About Waged Labour: From Monetary Subordination to Exploitation

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Abstract

Wage-earners voluntarily accept to work under the control, and for the account of, firms run by entrepreneurs;\(^1\) they do not decide what, how and how much, they must produce; wage-earners are not responsible for the consequences of their activities when they comply with entrepreneurs’ orders;\(^2\) inside the firm, wage-earners are subordinates. Outside the firm, wage-earners freely choose the way they spend their wages in the markets for commodities and services. Such is the ‘stylised fact’ which characterises the wage relationship in our economies. Any theory of the wage relationship should account for this ‘stylised fact’ by deriving it from a consistent set of assumptions and propositions.

Three main propositions are advocated in this paper:

1. Mainstream economists conceive the ‘wage’ as being the price of a commodity (‘labour power’ or ‘human labour’) determined by a market – as for any other commodity and service. As a consequence, the wage relationship is thought of as an exchange relation ruled by equivalence; this view cannot be derived from the usual basic assumptions without violating the very logic of mainstream theory. Following this logic:
   - either the wage relationship should be thought of as a relation between human beings having such different conditions that it cannot be interpreted as an exchange ruled by equivalence
   - or ‘human labour’ is not to be found within the commodity space.

In any case, the ‘stylised fact’ mentioned above is not accounted for by mainstream theory.

2. ‘Wage’ is the name of the payment entrepreneurs give to other people with the view to making them participate in production under their control and for their account; wage payment is neither a purchase nor a sale – it just allows wage-earners to enter the market and spend in order to acquire the commodities they desire

3. Wage-earners are, economically speaking, a means used by entrepreneurs for their own ends; exploitation (Fleurbaey’s M-exploitation) is inherent in the wage relationship.

Propositions 2 and 3 do not fit general equilibrium theory (inspired by Walras and rationalised by Arrow-Debreu); they do not fit modern mainstream theory either. They have no room in the theory of prices of production (inspired by Ricardo and rationalised by Sraffa). Moreover, they are not compatible with Marx’s theory of labour power. An alternative approach is needed to satisfy them.

Paving the way for that alternative theory requires us to show that ‘human labour’ cannot belong to the commodity space from the very point of view of mainstream theory; a sharp incompatibility

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\(^1\) ‘Entrepreneur’ here means, following Coase, ‘the person or persons who, in a competitive system, take the place of the price mechanism in the direction of resources’ (Coase, 1937, p. 388).

\(^2\) David Ellerman distinguishes between factual/de facto and legal or de jure responsibility. What I mean here is economic responsibility only. Another way at looking at it may use David Ellerman’s propositions. The ‘Invisible Judge’ market gives the entrepreneur the property of raw material and labour – and also of the finished product sold in the market. The market gives nothing to the wage-earner inside the firm; outside the firm it gives her the property of consumption of goods she acquires out of her wage. Inside the firm, the wage-earner is not economically responsible. Arguing that if she kills someone, the wage-earner is responsible has nothing to do with the ‘Invisible Judge’!
between assumptions and conclusions would follow, and justify resorting to an alternative approach. This is our first step. A second step is to effectively resort to a monetary analysis – the alternative approach to real analysis, according to Schumpeter in his *History of economic analysis*. In a nutshell, we have to discard the commodity space postulate, and to think of economic relations as money mediation. Instead of a commodity space, we presuppose money to be a unit of account ($) combined with a means of payment. Instead of a permutation of goods and services exchanged amongst people, economic relations are payments. Individuals are no longer endowments and preferences, but accounts into which payments write down quantities of $. *Conditions of people may differ according to the form of money circulation* – this view allows us to deal with different types of economic relations; for what matters here, the wage relationship involves a specific form of circulation not reducible to that of exchange. The final step is to suggest that exploitation is inherent in the wage relationship; such exploitation has nothing to do with justice, since there is no norm whatsoever for the level of wage; it is also quite different from the exploitation Marx thought he had unveiled. This exploitation is simply due to the special situation of wage-earners vis-à-vis the market, which a specific form of circulation makes clear.

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1. ‘Human Labour’ does not Belong to the Commodity Space if not with the Human Beings who Perform it

The starting point of any theory of value is a given commodity space. It is especially clear in modern mainstream theory where the commodity space is the Euclidian space \( \mathbb{R}^1 \) in general equilibrium theory or a continuum \([0,1]\) in search models. People who populate the economy are grasped by reference to the commodity space: initial endowments (points of \( \mathbb{R}^1 \)) and preference function (defined in \( \mathbb{R}^1 \)). Among the goods belonging to that space, Debreu (1959) cites ‘Number 2 Red Winter Wheat’ and ‘human labour’. Many other items could be added, such as trucks and truck services, for example.

Listing all these goods is tantamount to listing all the markets in which they may be traded against each other, depending on the behaviour of individuals who do not belong to the commodity space. To know whether a determinate item is, or is not, to be found there is not an empirical matter. Consider, for instance, money. ‘What kind of monetary theory is possible?’ is not an open question once theoreticians have decided that money is a special good, being not privately produced, and useless for consumption and production. If money is an element of the commodity space under the name of ‘fiat money’, the basic question theory must solve is: does ‘fiat money’ have a positive price in general equilibrium in spite of its special properties? Whatever the solution may be, it is impossible to think of money in the context of a set of rules (an institution) but, instead, as a commodity (very special indeed).

What is true for money is even more obvious for ‘human labour’. It is only because they conceive the wage relationship as an exchange relation that mainstream economists find ‘human labour’ in the commodity space. Their basic vision is that individuals endowed with ‘human labour’ supply it in a ‘market for labour’, while individuals needing to produce something with the help of ‘human labour’ offer some bundles of commodities (the real wage). Assuming that ‘human labour’ belongs to the commodity space is by no means the result of
an empirical observation, but the by-product of a theoretical stance on the nature of the wage relationship. Is that a legitimate and fruitful theoretical stance?

To elucidate the point, a clear answer to the following question is in order: what is (are) the condition(s) which make(s) acceptable an inscription of ‘human labour’ in the commodity space?

The answer should be clear to everybody: ‘truck services’ and ‘human labour’ cannot be found in the commodity space but with their respective sources – i.e., ‘trucks’ and ‘workers’. A ‘truck service’ without a ‘truck’ is no more conceivable than ‘human labour’ without a ‘worker’. The mere fact that it is generally assumed that there is a choice between buying the ‘truck’ in order to get its services or hiring the ‘truck’ for a given duration confirms their common presence in the commodity space. What is true for ‘trucks’ should also be true for ‘workers’.

If so, we should have at least two kinds of human beings: on the one hand, the usual agents who trade commodities in different markets who are not found in the commodity space and, on the other hand, the ‘workers’ who stand there along with ‘trucks’, ‘Number 2 Red Winter Wheat’ and ‘human labour’. But mainstream economists do not follow that line of reasoning when labour and the wage are talked about, although they do when other commodities are dealt with. Applied to labour, such reasoning prevents us from thinking of the wage relationship as an exchange since:

- either ‘workers’ are themselves the commodities which are traded in a labour market by the usual agents (who have them as endowments and as arguments of their utility functions) – but what is described is not a wage relationship, but a slave economy;
- or it is admitted that ‘workers’ enter the market to negotiate the sale of their ‘human labour’. But the conditions of the ‘workers’ and the ‘usual agents’ are so different that no equivalence in exchange could make sense.  

In other words, the normal reasoning in mainstream economics, when applied to labour, does not legitimise the vision of the wage relationship as being an exchange ruled by equivalence, which is, however, the expected result of assuming that ‘human labour’ is in the commodity space. In order to preserve their social prejudice and to theoretically support it, mainstream economists have to be twice untrue to their usual method.

A first infraction consists of ignoring the fact that ‘workers’ can be traded amongst the usual agents, which amounts to stating that slave economies should not be dealt with. Such a stance cannot be justified except by a moral argument. Slavery is an abomination, but to ignore it does not prevent ‘workers’ from being in the commodity space along with ‘human labour’. ‘Workers’ and ‘human labour’ are physically related as are ‘trucks’ and ‘truck services’. While ‘human labour’ is supposed to be in the commodity space, ‘workers’ are also there – even if they are not sold. ‘Workers’ and usual agents are still two different kinds of human beings, the condition of the former being not clearly stated so far. Which ‘human labour’ may be traded in that strange environment, and how is it done?

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3 In his comment David Ellerman misunderstands the term ‘equivalence’: he admits some degrees, as if an exchange relation may be more or less equivalent. If a wage relationship is not an exchange, which is what I am trying to show, there is no point asking how far from equivalence a wage relationship is. Such a misunderstanding is astonishing, since David Ellerman may be credited with having raised a good question about the employment contract – that of legitimacy. An employment contract is not more or less legitimate by comparison with a commodity sale: it is or it is not! In the same manner, a wage relationship is not more or less equivalent: it is not! No norm can be found for determining the wage rate if it does not result from an exchange relationship.

4 Some authors disagree with such an argument (Nozick, for instance).
The necessity to remedy that indeterminacy gives the opportunity of a second infraction to the ordinary method of mainstream theory. Mainstream economists not only ignore slavery, but they also expel ‘workers’ from the commodity space, pretending nevertheless to keep ‘human labour’ as an element of it. By virtue of the physical bind alluded to above, expelling ‘workers’ means expelling ‘human labour’ as well. ‘Human labour’ being no longer in the commodity space, it would be a nonsense to make it a possible item of usual agent endowments and a possible object of trade.

To sum up, once the double infraction is corrected, we are left with:

- either ‘human labour’ being in the commodity space, with no possibility of conceiving the wage relationship as an exchange since the condition of ‘workers’, although not well-defined, radically differs from that of usual agents;
- or ‘human labour’ not being in the commodity space, which means that only a pure exchange economy may be dealt with, where usual agents share the same condition and trade amongst themselves according to equivalence. Such an economy does not host any wage relationship.

According to the ordinary logic of mainstream theory, dealing with ‘human labour’ as a commodity requires that ‘workers’ who perform ‘human labour’, on the one hand, and usual agents who use it, on the other, belong to different classes of people. Such is the case in the agency models widely used in ‘labour economics’. They presuppose that a usual agent (a ‘Boss’ in Simon, 1951) concludes a contract with a ‘worker’ without making it clear how ‘bosses’ and ‘workers’ are manifested. Sweeping the tricky issues under the carpet is not good practice, even if it helps to preserve social prejudices.

It is better to stop dealing with ‘human labour’ as if it were a commodity and to stick to the image of an exchange economy where independent producers (usual agents) are specialised and exchange amongst themselves the commodities they have freely chosen to produce. No human being can be found in the commodity space. Each producer privately knows the disutility of his/her effort, but no effort is to be found in the commodity space: efforts are not common knowledge. Consequently, there is no room for a wage relationship in such an economy.\(^5\)

Accounting for the ‘stylised fact’ characterising the wage relationship requires us to give up value theory reasoning and focus on understanding how human beings of different conditions may coexist in a market economy.

2. The Wage Relationship is a Monetary Subordination; Means of Payment Circulation Makes it Clear

By its construction, mainstream theory deals only with one type of economic relation: exchange ruled by equivalence. The ‘stylised fact’ above implies that economic theory should be capable of accounting for at least two different types of economic relation: exchange between people sharing the same condition, and the wage relationship between entrepreneurs and wage-earners. Such theory exists. It is radically different from the mainstream, but it is not new. Schumpeter, in his *History of Economic Analysis*, compared the real (value theory) and monetary approaches and maintains that this represents the main split

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\(^5\) Attacking the mainstream at its foundations, contrary to what David Ellerman affirms, is the strongest theoretical critique possible (at least for those who attach a high prize to the internal consistency of a theory).
in our discipline. Here, we will follow in Steuart’s and Keynes’ footsteps (to name two ancestors of this approach) and we will adopt a starting point radically opposed to the mainstream. Instead of presupposing a commodity space, we start from the idea that economic relations are made of payments. This requires three postulates: (i) unit of account (say, the $), (ii) a definition of individuals as accounts in which (iii) payments write down quantities of $. The table below shows how far from mainstream theory we go if we follow the idea that money mediation is the basis of economic relations.

<table>
<thead>
<tr>
<th>Basic postulate</th>
<th>General equilibrium theory</th>
<th>Monetary approach</th>
</tr>
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<tbody>
<tr>
<td>Active individuals</td>
<td>Commodity-space $R^1$</td>
<td>Nominal unit of account ($)</td>
</tr>
<tr>
<td>Relations</td>
<td>Preferences defined on $R^1$</td>
<td>Accounts where quantities of $ are written down</td>
</tr>
<tr>
<td>Condition of relations</td>
<td>Generalised exchange: permutation of commodities</td>
<td>Dollar transfers from one account to another for settlements of debts</td>
</tr>
<tr>
<td></td>
<td>Initial endowments ($\in R^1$)</td>
<td>To be eligible for the minting process</td>
</tr>
</tbody>
</table>

Economic relations may be summed up by a payment matrix displaying the different payments performed during a given period:

$$M = \begin{pmatrix}
0 & m_{12} & \cdots & m_{1H} \\
\cdots & \ddots & \cdots & \vdots \\
\cdots & \cdots & \ddots & \ddots \\
m_{H1} & m_{H2} & \cdots & 0
\end{pmatrix}$$

with $m_{hk}$ being the payment made by individual $h$ to individual $k$.

This is not the proper place to detail every aspect of this approach. Two points, nevertheless, have to be mentioned: (i) prior to any payment between people, a means of payment has to be available from another source (i.e. a monetary authority which cannot be an ordinary individual, but an institution); (ii) let us call the issuance of means of payment the minting process. On the basis of the postulates above, many forms of circulation can be imagined.

Here is the clue to the plurality of economic relations that a monetary approach can deal with, as opposed to mainstream theory. The nature of economic relations is entirely determined by the form of money circulation.

When all human beings (accounts) have access to the minting process, they share the same condition: they are all able to intervene directly in the market (to run a specialised activity according to their free will). They are able to spend independently from each other. Translated into plain language: they are free to decide in which type of activity they will specialise (under the constraint of the minting process). Decentralised decisions – payments coming from other people – validate (or not) individual choices, leaving room for balance of payment settlements (note, incidentally, that disequilibrium is the rule, equilibrium the exception). This form of circulation may be said to characterise pure exchange relations. Figure 1 illustrates the point:

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When only a fraction of human beings have access to the minting process (let us call them ‘active human beings’), this generates a difference of condition. Those people who do not have access to the minting process cannot intervene directly in the market, which means that they are unable to run an independent process of specialisation. They are unable to exist economically, since they cannot perform any payment. Their existence as economic agents is entirely conditional on the payments made to them by the active human beings. These transfers may have different motivations and generate diverse forms of circulation. For what interests us, the wage relationship can be represented by the form below in Figure 2.
Active human beings (represented by the hexagons in figure 2) make some non-active human beings (the black circles) participate in their own market specialisation. That process defines firms (the ovals encircling both types of human being), with active people being the entrepreneurs and non-active people the wage-earners. While the former have the capacity to choose their specialisation, the latter have not. Consequently they work for the account of the firm and of the entrepreneur. Wage-earners are not responsible for what firms produce and their relation with the market is not direct, but only occurs via the entrepreneurs: they are subordinate to them. Wage payments (black arrows in the oval of the firm) cannot be interpreted as a market relation, nor as an exchange. They are sui generis operations shaping a specific relation: the wage relationship.

This relation is twofold:
- Inside the firm, wage-earners work for the account of the entrepreneur, who is economically responsible for the firm’s activity. Wage payment is unilateral: it submits wage-earners to the firm;
- Outside the firm, wage-earners spend their wage as they please in a way which does not distinguish them from other people; nothing prevents them from having the same non-economic conditions as other people (citizenship, property rights, and so on).

The monetary approach of the wage relationship perfectly fits the ‘stylised fact’ reported above, i.e. a monetary subordination inside the firm compatible with a full political citizenship and the freedom to spend wages in the market.

A deeper analysis (see Cartelier, 2016) develops the idea that wages are a cost for the firm (cost is a meaningless notion in a pure exchange economy) while payments between firms (or entrepreneurs) appear as gross profits. The internal logic of the wage relationship circulation (Figure 2) differs significantly from that of exchange (Figure 1). The latter validates specialisations chosen by active people; the former is centered on the difference between proceeds and costs, i.e. on profits. This is reminiscent of Marx who, in Capital, opposes $C - M - C'$ (with $C = C'$) and $M - C - M'$ (with $M' > M$). Along that line of reasoning, it is worth emphasising that the two elements of the wage relationship (respectively wage payment and payments out of wages) join in a unique process; the square in Figure 2 encompasses the whole of wage-earners to make it clear that wage-earners form a group (a ‘class’ as Marx would say).

That some human beings – wage-earners – appear to be (and are) a cost for others (firms and entrepreneurs) is the most significant and specific characteristic of a market economy when embedded in a wage relationship. This is probably the essential feature which distinguishes a market economy from an exchange economy – where everybody is in a symmetric position vis-à-vis anybody else.

In spite of the apparent homogeneity of economic relations, using the concept of money mediation we can visualise two very different relationships – thanks to a monetary approach. The main ‘stylised fact’ of the wage relationship, i.e. the coexistence of subordination inside the firm and freedom in the market, is reproduced in our approach, whilst it is impossible within Ricardian and Sraffian theories (which fail to account for freedom) and to mainstream theory (which fails to account for subordination).

The monetary approach also provides an alternative to Coase’s theory, which argues that the co-existence of exchange (in the market) and hierarchy (inside the firm) is the result of an arbitrage about relative costs:

‘We may sum up (...) the argument by saying that the operation of a market costs something and by forming an organization and allowing some authority
(an “entrepreneur”) to direct the resources, certain marketing costs are saved’ (Coase, 1937, p. 392).

Coase’s view, interesting as it is, leaves unsettled the question of by whom and how such an arbitrage is performed.

3. Exploitation of Wage-earners by Entrepreneurs is Inherent in the Wage Relationship

Amongst the many topics within a theory of the wage relationship, exploitation is without a doubt the hottest. Two types of exploitation (in the economic sense) are currently discussed.

The first one is very general since it refers to a norm. Any economic agent who gets less from the market than the norm is considered to be exploited by any other who gets more. For example, if the norm is marginal productivity, any holder of a production factor would be considered by those whose income is greater to have been exploited if his/her income is less than that norm. This notion of exploitation is not specific to the wage relationship (wage-earners may exploit not only entrepreneurs, but also land owners) and has something to do with social justice.

A second interpretation of exploitation is specific to the wage relationship. Marx is the main reference. Wage-earners are exploited when the value of the labour power – which is determined by the quantity of social labour involved in its production, like for any other commodity – is less than the quantity of value its utilisation provides to the capitalist. That difference is called surplus value and may be interpreted as non-paid labour, according to Marx. Here, the exploitation of workers by capitalists relies on the norm, given by the labour value theory.

These notions of exploitation are not acceptable as far as the wage relationship is concerned.

The Marxian theory of exploitation relies on two concepts – the labour theory of value and labour power as a commodity. But both these concepts are incorrect from the point of view of Marx’s commodity theory: (i) there is no quantitative determination of labour values respecting Marx’s idea of the double character of labour embodied in a commodity;7 (ii) labour power is not a commodity since it does not satisfy the condition put forward by Marx ‘to be privately and independently produced’ (see Cartelier, 1991).

The normative theory of exploitation may be meaningful when applied to transactions ruled by equivalence (as is the case in competitive general equilibrium theory). But it cannot apply to the wage relationship: ‘human labour’ (which is what Marx called ‘labour power’) does not belong to the commodity space; humans are not commodities. As we have seen above, the wage relationship is not mediated by a commodity, but exists as a specific form of money circulation.

Exploitation has to be reexamined on this new basis. The wage relationship differs from exchange due to the difference of condition between entrepreneurs (or independent producers having access to the minting process) and wage-earners. Elaborating a little further, the effects of this difference lead to a pertinent notion of exploitation.

7 Stavros Mavroudeas does not agree (this is an understatement) with my thesis. But he does not discuss my point. I do not pretend to give an explanation of how capitalism was born, nor to give a fully-fledged view of the working of capitalist economies. Concerning Marx, who is not at the centre of my paper, I am content to point out some inconsistencies in his economic reasoning. The definition of commodity production he provides should not allow him to treat labour power as a commodity. He has to do so, however, to elaborate his surplus value theory. Marxists too often turn a blind eye to these logical flaws. It is a pity.
An independent producer or entrepreneur freely decides what, how and how much he/she produces. The counterpart of that freedom is that he/she complies with decisions of other independent producers. Freedom and responsibility are the two sides of the same coin. Prices and quantities determined by the market are objective, and all independent producers take them as such.

Consequently, any independent producer or entrepreneur decides his/her expenditures (or efforts) taking into consideration his/her expected proceeds (reward). Mainstream theory is crystal-clear on this point: an independent producer maximises his/her satisfaction, which implies that the marginal utility of the reward just compensates for the marginal disutility of the effort (labour). In a monetary approach, the same is true but expressed as the equality between expected proceeds and expenditures (Keynes’s effective demand theory applied at a microeconomic level).\(^8\)

Very different is the situation of wage-earners. They decide neither what, how nor how much to produce. A clear consequence is that wage-earners do not master their reward nor their efforts. The unique arbitrage open to wage-earners is not to equalise marginal utility of reward and disutility of effort, but to equalise disutility of effort and risk of being fired, which depends on the internal organisation of the firm, not on the market. In money terms, wage-earners decide their expenditures, not their reward (this is reminiscent of Keynes’s rejection of what he called ‘the second classical postulate’). A straight consequence of the specificity of the wage relationship is that wage-earners have only an indirect relation with the market through entrepreneurs. Entrepreneurs may go bankrupt if disequilibrium is too great, and wage-earners lose their jobs – which is not at all the same thing.

To sum up, two differences in the condition of entrepreneurs and wage-earners are meaningful:

- entrepreneurs and independent producers master the two elements of their budgetary constraint, while wage-earners master only their expenditures (not their reward);
- entrepreneurs and independent producers determine their efforts through an arbitrage in the market, wage-earners determine their efforts through an arbitrage inside firms.

In this double difference lies exploitation.

If we consider the different types of exploitation enumerated by Fleurbaey, the exploitation inherent in the wage relationship is the one he calls M-exploitation: any human being utilised by another human being as a means oriented to his/her own ends. This is precisely what characterises the wage relationship. The specific form of money circulation shows clearly the monetary subordination of wage-earners (compatible, as we know, with full citizenship and property rights). We have seen above that wage-earners are a cost for entrepreneurs. So, expressed in another way: wage-earners are used as a means by entrepreneurs to get profits. Consequently, wage-earners do not master their efforts, which are determined by the organisation of the firm.

Modelling the differentiation between entrepreneurs and wage-earners may provide a quantitative expression for the exploitation inherent in the wage relationship (Cartelier, 2014). If \( x \) is the effort resulting from the arbitrage inside the firm and if \( y \) is the effort resulting from the arbitrage in the market, the rate of exploitation may be defined as \( \frac{y-x}{x} \).

That notion of exploitation does not depend on the level of wage and, more generally, has no relation with income distribution. Neither does it concern any idea of social justice in an economic sense. No economic norm is relevant except the one we have emphasised, that

\(^{8}\) In both cases second-order conditions matter but this ‘technicality’ may be neglected here.
is, the differences between their relation to the market (direct for entrepreneurs, indirect for wage-earners). The heterogeneity of condition, which prevents us from assimilating the wage relationship and exchange, also prevents us from considering, as Coase seems to believe, that market and hierarchy are just two modes of coordination between which an arbitrage – in terms of cost – is possible.

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References


