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Productive and Unproductive Labour in the Labour Theory of Value

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Revised March 1996

Abstract: Using a particular understanding of the labour theory of value, this paper surveys the criticisms made of the Marxian distinction between productive and unproductive labour, and rejects them as misconceived. The distinction is then used to draw some consequences for how 'the rate of exploitation' should be understood.

JEL Classification: E11.

Introduction[*]

In a recent extended book review (Laibman 1993), and more substantively in his recent book (Laibman 1992, Ch.4), Laibman forcefully argues that Marxists should abandon the distinction between productive and unproductive labour. In his article, he argues that the distinction "cannot be defended" (Laibman 1993, p.226), that it "rests on extremely insecure foundations" (ibid. p.227), that it is "metaphysics" (ibid. p.231); and he concludes that

> "preoccupation with 'productive and unproductive labour' leads at best to results that cannot be verified, because their meaning lies imprisoned within an arbitrary shell of unsubstantiable belief; and at worst to error." (Laibman 1993, p.232)

He argues that Marxists who use the distinction provide

> "no independent rationale for treating the wages of certain categories of workers as part of surplus value, despite their clear socioeconomic status as workers and the socially necessary character of their labour. The same holds for the distinction between productive and unproductive capital, which also appears to be devoid of operational significance." (Ibid. p.227)

In this paper, I want to outline such a rationale, and to show that, at least for one interpretation of the labour theory of value, the distinction can be framed in a way which satisfies Laibman's theoretical objections and has 'operational significance'. In doing so, I will have relatively little to say about Marx's writings and interpretations of them.[1] Instead of exegesis, two themes run through the paper. First, if the distinction between productive and unproductive labour is rejected then other fundamental categories of Marx's theory lose their theoretical coherence. It is not possible both to maintain the labour theory of value and to dispense

* A first draft of this paper was written while I was visiting the Department of Economics at the University of Sydney. I would like to thank members of the Department, and especially the Political Economy Group, for providing a stimulating working environment. I would also like to thank Dick Bryan, Ben Fine, Susan Himmelweit and three referees of this journal for their useful and encouraging comments. Errors that remain are my own.

1 The extent to which a consistent approach can be found in Marx's writings is a subject of considerable disagreement; see for example Rose (1977), Hunt (1979), Leadbeater (1985), Laibman (1992, 1993), and Moseley (1991, 1994).

with its fundamental building blocks. And second, the labour theory of value does provide the theoretical basis for an analysis of empirical trends in present-day capitalist economies.

The account of the labour theory of value presented here is 'analytic'; it is not 'evaluative' whereby what is value-creating and what is productive and what unproductive is assessed from the standpoint of a 'higher' or 'more progressive' mode of production.[2] For example, it is sometimes argued that since discipline and hierarchical control would not be necessary in a socialized mode of production, then the labour which 'produces' them in a mode of production in which they are necessary must be unproductive. A similar 'evaluative' approach occurs in the project of identifying 'waste' in a capitalist economy. To pose a question concerning the labouring activity which is performed in a contemporary capitalist economy, and which would not be performed in some posited 'socialized mode of production', is to raise important political issues about hierarchy and waste in contemporary capitalism and the democratization and potential resources that could be released by its revolutionary transformation. However, to raise the issue of hierarchy, or of the co-existence of waste and poverty in contemporary capitalism, is to raise different issues from those implicit in the 'analytic' framework of the labour theory of value; important perhaps, but different. The distinction between productive and unproductive labour in this paper remains analytic and internal to the capitalist mode of production; it is not evaluative and comparative across different modes of production, whether those modes are real or imagined.

The first section outlines a particular understanding of the labour theory of value, and the role of productive and unproductive labour within this understanding. The next section surveys some commonly cited objections to these definitions and responds to them. The third section is concerned with whether and how value theory can be quantified in an internally consistent way in the presence of unproductive labour. A short conclusion follows.

2 The terminology is taken from Laibman (1992, ch. 4).

1. Theory

The interpretation of the labour theory of value in this paper is based on an account proposed by Duménil (1983/84) and Foley (1982, 1986). It is summarized in the following six propositions, in which some stress is placed on how the categories of productive and unproductive labour are an integral part of that account.

Proposition 1. Aggregate labour-time is the source of aggregate value added.

That all new value produced is attributable in some sense only to the expenditure of labour is a basic proposition of the labour theory of value. The only alternative in economic theory is the neoclassical proposition which sees net output as produced both by labour and by other 'factors of production', but any Marxist perspective must insist on the ontological uniqueness of labour; otherwise there can be no *labour* theory of value.[3] In this, the Marxian perspective is no different from the Ricardian: value is embodied labour.

Proposition 2. A unit of money is the way in which society measures value when it is separated from particular commodities.

This proposition sharply distinguishes Marxian value from Ricardian value. The difficulty with any embodied labour approach is that all labouring activity is heterogeneous, from whose concrete specificity abstraction is required in order that commensuration is possible. Merely to argue that all labouring activity could be commensurated in terms of homogeneous units of time does not provide an explanation of commensurability, unless some account is given of the process whereby an hour's worth of one person's activity is made identical to an hour's worth of another's. The account followed here is that heterogeneous concrete labours are rendered homogeneous and abstract by the market. The creation of value is not only a process of labour embodiment, or objectification of labour, in production; it is also, and crucially, a social process involving exchange in the market. For it is the market which establishes connections between all the private labours occurring in a society, and, in production for the market, the market mechanism determines *a*

3 More generally, in the neoclassical world, demand and supply in goods and factor markets have independent determinants in preferences, technology and endowments; with these latter specified, there is no room for a concept of value which is not identical with price.

posteriori which labours are to count as portions of social labour and for how much they are to count. This is only possible if the value of a product, as a commodity, achieves a form independent of the commodity itself.

In more Hegelian vein, the opposition between use-value and value cannot be contained within the commodity, but has to be externalized as an opposition between commodities and money. The value contained within the commodity achieves an independent form of expression from the commodity as a definite quantity of money, and it does this through exchange. Private, independent labours are only revealed as having a social dependent character as they express themselves in a form which represents their value-equivalence to all other commodities.

But as soon as the value of a commodity achieves a form independent of the commodity, the possibility exists of a quantitative difference between the labour embodied in a commodity and the labour represented by the sum of money for which that commodity sells. While the simplest assumption is to suppose that no such quantitative discrepancy exists for the individual commodity (equivalent exchange), this assumption is not necessary, and indeed is not in general appropriate because of the effects on prices of the (tendential) equalization of the rate of profit.

However, at the aggregate level across all commodities there can be no such quantitative discrepancy if a *labour* theory of value is to be coherent. Hence the total number of hours worked by all value-creating labour, and the measure of this aggregate abstract labour in terms of the money-form which it takes, are equivalent measures. In these circumstances, the ratio of aggregate 'labour value-added' (*LVA*) to aggregate 'money value-added' (*MVA*) defines the value of money (*VM*).[4]

4 This formulation avoids discussion of the more direct definition of the value of money as the socially necessary labour required to produce it, because of the difficulties of understanding this in the presence of credit money. Note also that *VM* as defined in the text is defined with respect to value added (by living labour) rather than total value (attributable to living and 'dead' labour). In part this is to avoid the difficulties surrounding both the effects of technical change and the effects of changing interest rates on the valuation of the existing stock of constant capital; by the same token the definition in terms of aggregate value added has immediate empirical application. See Foley (1992).

$$MVA = \frac{LVA}{VM} \qquad (1)$$

Once value exists both in the form of commodities and in the form of money, then, as soon as labour-power is forced into the commodity form, that value confronts labour as capital, simultaneously the alienated results of its own activity and a coercive social relation. Hence,

Proposition 3. The stocks of value in their various forms, and the flows of value connecting them, are schematically represented by the 'circuit of capital'.

A typical capitalist firm starts with a stock of money, and uses it to purchase inputs; these are then organized in a production process, from which produced commodities emerge, which in turn are sold. The total revenue accruing to the firm exceeds the initial stock of money, and the addition is attributable to the difference between the value of labour-power and the new value created in production by that 'labour-power in process', that is, by labour. Marx called this process the 'self-expansion of value' or the 'valorization of value'.

Hence one form in which value exists is as a stock of money-capital: cash; bank deposits of domestic and foreign currencies, holdings of public and private sector domestic and foreign securities, commercial bills and bank loans. At any point in time, money-capital will have been committed in the past to the purchase of inputs of plant and equipment, raw materials and semi-finished commodities. The value of these (in terms of money) is the firm's 'productive capital'. And production in the past will have resulted in inventories of finished commodities which are not yet sold, whose value (in terms of money) is the firm's 'commodity capital'. Corresponding to these stocks of capital are flows of value which connect them. The firm advances value on means of production (non-labour inputs) and labour-power over some specified period; the flow of costs during that period is the 'capital advanced'. The flow of output over that period to sales plus additions to inventories is 'production'; and there is also a flow of sales during that period.

Because these stocks and flows all coexist in a developed economy, untangling the relations between them is a complicated matter.[5] But for present purposes, nothing is lost analytically by the following simplification. Suppose a new firm begins with a stock of money-capital and nothing else. This is then entirely used up in the purchase of inputs; it is instantaneously partially transformed into means of production, and the remainder is used to purchase labour-power in a single transaction such that the entire stock of money-capital becomes a flow of productive capital advanced. Production occurs and results in a flow of produced output, or commodity capital, which is then entirely liquidated in sales, leaving the firm with a larger stock of money-capital than it began with, and nothing else. Value thus sequentially changes its form from money-capital to productive capital to commodity capital, which in turn via a flow of sales becomes a larger stock of money-capital. The labour theory of value then asserts that new value is added *only* in the process of production. Otherwise, in whatever form it exists as a stock, and in whatever flow process its form is transformed into some other stock, value remains quantitatively the same.

This principle holds however complicated the relationships are between stocks and flows in the real world. And it holds whatever the relationship between values and prices. In particular, it will generally be the case that there is 'unequal exchange', that is, because of the requirements that the formation of a general rate of profit makes of prices, these prices will not be proportional to labour values, and hence circulation will redistribute values so that values appear in locations other than where they were produced. But whatever the appearances, this is only a redistribution, and the same principle remains. Whatever the transformations of the form in which value exists, the magnitude of value is only increased in production. Otherwise, value remains of constant magnitude.

This understanding of the circuit of capital implies the following definitions of productive and unproductive labour.

Proposition 4. Definitions:

Wage labour is

5 See for example Foley (1986, ch. 5).

productive (PL) **if and only if it transforms a quantity of productive capital into a greater quantity of commodity capital.**

unproductive (UPL) **if and only if, within the circuit of capital, it transforms either commodity capital into money-capital, or money-capital into productive capital; but it also exists outside the circuit of capital.**

Labour which is not wage labour is non-productive, being neither productive nor unproductive.

In these definitions, the social usefulness of the labour concerned is irrelevant. What is at issue is rather its location with respect to valorization, an issue which can be clarified by considering some of the implications of these definitions.

i) Labour-power purchased by capital

Consider first that labour-power purchased for a wage by a capital and employed in a valorization process. The labour subsequently performed is conceptually distinguishable as one of three types:

a) labour which adds new value by transforming productive capital into commodity capital;

b) labour which enforces hierarchy and discipline in the process of transforming productive capital into commodity capital;

c) labour employed in circulation:

by commercial capital, which transfers title of ownership in processes of sale and purchase;

by financial capital, which continually rearranges the liquidity structure of financial assets which either are or potentially could be money-capital;

by industrial capital,[6] which chooses to retain control over moments of valorization which could be undertaken by more specialized (financial or commercial) capitals, but is not.

The first is productive labour, and is the only labour which creates surplus-value. The second is surrogate for the 'capitalist', whether individual or corporate. Labour which enforces hierarchy and discipline arises out of

6 Marx defines industrial capital "in the sense that it encompasses every branch of production that is pursued on a capitalist basis", successively assuming the forms and functions of money capital, productive capital and commodity capital (Marx 1978, p.133). I am using the term more narrowly to refer to a capital engaged in the production of value and surplus-value, whatever else it does.

the need for capital to retain coercive control over the class antagonisms inherent in the capital relation. The labour which performs this function merely personifies the coercive power of the latter, and does not in so doing create value.[7] The third is employed by capital in C-M-C circuits to circulate value created elsewhere; circulation labour is unproductive, and the profits derived from its activities are created elsewhere, in the transformation of productive capital into commodity capital, and transferred in market processes of unequal exchange.[8]

ii) Labour-power purchased by the state

In modern capitalist economies, a substantial quantity of waged labour-power is purchased not by capital but by the state. Some of this labour is employed by public enterprises or nationalized industries, producing commodity outputs, often, although decreasingly so, under monopoly conditions maintained by legal barriers to entry. From a circuit of capital perspective, the juridical forms of ownership of capital are not relevant; wage labour remains engaged in the production of commodities. Hence, as in the private sector, supervisory and circulation labour is unproductive; and labour which transforms productive capital into commodity capital produces both value and surplus value, and is productive.[9]

However, very many state employees do not produce a commodity output at all, and are funded not out of the proceeds of any sales but out of general taxation and state borrowing. In most developed capitalist societies, such labour facilitates and enforces the rule of capital in a variety of ways, representing to each individual capital the common interest of all capitals, and representing to each citizen the common interest of all capitals as though it were also the common interest of all citizens. Managing the monetary system facilitates both circulation processes and the concentration and centralization of capital; the armed services, the judiciary, the police and the prison service together enforce property rights; and the administration of

7 The labour which enforces the coercive capital relation is theoretically distinguishable from the labour which coordinates the specialized division of labour characterizing the collective worker, for the latter is productive. In some cases, however, giving empirical content to this distinction might be impossible, and then it becomes a matter of judgement how quantitatively significant this is.

8 This further generalizes the notion of unequal exchange.

9 Unequal exchange is further complicated by any subsidies given to such commodity producing public corporations.

poverty, social security, public health, and public education intervene in the determination of the value of labour-power. Such state sector workers exchange their labour-power not against capital but against revenue. Since there is no commodity output, there is no commensuration of the products of labour, and hence no commensuration of labour itself. No value is produced, and non-commodity-producing state sector workers are therefore unproductive.

iii) Labour that is not waged

Not all labour in capitalist society is wage-labour. Some non-wage-labour produces use-values which are *not* marketed. These activities do not produce value, because there is no social mechanism for commensurating different labouring activities, and so there is no way in which the time taken in such activities can be regarded as "socially necessary". That this is very different from "socially useful" is obvious when one considers the daily and generational reproduction of labour-power. Such labour is non-productive; indeed, in value theoretic terms it does not count quantitatively at all.[10]

Second, consider that non-wage-labour which produces use-values which *are* marketed. Because they are marketed, and hence compete with products of capitalist production, there is commensurability of the products of different labours. But because the labour is not waged, the commensuration of the products of labour does not involve the commensuration of the labours themselves, and there is no possibility of producing surplus value. Typically, non-wage-labour in competition with capitalist wage-labour is forced into working longer than average hours in order to survive. Peasant household production is one example of such labour, which is generally characterized by patriarchal familial relations within the interstices of commodity production; where such relations co-exist with capitalist ones, they tend to be dominated by the relative dynamism of the latter. Another example of non-wage-labour which produces marketed use-values, and more relevant to the analysis of developed capitalist economies, is the labour of the self-employed. While the numbers of genuine self-employed are almost certainly exaggerated,[11] there is the same tendency

10 The social invisibility of housework raises substantial issues, but they are not value-theoretic.

11 Particularly in the construction industry, where sub-contracting and consequential tax avoidance is common; self-employment is here a legal fiction, and such workers in effect are wage-labour working for construction capital.

as in peasant household production to have to work long hours in order to compete; and there is a similar but less pronounced tendency to employ unpaid family labour (particularly in agriculture and in retailing).

The self-employed are not waged workers, and so are neither productive nor unproductive. However, since their income is derived from participation in markets, and since in such markets separation from the means of production is the normal relation, this separation is maintained even in those cases in which there is non-separation. Consequently, self-employed workers are both capitalists (as owners of means of production) and workers (working for themselves as their own wage-labourers): they pay themselves wages and exploit themselves. Hence they can be categorized as unproductive of value, if they produce a marketed use-value in competition with capitals which employ wage-labour in circulation activities, and as value and surplus-value producing otherwise, of magnitude determined by the average levels of intensity and technique in comparable capitalist production.[12]

This yields the following schematic representation.

12 This argument follows Marx (1969, pp.407-9). Note also that self-employment is not a stable category; over time the self-employed will either become small capitalists, exploiting the wage-labour of others, or be transformed into wage-labourers themselves.

Table 1. Productive and Unproductive Labour: Theoretical Classification

Employed within circuit of capital:	**M-C**	**C-P-C'**	**C'-M'**	
Wage-labour employed by capital	UPL	PL	UPL	
Wage-labour employed by state and producing a marketed output	UPL	PL	UPL	
Wage-labour enforcing hierarchy and discipline	UPL	UPL	UPL	
Non-wage-labour: employers	UPL	UPL	UPL	
Employed outside circuit of capital:				
Wage-labour employed by state and producing a non-marketed output				UPL
Non-wage-labour: self-employed, in competition with labour in				
M-C or C'-M' activities	UPL		UPL	
C-P-C' activities		PL		

In order to emphasize that value was created in production and not in exchange processes, Marx abstracted from unequal exchange by assuming in *Capital I* that all exchange is ‘equivalent’ or ‘equal’ exchange, and hence that all prices are proportional to values.[13] Then all prices are calculated by the corresponding values divided by the value of money. But, as already mentioned, this assumption of proportionality is incompatible with the processes of capitalist competition which distribute value, and unequal exchange will be the norm.

However, two such proportionality relations are independent of whatever assumptions are made about prices and the rate of profit. The first has already been given as equation (1) in which aggregate value added by productive labour is measured equivalently either in labour-time or in money terms. The second proportionality relation is that between the value and price of labour-power. The reason for non-proportionality between disaggregated labour values and corresponding money prices concerns the effects of different compositions of capital (vertically-integrated capital-labour ratios) in production processes. However, this cannot affect the exchange of labour-power for a wage, since labour-power is not a produced

13 This enabled a clear focus on the relation between profit and exploitation, uncomplicated by transfers of value in circulation.

commodity, but an attribute of human beings, and while people are (re)produced, the relations of (re)production are not capitalist ones. So while non-proportionality between prices and values must characterize the commodities the wage purchases (because of the different compositions of capital in their production), there is no such non-proportionality in the sale of labour-power for a wage. Hence labour-power is 'equivalently' measured in terms of labour hours and in terms of money:

Proposition 5. The hourly wage rate (*w*) is equivalent to the value of labour-power per hour of labour hired (*VLP*), the equivalence being expressed by the value of money.

$$w = \frac{VLP}{VM} \tag{2}$$

In effect, equation (2) defines the value of labour-power (per hour of labour hired) as the money wage (per hour) multiplied by the value of money, (and hence aggregate variable capital as aggregate wages multiplied by the value of money). An immediate corollary is that only when prices are proportional to values is the value of labour-power equal to the embodied labour value of the commodities purchased with the wage; in general such a relation will not hold.

The final proposition draws out some implications of the preceding ones, establishing that aggregate profits are an exact representation of aggregate surplus-value.

Proposition 6. Since *LVA* is by definition the sum of aggregate variable capital (*V*) and aggregate surplus-value (*S*), and since *MVA* is by definition the sum of the aggregate wages of productive labour (W_P) and aggregate profits (Π), it is straightforward to derive the following:

$$P = \frac{S}{VM} \tag{3}$$

$$e = \frac{S}{V} = \frac{P}{W_P} = \frac{1 - VLP}{VLP} \tag{4}$$

To summarize, the labour theory of value is an aggregate theory, asserting that the labour-time worked by productive labour is the source of all money value-added, whatever prices happen to be; that the value of money relates the wage rate per hour and the value of labour-power per hour of labour hired, whatever prices happen to be; and that aggregate profits are an exact representation of aggregate surplus-value, whatever prices happen to be. It is *not*, on this interpretation, the theory of the beginning of Ricardo's *Principles* which tries to assert, in however an attenuated manner, that embodied labour ratios determine price ratios. This is to make a quite particular assumption about the formation of individual prices. Nor does it have anything to say about how one assumption of price formation (proportionality to labour-time) can be 'transformed' into a different one (proportionality to total capital advanced). Equations (1)-(4) are independent of such particular price assumptions and compatible with either, or indeed any.[14]

2. Responses to Common Objections

The previous section has asserted that the categories of productive and unproductive labour are an integral part of the labour theory of value, and hence implies that they stand or fall with that theory. The doubts that have been raised about the coherence of the distinction argue that the distinction itself would be better abandoned in favour of a more inclusive definition of 'productive'. I will consider each of the unproductive categories identified above in turn, outline the major criticisms, and respond to them.

i) Labour which enforces capitalist hierarchy and discipline.

It is sometimes argued that because hierarchy and control are essential to the maintenance of capitalist relations of production, and that because without the personnel to enforce these the very basis of capitalist relations is threatened, then such labour should be regarded as a part of the collective worker and hence productive. But this is a *non-sequitur*. The necessity or otherwise of a particular type of labour is a different criterion for distinguishing types of labour from that with respect to their location in the circuit of capital, and hence the criticism is not to the point.

14 This approach is surveyed in more detail in Mohun (1994).

ii) Labour which transfers value in the sphere of circulation

A number of criticisms argue that labour which transfers value in circulation cannot be distinguished meaningfully from productive labour, and I will consider them in turn.[15]

Criticism 1a. Treating pure circulation workers as unproductive involves consideration of what such workers do, which is inconsistent with the definition that it is not what workers produce that matters, but rather the social relations under which they work, irrespective of what they produce. Since the social relations are the same whether labour is employed in production or circulation, there is no case for calling one group productive and another group unproductive.

Criticism 1b. If the labour which uses a cash register at the point of sale is unproductive, then it is illogical to regard the labour which produces the cash register as productive. Similarly for the labour which produces the inputs necessary for the production of cash registers, and so on.

Response. It is true that a focus on social relations alone cannot distinguish unproductive from productive labour, but, in turn, social relations cannot be understood in abstraction from the valorization of value, and it is the moments of *this* process which define productive and unproductive labour. For the reproduction of capitalist social relations is inseparable from the reproduction of the circuits of capital, and from the way in which values, manifested in particular use-values, appear in successively different forms. That is, concrete labours are understood as the bearers of particular moments in the valorization of value, and hence as consequences, not causes, of the latter. The issue is not what is happening to value as a result of this or that concrete labour, but rather what concrete labour is required by this or that moment in the valorization of value; not the manner in which some particular concrete labour determines how valorization occurs, but rather the manner in which valorization determines what concrete labours are necessary. A focus on concrete labours undermines the coherence of the labour theory of value, for as soon as concrete labours and use-values are treated as primary data, the stage is set for a theoretical slippage away from the labour theory of

15 These criticisms are drawn variously from Harrison (1973), Gough and Harrison (1975), Hunt (1979), and Laibman (1992).

value and towards some other theory. Hence the (related) criticisms above fall: in the valorization of value, it does not matter what use-value is produced; instead, what is required is a specification of the moments of that valorization.

Criticism 2. 'Production' and 'circulation' are abstractions which cannot be identified as separate 'places'. There is no identifiable moment prior to consumption at which it is definitively possible to regard 'production' as having finished, for all activities prior to the consumption of a use-value are reducible to some aspect of the transformation and processing of that use-value.

Response. This is more than simply the assertion that all circulation activities involve processes of storage and transportation, for they do not. Many market-makers, such as commodity brokers, simply bring buyers and sellers together and organize transfer of title, making a profit in the process. But no additional value is created. The profits of the broker derive from unequal exchange, it being more profitable for industrial capital to pay specialized commercial intermediaries to bring buyers and sellers together, than to make the market itself. The commodity being traded undergoes no transformation whatsoever, other than a change of ownership, and neither use-value nor value is produced. It might be objected that, since physical form is unaltered, this is to impose a 'physicalist' criterion for the definition of unproductive labour.[16] Again the argument conflates location with respect to the circuit of capital on the one hand with the description of particular concrete labours on the other. The labour which brings buyers and sellers together produces nothing in addition to what is already in existence; transferring title of ownership generates utility for buyer and seller and that is all. If it is argued that all workers employed by capital are productive, irrespective of their location with respect to the circuit of capital, then there must be a slippage in the category 'use-value' to its neoclassical sense as a subjective property, *qua* psychological characteristic, of the purchaser. And this is destructive to the theoretical coherence of the labour theory of value.[17]

16 Echoing Adam Smith's distinction between the labour which produces material goods, and that which produces immaterial services.

17 As is immediately apparent in the critique by Böhm-Bawerk (in Sweezy (ed.) 1949).

Criticism 3. The conditions of employment of circulation workers are identical in every respect with those of production workers. There are the same competitive pressures to innovate, to reduce socially necessary labour-times, and to expel living labour. Circulation workers are exploited in exactly the same way as production workers; both perform unpaid labour, and commercial and financial capital reaps profits just like industrial capital as an excess of revenues over costs.

Response. It has already been argued that whether labour processes employ productive labour is determined not by what employees and employers do, but by their location with respect to the circuit of capital. It is this location with respect to valorization which determines what people do, not the converse. The issue then is how to understand exploitation within this framework. Firstly, if any worker (whether productive or unproductive) has to work for longer than the time represented by the wage, then that worker is exploited. It follows that there is no experiential difference in exploitation as between productive and unproductive workers, and eloquent descriptions of the fundamental similarity of *all* workers employed by private capital with respect to labour process and exploitation are beside the point. That such descriptions are regarded as telling against any distinction between productive and unproductive labour is perhaps because of the existence of the profits of commercial and financial capital, and the apparent problem of the origin of these profits if not in the exploitation of workers employed by these capitals. But this *is* only an apparent problem, for, since only the surplus labour-time of productive labour is monetized, the profits appropriated by financial and commercial capital can straightforwardly be understood as the consequence of unequal exchange with industrial capital, the terms of which are determined by competitive struggle.

If then a commercial capital, for example, comes into existence and earns a profit, there is a pure redistribution from the productive sector, and unequal exchange is the mechanism whereby profits 'really' earned in the productive sector are realized by commercial capital. A reduction of wages by a commercial capital increases its profits, because it increases the total profits available for capitalists' consumption and investment. An increase of hours by a commercial capital, and an increase in the productivity of unproductive labour both circulate more value in a working day; more value is thereby transferred by unequal exchange from the productive sector. At the same time, turnover time is reduced for the circuit of capital as a whole, enabling a greater mass of surplus-value to be produced in a given time period by productive labour. So in all cases it is the surplus labour-time of productive workers which is monetized and a portion of which is transferred by unequal exchange to commercial capital. Similarly for financial capital.

Criticism 4. The economy-wide equalized rate of profit is determined by capital advanced, and it is irrelevant how such capital advanced is divided between capital advanced in circulation and capital advanced in production; similarly for the prices and wages compatible with such an equalized rate of profit.

Response. When prices are not proportional to labour values, it is just not the case that the profits of an individual capital can be attributed in any simple manner to the unpaid labour of the workers employed by that capital. That capitals 'contribute' different amounts of labour time to the aggregate than those amounts which they 'withdraw' is a metaphor of unequal exchange. Marx used this metaphor in his account of the formation of prices of production and a general rate of profit, as part of his account that unequal exchange, considered in a variety of ways, is central to the account of capitalism. It is central to the analysis of production, whereby capital purchases labour-power but receives labour (Marx 1976, chs.6-7); it is central to the analysis of reproduction, whereby laws of property become laws of appropriation (ibid., chs.23-24); it is central to the analysis of the consequences for the price-form of different compositions of capital (Marx 1981, chs.8-10); and it is central to the account of how surplus-value is distributed as commercial profit (ibid., chs.16-19), interest and fictitious capital (ibid., chs.21-25), and rent (ibid., chs. 37-45). For an individual capital, the relation between profit and surplus labour time is a relation of unequal exchange. This is true for every capital, whether or not it employs productive labour. For those that do not, surplus labour time counts for zero; but the principles for understanding the *profits* accruing to commercial capital are no different from the principles for understanding the profits accruing to *any* individual capital. Issues surrounding the formation of an equalized rate of profit are not therefore relevant to the productive-unproductive labour distinction.

iii) Labour employed by the state which does not produce a commodity output.

Labour employed by the state and not producing a commodity output *is* socially necessary in the ordinary sense that without it capitalist social relations could not be reproduced. This fact has prompted the suggestion that such state labour be treated as though it were 'indirectly productive' of value, since its activities are essential to the reproduction of labour-power.[18] It has been further suggested that the surplus labour performed by such state labour (surplus in the sense of being that labour time worked over and above the time that is the equivalent of the wage) is transferred to the capitalist sector, being monetized as the higher wages accruing, for example, to skilled labour and as the higher profits accruing to the employers of skilled labour as a result of its greater value-creating capacity.[19] Because state production is not valorized, it is in effect a subsidy to capital, enabling lower wages than would otherwise have to be paid; for if the state activities were produced by the private sector, they would have to be priced so that a 'normal' profit could be earned in their production; because they are not so produced and so priced, wages can be lower and exploitation higher in the private sector, which amounts to a transfer of surplus labour from the state sector.

The problem with this argument is that it implicitly redefines 'socially necessary labour' in a way that detaches value categories from the capitalist mode of production. The focus becomes one of surplus labour performed, under any relations of production, in some activity considered essential to the reproduction of that society, instead of a focus on the specific form which surplus labour takes under capitalist relations of production. 'Value' is then 'labour embodied', as it is in Ricardo's political economy. But if no output in commodity form is produced, then there is no possibility of commensuration of the products of labour through the market, and hence no possibility of commensuration of the labours themselves. Hence one hour

18 See Harrison (1973) and Gough and Harrison (1975).
19 See Rowthorn (1980, ch.8), following an approach suggested by Hilferding in Sweezy (ed.) (1949).

worked in the non-commodity producing state sector is incommensurable with one hour worked by productive labour for private capital, and so the posited sectoral transfers of surplus labour do not make sense.

There is therefore no value-theoretic sense in which these state labours can be determined as 'socially necessary'. Allocation of labour is not determined in any *a posteriori* sense by the market's determination of profitability, but is determined *a priori* by political decision. In developed capitalist economies, these political decisions concern state determination and regulation of law and money, (so that markets can function), violence (so that inter- and intra-class conflicts can be contained within the prevailing system of social relations), and welfare (so that the reproduction of labour-power is maintained). The political decisions thereby involved are simultaneously supportive and antagonistic of prevailing social relations: supportive, in the sense that without law, money, violence and welfare, the capital relation could not exist; antagonistic, in the sense that the *a priori* allocation of labour to state activities conflicts with the *a posteriori* allocation of labour by the market. Currently, governments of developed capitalist economies are attempting to attenuate the contradiction by imposing upon state bureaucracies (especially in health and education) quasi-market criteria for 'efficient' decision-making, as though artificial competition imposed on non-commodity producers could act as surrogate for the real coercive forces of competition on commodity producers to reduce socially necessary labour times. Moreover the incentive structures created by the imposition of wholly artificial 'value' criteria play such havoc with the welfare function of the reproduction of labour-power that there is frequent administrative *ad hoc* intervention in order to try to correct for the distortions produced. This only serves to reinforce the judgment that if the category 'value' is to retain its coherence, with socially necessary labour time as its measure, it cannot be the case that non-market based state activities are value-creating.

This section can be concluded as follows. The criticisms directed against the productive-unproductive labour distinction all rest one way or another either on the introduction of considerations of concrete labour to attack a distinction which has nothing whatsoever to do with the description of concrete labours; or, relatedly, on misconceptions of the labour theory of value and the relations which it postulates between labour values and money prices. As such, the criticisms have no validity.

3. The Allocation Problem

The aggregate value added in equation (1) refers to the activity of productive labour alone. This leads to the ‘allocation problem’. In Laibman’s words,

> “How are we to account for the determination of the components of the value of output that represent the unproductive activity? What kind of component of the value product is the cost of unproductive labor ...? This is partly a matter of settling the value nature of unproductive labour costs, and partly one of showing how the quantitative determination of the system would proceed, and that such a quantitative determination is both possible and consistent with the rest of the value-theoretic system.” (Laibman 1992, p.79.)

The previous two sections have considered ‘the value nature of unproductive labour costs’, and have argued for an understanding of unproductive labour as being financed out of surplus value, so that both the wages paid to unproductive workers and the profits earned from their employment are deductions from the surplus value derived from the unpaid labour of productive workers. This section considers the implications of this for ‘the quantitative determination of the system’, and attempts to show that ‘such a quantitative determination is both possible and consistent with the rest of the value-theoretic system’.

First, consider unproductive workers employed by the state. Such labour produces use-values which are not marketed, and so in Marxian terms makes no contribution to any monetary figure of value added. In conventional National Income accounting terms, the use-values produced are valued at cost, primarily in terms of the relevant wage and salary bill, and this imputation is then treated as a component of Gross Domestic Product (*GDP*). In Marxian terms this is a nonsensical procedure, and it starkly poses the issue of what statistic is wanted, and why. A Marxian measure of value added in monetary terms, to be divided between antagonistic classes, is different from, and smaller than, a national income accounting measure in monetary terms of the use-values going to final demand, however necessary the latter might be for ‘demand management’ and in other contexts for (a rather imperfect) welfare analysis.

The issue of imputation provides another example of the difference in purpose which structures a different Marxist approach from that of the neoclassical orthodoxy. Consider the treatment of owner-occupied housing. In conventional national income accounting terms, an imputation is made for the opportunity cost of owner-occupation; otherwise *GDP* will fall if any private or public sector tenant buys a house, despite there being no alteration in the total provision of housing services but *merely* a different distribution of their ownership. Again in Marxian terms this is a nonsensical procedure, for no purpose is served by ‘valuing’ use-values in some way different from the market: a Marxian focus is not on a monetary evaluation of all goods and services going to final demand, whether or not they are marketed, but is rather on that value added in monetary terms provided by the market itself. Since markets cannot exist without some prior assignation of property rights, the distribution of ownership *is* then important. A simple way to see this is to consider property rights in the commodity labour-power. The wage bargain assigns these to capital for a specified period of time. The ‘consumption’ of this commodity in a process which transforms productive capital into commodity capital creates value and surplus-value. But if all labour were self-employed, so that there was no question of any separation between the person and her labour-power, and hence the person and her labour, then there would be no exploitation and no surplus-value produced.

These considerations suggest that a number of subtractions must be made from conventional measures of money output to arrive at *MVA*. If W_{UG} denotes the wage and salary bill of unproductive labour working for general government, *IR* denotes the imputation of rent to owner-occupiers, and *CC* denotes capital consumption,[20] then

$$MVA = GDP - CC - IR - W_{UG} \tag{5}$$

20 *MVA* is a ‘net’ concept, and so account must be taken of the depreciation of the capital stock in any given period.

Secondly, consider unproductive workers employed by capital. [21] In money terms, macroeconomic profits (including non-imputed rent and interest, but net of capital consumption) are conventionally defined as

$$P' = GDP - CC - IR - W' \qquad (6)$$

where Π' is conventional profits, and the last variable, aggregate wages $\left(W'\right)$, is the sum of wages paid to productive labour $\left(W_P\right)$, to unproductive labour working for capital $\left(W_{UC}\right)$, and to unproductive labour working for general government.[22] Expanding equation (6),

$$P' = GDP - CC - IR - W_{UG} - W_P - W_{UC} \qquad (7)$$

Using equation (5),

$$P' = MVA - W_P - W_{UC} \qquad (8)$$

Since by Proposition 6

$$MVA - W_P = P \qquad (9)$$

then rearranging the right-hand side of equation (8) and using equation (4) yields

$$P' = W_P\left(e - \frac{W_{UC}}{W_P}\right) \qquad (10)$$

so that if (conventional) profits are to be positive, the rate of exploitation must exceed the wage ratio of unproductive labour (employed by capital) to productive labour.

While this is just another way of saying that Marxian profits Π is the sum of the conventional notion plus the wages paid to unproductive workers employed by capital (since equations (8) and (9) imply $P = P' + W_{UC}$), Laibman (1992 p.81) regards it as potentially severing the systematic relation between profit and exploitation.[23] For a positive rate of exploitation might be sufficiently low that conventional profits are zero.

21 Unproductive labour employed by the state is quite different in this regard from unproductive labour employed by capital. For the latter does contribute to the monetary figure of value added through the sale of output, even if a value-theoretic approach identifies its activities as consuming rather than producing value.

22 Incorporating the self-employed into the wages of productive labour and the wages of unproductive labour employed by capital, as appropriate.

23 Laibman's equation (Laibman 1992, p.81) is equation (10) above, except that he implicitly defines the value of money as unity.

This is indeed a possibility. But Laibman's point is mistaken, for the systematic relation between profit and exploitation concerns Marxian profits, not conventional macroeconomic profits. Thus since

$$P^{'}=P-W_{UC}$$

substituting in equation (10) yields the familiar proposition

$$P=eW_P \tag{11}$$

The correct point is simply that the unpaid labour performed by productive workers must be more than enough to pay the wages of those unproductive workers employed by capital.

However, as soon as unproductive labour is employed by capital, the rate of surplus-value is no longer the only measure of the balance of class forces in the economy. Because equation (4) measures the rate of exploitation of productive labour , it is a critical variable in the analysis of accumulation, and in equation (11) determines the mass of profits available for capitalists' consumption and investment, and for the finance of unproductive labour by capital. The rate of exploitation of productive labour is thus a 'systemic' rate of surplus-value. But the balance of class forces is also captured by the conventional profit-wage ratio,[24] in the sense that this is a measure of what remains to capital for consumption and investment. This latter 'class distributive' rate of exploitation (e_d) is

$$e_d=\frac{P^{'}}{W_P+W_{UC}}$$

which using equation (10) can be written as

$$e_d=\frac{W_P}{W_P+W_{UC}}\left(e-\frac{W_{UC}}{W_P}\right) \tag{12}$$

Equations (1)-(4) and (12) suggest a rich agenda for empirical investigation. In particular, there appears in developed capitalist countries to be a secular upward trend in the wage ratio of unproductive to productive labour (employed by capital).[25] Since movements in this ratio, together with those in the systemic rate of

24 Pre-tax, and so ignoring the wages of general government workers.

25 The rise in this ratio is (imperfectly) reflected in the common observation that over the long run employment becomes increasingly concentrated in the tertiary sector, the decline in

exploitation, determine class distributive shares, I conclude that it *is* possible to establish the link Laibman requires "between the essential concepts and their outward counterparts" (Laibman 1992, p.83), and that it *is* possible to provide a theoretically informed empirical basis for Marxist economists to

> "do careful, hard-nosed analysis of trends and develop their implications concretely, rather than reduce a rich field of study to the semantic defense of an apocalyptic, and somewhat fatalistic, vision". (Ibid.)

Conclusion

This paper has attempted to show that the common strictures against the notions of productive and unproductive labour are misconceived. The distinction is not a superfluous addition to the labour theory of value but an essential part of that theory, to such an extent that if the distinction is abandoned then the conceptual structure of the labour theory of value is itself undermined. Arguably, that there is so much misunderstanding of this is largely due to fundamental misunderstanding of the labour theory of value itself. In any event, this paper has argued for an understanding of the labour theory of value in which the productive-unproductive labour distinction is an irreducible part, analytically coherent and consistent, and operational.

Since the productive-unproductive labour distinction is an essential part of the labour theory of value, then its rationale is the same as the rationale of the latter: whatever appearances might indicate, the capitalist mode of production is founded on class antagonism, coercion and exploitation; its dynamics can only be adequately understood on this basis, and the role of the labour theory of value is to capture this exploitation in an adequate theoretical conception, and to explain the ways in which this exploitation appears in everyday market phenomena. This requires that the systemic rate of surplus-value be distinguished from the class-distributive rate of exploitation, in order that the trends in each be identified.

the secondary sector following the historically earlier decline in the primary sector. More specifically, for the US, albeit in different value-theoretic frameworks from that presented here, see Moseley 1991, especially ch.5, and Shaikh and Tonak 1994, especially Appendix F.

The distinction between productive and unproductive labour is also necessary in order to begin to approach the issue of why there should be any unproductive labour at all. Indeed, it is clear from the foregoing analysis that unproductive labour is not an homogeneous category. It is rather ranged along a spectrum from the systemically necessary to the purely historically contingent. An investigation of the relative ‘densities’ along this spectrum for a single country through time and for several countries at a single point in time is an obvious subject for further investigation.

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