On the Ricardian Problem of an "Invariable Standard of Value"[*]

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The problem of an "invariable standard of value," which preoccupied Ricardo throughout his life, virtually disappeared from economic literature after his death. Interest in it revived somewhat only after Sraffa published his famous commentary on Ricardo's *Principles* (1951) and, above all, after his book, *Production of Commodities By Means of Commodities*, explained a procedure for constructing a "standard commodity" which is reminiscent of the Ricardian standard (1960, Ch. 3-5 and 8). After the critique by Bailey (1825), partially taken up by Marx (1905, pp. 122-167), the tradition seems to have settled on the idea that the problem of an "invariable standard of value" is absurd in itself. This point of view is widespread today: see, e.g., Blaug (1974), who turns it into an argument against Sraffa. On the other hand, several scholars, impressed by Sraffa's book, consider that the Ricardian problem, though poorly formulated, was not absurd, and claim that *Production of Commodities* contains both a correct formulation of the problem and its solution (e.g., Eatwell 1975a).

This article sets out to show that neither of these views is justified. As we shall argue, the problem of the invariable standard necessarily arises within the framework of the Ricardian theory of value, and the terms of the problem are essentially as Ricardo himself stated. The argument requires one to bring out the theory's implications properly. In particular, it is crucial to distinguish the problem of the invariable standard from the

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related problem of a standard that is neutral with respect to income distribution. This essay may be read as a case study in Ricardian economics; hopefully, it will help to understand a little more thoroughly the context in which the special problem of the invariable standard arose. It should be emphasized that what is at issue here is a matter of history only. We are pitting against each other conflicting interpretations of a past theory. We do not aim at reviving it. Nor do we intend to take side for or against Sraffa's own theory of value.

1. THE INVARIABLE STANDARD AND "ABSOLUTE VALUE"

The problem of the invariable standard arises inevitably within the Ricardian theory of value and arises only within this theory.

Before attempting to establish this claim, we must spell out what Ricardo meant by "absolute" or "real" value (see for example *Principles*, I, 1, section 6, and *Absolute Value & Exchangeable Value,* IV, 358-412). There is no explicit definition, so the general sense must be reconstructed on the basis of the term's usage.

1) "Absolute values" are physical quantities (of corn, land, labour, etc.) evaluated in a given unit of measurement (e.g., 1 lb of corn).

2) There is a 1-1 mapping from "absolute values" to prices.

3) Even though, mathematically speaking, one may represent prices as a function of values or the other way round, the two formulations are not equivalent from the economic viewpoint, because prices causally depend on absolute values and not the other way round.[1]

All this applies to the successive stages of Ricardo's theory, the "absolute value" being corn or labour in the *Essay on Profits,* and

[1]According to Dobb (1937, Ch. I), the first two points should hold in *any* theory of value. The third point is specific to a class of theories which can be called theories of *absolute* value. General equilibrium theory, where values and prices are mutually dependent, do not satisfy this property. It is of course found in Marx, as Morishima recalls (1973, Ch. I, pp. 11-12).

subsistence commodities or labour in the *Principles.*[2] Note in passing that land could also have been chosen as an "absolute value," as Samuelson (1959) suggested. Ricardo uses the term "absolute value" to refer both to the relevant substance (e.g., corn) and quantities of that substance (e.g., 2 lb of corn). This ambiguity raises no difficulty.

The commodity selected to be the "absolute value" need not be the same as the one chosen to measure relative prices. The latter is simply defined by the formal property of having its relative price equal to 1, which has nothing to do with requirements 1), 2) and 3). The difference between labour *as an "absolute value"* and labour *as a standard of measurement of prices* (or a standard, as we shall often put briefly) is the same as the classic difference between "embodied labour" and "commanded labour". As is well-known, Ricardo made this distinction the basis for the anti-Smithian argument at the beginning of his *Principles* (I, 1, 1, pp. 13-14), and Marx (e.g., 1939, p. 232) praised him highly for realizing it. All this, and especially the distinction between an "absolute value" and a standard of measurement, was unfortunately missed by most of Ricardo's contemporaries, like Malthus, as will be seen below.

The notion of an "absolute value" should not keep one from dealing with *ratios* of "absolute values," as Ricardo does (*Principles,* I, 1, 6, p. 47). The ambiguous expression "relative values" that he uses in this case does *not* mean the opposite of "absolute value" in the special sense just explained. This sounds like a trivial observation, but the deceptive ambiguity of the term "absolute" had a disastrous effect on the classical literature, both Ricardian and anti-Ricardian. To prevent any confusion, we will retain the quotation marks each time that "absolute" is employed in the technical sense.

When assessing whether a commodity is "invariable", Ricardo should accordingly distinguish between two kinds of questions, i.e., whether the price of this commodity is invariable with respect to the

[2]For the equivalence between corn and labour in the *Essay on Profits,* see section 3.

chosen standard and whether the commodity's "absolute value" is invariable. If, for example, "absolute values" are in terms of labour and gold is the standard, the gold-price of A may vary while its "absolute value" remains invariable, the converse also being possible. When the commodity A is the standard itself, the only sensible meaning for "invariability" is that the "absolute value" of A is invariable, since the other kind of invariability is guaranteed by the very definition of a standard. More than once in his *Notes on Malthus* (e.g., II, p. 30 sq.), Ricardo pointed out the - trivial - difference between two issues of invariability, the one real and the other non-existent.

An invariable standard is desirable whenever, as in Ricardian economics, the 1-1 mapping relates relative prices to a *ratio* of values, typically the ratio of the labour time embodied in one unit of the commodity to the labour time embodied in one unit of the standard. A major theoretical function of the mapping is to attribute a change in the price of A to a change in the quantity of labour required to produce A - as against a change in the quantity of labour required to produce the standard (*Principles,* I, 1, 6, pp. 43-44). For this purpose, it is obviously desirable that the chosen standard have an invariable "absolute value".

At this juncture, it is worth recalling that Marx's own value-price mapping relates prices to "absolute values", and not to *ratios* of "absolute values". The well-known "transformation problem" entails going from an absolute number to another. Accordingly, the present discussion of an invariable standard does not even arise in Marxian economics. There is a basic theoretical difference here. It must not be confused with the minor difference in the (physical) unit of measurement adopted for "absolute values" (an hour of labour in Ricardo, an hour or a day of labour in Marx, the sum total of labour inputs in Sraffa).

We said that it was "desirable" for Ricardo to have an invariable standard, but the *actual* invariability of the standard in terms of labour time, or whatever "absolute value", would be too stringent a requirement. As

Bailey mentioned in passing (1825, p. 250), it would be enough if one *knew* the changes in the conditions of production of the standard. This is an important point, and we should correct Ricardo's formulation accordingly. Once the problem has been presented in these more appropriate terms, it is no easier to resolve empirically, but it no longer presents a logical difficulty. There is a traditional argument against Ricardo first raised by Bailey (1825), and then taken up in Marx (1905) and others, to the effect that an invariable standard is a *logically* non-sensical objective because no commodity is ever produced in invariable conditions. Once Bailey's passing observation is brought to the forefront, this seemingly destructive criticism becomes irrelevant.

It remains to be asked why Ricardo based his reasoning on a weak formulation when a better one was available. He doubtless had no empirical reason to suppose that gold and precious metals were produced in invariable conditions. One may submit that, here as elsewhere, he made use of a special case in order to make progress with a purely theoretical argument. It may also have seemed to him appropriate to oversimplify his exposition once he discovered the more serious complications, to be discussed at length in this paper, that are involved in the distribution problem.

2. THE RICARDO-BAILEY-MARX CONTROVERSY: THE SPIRAL OF A MISUNDERSTANDING

The foregoing comments cast some light on this celebrated controversy of classical political economy. Bailey's book, *A Critical Dissertation on the Nature, Measure and Causes of Value,* attacked the Ricardian theory in all possible ways, with no effort at internal consistency. As is happens, Bailey's rejection of the invariable standard is less relevant to Ricardo's theory than it is to Malthus's. In *The Measure of Value,* Malthus wrote for instance, "if we could suppose any object always to

remain of the same value, the comparison of other commodities with this one would clearly show which had risen, which had fallen, and which had remained the same." This passage was cited and ridiculed by Bailey. Malthus was unable to distinguish between embodied and commanded labour. A related confusion, he was unable to distinguish between an "absolute value" and a standard.[3] As a result, his expression "remain of the same value" in the passage above is grossly equivocal. Bailey understood it as referring to *invariability with respect to the standard*, and had no difficulty in concluding that Malthus's argument was absurd. Plainly, it is inconceivable that *all* commodities keep the same value in terms of a standard (1825, Ch. I).

Having drawn this rather obvious conclusion, Bailey could not imagine that Malthus had perhaps been groping after a deeper notion of invariability. Bailey had himself no theory of an "absolute value", and thus explicitly identified price with value. The narrowness of his viewpoint was underscored by Marx, who kindly called him an "ass" ("Aber der Esel…", 1905, pp.153-154). Quite rightly, Marx chides him for overlooking that, in Ricardo, "value" sometimes means price and sometimes "absolute value". Bailey — a "vulgar economist" if ever there was one — remains at the surface of economic reality. He may be excused for being misled by Malthus, but he simply failed to come to grips with Ricardo's theory of value.[4]

Marx attempted to defend a third position intermediate between Bailey's and Ricardo's. He praised Ricardo for having a labour theory of value. But not having well identified the brand of labour theory of value framed by Ricardo, he could not see why invariability raised a problem, and eventually gave Bailey credit for having dismissed it (1905, pp. 130-35). Reinterpreting the whole debate in his own way, Marx blamed Ricardo for clumsily confusing an inquiry into the essence of value with the quest

[3]Ricardo complains about Malthus's confusion of commanded with embodied labour in *Notes on Malthus,* II, Ch. 2, no 11. Interestingly, Ricardo's note also deals with invariability.

[4]Rauner's (1961) lengthy commentary on Bailey takes an opposite stand and seems to glorify him for his narrow-mindedness.

for a commodity having certain properties. "Invariability reflects the fact that the immanent measure of values cannot yet itself be a commodity, a value, but is rather that which constitutes value, hence also, the immanent *measure* of value."[5]

A similarly negative interpretation can be found in the Marxian literature (e.g., de Brunhoff, 1973, pp. 70-73). It connects with a central tenet in Marxian economics, namely: one and the same concept (abstract labour time) should provide both the theoretical foundation and a method of measurement for exchange-value. (This much is suggested by the *hence also* in the passage just cited.) Without questioning this tenet, one can argue that the resulting interpretation of the invariable standard is off the mark. Marxian economists seek an implicit and remote meaning to Ricardo's problem of the invariable standard because, like Bailey, they do not even address its *explicit* statement. The notion of invariability they take for granted is, in effect, Bailey's. Marx himself was usually a careful reader of Ricardo. This time, he did not bother to grasp his meaning, and instead relied on an incompetent commentator.

3. THE STANDARD OF MEASUREMENT AND THE DISTRIBUTION PROBLEM

Invariability is not the only problem raised by the choice of a standard. It would be the only one if the relative prices were strictly proportional to the relative values. But, as is very well known, this proposition holds only in special cases, the simplest of which (e.g., Pasinetti, 1974) is the following:

1) no fixed capital;

2) identical proportions of circulating capital across industries;

3) identical turnover periods of circulating capital across industries.

[5]"Das Unveränderliche drückt aus, dass das immanente Mass der Werte nicht selbstwieder Ware, Wert sein darf, sondern vielmehr etwas, was den Wert konstituiert und daher auch das immanente *Mass* seines Wertes ist" (1905, p. 154).

By relaxing these three hypotheses in the last edition of the *Principles,* Ricardo brought to light "exceptions" to the simplified labour theory of value which he had defended until then. The successive revisions of Ricardo's theory, linked to his discussions with Torrens and Malthus that took place between 1814 and 1820, are now better understood thanks to Sraffa's *Introduction* to the *Principles* (see Sraffa, 1951, Schmidt, 1970, Hollander, 1973, Eatwell, 1975b). However, there is a difficulty with Sraffa's interpretation that needs emphasizing. The overall reconstruction is so impressively coherent and well-argued that today's scholars have not questioned Sraffa's very peculiar account of the *Essay on Profits* in his *Introduction*.

Sraffa reserves assumptions 1), 2) and 3) for the first edition of the *Principles*, and interprets the *Essay on Profits* in terms of an even simpler construction, i.e., the - now famous - « corn economy » model (1951, pp.XXXI-XXXIII). We disagree with Sraffa here. The model of the *Essay on Profits* must already rest on the assumption that prices are proportional to relative quantities of embodied labour. Or else, it would be hard to make sense of such passages of the *Essay* as the following one: "The exchangeable value of all commodities, rises as the difficulties of their production increases. If then new difficulties occur in the production of corn, from more labour being necessary, whilst no more labour is required to produce gold, silver, cloth, linen, &c. the exchangeable value of corn will necessarily rise, as compared with those things" (IV, p. 19). By way of implication, the model of the *Essay* must also rest on assumptions 1), 2) and 3), and the distinction that Sraffa draws between this text and the 1st Edition of the *Principles* cannot be the right one. If there is a difference to be drawn between the two texts, we would suggest that it concerns the real wage, which consists of corn in the former, and is more generally conceived in the latter.

To make things worse for the Sraffian interpretation, Ricardo *never* mentions the property that the rate of profit can be determined in physical

terms in the corn industry. If Ricardo had already in mind the uniformity assumptions 1), 2) and 3), as we are suggesting, he could of course determine the rate of profit independently of prices by computing the relevant aggregates in labour terms in *any* industry whatever.[6]

Returning now to the main argument of this paper, we will have to understand how the "exceptions" to the first labour theory of value led Ricardo to reconsider the whole issue of the standard of measurement. In this section and the next, we show that he added to the invariability requirement further requirements pertaining to distribution, the two series of conditions taken together defining the "right" standard in his sense.

Ricardo's general strategy in value theory may strike one as paradoxical. On the one hand, he unequivocally acknowledges deviations with respect to the labour theory of value: "In all observations of Mr Malthus on this subject I most fully concur" (*Notes on Malthus,* II, p. 50). On the other hand, he always treats them as being "exceptions" even though they appear to be the general case, and it is rather assumptions 1), 2) and 3) which should count as "exceptions".

The paradox is less worrying if one notices that Ricardo judged the deviations from the labour theory of value to be quantitatively negligible: "the effect on the relative prices of things from a variation in profits is comparatively slight" (*Principles,* I, p. 45). From this passage Stigler (1958) argued that Ricardo's theory juxtaposes two types of propositions, those of a "theoretical" nature (here: the rule of the proportionality of prices to values), and those of an "empirical" nature (here: the claim we just quoted). This is not yet the right distinction, for one does not see on what empirical basis Ricardo would have founded what Stigler has dubbed "the 93% labour theory of value." He arrived at the conclusion that the deviations were *practically* negligible on the basis of a purely *theoretical* line of reasoning that can be reconstructed from fragmentary evidence.

[6]It is worth noting that at the later stage of *Production of Commodities* (1960, Appendix D), Sraffa came to express reservations about his "corn-economy".interpretation of the *Essay*.

This feature is typical of Ricardo's overall method. He reasons on particular cases not because they would capture empirical facts, but rather because they condition either his exposition or even the essential theoretical point he is trying to make, which is the case here.

It seems as if Ricardo was primarily concerned with defending not so much the labour theory of value itself as a *predictive* and *dynamic* version of it. The relevant proposition is that a change in price can be attributed to a well determined change, in the same direction, undergone by the quantity of labour embodied in the given commodity. If this is indeed the conclusion Ricardo was aiming at, it could be reached on the basis of less restrictive assumptions than 1), 2) and 3) above. They can be replaced by the following:

1') There exists a *known function* F_i relating the relative price p_i of each commodity i at time t to the quantities of labour directly and indirectly necessary at t to produce, respectively, commodity i and the standard. The function F_i is increasing in the former and decreasing the latter labour quantities, respectively.

2') The functions thus defined are *constant over time*.

Assumptions 1') and 2') are more general than 1), 2), 3) insofar as the F^i may exhibit nonlinearities and need not be uniform from one industry to another.

These new assumptions make sense against the background of the invariability condition as restated in section 1, i.e., the labour quantities embodied in both the commodity and the standard must be *known* at all times, so that relative prices p^i can be predicted using the F^i functions. Two further comments apply:

1) The *existence* of the F_i poses no theoretical problem if one adopt Ricardo's simplifying suggestion that was taken up by Dmitrieff (1904). That is, the value of the machinery is divided by the number of years of use, and the fraction thereby obtained, multiplied by a factor of $(1 + r)^j$ -where r is the rate of profit and j is the number of years of use already elapsed - is added to the other value components of the annual product. This way of handling fixed capital is obviously very rough (for some refinements, see Bortkiewicz, 1907). If one makes the even more sweeping assumption that there is no fixed capital, the F_i are readily obtained from the equations for reducing the production prices to dated labour quantities, as in Sraffa (1960, Ch. 6). Rewriting the dated labour quantities in terms of the vector of direct labour quantities l, the wage rate w, and the technical coefficients given by the matrix $A = (a_{ij})$, Sraffa gets the following equation for the price vector p:

$$[1]\quad p = wl(1 + r) + wAl(1 + r)^2 + \ldots + wA^n l(1 + r)^{n+1} + \ldots$$

Denoting by I the unit matrix, this series converges to:

$$[2]\quad p = w(1 + r)\,[\mathrm{I} - A(1 + r)]^{-1} l$$

whenever the usual conditions on the matrix A hold.[7] Thus, fixing A and the value of w when r =0, the matrix equation [2] leads to a particular version of the F_i.

2) The *constancy* of the F_i over time poses a much trickier problem. Ricardo strove to resolve it by constructing his theory of the "average commodity." We discuss it now.

4. THE "AVERAGE COMMODITY" (OR THE STANDARD THAT IS NEUTRAL WITH RESPECT TO DISTRIBUTION)

The reduction equation [1] alone makes it clear that whenever distribution changes, the F_i will also change. There is a kind of converse

[7]The condition used by Sraffa ("Self-replacing state," 1960, § 4) implies that the dominant eigenvalue of A has modulus less than 1, which is sufficient for the series on the right side of [1] to converge (e.g., Solow, 1952).

that goes with this statement: if it were somehow possible to minimize the changes in prices brought about by a change in distribution, one might argue that the constancy of the F_i would be a reasonable approximation. Ricardo introduced his idea of an "average commodity" precisely at this juncture, i.e., *in order to diminish the error made by neglecting the influence of distribution on the value-price mapping*. Taking the technology to be constant, we will assume that the magnitude of the change in p due to a change occurring in distribution can be functionally related to some index representing the composition of capital. Let us take as an index the ratio:

price of raw materials/wages.

This amounts to assuming that there is no fixed capital, and that apart from wages, all of the circulating capital has the same turnover period and enters into all industries in the same proportions. These assumptions clearly differ little from 1), 2) and 3) but are appropriate for the reconstruction of Ricardo's argument about the "average commodity".

Under the assumptions made, the error entailed by hypothesis 2') is minimized if one chooses as the standard a commodity whose capital composition is the average of what is found in the economy at large. As Ricardo puts it, "the mean will in most cases give a much less deviation from truth than if either of the extremes were used as a measurement" (*Absolute Value & Exchangeable Value,* IV, p. 31). Here is how one might expand on Ricardo' cryptic statement. If the standard is chosen from one of the "extremes", for example in the industry where our index of capital composition is minimum, then a fall in wages should bring about a rise in the profit rate that is greater in the standard industry than in any other industry. The prices of raw materials will therefore have to be increased in order for the profit rate to be uniform; and the maximum deviation with respect to the previous price will appear in the industry located at the other "extreme". The argument is symmetrical in the case where the standard is chosen in the industry where the composition of capital is maximum. Now, if the standard industry displays the average composition, some prices should fall and others will rise, and one can expect the greatest price

deviation to be smaller than in the cases where the standard was chosen at one of the "extremes". One may even hope that the greatest price deviation is minimized over all possible cases.[8]

Thus, by choosing as the standard the commodity possessing an index of capital composition close to the average, one may hope that a standard that is "neutral with respect to distribution" has been found. We must emphasize that this "averaging" or "neutrality" condition envisaged by Ricardo has nothing to do with the earlier requirement of invariability. It is *added* to the latter as part of a search for the "right" standard of measurement. The comment would be superfluous if it were not for the surprising fact that Sraffa apparently conflated the two types of problem.

When constructing his "standard commodity" in *Production of Commodities by Means of Commodities*, Sraffa tackles the following problem: "The necessity of having to express the price of one commodity in terms of another which is arbitrarily chosen as standard, complicates the study of the price-movements which accompany a change in distribution" (p. 18). This sounds like a problem analogous to the one Ricardo faced when constructing his "average commodity". But Sraffa adds: "It is impossible to tell of any particular price-fluctuation whether it arises from the peculiarities of the commodity which is being measured or from those of the measuring standard" (*ibid.*). This added sentence is nearly an exact quotation from Ricardo, and it can only allude to the problem of invariability.[9] It is quite surprising to encounter this sentence in the present context and, more generally, in Sraffa, who has no theory of "absolute value" and no need for the invariability concept. What we have here is a confusion between two types of problems. This passage encouraged the false belief that Sraffa had resolved *all* the problems concerning the standard which Ricardo had in mind. What he did in actual fact was to

[8]This reconstruction is related to Sraffa's commentary in (1960, Ch. 3, §16-18). However, this passage of Sraffa does draw any connection with the standard of measurement.

[9]Compare with *Principles,* I, 1, 6, p. 43: "When commodities varied in relative value, it would be desirable to have the means of ascertaining which of them fell and which rose in real value, and this could be effected only be comparing them one after another with some invariable standard measure of value...".

study a problem formally identical to that of the "average commodity" in Ricardo, although *with an entirely different theoretical purpose*.

Can one find a standard that is neutral with respect to distribution? It is easy to see that no such standard exists in general by further pursuing the argument sketched at the outset of this section. The argument involved an index of capital composition for each industry. In the particular version we chose, the index was constructed by relating the aggregated means of production to the total wage bill in each industry. Whatever index is chosen, prices are of necessity brought into play (physically heterogeneous quantities cannot be aggregated without the prices).[10] We have mentioned that prices will have to adjust to changes in the distribution. Thus, the index assigned to each industry should normally change after each change occurring in distribution, and the same holds for the average index. It follows that the "average commodity" will not always be the same through time. In effect, the standard would have to be changed after each change in distribution, which reduces the entire enterprise to nought.

5. MORE ON THE RICARDIAN THEORY OF VALUE

This section goes beyond the problem of an invariable standard of values in order to discuss Ricardo's theory of value at large.

The primary — and avowed — aim of his theory of "absolute value" was to aid in the measurement of the distribution of national income and its changes. Ricardo elaborated at length on this point. It is part of his polemic against Malthus and Smith, whom he blamed for not grasping the long-term changes in distribution because their value theory was incorrect

[10]To aggregate these heterogeneous quantities in terms of embodied labour is clearly impossible, since this would amount to assuming the entirety of conditions 1,2 and 3.

(cf. *Principles,* I, p. 48, and the relevant commentaries in Dobb, 1973, Ch. 2, 3).

From this point of view, Ricardo elaborated a "positive" interpretation of the theory of value that accords well with a currently influential strand of interpretation. For instance, Morishima interprets the Marxian labour-value as a way of aggregating heterogeneous physical quantities and views it as a means, alternative to prices, for defining macroeconomic quantities. The essential difference between Ricardo and Marx as reread by Morishima is that only the former believed he could identify (at least as a first approximation) the measurement in terms of value and in terms of gold, thus making the "absolute value" both a theoretical and an practical tool (cf. *Principles*, I, 1, 6, p. 46). When this belief is abandoned, only the theoretical component of the value concept remains, and the *Principles* eventually boil down to a one-sector model of distribution.

What Ricardo did not explain so well is that his concept of "absolute value" was important also to account for relative prices. This use of the theory is implied by the very logic of his construction. Take the famous discussion with Malthus regarding changes in the farmers', landowners' and wage-earners' incomes, respectively. It follows from this interchange that the Ricardian "laws of distribution" can be fully determined only when the changes in each income are known both in terms of labour-value and in real terms, that is, in terms of commanded subsistence commodities. The theory of distribution needs these two measures, the only significant

ones as opposed to monetary measures.[11] Now, take the celebrated table in the *Essay on Profits*. It illustrates the following long-term changes: the landowner's share of income increases in terms of embodied labour and in terms of commanded corn, the farmer's share decreases in terms of both measures, and the wage-earner's share increases in terms of the first measure while being stable or decreasing in terms of the second.[12] In this case too, Ricardo made use of two accounting systems. In order to assess the pattern of distributive changes, he needed a theory of relative prices, at least as far as corn or subsistence commodities are concerned.

In sum, *because* political economy is first of all the science of distribution*,* it must include a theory of relative prices. The connection is simple enough, but later writers, especially in the neo-classical tradition, have tended to obscure it. For instance, when discussing the Ricardian theory of relative prices, Marshall strongly suggests that he is shifting the emphasis onto a point deemed secondary by Ricardo, the importance of

[11]This is confirmed by Ricardo's letter of 27/03/1815 (VI, p. 202 sq.), where he answered one of Malthus's objections. The latter had argued that the monetary profits (as well as the profit rate) in the agricultural sector could increase even if the productivity of labour was declining in that sector (24/03/1815, VI).

[12]More on this table in Hollander (1973). Notice the following complication, brought out by Malthus. Suppose that measurement is made in terms of a consumption bundle ("necessaries," or subsistence commodities in the broad sense) instead of just corn. Then, a rise in the relative value of corn with respect to that of other subsistence commodities can very well block the predicted fall in the agricultural rate of profit. Ricardo was left with no reply to this objection (Letters of 23/11/1814 and 18/12/1814, VI, p. 151 sq.).

which could only have been fully appreciated by the marginalists. "Ricardo's first chapter has been discussed here with sole reference to the causes which govern the relative exchange values of things... But it was originally associated with a controversy as to the extent to which the price of labour affords a good standard for measuring the general purchasing power of money" (*Principles,* p. 676).

Returning to the invariable standard, it seems safe to conclude that this construction served not only to prepare Ricardo's aimed at conclusion that changes in distributive shares, as measured in terms of gold, provide an acceptable picture of real changes. Ricardo also meant the invariable standard to be a theoretical tool to investigate price changes, according to the scheme that sections 3 and 4 commented on. The particular construction of the standard that is "neutral with respect to distribution" is part of this scheme. It was introduced as a means of further extending the validity of an analysis of relative prices that was initially based on the special assumption of a uniform capital composition.

Here again we disagree with the more common interpretation of Ricardo that was inspired by Sraffa, if not defended by Sraffa himself. This Sraffian reading eliminates the notion of an "absolute value" as being insignificant in the eyes of Ricardo himself, and it turns the theory of the

"average commodity" into an autonomous construction that would make it possible to measure distribution. Rather than the *Principles,* this peculiar interpretation is supported by *Absolute Value and Exchange Value* — where Ricardo seems to have indeed outlined this perspective while inconsistently maintaining the other.[13]

6. CONCLUSIONS

To sum up the historical reconstruction offered in this paper, we have endeavoured to show that the invariable standard raised a genuine problem *within* the Ricardian theory of value, and that it was by and large properly stated there. An important step in our interpretation was to distinguish it from the related problem of the standard that is neutral with respect to distribution. We have also argued that the conditions relative to distribution are, while distinct from the invariably condition, both theoretically linked and subordinated to them. Beyond these clarifications, the aim of the present essay has been to paint a picture of Ricardo different from the prevailing one. The apparent continuity from Sraffa's 1951 *Introduction* to his *Production of Commodities* has fostered a retrospective projection that would perhaps have been unacceptable to Sraffa himself. We have sought to recall the fact that Ricardo was above all "the economist of production," to borrow a phrase from Marx who, on this score, understood him well and identified fully with him.

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[13] A few allusions made in correspondence provide further supportive evidence. See, e.g., the famous letter to McCulloch of 13/06/1820. For comments on *Absolute Value and Exchange Value*, see Sraffa (1951, I, p. XLVII).

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