A RESTATEMENT OF THE MARXIAN THEORY OF VALUE (*)

by

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ABSTRACT

This article presents an interpretation of the Marxian theory of value which deeply differs from the prevailing interpretation in which Ricardo's and Marx's theories are seen as identical. In my view, value is not linked to the mere embodiment of labor. Rather it refers to the process of validation of private labor. Thus the emphasis is put, not on a technological aspect - the difficulty of production -, but on the social form in which the production decisions are made and sanctioned. This leads me to argue that the Marxian theory of value should not be seen as a production theory but that the creation of value is rooted in the interdependence of production and circulation. In such a perspective money receives a central place. Indeed, I defend the view that the theories of value and money must form a unique entity. They cannot be dissociated. The impact of these elements on the scope of relevance of the theory of value is examined. Particular attention is paid to the contradiction between two temporal orders, the diachronic and the synchronic, and its effects on value regulation. Finally the article introduces the notion of loss of value to point out the effects either of failures in private initiatives or of obsolescence.

INTRODUCTION

This article, which synthetizes some of the ideas contained in a forthcoming book [1], aims at inviting a change in the understanding of the Marxian theory of value, which has prevailed in the Anglo-american literature ever since the works of Dobb, Meek and Sweezy and until the recent contributions by sraffian marxists [2]. In a nutshell the main characteristic of this interpretation is that for all practical purposes it makes identical the content of the Marxian theory of value and that of the Ricardian theory. The article, on the other hand, defends an interpretation in which the two theories are radically different.

Three differences will be advocated which all amount to a narrowing of the scope of relevance of the theory of value. Firstly, I locate the creation of value, not in production, but at the articulation of production and circulation. Secondly, I argue that the theory of value simply does not stand up without a theory of money and that this interconnection has important consequences for the relationship between values and prices. A third and less noticed difference flows from the consideration of the relationship between two dimensions of time, which I call the synchronic and the diachronic logic (or logical time versus historical time). On the one hand, the theory of value, as I see it, provides a space of measurement which enables norms of exchange, i.e. prices, to emerge. But these norms derive from instantaneous constraints, pertaining only to conditions prevailing at the point of exchange. On the other hand, capitalism, more than any other system, involves irreversible structural changes which have the effect of perpetually modifying the norms of production and exchange. Therefore, the value regulation is always impeded by the destructuring effects of the diachronic logic. This leads me to argue that if the theory of value is about the definition of a situation of equilibrium in a commodity system, it is nevertheless inherent to this system that the equilibrium can never be reached, not only because of market imperfections but also and mainly because of the effects of this irreversibility of historical time. The awareness of the interrelationship between the two logics has important theoretical consequences. On the one hand, it invites new assumptions and new syntheses for the investigation of capitalist regulation. But, on the other hand, it suggests that some paths of research, which Marxian theoricians have bread, may lead to a dead-end.

Taken one by one, the ideas presented here are not entirely original. Indeed this article is influenced by a line of thought which has mainly been fostered by French authors, many of whom have published in the series Interventions en économie politique (Benetti 1974 ; Benetti and Cartelier 1978 ; Cartelier 1976 ; de Brunhoff 1977 and 1979 ; Deleplace 1979 ; Dostaler 1978 ; Fradin 1973). Although these writers do not necessarily share the same positive view, all of them question the Ricardian interpretation of Marx. In the English-speaking tradition rather similar positions have been taken by authors like Piling (1972) and Gerstein (1976). But my main source of inspiration is Aglietta's work (1979 a and b ; 1980). In fact this essay could partially be described as an effort to make explicit the theory of value contained in Aglietta's Theory of Capitalist Regulation and to present it in a pedagogical way. Such a task is useful because this theory, despite the central role it plays in the argument, is introduced in a rather condensed and allusive manner. Consequently, as I learned from the use of this book in graduate courses, many readers fail to grasp its full significance. On the other hand, the article is more than just a summary or a review, because it introduces a number of new elements.

It should also be indicated that the aim of the article is not to trace the origin of the ideas, which it develops, back to Marx own writings. It is not claimed that my interpretation of his ideas is the one and only possible one. My feeling is rather that Marx's writings are sometimes contradictory which has as consequence that both Ricardians and "anti-ricardians" can find passages legitimating their own views in them. Furthermore, although this article contains an implicit criticism of the way in which problems are tackled by the Ricardian interpretation (indeed if one agrees with my problematic, several of the main questions raised by this interpretation lose their meaning), it does not aim to make this criticism explicit.

The article is composed of five sections. In the first one, I will argue that commodity production is a specific social form and I defend the view that the relevance of the theory of value is confined to this social form and that the creation of value implies an articulation of production and circulation. The second section examines the problem of the relationship between the two time-structures and its effect on the process of transfer of value. The third section advocates the principle that the categories of money and value are indissociably interconnected. In the fourth one I present some remarks about the relationship between value and prices. The final section deals with the effects of the lack of attainment of the equilibrium situation. The concept of loss value is introduced to designate the effects of failures either in the creation of value or in its transfer, while the concept of profits and losses of circulation is developed to designate the effects of the absence of a fully competitive structure or of a discrepancy between supply and demand.

I. The commodity system

In the English tradition the Marxian labor theory of value is usually defined as a production theory. Value is linked to the difficulty of production or,in other words,to the average amount of labor required to produce a given good. The field of relevance of the labor theory of value is boundless. It aims at universal explanation. It is deemed relevant to pre-capitalist societies and also to capitalist or socialist ones.

The view defended here is different. The pertinence of the concept of value is limited to the capitalist mode of production, seen as a system in which the class structure takes the form of the wage relation and in which the commodity is the predominant social form taken by the products of labor. This view implies a narrower definition of the concept of commodity than the usual one, which is simply characterized as the articulation of a use-value and an exchange-value. Here the notion refers to a specific theoretical space, membership of which depends on the social form in which production is effected and not on physical criteria [3]. What then is a commodity system ? It is a particular system of allocation of the labor force of a society or óf formation of its social labor. The latter concept refers to the labor of society seen as a "collective worker" and having to reproduce itself (i.e. the social structure in which it consists) through an allocation of its labor force to several objects of production. Social labor is a generic or universal category. One has thus to distinguish between the specific forms through which it is constituted. The main feature of the commodity system, in this respect, is that here social labor is formed in an indirect way. Labor is first performed as private labor, initiated by an independent decision. It is transformed into social labor through, and only through, the sale of its product. When social labor is formed in this context, it is called abstract labor, the adjective referring to the operation of homogeneization or abstraction achieved by exchange on the market. Thus the notion of abstract labor does not refer to labor in general as a universal category. It simply means : social labor in the context of a commodity system. The specificity of the latter can be approached in another way, by saying that its main feature is the independence of the producers (.This term refers not to the people performing the actual labor but the agents making the decisions about what to produce, i.e. the capitalist class). In this context the creation of value is no longer just a technological process. It depends on social recognition by the market of a privately initiated allocation of the social labor force. Thus the notion of value, rather than being linked to a mere embodiment of labor, refers to the validation of private labor. In this system there is a dissociation between the expense of labor (or in the case of services, the mobilisation of a labor force at the disposal of customers) and its validation. A somersault has to be succesful. This implies that failure is possible. The meaning of private labor is thus as follows. When capitalist units undertake private projects they are taking, so to speak, a debt-position towards society. They intervene privately in the allocation of the society's labor force with the expectation that their private choices will receive recognition social through the sale of the commodities [4]. If this expectation meets with success, the debt is liquidated. Value is created and an income is formed. They recover their capital expenditures and get a profit. When the projects fails, however, the picture is different. No creation of value occurs. As analysed by Aglietta :

> "*The lack of sale of the production and exploitation deficit signify that the individual producer must himself privately buy something that society has not validated but whose expenditure has for him been inscribed as a cost, since in order to produce these commodities without social utility he has nevertheless withdrawn a part of the productive force from society*". (1979 b : 17-18)

In this interpretation, the concept of value points to an articulation of production and circulation. It cannot be seen as a production theory as in the Ricardian interpretation, since in the case of absence of circulation, i.e. of sale, there is no creation of value at all. The transformation of private labor into social labor occurs only through exchange. On the other hand, however, it is not a pure circulation theory because, once there is a sale and thus a creation of value, the magnitude of value depends on the average conditions of production prevailing at the point of exchange. Exchange creates value but production determines the magnitude of value.

The commodity system thus appears as two-sided. On the one hand it is anarchic. There is no explicit and authoritarian allocation of the social labor force. But, on the other hand, there must be some social cohesion, so as to ensure the reproduction of society. This occurs through a posteriori norms. The theory of value is precisely about this whole process of indirect regulation.

Logically, the first question, which this theory has to settle, is the following one. In order to make commodity exchange possible, a theoretical space of measurement must exist, so that the hetoregeneous products of private labor can be transformed into equivalent categories. This is the "raison d'être" of value. It constitues a space of commensurability without which no relation of equivalence could be established. Prior to any measurement, an abstraction must be constructed. As said by Fradin :

> *"In order for the notion of a relation between two goods to make sense, a real measure of goods must be defined (this is either made implicitly or is openly admitted). This entirely transforms the notion of economic object, as the notion of physical object is exploded by the introduction of the mass as a unit of measurement"* (1973 : III,7)

Thus value is a necessary category because it makes possible the transformation of economic objects, i.e. heterogeneous realities, into commodities, i.e. products of abstract labor. All this is realized through exchange. As said by Gerstein :

> *"There is no way to reduce observable concrete labor to social abstract labor in advance, outside of the market which actually effects the reduction"* (1976 : 250)

This reflection on the scope of the theory of value leads us thus to point out two limitations of the theory of value [5]. Firstly, in our view, it is only valid for a particular type of system of organization of social labor : the commodity system. The second limitation is more subtle. If we argue that value is created at the articulation of production and circulation (in a commodity system), then value refers to a measurement whose validity is limited to the point of exchange. In other words, value is an instantaneous measurement. The social cohesion, which it backs up, is synchronic. The idea of an ever-existing value, an "embedded" value, makes no sense. This second limitation has important theoretical consequences, which we will now examine.

II. The contradiction between the synchronic and diachronic logics

As just stated, in our conception the existence of value cannot but be fugitive. But then, how are we to relate the different points of exchange ? How can an inter-temporal cohesion establish itself ? Several sub-questions are involved. The first one refers to the fact that there must be a category whose function is to overcome this caesura between the points of the time-sequence. In the next section we will argue that it is precisely one of the two theoretical "raisons d'être" of money. We thus leave this point for future treatment. The second question refers to the way in which value,created in precedings cycles , may still intervene in the production of current value. This is the problem of the transfer of value. It arises because there is no overlap between the length of the cycle of production and exchange (if one makes the heroïc assumption that a unique one could exist) and the length of the process of utilization/destruction of the means of production. This raises a very concrete problem for capitalist units : the amortization of their expenditures on constant capital. The third problem involved is related to the second one, but, instead of concerning the relation between past and present, it involves that between present and future. Here the problem confronting capitalist units is that by making their decisions, especially on investment, they commit themselves to making definite payements while having only prospects of receipts. This uncertainty (in the sense of Keynes [6]) is derived from two features which are related to the deep nature of the capitalist system. The first one is the already stressed separation and independence of the producers. The second one, to which we shall shortly come, is the irreversibility of time, which capitalism breeds to a far greater extent than any other mode of production (see Devillé 1980).

The problem of inter-temporal cohesion would not be so crucial if time elapsed without change taking place or, in other words, if there was a constant reproduction of the norms of production and exchange. In this case, the principle guiding the integration of past commitments would be rather simple. Let us assume that the means of production retain the same efficiency all through their life-time and that the latter is a multiple of the duration of the production cycle of final commodities. Then, at each cycle, a part of the total value of the machine will be transfered [7] to the value of the commodity, with the magnitude of the transfered value depending on the multiplying factor. At the end of each cycle, the total value then consists of two components : value created (i.e. the product of abstract or present labor) and value transfered (i.e. the product of past reactualized social labor). Likewise, at each cycle the means of production loses a fraction of its initial value, so that in the end it is, from the physical point of view, worn out and attains zero value, on the value axis. The transfer of value thus establishes a system of communicating vessels between the means of production and the final commodity. This achieves the inter-temporal cohesion, providing the relations of equivalence are maintened over time. The progressive drop in the value of the means of production, expressing their physical wear and tear, will be called depreciation. Its monetary counterpart is amortization. At the end of the life-cycle of the machine the amount of money put in the amortization fund should permit the purchase of a new machine.

Let us stress at this point that the transfer of value is not an automatic process but a conditional one. As seen before, the expenditure of private labor is not a sufficient condition for the creation of value. Likewise, it is not because means of production are utilized that a transfer of value occurs. The final commodities must therefore be sold. This sale effects two sanctions : on the one hand, it validates private labor, and on the other it reactualizes social labor, which has already been validated in the past. If these commodities are not sold, the failure also becomes two-fold. It is at one and the same time a failure to validate and to transfer value.(Thus, strictly speaking, we must dismiss the notion of embedded value since it suggests that value can be a permanent characteristic of commodities).Both the creation of value and its transfer are instantaneous processes. Means of production may preserve their value either as long as they can be the object of a second-hand sale (this is also the case for other commodities) or as long as they can be productively consumed within an unchanging norm of production. But this preservation is conditional since it depends on the occurence of the sale.

However, the notion of time underlying the preceding reasoning and characterized by the absence of change, cannot be defended. The notion of time as irreversible is more appropriate to capitalism than one of constant reproduction. The paradox of the capitalist mode of production is that the maintenance of its basic class relation, i.e. the wage relation, entails unceasing transformations. These concern the norms of production (and if they change unevenly from one branch to another, they modify the norms of equivalence), and also the creation of new products and branches, the mode of consumption, the market structure, the intervention of the State. The distinguishing feature of these processes is their irreversibility. Once a change has been introduced, it is not possible to return to the previous situation. At the core of this constraint to change, characterizing so uniquely the capitalist mode of production, we should place neither the "animal spirits of entrepreneurs" as Keynesians would often say, nor competition, as many Marxists would probably argue. Rather, following Aglietta, we would locate the source of change in the wage relationship itself, i.e. the class antagonism which is typical of the capitalist mode of production. "Progress" could thus be seen as the result of class confrontation.

> *"Technical progress is the essential modality of resolving the conflicts which recur in production. It permits the capitalist management to perpetually assert itself over the wage-earning class. Technical progress is thus indissolubly a material transformation and a change in the social relations established within production. It segments and restructures the wage-earning class, incorporates and defuses wage claims when they tend to become amplified and generalized. It destroys or channels antagonisms by transforming the regulation of labor and the organization of collective labor. Such is the source and the orientation of innovation and the reason for its inexhaustible character within the wage relation. Such is the mistake of economists who think that the origin of innovation lies solely in competition between firms, and who have therefore announced the euthanesia of technical progress as a result of the centralization of capital"* (Aglietta, 1980:13)

Technical progress makes the norms of production more efficient. This impedes the "normal" process of transfer of value. Let us assume that the value of a given machine diminishes. This will change the norm of production. A series of changes follows from this : the efficiency rises,the value transfered per unit of product (and thus also the value of the final commodity) drops. In a context of full competition, the endowment to the amortization fund per unit of product is also lowered. This does not present a problem for those capitalist units which bought the machine at the new price, corresponding to the new magnitude of value. But it does for those which bought it at the old price : they cannot fully recover the expense incurred on purchasing it. The same situation occurs when a new machine, which is more efficient, is introduced. As its use becomes generalized, all units must adopt it in order to keep up with the new norm , even if the previous machine is not worn out. In both cases there is a drop in the value of the means of production in addition to its depreciation. We call it a devalorization[8] . Its physical counterpart is obsolescence (as distinguished from wear).

The two logics, the inter-temporal one characterized by this unforeseeable irreversibility and the synchronic one, interact in a very specific way. The first one in fact impedes the full functioning of the second one. The relations of equivalence have no reason to remain stable over time. Furthermore, the fact that new norms are always emerging does not allow the preceding ones to fully impose themselves.

What is the theoretical consequence of our argument ? It does not deprive the theory of value of all significance or consistency but it undoubtedly indicates its limitations. These can be expressed in two ways. Firstly, the theory of value refers to one dimension of the functioning of the capitalist system and cannot grasp the specificity of physical and structural changes brought about by the development of capitalism. It points only to the invariant elements of capitalism. For example, whatever the regime of accumulation and the structural position , the rate of profit may always be defined as dependent on the interaction between the rate of surplus-value and the value-composition of capital. To express this in another way, one can state that the theory of value is an equilibrium theory but that the achievement of equilibrium is totally out of reach, not because of market imperfections but because of the importance of the diachronic logic which perpetually mitigates the operation of the instantaneous norms. If, for us, this disruptive logic does not dismiss the theory of value, it must however not be overlooked. Its presence should influence the judgements that one could make about the interest of some topics of research, as for example simple and expanded reproduction. In the light of the preceding remarks, this becomes a very formal and academic question. Indeed by assuming the absence of change in the norms of production and exchange,this theory is entirely disconnected with what, in our view, constitutes the core of capitalist development. What is called growth in such theory is the opposite of real capitalist dynamics.

III. Money

Of course, every economic theory admits that money plays an important practical role in market economies. But they disagree on its theoretical place. The most common view originated with Adam Smith. It is shared by both neo-classical economists and Ricardians and also by such eminent Marxists as Dobb, Meek and Sweezy [9]. It claims that market exchange does not essentially differ from barter. Certainly money facilitates exchanges, they would assert, but its presence is not theoretically required. The system could also function without money. Thus, to use the well-known metaphor, money is a veil which must be lifted to get to the real world. A dichotomy is set between the field of value (aiming to explain the exchange-ratios) and that of money. This is not at all the case in our view, where both concepts are intrinsically linked.

For us the theory of value is incomplete without the introduction of money. It simply does not stand up. Two reasons are advanced in defense of this thesis, both being linked to instantaneous character of value. The first results from a paradoxical feature of abstract labor, defined as the form taken by social labor in a commodity system. Abstract labor is considered as a theoretical category permitting the commensurability between objects which are heterogeneous in all respects, except for the fact that they are products of abstract labor. It is said, as a first approximation which must be amended in the second stage of the reasoning, that the exchange relationships between commodities depend on the amount of abstract labor which their production has required. But a problem arises : in fact abstract labor seems not be able to play its role in the allocation of the social labor force and this for two reasons. Firstly, it is an invisible category constructed only through reasoning. Secondly, it bears a real contradiction which has already been pointed out by Marx in his Contribution to a Critique of Political Economy [10]. On the one hand, to say that abstract labor serves as the foundation of commensurability and the basic criterion for determining exchanges ratios, implies that it is logically anterior to exchange. But on the other hand, it is also asserted that abstract labor and value are formed only when exchange actually occurs. This implies that abstract labor is logically posterior to exchange. Thus to accomplish its function, abstract labor must, firstly, have a visible and concrete substitute and, secondly, the latter must be such that it does not betray the paradoxical relation of abstract labor to exchange. This is exactly what money fundamentally does. As far as the first aspect is concerned, it is an institutionalized symbolisation of abstract labor [11]. Money allows the private activities to form a social coherence and the products of such activities to exist as commodities. It is through their relationship with money that they can gain a social recognition. With the introduction of money, the validation process receives a more concrete meaning. Owners of means of production can take whatever production initiative they want, as long as they satisfy one condition, called the monetary constraint : their products must be sold, i.e. exchanged for money [12]. Payment is the most fundamental rule of the game in a commodity system. Contractual engagements must be fulfilled under pain of legal punishment.

As far as the second aspect is concerned, money contains precisely the paradoxical feature described above. It is at one and the same time an autonomous and a dependent category. As an autonomous category, it pre-dates exchange and is a locus of new impetus. But it is dependent because, ultimately, the monetary system is submitted to the requirements of commodity exchanges. Any monetary impulse which does not generate a validation leads to correcting effects, whose logic is to re-establish the submission of money to exchange [13].

The second reason for the necessity of money flows from the question examined earlier of the contradiction between synchronic and diachronic logic. A diachronic category must exist in order to make possible the transition from one set of norms to another. Again, this is exactly what the reconstitution of the general equivalent permits. On the one hand, money secures the permanence over time of the theoretical categories established in an instantaneous approach. This enables economic agents to make economic calculation over time [14]. On the other hand, the variability of the general equivalent will express the transformation of the social norms. In other words, the intertemporal instability resulting from technical progress is projected onto money. The following quotation from Aglietta synthetizes the argument :

> *"Even though (in either classical or neo-classical orthodoxy) the price system assumes a very different sense for each of these schools, it always possesses the characteristic that it can only be defined in relative terms and depends on the exogenous variable of the conditions of production and exchange. Transition from one set of conditions to another is totally unintelligible here. Only the Marshallian school has sought to tackle this problem with a typology of equilibria over time. But for want of any support in an adequate theory of value, this empirical approach cannot analyse the real historical process of irreversible transformations of the conditions of production. Only a theory of value for which the monetary form of price is not a disguise, but rather the exclusive modality of homogenization of production activities and the conditions of existence for exchange relations, can go beyond the notion of a coherent system of relative prices. The permanence over time of monetary prices makes it possible to understand*

> *the incoherence over time of the price system as the characteristic of any real dynamic - in other words, one that is irreversible and radically uncertain for the individual economic agents caught up in it* (1979a : 300).

To sum up, our view (which we agree is as unprovable as the counter-view would be) is that money is not just a practical device aimed at facilitating exchange. Rather, its presence expresses a theoretical necessity. It is a category indispensable to the working of value regulation.

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Some further comments on the characteristics of money (as we see it, in a way which is sometimes dissenting from "orthodox" Marxism) should be made. We group them into three points.

1) The endorsement by a use-value of the role of general equivalent occurs through a process of exclusion. This has been well described by Marx. However it should also be stressed that the operation of attributing monetary status (monetization) involves State intervention. This is the minimal economic intervention of the State in a system otherwise characterized by its very absence. It bears mainly on the following objects : the officialization of the choice of general equivalent, the definition of the taxonimic system of monetary subdivisions, and in the case where money has a physical support, the definition of the correspondence between the monetary pivotal unit and the physical one.

2) It should be specified that one must not confuse money with its physical support. For example it is a mistake to say that gold is money. The metal itself never constitutes money. The latter is an institutionalized system of denomination which can, but must no, be affixed on a material basis. In other words, money is a social relationship, originating in the process of monetization, and not a physical reality . Although many Marxian will probably agree on the principle, in practice confusions arise quite often. For instance, if money is a sign affixed on an object and not the object, then changes affecting the object do not necessarily have an impact on the sign. If the productivity of gold extraction

rises, this may affect the exchange value of the monetary unit but this is not necessary, because the physical modification can be exactly compensated by opposite modifications in the definition of the correspondence between the monetary and the physical units.

3) As already stated, as we understand it, the notion of value is linked to the process of validation of private labor rather than to the expense of labor. This has one effect for the theoretical status of money : it can no longer be said, as Marx used to say, that money has a value (and inasmuch as the scopes of relevance of the concepts of value and commodity overlap, that it is a commodity). Our assertion is simple to state. We would link the notion of validation to the possibility of non-validation. It cannot be an automatic, guaranteed operation. Now this is exactly what is going on with money. Since it is the institutionalized representation of abstract labor, validation is not a challenge to it. The production of money never faces problems of outlet. Money is always exchanged, even at a varying rate [15]. Marx had already demonstrated that money could not have a price. If one now accepts that it has no value, it retains only one of the three features abscribed to commodities : an exchange value.

IV.The articulation of the concepts of value and price

When validation of private labor occurs, only one thing is observable : a given use-value is sold at a certain price, called the actual or market price. But in order to explain the magnitude of the latter, a series of interconnected concepts, which have no direct observable counterparts, must be constructed. One feature of the Marxian theory of price, as we see it, is that it does indeed develop a conceptual framework which is far more complex than that of orthodox economics. The concepts of value, exchange value and price, which in other paradigms are used as synonyms, are here each given a very distinct meaning. Furthermore, the notion of price is considered a generic one, which must be broken down into several different forms. In this section, these definitions and distinctions are briefly recalled.

First, we must comment on the meaning of the notion of price. In neo-classical and Ricardian paradigms, when one speaks of price, it is understood that one refers to a so-called relative price. It expresses the equivalence ratio between physical units of different goods. It is a "real" ratio.

As this is also the definition of the exchange value, the two notions are thus identical. This amounts to an expulsion of money. To reintroduce it, one has to specify by adding the adjective "monetary" or "nominal" to the term "price". On the contrary, in our approach, when we use the notion of price, we always mean monetary price, so that the adjective is, in fact, redundant. The notion of price refers to one out of all the possible expressions of the exchange-value of a commodity : that in which it is expressed in terms of monetary units. This difference in meaning is not just a question of convention. It goes back to a radical difference in the role attributed to money. In the conventional view money is exogeneous. The relative equilibrium prices are determined independently of any monetary condition.In our approach,on the contrary the real economy is first and above all a monetary economy. Money is what makes prices exist. It is logical precondition for the construction of the concept of price. As de Brunhoff puts it :

> *"Money is not added afterwards to a non-monetary economy. It necessarily confronts the commodity, so permitting it to express its value"* (1979 : 47)

This remark being made, we can now examine the articulation between value and price [16]. These two notions are intrinsically linked, since they refer to the same process, i.e. the validation of private labor. The creation of value, the settlement of the effective price and the formation of the seller's income cannot but occur at one and the same time. Value is a concept which does not pretend to be observable. It expresses itself only through the mediation of price. To speak of a value existing in itself, independently of its expression in a price, makes no sense in our conception [17]. The two concepts can only be separated in intellectual reasoning. It can then be specified that value refers to a foundation aspect and price to a phenomenal one. To borrow philosophical language, their relation is one of "dissimulation-manifestation". On the one hand, the price hides the value, since in the sphere of what is observable, it fills all the space. On the other hand, however, the price indicates the value, since questioning the nature and possibility of the price leads to the construction of the concept of value.

These qualitative considerations have, of course, quantitative consequences. They must be examined at two levels, a macro-one refering to the whole of social production and a micro-one dealing with particular commodities. We shall start with the former. Let us assume a very abstract closed commodity system in which, firstly, all products of labor take the form of commodities (i.e. there is only productive labor) and, secondly, there is no rent on natural ressources. If the velocity of circulation is equal to one, an assumption that we will make for the sake of ease, the quantity of money in circulation equal the total sales or incomes, i.e. the sum of prices. At this abstract level of a pure commodity system, there is a strict correspondence between the sum of prices and that of value. Indeed in such a situation no income can be formed except by the creation or transfer of value. Thus the total income is the monetary form of total social labor and its division among the different agents reflects their claims about the sharing of the total product of social labor. Following Bullock and Yaffe, one can state :

> "*It is quite impossible for total prices to express anything other than total value*" (1975 : 14).

This relation must not however be misinterpreted. The concepts of value and price belong to different theoretical spaces. As a result, mathematical operations mixing them in the same equations make no sense. Unfortunately this is rarely noticed and most people, following Marx in this error, seem to assume that these operations are epistemologically legitimate. They say, for example, that a quantity of value is bigger than a quantity of price or that the sum of values could be bigger, smaller or equal to the sum of prices. This cannot be accepted. Only an overall quantitative link can be brought in, through the concept of the monetary expression of social labor time (in abbreviation : ME)

$$ME = \frac{\text{Sum of prices}}{\text{Sum of values}}$$

It indicates how many monetary units the quantum of total social labor (value created and transfered) is equivalent to[18]. In our closed abstract system the dimension of the space of prices, i.e. the sum of prices, can change through only two channels : either there is a change in the dimension of the space of value, i.e. in the total value produced (created and transfered) or there is a change in the ME [19].

We can now turn to the relationship between value and price with respect to particular commodities. Firstly, the epistemological remark made above must be repeated. No arithmetical operations can be made which would mix values and prices in the same equations. However there exists one possibility that the same numbers would describe both the magnitude of value and that of price. It would be the case if the following four conditions were assumed (without furthermore forgetting our more general assumptions) :

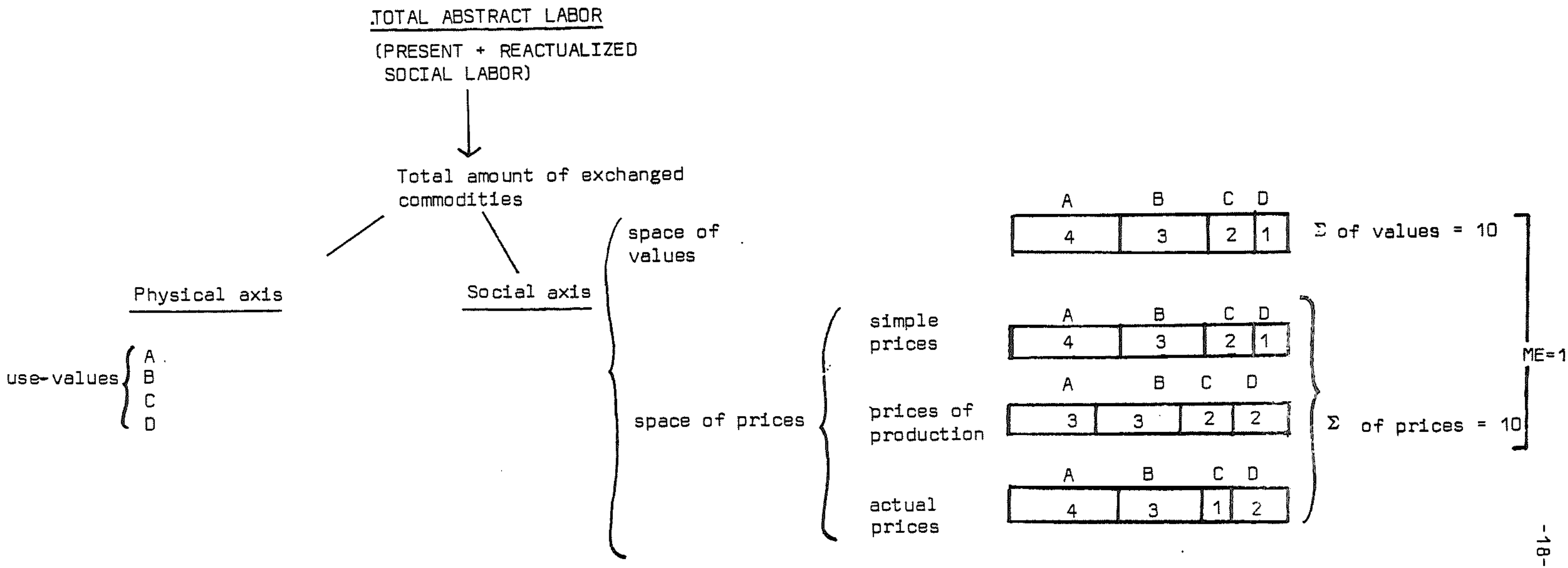
1) ME = 1
2) the different branches have the same organic composition of capital;
3) for all commodities receiving validation, at the supply price the quantities demanded and supplied are equal.
4) absence of market power.

The magnitudes of value and of price would then be designated by the same figures. If the ME was not equal to one [20] but the three other conditions were realized, there would remain a perfect correspondence between the divisions of the two spaces, althouth different figures would now be affixed on value and price magnitudes. Thus the first condition is not necessary for the correspondence between value and price. It just adds a numerical identity. When the three other conditions are realized, the price of a commodity is determined exclusively by its value. This magnitude of price is called the simple price [21], because it expresses simply and solely the magnitude of value, without any deviation.

But these three conditions are not defensible. So the reasoning cannot be stopped here. The effect of abandoning the first one, i.e. to allow inequalities of organic compositions of capital, leads to a modification of the equilibrium price, from the simple price to the price of production. The latter refers to a magnitude of price deviating from the simple price by an amount which is such that the same rate of profit would prevail in all branches [22]. The new situation of equilibrium would imply that the actual prices coincide with the prices of production. Again this can be observed only indirectly : if there was equilibrium all branches would exhibit the same rate of profit. Thus the actual inequalities in profitability indicate how far from the equilibrium point the economy is. In our conception, which focuses on irreversibility of time and on the perpetual remodelling of the norms of production and exchange as well as of the boundaries of the branches, it is not at all surprising that this state is never achieved. It is the opposite which would be ... Relaxing the other two conditions opens the way for these disruptive effects. The permanent desequilibrium between supply and demand, the shifts towards new products, the market structures, the possible interventions of the state all intervene to create gaps between the effective prices and the equilibrium magnitudes [23]. We cannot enter into these questions here. Let us just emphasize that these shifts concern an internal reallocation within the space of prices, whithout implying a change in its overall size insofar as they are not accompanied by a modification of the ME or of the total production of value. In other words, the sum of simple prices must equal the sum of prices of production as well as that of actual prices. The articulation between value and price and the subdivision of the latter concept into its different logical forms can be illustrated in a simple diagram describing the situation of a commodity system in which, through an arbitrary choice of ours, there exist four types of commodities, A, B, C, D, having values of 4, 3, 2, 1 respectively. The ME is defined as equal to 1. A full validation is assumed but the organic compositions of capital are supposed to differ, so that the prices of production deviate from the simple prices. Furthermore it is assumed that some unexplained market situation make the actual prices deviate in turn, from the prices of production.

To conclude this section on the articulation between value and price it may be useful to address to the more fundamental question of the object of the theory of value. Again, in other paradigms this problem is rather easily set. The aim of the theory of value is to explain the level, if not of effective prices, at least of the long-term equilibrium prices. In the Marxian approach things are more complex because the theory develops at the same time on two different levels. On the one hand, it aims to understand the deep nature of the commodity system. The questions tackled in this respect are : how can one explain the formation of social cohesion in a system in which all production decisions are private ? In other words, what are the conditions of possibility of the functioning of a system in which the products take the form of commodities ? To answer these questions a network of concepts is constructed, which allegedly refer to categories functioning in reality, even if, for part of them, it is at an invisible level. Value lies at the core of this network but it cannot be separated from the other concepts which are connected to it. But, on the other hand, the theory of value evidently also deals with the narrower question of price determination, as do the other theories. However, in this respect, it is less ambitious than the Ricardian theory. As we see it, it does not assert that equilibrium prices are explicable only in terms of the socially necessary labor, i.e. by excluding

DIAGRAM 1 : THE ARTICULATION BETWEEN VALUE AND PRICES



circulation factors. Indeed if they coincide with prices of production, their explanation requires something else than value sensu strictu. So we would state that, with respect to particular commodities, the theory of value does not aim at fully (or exclusively) explaining their equilibrium prices and exchange-values but rather that it is a theory of the foundation of prices. We therefore defend the view that value is a logically indispensable feature in the formation of prices but not that it is the only factor explaining long-term exchange ratios, as Ricardo hoped to demonstrate.

V. The failures of private initiatives

It is inherent to the idea of private initiative that it bears risks and that these cannot meet with success every time, nor for every decision-maker. Two types of failure, which are qualitatively different, must be distinguished. The first concerns those cases in which there is validation but at a rate which is not the equilibrium one. Their common consequence is to lead to what we will call circulation profits and circulation losses. The second type of failure refers to cases of losses of value, inducing a shrinkage of both the spaces of values and of prices. This type can, in turn, take two forms : either a lack of sale or a devalorization. Let us study them successively.

1) Circulation profits and losses

Profits and losses of circulation derive from the lack of full realization of the norms of exchange. They occur as soon as there is either a situation of market power or a desequilibrium at the supply price (which at the equilibrium would correspond to the price of production) between supplied and demanded quantities. These situations lead to transfer of income from some agents to others. If the seller is in a position of strength, he will be able to impose a premium on the equilibrium price. If the buyers are in such a position, they will be able to lower the price. The specific nature of these transfers is that they are cancelled out on the global level, since the circulation profits of some are by definition the losses of others. The sum of both amounts to zero. Moreover these transfers do not affect the size of the spaces of values and prices (to the extent that the factors causing transfers do not at once lead to losses of value). They just generate a change in the internal division of the space of prices, by modifying the actual exchange-ratios among commodities (cfr diagram 1).

However this compensation occurs only at the global level and not among the several sub-sets of relations into which the global set of exchanges can be divided. This leads to an important consequence. Let us divide the global set into two categories, the first grouping the exchanges among capitalist units, and the second those occuring between capital units and the wage-earning class, whether they involve the sale of the labor force or the purchasing of commodities by wage-earners. If there is no complete compensation within the sub-set formed by capital/labor relations, an inter-classes transfer of income occurs. It modifies the magnitude of the total mass of profit available for accumulation and for consumption by capitalists. If the market power favours the capitalist class, two consequences ensue. On the one hand, the average wage will not allow fulfilment of the norm of consumption and, on the other hand, the total mass of profit available for accumulation will consist of two components : profit stemming from surplus-value and inter-classes profit of circulation to the benefit of capital. If the market situation is the other way round, then the outcome is also reversed.

2) Losses of value

As stated above, they flow from two sources : the lack of sale or the devalorisation of the means of production. The first is due to mistaken choices of production. Some private initiative has been taken, the product of which fails to find an outlet (either partially or totally). Thus no validation or creation of value occurs. The effective size of the space of the values (and also, ceteris paribus, that of the space of prices) is smaller than what it could have been. The notion of loss of value must be understood, not in the sense of a substraction from an existing amount of value, but as a non-actualization of something potential. Besides this lack of validation of private or present labor, the absence of sale brings about another consequence, namely a failure in the transfer of value from the means of production to the final commodity. Both the expense of private labor and the utilization of the machines appear a posteriori to be the wrong choice and a waste.

The loss of value caused by devalorisation could theoretically occur even when the production is sold in its entirety and there is a full validation. Again it involves a mistake but it appears as such only later on. A priori it was unpredictable. A choice which commits a firm for a certain period, and which was rational at the time it was made, turns out later on to be a mistake because a technical progress modifying the norms of production has emerged. Its result is, as noted above, a devalorization, i.e. a brutal drop in the value of the means of production beyond what they depreciated. It generates an incapacity to transfer integrally the amount of value created in preceding periods and which would have been reactualizable if there had be no technical progress. Table 1 (p.22) synthetizes the possibles outcomes in terms of failure or success of the transfer process, resulting from the utilization of means of production.

In contrast with the cases of losses of circulation, losses of value are not compensated. Whatever their form, lack of sale or devalorization, they always represents a waste in the allocation of the social labor force of a commodity society. It is the "price" paid for the social way in which social cohesion is formed in this type of society [24]. It generates a decline in overall income [25] and social production with respect to the potential amounts which could have be obtained without these errors. The losses of value have to be supported by some agents in the form of a decline in their income. In a social context characterized both by full competition and by a certain stage of development of the monetary system, the sanction of the loss of value falls on the capitalist units which initiated the failed project or which are the victims of obsolescence. In another context, however, this sanction can be transfered to other agents. But somebody has to bear the cost. The sanction cannot be leviated. The effects of the different forms of losses of value in the case of a constancy of the ME are illustrated in diagram 2 (p. 23).

X

X X

All these different types of losses can be labelled "dysfonctionalities" of the system, since they indicate a lack of achievement of the equilibrium situation. But at the same time, as argued earlier, they are inherent to its functioning. What varies with the business cycle and the structural evolution is their relative amount and the way in which they are absorbed. Here, we have described them se-

TABLE 1 : The possible outcomes of the uses of means of production

PHYSICAL AXIS	SOCIAL AXIS		
	STATE OF PRESERVATION OF THE VALUE OF THE MEANS OF PRODUCTION	MARKET RESULTS	OUTCOME IN TERMS OF SUCCESS OR FAILURE OF THE TRANSFER PROCESS [26]
progressive wear and tear in line with the use of the means of production	depreciation →	sale of the final commodity →	success of the transfer of value (reactualization)
		lack of sale →	failure of the transfer of value (LOSS OF VALUE)
obsolescence a) the means of production has to be put on the scrap-heap	total devalorization →	→	LOSS OF VALUE
b) still in use	partial devalorisation →	sale of the final commodity →	partial transfer of value (LOSS OF VALUE)
		lack of sale →	lack of transfer, (LOSS OF VALUE)

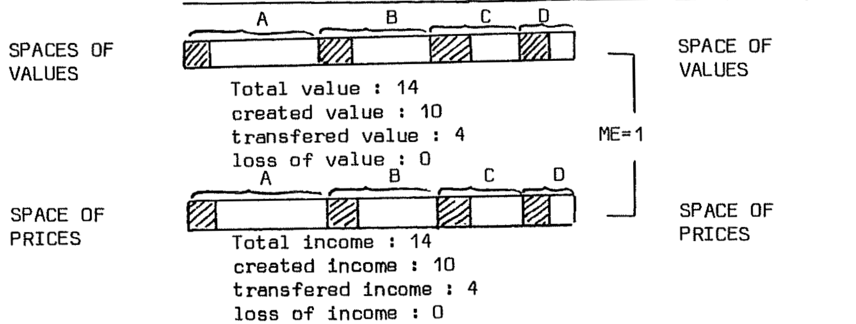
DIAGRAM 2. A diagramatic example of losses of value

value or income created

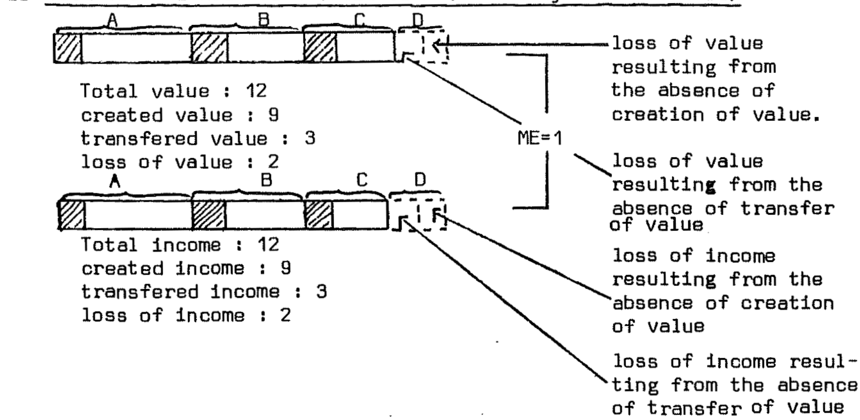
value transfered or amortized portion of total income

loss of value or of income

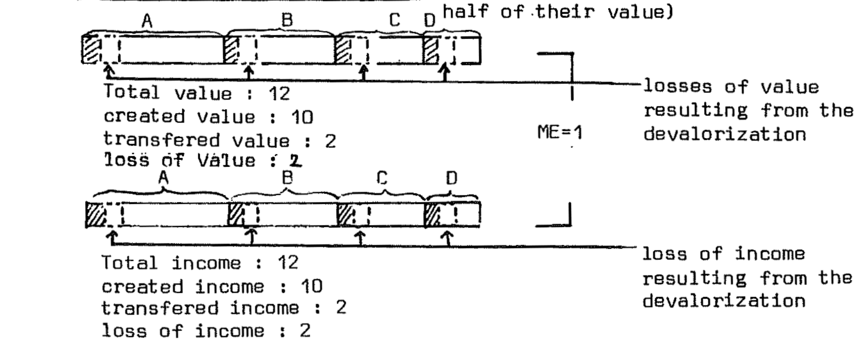
I. Situation with full-validation and without devalorization



II. Situation without full-validation (commodity D is not sold)*



III. Situation with devalorization** (all the means of production lose the half of their value)



*it is supposed that there is no devalorization
**it is supposed that there is full validation

parately but , of course, they are interwined, with the one generating the others. For instance, a profit of circulation occuring on one market can diminish the purchasing power creating the effective demand on other markets, so that these would consequently experience either a lack of sale or losses of circulation.

The notions of circulation profits and losses of value are of central importance to the understanding of the working of capitalist economies. Unfortunately they are not given the attention they deserve. This neglect is due to the fact that the Marxian analysis is usually developped in terms of static equilibrium. The mechanism of determination of equilibrium prices is almost always demonstrated in the case of full validation of private labor and of absence of obsolescence. Consequently the fact that equilibrium is never reached is forgotten by many Marxian analysts. So what we understand as their concern for pedagogy, leads to the loss of two main features of the system which they claim to study : firstly, the fact that the way in which social cohesion is formed in a commodity society unavoidably leads to market failures. Secondly, the idea that the concept of time appropriate to capitalism is that of irreversibility, which leads to the consequence that the norms of production and exchange are perpetually shifting and can never fully impose themselves. Surely the definition of the equilibrium situation is a necessary step in the theoretical reasoning but it cannot be the end of the analysis. One has to go on to integrate the elements which are at work as destructuring forces and to investigate their effects on the invariant basic ratios which underlie the wage relation, namely the rate of surplus-value, the value-composition of capital and the rate of profit.

Louvain-La-Neuve, june 1980.

NOTES

(1) For the moment it exists only in the form of working-papers. Cfr M. De Vroey, Travail abstrait, valeur et marchandise. Une réinterprétation de la théorie de la valeur de Marx, 1ère partie : les concepts de travail abstrait et de marchandise, Cahiers de l'université de Montréal, n° 7912; 2ème partie : la valeur dans un système formé exclusivement de marchandises Working-Paper de l'Institut des Sciences Economiques de l'Université de Louvain, n° 7915.

(2) Cfr M. Dobb, Theories of Value and Distribution since Adam Smith; R. Meek, Studies in the Labor Theory of Value; P. Sweezy, The Theory of Capitalist Development; I. Steedman, Marx after Sraffa.

(3) To quote Aglietta : "There are no use-values which are commodities by nature, nor others which are not. The commodity is a social relation of exchange. It can well happen, therefore, that certain use-values that are not commodities under certain types of labour process and certain evolutionary logics of the mode of consumption become so at other periods in capitalist development" A Theory of Capitalist Regulation, p. 166.

(4) A distinction must be made between the act of validation which is a yes or no process and the rate at which it occurs. As will be developed later on, it can be the equilibrium rate (when the effective price coincides with the equilibrium price) or not (when it does not do so).

(5) A third one, which is not considered here, deals with the distinction between productive and unproductive labor.

(6) We have here an important meeting point between Marx, as we read him, and Keynes, as read by the "Post-Keynesian school". Cfr. H.P. Minsky, John Maynard Keynes; P. Davidson, Money and the Real World; A.Eichner, A Guide to Post-Keynesian Economics.

(7) In our conception, the notion of transfer of value refers to a time-dimension (transfer from one period to another) and not to a synchronic displacement from one agent to another.

(8) The notion of devalorization is of the utmost importance for the understanding of capitalist regulation. It can for instance be argued that the way in which the loss of value, which is linked to it, is financed and absorbed in a regime of intensive accumulation, is precisely the main reason for the presence of creeping inflation. Cfr. M. Aglietta, A Theory of Capitalist Regulation and my study "The Logic of Inflation in a Regime of Intensive Accumulation".

(9) But not by "post-keynesians".

(10) "Les travaux individuels, qui se manifestent dans les valeurs d'usage particulières, ne deviennent (...) du travail social qu'en s'échangeant réellement entre eux (...). Le temps de travail social n'existe pour ainsi dire qu'à l'état latent dans ces marchandises et il ne se révèle que dans leur procès d'échange. Le point de départ n'est pas le travail des individus sous forme de travail collectif, mais au contraire les travaux particuliers de personnes privées, travaux qui dans le procès d'échange seulement se révèlent travail social général en perdant leur caractère primitif. Le travail social général n'est donc pas une condition prête d'avance sous cette forme, mais un résultat auquel on aboutit. D'où cette nouvelle difficulté que, d'une part, les marchandises doivent entrer dans le procès d'échange comme temps de travail général matérialisé et que, d'autre part, la matérialisation du temps de travail des individus comme temps de travail général n'est elle-même que le résultat du procès d'échange" in K. Marx, Contribution à une critique de l'économie politique, pp. 23-24.

(11) This is the reason why its fetishization is not a "mirage".

(12) It should be added that, in order to stay in competition, they must sale at a price providing them the average rate of profit of their branch.

(13) This question is examined in depth in our study "The Logic of Inflation in a Regime of Intensive Accumulation".

(14) This was well perceived by Keynes, who wrote "the importance of money essentially flows from it being a link between the present and the futur" The General Theory, p. 293.

(15) This assertion is valid only if one discards the existence of what we will call "pseudo-money", privately issued. This is examined in our study "The Logic of Inflation ...".

(16) Not much attention will be given here to the third notion of the triad, that of exchange value. Let us just say that it cannot be confused with the price (exchange-value is a general concept, this implying that in the formation of an exchange ratio the referent may be whatever other commodity; the price is one exchange-value in which money plays the role of the referent) neither with value (value is an absolute magnitude while exchange value is a ratio; value is logically anterior to exchange-value; finally value and exchange-value must not necessarily evolve concomitantly).

(17) Therefore, strictly speaking, there cannot be a problem of "transformation of values into prices" since value is always and immediately transformed into prices. What the so-called transformation problem is really about is the transition from simple or direct prices into prices of production.

(18) If ME = 1, the same figures apply to the sum of values and the sum of prices. But this numeric equality between non-commensurable magnitudes cannot be considered as a meanful result. It just follows from a particular assumption about the magnitude of ME.

(19) The factors explaining changes in the magnitude of the ME are investigated in our study "The Logic of Inflation ...". Let us just note here that the quantitative evolution of ME does not alter the qualitative role of money. For instance, if it doubles, this means that one monetary unit represents only half the fraction of total value that it used to do. But the status of money as the institutionalized symbol of abstract labor does not change as a consequence of this shift.

(20) There is no reason that it would be, except that it facilitates the construction of examples (but at the same time it may help to bring about the denounced confusion).

(21) The notion of simple price can be found in Bullock and Yaffe's article, "Inflation, the Crisis and the Post-War Boom" p. 15. It corresponds to Shaik's "direct price". Cfr A. Shaik "Marx's Theory of Value and the "Transformation Problem" in J. Schwartz ed. The Subtle Anatomy of Capitalism.

(22) In this operation a difference in the rate of profit arises, compared to what it would have been if simple prices were the actual prices of equilibrium. Cfr. our study, Travail abstrait, valeur et marchandise, second part, p. 156.

(23) All these deviations refer to logical steps, the real process being instantaneous.

(24) In a centralized system of allocation a waste of resources is also likely to occur, but by definition it could not take the same form.

(25) If these is a drop in the size of the space of values with a constancy of the ME, the size of the space of prices also lowers. Then we have a drop in the "nominal income". If the drop in overall value is accompanied by a rise of the ME, the sum of prices can remain constant or even encrease but there is a decrease in the "real income".

(26) It is not because the sale succeeds and there is thus a transfer and a validation, that the whole resulting income will accrue to the saler. Indead profits and losses of circulation may change the distribution of total income among the agents so that some get a larger part and others a smaller one. It is just the overall size of income which is determined by the amount of produced value and by the ME.

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