory of value is a theory of class, class relations, and exploitation. The concept of value is essential because it expresses the relations of exploitation under capitalism, and allows them to be explained in spite of the deceptive appearances created by the predominance of voluntary market exchanges.

This approach to Marx's theory implies that value theory is not essentially a theory of the 'separation' of commodity producers, commodity exchange ratios, labour embodied in products, or of the allocation of labour in the economy, as is the case in alternative interpretations discussed in section 1. Quite the opposite, the class interpretation of Marx's theory of value highlights the social form of the property relations (the means of production are owned by the class of capitalists), the social form of labour (wage labour), the mode of labour control (capitalists hire and manage the expenditure of labour power), the social form of the products of labour, and of goods and services more generally (commodities) and the objective of social production (profit rather than, say, need, exchange, consumption or investment).

It is impossible to draw together, in the limits of this paper, all the implications of the class interpretation approach outlined above. Moreover, Marx's writings on value, and the interpretation outlined above, are pitched at a level of abstraction that is too high to offer ready-made answers to the urgent problems of today. In spite of this, a class interpretation of Marx's value theory can provide a uniquely insightful explanation of the inner workings of capitalism and the articulation between distinct aspects of this economic system, showing the enormous potential of capitalism to achieve constructive as well as destructive and degrading outcomes. In particular, Marxian analysis can explain important features of capitalism which other schools of thought, including the neoclassical, Keynesian and institutionalist, have difficulty analysing. For example, the necessity and origin of money, technical progress and the rising productivity of

labour, conflicts over the intensity of labour and the length of the working-day, the growth of the wage-earning class, the inevitability of uneven development, cycles and crises, and the impoverishment of the workers – not because of declining living standards but, rather, because of the growing distance between their 'needs' and what they can afford to buy, often leading to debt and overwork.

Another distinguishing contribution of Marx's theory of value is its capacity to point out the root cause of several contemporary problems and the limits to their potential solution under capitalism. Some of these problems can be remedied within the current system, for example, relative economic stagnation, high unemployment, the erosion of political democracy, lack of corporate responsibility, and absolute poverty. In contrast, other problems cannot be resolved, because they are features of capitalism; among them, the existence of unemployment and exploitation of the workforce, economic inequality, the encroachment of work upon free time, systematic environmental degradation, lack of economic democracy, and production for profit rather than need. Problems such as these can be, at best, concealed by propaganda and mitigated by economic prosperity.

Concealment has become an art form. Today, inequity and exploitation are more heavily cloaked by 'market' ideology and by the vacuous discourse of 'globalisation' (although both have been fraying at the edges). In spite of the much-repeated claim that history is dead or, more precisely, that significant social and political changes are no longer possible, the hegemonic neoliberalimperialist-globalist project has been facing difficult challenges. It has suffered legitimacy problems in the US because of falling wages in spite of rising national income, and the brutality with which the 'neocons' have imposed an exceptionally aggressive brand of imperialism, in Western Europe because of simmering social conflicts triggered by high unemployment and stagnant living standards, and by ideological and economic disputes with the US, and in Japan because of the protracted economic crisis and because of ideological conflicts between the ruling elite and the majority. In the peripheral areas of the world economy, discontent with neoliberalism and imperialism has been bubbling, and alternatives are being actively sought in several countries. The new social ('global justice') movements offer an especially promising avenue for the challenges to contemporary capitalism. Although these movements suffer from a range of insufficiencies, in contrast with ideal or imaginary movements they already exist, and include the most active organisations challenging contemporary capitalism from several different angles.

Mass action is necessary in order to address important problems of our age, among them

#### **B**6Marx's Theory of Value Still Relevant?

environmental degradation, long-term unemployment, poverty amidst plenty in developed and developing countries, the dissemination of curable or controllable diseases, illiteracy, cultural, ethnic and economic oppression, and other problems. In addressing these problems and their potential solutions, Karl Marx offers an analysis that is unencumbered by current prejudices, and that can inspire creative solutions. Marxists can, therefore, contribute to the advance of these movements and, in doing so, familiarise large numbers of people with Marxian views. This has become especially urgent. The reproduction of Marxist theory is in danger, as the 'generation of 1968' approaches retirement age and draws to a close its militancy in the universities, trade unions and workplaces. There is a great risk that Marxism will face a historical decline similar to that experienced between the late twenties and the mid-sixties, with irretrievable losses in terms of theory and political experience.

#### References

- Aglietta, M. (1979) A Theory of Capitalist Regulation, the US Experience, London: New Left Books.
- Attewell, P.A. (1984) *Radical Political Economy, A Sociology of Knowledge Analysis*, New Brunswick, N.J.: Rutgers University Press.
- Backhaus, H.-G. (1974) 'Dialectique de la Forme Valeur', *Critiques de l'Economie Politique*, 18: 5-33.
- Brunhoff, S. de (1973) *La Politique Monétaire, Un Essai d'Intérpretation Marxiste*, Paris: Presses Universitaires de France.
- Brunhoff, S. de (1976) Marx on Money, New York: Urizen Books.
- Chattopadhyay, P. (1994) *The Marxian Concept of Capital and the Soviet Experience: Essay in the Critique of Political Economy*, Westport, Conn.: Praeger.
- Dobb, M. (1940) Political Economy and Capitalism, London: Routledge and Kegan Paul.
- Dobb, M. (1943) 'Review of Theory of Capitalist Development, by Paul M, Sweezy', *Science & Society* 7: 270-275.
- Dobb, M. (1967) 'Marx's "Capital" and Its Place in Economic Thought', *Science & Society* 31, 4: 527-540.
- Duménil, G. (1980) De la Valeur aux Prix de Production, Paris: Economica.
- Eldred, M. (1984) 'A Reply to Gleicher', Capital & Class 23: 135-137.
- Eldred, M. and Hanlon, M. (1981) 'Reconstructing Value-Form Analysis', *Capital & Class* 13: 24-60.
- Elson, D. (1979) 'The Value Theory of Labour', in D. Elson (ed) *Value, The Representation of Labour in Capitalism*, London: CSE Books.
- Engels, F. (1981) 'Supplement', in K. Marx, Capital 3, Harmondsworth: Penguin.
- Fine, B. (1980) Economic Theory and Ideology, London: Edward Arnold.
- Fine, B. (2001) Social Capital versus Social Theory, London: Routledge.
- Fine, B. and Harris, L. (1979) Rereading Capital, London: Macmillan.
- Fine, B., Lapavitsas, C. and Saad-Filho, A. (2004) 'Transforming the Transformation Problem: Why the 'New Interpretation' is a Wrong Turning', *Review of Radical Political Economics* 36 (1), pp.3-19.
- Fine, B. and Saad-Filho, A. (2004) Marx's Capital, 4th ed. London: Pluto Press.
- Foley, D. (1982) 'The Value of Money, the Value of Labour Power and the Marxian Transformation Problem', *Review of Radical Political Economics* 14, 2: 37-47.
- Foley, D. (1986) *Understanding Capital, Marx's Economic Theory*, Cambridge, Mass.: Harvard University Press.

- Gleicher, D. (1985-86) 'The Ontology of Labour Values', Science & Society 49, 4:463-471.
- Glick, M. and Ehrbar, H. (1986-87) 'The Labour Theory of Value and Its Critics', *Science & Society* 50, 4: 464-478.
- Grossman, H. (1977) 'Marx, Classical Political Economy, and the Problem of Dynamics', *Capital & Class* 2: 32-55.
- Harvey, D. (1999) The Limits to Capital, London: Verso.
- Himmelweit, S. and Mohun, S. (1978) 'The Anomalies of Capital', Capital & Class 6: 67-105.
- Lee, C.-O. (1990) On the Three Problems of Abstraction, Reduction and Transformation in Marx's Labour Theory of Value, PhD Thesis, University of London.
- Levidow, L. and Young, B. (1981, 1985) *Science, Technology and the Labour Process, Marxist Studies*, 2 Vols., London: Free Association Books.
- Marx, K. (1974) 'Critique of the Gotha Programme', in *The First International and After*, Harmondsworth: Penguin.
- Marx, K. (1978a, 1969, 1972) *Theories of Surplus Value*, 3 Vols., London: Lawrence and Wishart.
- Marx, K. (1981a) Grundrisse, Harmondsworth: Penguin.
- Marx, K. (1976, 1978b, 1981b) Capital, 3 Vols., Harmondsworth: Penguin.
- Marx, K. (1988a) *Letter to Kugelmann, July 11, 1868*, Collected Works, Vol.43, London: Lawrence and Wishart.
- Marx, K. (1988b) Collected Works, vol. 30, London: Lawrence and Wishart.
- Medio, A. (1977) 'Neoclassicals, Neo-Ricardians, and Marx', in J.G. Schwartz (ed) *The Subtle Anatomy of Capitalism*, Santa Monica: Goodyear.
- Meek, R.L. (1956) 'Some Notes on the "Transformation Problem", *Economic Journal* 66: 94-107.
- Meek, R.L. (1973) Studies in the Labour Theory of Value, London: Lawrence and Wishart.
- Mohun, S. (1991) 'Value', in in T. Bottomore (ed) *A Dictionary of Marxist Thought*, 2<sup>nd</sup> ed, Oxford: Blackwell.
- Moseley, F. (2000a) 'The "New Solution" to the Transformation Problem: a Sympathetic Critique', *Review of Radical Political Economics* 32, 2: 282-316.
- Moseley, F. (2000b) *The Determination of Constant Capital in the Case of a Change in the Value of the Means of Production*, unpublished manuscript.
- Naples, M. (1989) 'A Radical Economic Revision of the Transformation Problem', *Review of Radical Political Economics* 21, 1-2: 137-158.
- Nell, E.J. (1992) *Transformational Growth and Effective Demand*, New York: New York University Press.
- Perelman, M. (1999) 'Marx, Devalorisation, and the Theory of Value', Cambridge Journal of

- Economics 23, 6: 719-728.
- Reuten, G. and Williams, M. (1989) *Value-Form and the State, The Tendencies of Accumulation and the Determination of Economic Policy in Capitalist Society*, London: Routledge.
- Rosdolsky, R. (1977) The Making of Marx's 'Capital', London: Pluto Press.
- Rowthorn, B. (1980) Capitalism, Conflict and Inflation, London: Lawrence and Wishart.
- Rubin, I.I. (1975) Essays on Marx's Theory of Value, Montréal, Black Rose Books.
- Rubin, I.I. (1978) 'Abstract Labour and Value in Marx's System', Capital & Class 5: 107-140.
- Saad-Filho, A. (1993) 'Labour, Money and "Labour-Money", a Review of Marx's Critique of John Gray's Monetary Analysis', *History of Political Economy* 25, 1: 65-84.
- Saad-Filho, A. (2002) *The Value of Marx: Political Economy for Contemporary Capitalism,* London: Routledge.
- Shaikh, A. (1977) 'Marx's Theory of Value and the "Transformation Problem", in J.G. Schwartz (ed) *The Subtle Anatomy of Capitalism*, Santa Monica: Goodyear.
- Shaikh, A. (1981) 'The Poverty of Algebra', in I. Steedman (ed) *The Value Controversy*, London: Verso.
- Shaikh, A. (1982) 'Neo-Ricardian Economics, A Wealth of Algebra, a Poverty of Theory', Review of Radical Political Economics 14, 2: 67-83.
- Shaikh, A. (1984) 'The Transformation from Marx to Sraffa', in E. Mandel and A. Freeman (eds) *Ricardo, Marx, Sraffa*, London: Verso.
- Slater, P. (ed) (1980) Outlines of a Critique of Technology, Atlantic Highlands: Humanities Press.
- Sweezy, P. (1968) The Theory of Capitalist Development, New York: Monthly Review Press.
- Vroey, M. de (1981) 'Value, Production and Exchange', in I. Steedman (ed) *The Value Controversy*, London: Verso.
- Vroey, M. de (1982) 'On the Obsolescence of the Marxian Theory of Value, a Critical Review', *Capital & Class* 17: 34-59.
- Vroey, M. de (1985) 'La Théorie Marxiste de la Valeur, Version Travail Abstrait, Un Bilan Critique', in G. Dostaler and M. Lagueux (eds) *Un Echiquier Centenaire, Théorie de la Valeur et Formation des Prix*, Paris: La Découverte.
- Weeks, J. (1981) Capital and Exploitation, Princeton: Princeton University Press.
- Weeks, J. (1983) 'On the Issue of Capitalist Circulation and the Concepts Appropriate to Its Analysis', *Science & Society* 48, 2: 214-225.
- Winternitz, J. (1948) 'Values and Prices, A Solution to the So-Called Transformation Problem', *Economic Journal* 58, 2: 276-280.

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