

# ‘Price of wages’

## A curious phrase

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### 1 Introduction

In Section VI of Sraffa’s ‘Introduction’ to Ricardo’s *Works*, which concerns edition 2 of the *Principles*, the following paragraph occurs:

One group of apparently slight corrections may be more significant than at first appears. In ed. 1 Ricardo had frequently employed the curious phrase ‘price of wages’; in ed. 2 however the expression is removed in several cases, and its elimination is carried further in ed. 3. Although in places he clearly treats this phrase as interchangeable with ‘price of labour’ or simply ‘wages’, it must originally have been related to the expression ‘real value of wages’, which he uses in explaining the peculiar sense in which he is to be understood when he speaks of the rise or fall of wages: namely as referring to the *proportion* of the total product going to labour, and not to the absolute quantity of commodities received by the labourers. However, after thus defining the ‘real value of wages’, he did not use again that expression in the *Principles*, except when in ed. 3 he had to defend himself against Malthus’s complaint that he had adopted ‘new and unusual language’ in connection with wages:– a complaint renewed in later times by Marshall, who deplored Ricardo’s failure to invent some new term for the purpose. Perhaps the early use of ‘price of wages’ was a sign that Ricardo at first felt the need for a special term, whereas later he seems to have come to regard the unqualified term ‘wages’ as adequate, ‘at least among Political Economists’,<sup>1</sup> to describe proportional wages.

(Ricardo 1951–73, *Works* I: li–lii)

In the past six decades, Sraffa’s ‘Introduction’ has been extensively discussed, and some parts of it, most notably his ‘corn-ratio’ interpretation of Ricardo’s early theory of profits, have attracted a great deal of attention. This paragraph has received almost no attention at all. Can we infer from this that it is clear and unambiguous? Or that it is of no importance for the reconstruction of Ricardo’s theory of value and distribution, and of the classical approach to economic analysis more generally? The meaning of some statements in this paragraph is indeed not immediately clear. This begins with Sraffa’s opening remark that the partial

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elimination of the term ‘price of wages’ in editions 2 and 3 of the *Principles* ‘may be more significant than at first appears’. One could well ask: What precisely is its significance, then? And why, one may wonder, should Ricardo ‘perhaps . . . at first {have} felt the need for a special term’, but later ‘have come to regard the unqualified term “wages” as adequate, “at least among Political Economists”, to describe proportional wages’ – given that the latter concept was (and is) not widely used by political economists?

This paper attempts to clarify the meaning and significance of the above paragraph in Sraffa’s ‘Introduction’ by making use of some material from his unpublished papers in the Wren Library at Trinity College, Cambridge. Its composition is as follows. Section 2 reproduces some of Sraffa’s working notes on the phrase ‘price of wages’, and on some closely related matters, which he composed in the late 1920s and early 1930s. Section 3 scrutinizes Ricardo’s concept of proportional wages, that is, his definition of the ‘real value of wages’ as ‘the proportion of the value of the whole produce {which} is employed in supporting labour’ (Ricardo, 1951–73, *Works* II: 252). Section 4 offers some preliminary conclusions.

## 2 Working notes in Sraffa’s papers relating to Ricardo’s phrase ‘price of wages’

In Sraffa’s papers there are three main sources that can perhaps throw some additional light on this issue. First, Sraffa’s lecture notes for his course on ‘Advanced theory of value’, which he composed in 1927–8, contain some pertinent remarks on the changing treatment of wages in pre-classical, classical, and marginalist authors. Second, in one of the folders relating to the ‘Ricardo edition’, there is a set of working notes under the heading ‘Price of wages’, which Sraffa presumably composed in the early 1930s in preparation of the editorial notes and introductions of his edition of Ricardo’s *Works*.<sup>2</sup> Moreover, the folders relating to the ‘Ricardo edition’ also comprise two sets of proofs of Sraffa’s ‘Introduction’ from November 1950 and January 1951, with some significant changes in the paragraph under consideration.<sup>3</sup> Finally, there are several working notes on the conceptualization of wages, which were partly written in the late 1920s and early 1930s and partly in the early 1940s, which Sraffa kept in folders relating to *Production of commodities by means of commodities* (1960).<sup>4</sup>

### 2.1 Sraffa’s observations on the transformation in the conceptualization of wages

The interpretation of Ricardo’s initial use and subsequent (partial) removal of the term ‘price of wages’ that Sraffa was to put forward in his working notes from the early 1930s (see below, Section 2.2) appears to be closely related to his earlier observations on the development of the notion of ‘cost’ in his lecture notes for the course on ‘Advanced theory of value’. In these notes, Sraffa contrasted

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the viewpoint of Petty and the Physiocrats, for whom cost is 'a stock of material that is required for the production of a commodity; this material being of course mainly food for the workers', with Marshall's notion of 'cost as sacrifice', and concluded:

The most important consequence of these opposite views of cost is the different conception of distribution which arises from it.

For Marshall, wages, interest and profits, are simply shares in the product . . . Both are the inducement required to call forth certain sacrifices, which are equally necessary for production, and they are also the reward of those sacrifices. Their importance to production is equally subordinate: what is really necessary for producing is only the efforts, not their rewards. It is not necessary for the actual goods which compose real wages and profits to be in existence at the beginning of the process of production – the hope, or the promise of these goods is equally effective as an inducement. They operate on production only by being expected . . . as shares in the product.

Petty and all the classics, on the contrary, take the opposite view. They don't regard at all wages as an inducement; they regard them as a necessary means of enabling the worker to perform his work. The food and the clothing of the worker are equally necessary as his tools and raw materials. It is no good promising him a share in the future product; this may induce very good intentions in the worker, but will not enable him to do anything. In other words, the wages of the worker belong to the same class of necessities as the fuel of machines or the hay of the horses.

(D2/4: 21–3)

Sraffa stressed that Petty's point of view, which was also adopted by the Physiocrats, implied a conception of wages and profits,

as two things of a radically different nature. Wages are a stock of goods that exists before production and which is destroyed during the productive process: they come thus to be identified with capital or at least with an important part of capital. Profits (and rent of course) are a part of the product, and precisely the excess of the product over the initial stock.

(D2/4: 24)

According to Sraffa the classical economists, beginning with Adam Smith,

adopted this notion of surplus, and with it the idea of cost of the Physiocrats. But {Smith} has also a different idea of cost – and it is in a sense true that the *Wealth of Nations* as a whole represents the connecting link between the eighteenth century economics and the modern one. Thus he conceives of labour as an amount of 'toil and trouble' . . . Also his view of wages in the 'original state of things', which he regards as being derived from product, seems to bring him very near to the modern conception:

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‘The produce of labour’ he says ‘constitutes the natural recompense or wages of labour. In that original state of things, which precedes both the appropriation of land and the accumulation of stock, the whole produce of labour belongs to the labourer. He has neither landlord nor master to share with him.’

But there is also another side of A. Smith’s thought in this matter, where his views are certainly very nearly identical to those of the Physiocrats . . . This other side is usually neglected.

When the ‘original state of things’ has passed, and the workers are employed by a capitalist, he takes a different view of wages, and regards them, no more as part of the product, but as advanced by the employer to the workman.

He says that seldom the man who tills the ground has the means of maintaining himself till he reaps the harvest, and this is the reason for his working in the employment of others:

His maintenance is generally advanced to him from the stock of a master, the farmer who employs him, and who would have no interest to employ him unless he was to share in the produce of his labour, or unless his stock was to be replaced to him with a profit.

In this passage A. Smith is obviously confusing his two notions of what wages are. There is no choice between the employer ‘sharing the produce of labour’ and his ‘having his stock replaced with a profit’: only the second alternative is possible under the given conditions.

(D2/4: 28–9)

Smith’s conceptual confusion is thus seen to be related to his attempt to introduce a symmetrical treatment of wages, profits, and rents as equally important shares in total income and, at the same time, to preserve the inherited conceptualization of wages. As regards Ricardo’s notion of cost, and in particular his treatment of wages, Sraffa’s comments are remarkably brief:

Ricardo . . . reduces cost to a single element, labour, with some doubts as to whether to include the services of capital in addition to the labour that has produced the capital goods – and {he} definitely excludes rent from cost. I do not propose to deal at this stage with Ricardo’s notion of cost, and particularly with the significance of his exclusion of rent from it . . .

At present I am only tracing *the transformation of the notion of cost from the original one of a stock of material goods to the conception of an amount of human sacrifice* – that is to say, *the gradual transition from an objective to a subjective point of view*. It is only this aspect of Ricardo’s theory that we are considering.

Now for Ricardo, all considerations about the pleasantness or unpleasantness of labour are irrelevant to this question. Workers are paid in exact

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proportion to what is required to keep them alive and efficient, and thus to enable them to produce.

(D2/4: 36–7; italic emphases added)

In tracing the transformation of the notion of cost, Sraffa thus identified two separate elements that must be clearly distinguished: there is, first, the gradual transition from the treatment of wages as subsistence to the treatment of wages as a share in the product, and there is, second, the transition from *physical* real costs (amounts of commodities) to *psychical* costs (amounts of human sacrifices), that is, from the *objective* to a *subjective* point of view, to which corresponds the transition from 'enabling' to 'inducing'. As Sraffa pointed out, traces of both elements of this transformation in the notion of cost are encountered in Smith, while in Ricardo one finds only the first element. The subjective point of view was fully introduced into economic analysis only by Nassau W. Senior, and was definitely not present in Ricardo.

## 2.2 Sraffa's working notes on '*Price of wages*'

In March 1930, soon after he had been entrusted with the editorship of Ricardo's *Works*, Sraffa made a complete collation of the first (1817), second (1819), and third editions (1821) of Ricardo's *Principles* with the help of Dobb, Kahn, and Isles.<sup>5</sup> On this occasion he must have noticed (among numerous other textual changes) the partial elimination of the curious phrase 'price of wages', which Ricardo had occasionally employed in edition 1, and which he had replaced with 'price of labour' or simply 'wages' in editions 2 and 3.<sup>6</sup> This finding prompted him to compose a set of (undated) working notes under the heading 'Price of wages'. The first two working notes simply give the page numbers in the *Principles* and the *Notes on Malthus* where the term 'price of wages' was removed/kept (D3/11/37: 1), and how it was replaced (D3/11/37: 2). In the following notes we then find Sraffa exploring different routes in search of an explanation. One of these routes is fully in line with his earlier findings on the development of the notion of cost: Sraffa appears to have interpreted Ricardo's initial use of the curious term as a reflection of the inherited physical real cost approach with its treatment of wages in terms of subsistence requirements. Its subsequent removal could accordingly be read as signalling the abandonment of this approach in favour of the more modern conception of wages. This interpretation is explicitly spelled out by Sraffa in the following working note:

Wages = labour

... In many cases R{icardo} changes 'price of wages' into 'price of labour' (e.g. p. 89, ed. 3). This is not merely 'poor master of language' but is of the essence of the theories inherited & partly preserved by R{icardo}, which he only gradually abandoned (cf. Marx, Hist. ).<sup>7</sup> Wages are here treated as a factor of prod{uction}, not as a share in the product: the equivalence of 'labour' and 'wages' corresponds to the equivalence of 'steam-power' and 'coal'. The

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price of 'steam power' or the 'price of coal' are interchangeable: it would not occur to us to criticise this by saying that coal, as the food of the machine, represents the share in the product to which it is entitled as a remuneration of its labour.

The same uncertain use is found in A. Smith (refs. Cannan's n. 4, p. 52 vol. I: ib. 'maintenance of horse': a beautiful example p. 58)

But R{icardo} and Smith were a stage of transition: Petty (Marx, Hist., I, 3) and Physiocrats rejected labour for wages. Later economists of all schools (Marx, Marshall Mem. 126) reject wages for labour. 'Wages' were the real thing, now are on{1}y the measure.

(D3/11/37: 6)

In the interpretation that Sraffa at first appears to have endorsed this is the full significance of Ricardo's initial use and subsequent removal of the phrase 'price of wages': it is a reflection of the transformation in the development of the surplus approach, in the course of which the 'physical real cost' approach of Petty and the Physiocrats was gradually abandoned. When Smith and Ricardo (and later Marx) sought to develop the surplus approach on the basis of the labour theory of value, attention focused on amounts of labour rather than on the amounts of commodities that are necessary to enable the labourers to perform their work. Wages were no longer regarded as an indispensable 'factor of production' but, from Smith onwards, began to be conceived of as a share in income.

This transformation was a long and gradual process, and traces of it can accordingly be discerned not only in Ricardo's writings but also in those of other economists. The 'beautiful example' mentioned by Sraffa in Cannan's edition of Smith's *Wealth of nations* is indeed very instructive in this regard. In Chapter VI of Book I, 'Of the component parts of the price of commodities', Adam Smith wrote in a well-known passage (the two starred editorial notes are Cannan's):

In every society the price of every commodity finally resolves itself into some one or other, or all of those three parts; and in every improved society, all the three enter more or less, as component parts, into the price of the far greater part of commodities.

In the price of corn, for example, one part pays the rent of the landlord, another pays *the wages or maintenance of the labourers and labouring cattle\* employed in producing it*, and the third pays the profit of the farmer. These three parts seem either immediately or ultimately to make up the whole price of corn. A fourth part, it may perhaps be thought, is necessary for replacing the stock of the farmer, or for compensating the wear and tear of his labouring cattle, and other instruments of husbandry. But it must be considered that the price of any instrument of husbandry, such as a labouring horse, is itself made up of the same three parts; the rent of the land upon which he is reared, the labour of tending and rearing him, and the profits of the farmer who advances both the rent of this land, and the wages of this labour. Though the price of the corn, therefore, may pay the price as well as the maintenance

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of the horse, the whole price still resolves itself either immediately or ultimately into the same three parts of *rent, labour,\*\* and profit*.

\* [Smith overlooks the fact that his inclusion of the maintenance of labouring cattle here as a sort of wages requires him to include it in the national income or 'wealth of the nation' and therefore to reckon the cattle themselves as part of the nation.]

\*\* [The use of 'labour' instead of the more natural 'wages' here is more probably the result of its use five lines higher up than of any feeling of difficulty about the maintenance of cattle. On p. 58 below 'rent, labour, and profit' and 'rent, wages, and profit' are both used.]<sup>8</sup>

(Smith 1904 [1776]: 52; emphases added)

Smith's treatment of the workers' sustenance on the same footing as the feed of the cattle clearly reflects the earlier conceptualization of wages that he had inherited from his precursors.<sup>9</sup> However, Smith not only reckoned the 'wages of the labourer and the labouring cattle' among the necessary capital advances but also insisted that the workers' remuneration forms a part of society's income: hence, his terminological confusion. As Sraffa pointed out, the same uncertain use of the terms 'wages' and 'labour' can also be discerned in the writings of other classical authors. Clear expressions of the earlier 'physical real cost' approach are encountered, for instance, in James Mill's *Elements of political economy* (1844 [1826]). Mill insisted that 'the agents of production are the commodities themselves . . . they are the food of the labourer, the tools and the machinery with which he works, and the raw materials which he works upon' (Mill, 1844 [1826]: 165).<sup>10</sup> And he warned that,

the terms, Labour and Wages, are sometimes, incautiously used; and confusion of ideas, and some fundamental errors, are the consequence. It is clear that, when we speak of the labour of a man, for a day, or a month, or a year, the idea of his subsistence is as necessarily included . . . If wages be taken as synonymous with the consumption of the labourer, the labour cannot be taken, as one item of an aggregate, and its wages as another. As often as this is done, an error is the necessary consequence.

(Mill, 1844 [1826]: 9–10)<sup>11</sup>

This warning against conflating the earlier approach to the treatment of wages with the more recent conceptualization of 'labour' and 'capital' as the two 'agents of production', each receiving its share of total income, was reiterated several times (see Mill 1844 [1826]: 17–18). However, Mill then presented a rather curious argument in support of his contention that wages can be conceived of as *both* a part of the capital advances *and* a share in the surplus. Following Smith, he contended that, in the 'early and rude state of society', the entire product belongs to the labourers, whereas in the 'more advanced state',

the commodity belongs to the labourer and capitalist together . . . the commodity, or the value of it, is to be shared between them . . . Instead . . .

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of waiting till the commodity is produced . . . it has been found to suit much better the convenience of the labourers to receive their share in advance . . . When that share of the commodity, which belongs to the labourer, has been all received in the shape of wages, the commodity itself belongs to the capitalist, he having, in reality, bought the share of the labourer and paid for it in advance.

(Mill, 1844 [1826]: 40–1)

There is no need for us to dwell on Mill's peculiar argument, except to note that the transition from 'wages as subsistence' to 'wages as a share' was apparently associated with a rather widespread uncertainty about the proper use of terms. Ricardo's initial use, and subsequent (partial) removal, of the term 'price of wages' could accordingly be seen as merely another reflection of the prevailing linguistic uncertainty: in this interpretation, Ricardo at first simply adopted a phrase that could be regarded as a remnant of the earlier approach to the treatment of wages. That Sraffa indeed pursued this line of interpretation, at least as a temporary working hypothesis, is also confirmed by the following note, in which he made an attempt to determine the origin of Ricardo's phrase:

The expression is used in the transl. of Garnier's 'Method of facilitating the study of Dr Smith's Work' prefixed to the ed. of the W.o.N., Edinburgh 1806, vol. I, p. III.

(Was it used in the French of Garnier? If so, was it usual in French? Does Say use it in 1st ed.? And did A. Smith derive it from the French of the Physiocrats?

Or was it used in Scotland?

if this is the origin, both for this, probably Scotch, translator, & for A. Smith, was it used by Buchanan? by Mill in Commerce Def.? From these two Ricardo may have derived it.)

(D3/11/37: 5)

In Sraffa's papers, there is no record of the answers he found in the treatises mentioned. However, it is of course not difficult for us to find them for ourselves. The expression '*prix du salaire*' was used by Garnier in his 'Introduction' to the French edition of the *WN*, and in the 'Preface' he referred to Smith's chapter on wages as '*sur le prix des salaires*' (Smith, 1999 [1802]: xxxiii). The English translation in Garnier's 'Method of facilitating the study of Dr. Smith's work' (1818 [1806]: xxv)<sup>12</sup> is apparently derived from this usage. But the term appears to have been specific to Garnier; Say did not use it in (the first edition of) his *Traité*, and (to the best of my knowledge) it was also not commonly used in the writings of the Physiocrats.<sup>13</sup> As the expression was neither used in Buchanan's edition of the *Wealth of nations* (1814 [1776]) nor in his *Observations* (1970 [1814]) nor in James Mill's *Commerce defended* (1808), we may assume that Sraffa found



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only little evidence in support of his temporary working hypothesis that it had been widely used in contributions to political economy prior to Ricardo. On the other hand, he found out that the expression 'price of wages' or 'value of wages' was adopted by some of Ricardo's contemporaries – *after* it had been used by Ricardo in the *Principles*: by Baring ('low price of wages'; in a speech of 30 May 1820, reported in *Hansard N.S.*, vol. I, p. 655), by Blake ('money value of wages', in *Observations on expenditure*, 1823, p. 75), and by Torrens ('Is the value of Wages the only thing which determines the rate of profit?' Question proposed by Torrens to the Political Economy Club, May 5, 1823, *P.E.C. Minutes 1821–82*, vol. IV, 1882, p. 59).<sup>14</sup>

The explanation for Ricardo's initial use of the phrase 'price of wages' that Sraffa eventually put forward in the relevant paragraph of the 'Introduction' differs from the one that seems to be implied by his early working notes. It is clear, therefore, that Sraffa must have detected an additional element in Ricardo's treatment of wages that prompted him to reconsider his earlier working hypothesis. This novel element shows up in the following working note, in which Sraffa excerpted a statement from Marshall's *Principles*, and then commented on it:

Marshall (Princ. p. 550, n. 1, quoted in Q.J.E. 1928, p. 694) thus comments on R{icardo}'s habit of saying that wages rise when the ratio which they bear to the value of the produce increases, and fall when this ratio diminishes: 'It is to be regretted that he did not invent some new term for this purpose; for his artificial use of a familiar term has seldom been understood by others, and was in some cases even forgotten by himself.'

R{icardo} was not in the habit of inventing new terms: but in 1st ed. simply called the thing by its proper name, the real price of wages.

(D3/11/37: 3)

Sraffa's comment on Marshall shows that Ricardo's initial use of the curious phrase could also be interpreted differently: it may not have been a reflection of the earlier 'physical real cost' approach to the treatment of wages, but rather represent traces of an attempt by Ricardo to find a proper term for his novel conceptualization of 'real wages'.

### 2.3 The re-drafting of the paragraph in the 'Introduction'

Before we can discuss this more fully, we must first take note of the fact that Sraffa rewrote the paragraph under consideration at proofreading stage in November 1950.<sup>15</sup> In the galley-proof version, the paragraph read as follows:

One group of apparently slight corrections may have more interest than at first sight appears. It was one of the characteristics of Ricardo's theory that a rise or fall of wages was treated as a change in the *proportion* of the total produce going to labour, rather than as a change in the quantity of goods which labour received. This use of language has laid him open to criticism.

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Thus Marshall wrote: ‘Ricardo . . . decided to regard the rate of wages as measured by this ratio [the ratio of wages to the product]: and to say that wages rose when this ratio increased, and that they fell when it diminished. It is to be regretted that he did not invent some new term for this purpose, for his artificial use of a familiar term has seldom been understood by others, and was in some cases even forgotten by himself.’ The frequent use by Ricardo in edition 1 of the unusual phrase ‘price of wages’ may represent traces of an attempt to find a special term for this purpose. Although he appears to have treated this phrase as the equivalent of ‘price of labour’, or simply ‘wages’, it was probably related in his mind with the ‘real<sup>16</sup> value of wages’, in terms of which he explains how he is to be understood when he speaks of a rise or fall of wages. However, after defining the ‘real value of wages’ he never again used that expression in the *Principles*, except when in ed. 3 he had to defend himself against Malthus’s charge that he had adopted ‘new and unusual language’ in connection with wages; and he removed the expression ‘price of wages’ from several places in ed. 2, and carried further its elimination in ed. 3.

(D3/11/95: 25)

On his proofreading copy, Sraffa noted at the margin next to the final statement (‘and he removed . . .’): ‘This comes first’, and indicated by arrows that it must be moved up, immediately following the opening sentence. The term ‘real value of wages’ elicited the remark: ‘This is the term asked for by M{arshall}: start with it & then go on to price’. What prompted Sraffa’s rewriting of the entire paragraph was thus merely an attempt to give it a clearer logical structure. But the interpretation proposed in the galley-proof version is substantially the same as in the final version: Ricardo’s initial use of the curious phrase is interpreted as representing ‘traces of an attempt to find a special term’ for his novel conceptualization of real wages. However, when redrafting this paragraph at proofreading stage, Sraffa introduced two significant changes. First, he decided to drop the quotation from Marshall, replacing it with a short footnote reference. Second, he introduced a new interpretative element by suggesting that Ricardo ‘later seems to have come to regard the unqualified term “wages” as adequate, “at least among Political Economists”, to describe proportional wages’. In my reading, this insertion was meant to be a discreet hint for attentive readers to study carefully Ricardo’s concept of ‘proportional wages’.<sup>17</sup> However, with a few exceptions this hint seems to have escaped the attention of most readers.

### 3 Ricardo’s novel conceptualization of wages: the ‘real value of wages’

When Ricardo first exposed the fallacy of Adam Smith’s ‘adding-up-of-components’ theory in his *Essay on Profits* (1815) and demonstrated that the wage rate and the general rate of profits are inversely related, his argument was conducted in terms of commodity (i.e. corn) wages. Moreover, the inverse relationship between the two distributive variables was derived by assuming a given technical

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environment, that is, by explicitly setting aside improvements in the methods of production.<sup>18</sup> Prompted by objections raised by Malthus in subsequent debates, Ricardo then appears to have developed his new conceptualization of wages, and, in edition 1 of the *Principles*, he first presented the proposition that the general rate of profits must always vary inversely with the 'real value of wages', that is, with the proportion of wages in the value of the total product.<sup>19</sup> Ricardo seems to have adopted the new concept precisely because it supposedly enabled him to demonstrate an inverse relationship between the share of wages and the general rate of profits *even in the presence of changes in the productivity of labour*. As Malthus had pointed out, and Ricardo had conceded, the inverse wage-profit relationship need not necessarily hold if wages are measured in absolute quantities of commodities. Commodity wages need not be inversely related to the rate of profits if there is an improvement in the production of wage goods. In this case, the rate of profits and 'real wages' (in terms of quantities of commodities) could well rise simultaneously. Now this was indeed precisely what happened in the numerical example by means of which he illustrated his new conceptualization of 'real wages':

It is not by the absolute quantity of produce obtained by either class, that we can correctly judge of the rate of profit, rent, and wages, but by the quantity of labour required to obtain that produce. By improvements in machinery and agriculture, the whole produce may be doubled; but if wages, rent, and profit be also doubled, the three will bear the same proportions to one another as before, and neither could be said to have relatively varied. But if wages partook not of the whole of this increase; if they, instead of being doubled, were only increased one-half; if rent, instead of being doubled, were only increased three-fourths, and the remaining increase went to profit, it would, I apprehend, be correct for me to say, that rent and wages had fallen while profits had risen; for if we had an invariable standard by which to measure the value of this produce, we should find that a less value had fallen to the class of labourers and landlords, and a greater to the class of capitalists, than had been given before. We might find, for example, that though the absolute quantity of commodities had been doubled, they were the produce of precisely the former quantity of labour. Of every hundred hats, coats, and quarters of corn produced, if

The labourers had before . . .	25	
The landlords . . .		25
And the capitalists . . .	<u>50</u>	
		100:

And if, after these commodities were double the quantity, of every 100

The labourers had only . . .	22	
The landlords . . .		22
And the capitalists . . .	<u>56</u>	
		100:

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In that case I should say, that wage and rent had fallen and profits risen; though, in consequence of the abundance of commodities, the quantity paid to the labourer and landlord would have increased in the proportion of 25 to 44. Wages are to be estimated by their real value, viz. by the quantity of labour and capital employed in producing them, and not by their nominal value either in coats, hats, money, or corn.

(Ricardo, 1951–73, *Works* I: 49–50)

The device of measuring the rise or fall in the ‘real value of wages’ by the change in ‘the proportion of the value of the total product received by the workers’, or ‘the proportion of the total annual labour which is necessary to support the labourers’,<sup>20</sup> rather than by an increase or decrease in the amounts of commodities received by the workers, was not merely another way of expressing the relative distribution of income. Ricardo rather conceived of it as an analytical device that allowed him to assert, or so he thought, what may be called his ‘fundamental proposition’ on distribution: that the *rate* of profits depends on *proportional wages*, and on nothing else.<sup>21</sup>

That Ricardo had adopted a new and rather unusual conceptualization of ‘real wages’ was duly noticed – and heavily criticized – by authors such as Malthus and Senior.<sup>22</sup> Both protested against Ricardo’s adoption of ‘new and unusual language’ in connection with wages.<sup>23</sup> As Ricardo put it in a letter to James Mill:

Malthus thinks it monstrous that I should say labour had fallen in value, when perhaps the quantity of necessaries allotted to the labourer may be really increased.

(Ricardo, 1951–73, *Works* VII: 378)

The novelty of Ricardo’s conceptualization of wages was also noted by later commentators such as Marshall and Cannan.<sup>24</sup> Marshall also pointed out – quite rightly – that Ricardo was not always consistent in the application of his own concept and occasionally fell back into using the term ‘real wages’ in the usual sense, that is, as referring to commodity wages. This fact certainly did not make it easier for his readers to understand the meaning and analytical significance of his new concept. At first, Ricardo’s new conceptualization of real wages appears to have been rather difficult to grasp even for Sraffa, who commented on it in one of his early working notes<sup>25</sup> as follows:

The fundamental law of Ricardo ‘if wages rise, profits fall’ (the truism that is true)

At first sight an exception is found in such a case as if the workers spend the additional wages in going to cinemas, besides on Sundays, also on Saturdays – the cost would not increase, and the national dividend would thereby be increased. As the proposition assumes that there is one cake, and the more the workers get, the less is left for capitalist, it would seem not to hold in this case. But for Ricardo increase in wages means not an increase in the goods

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that compose them (which would be meaningless in general, since the 'goods' are etherogeneous {sic} and not commensurable) but an increase in the amount of labour that goes to producing wages, and therefore a decrease in the amount of labour that goes to produce profits.

Therefore, in the above case, the additional show, if it doesn't cost more to produce, would not be an increase in wages in Ricardo's sense . . .

The proposition must always imply that wages are measured in labour. Thus it is always true, also if the rise in profits is due to increased productivity of labour (wages in goods remain unchanged, but in labour change) V. Marx, Hist. VI, 231–3.

(D3/12/10: 5)

This working note shows that Sraffa had correctly grasped the significance of the proportional wage concept for the applicability of Ricardo's proposition on the inverse wage–profit relationship when there are improvements in the methods of production. However, by interpreting Ricardo's proposition as referring to distributional *shares*, Sraffa committed the same error as numerous writers before and after him.<sup>26</sup> Properly understood, that is, as referring to the relationship between proportional wages and the *rate* of profits, Ricardo's proposition is by no means a 'truism'. As De Vivo has pointed out, it is indeed

obviously a truism that, if something has to be divided in two shares, as one of them increases, the other must decrease, and vice versa. Thus, it is obvious that if the share of wages rises, the share of profits must fall, given that they make up the whole of price, having 'got rid' of rent. Now, the ratio of the share of profits to the share of wages, *if we disregard non-wage capital*, is equal to the rate of profits:

$$\frac{\text{profits}}{\text{product}} : \frac{\text{wages}}{\text{product}} = \frac{\text{profits}}{\text{wages}}$$

Therefore, under these assumptions, the inverse relation between the rate of profits and the rate of wages can be proved passing through the truism on the shares.

(De Vivo 1984: 50; emphasis added)

For Ricardo's proposition to hold true, it is indeed crucial that capital is assumed to consist only of wage capital. If we take into account the existence of non-wage capital – or, more precisely, if we take into account that capital cannot be resolved entirely into direct and indirect wages, as Ricardo tended to assume – then the proposition need not necessarily hold true any more: the *rate* of profits can fall (or rise) even if the proportional wage in Ricardo's sense remains constant.

In Sraffa's understanding, it was one of Marx's important analytical achievements to have demonstrated this error of Ricardo.<sup>27</sup> In order to appreciate Marx's criticism of Ricardo's proposition on the wage–profit relationship, we must first take note of his approval of the latter's novel conceptualization of real wages. In the *Theories of surplus value*, Marx stressed:

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The value of labour has to be reckoned not according to the quantity of the means of subsistence received by the worker, but according to the quantity of labour which these means of subsistence cost (in fact by the proportion of the working-day which he appropriates for himself), that is, according to the relative share of the total product, or rather of the total value of this product, which the worker receives. It is possible that, reckoned in terms of use values (quantity of commodities or money), his wages rise as productivity increases, and yet the value of wages may fall and vice versa. *It is one of Ricardo's great merits that he examined relative or proportionate wages, and established them as a definite category.*

(Marx 1989 [1861–3]: 419; emphasis added)

A similar statement occurs in the chapter on Malthus, where Marx observed in addition:

The concept of *relative wages* is one of Ricardo's greatest contributions. It consists in this – that the *value of the wages* (and consequently of the *profit*) depends absolutely on the proportion of that part of the working day during which the *worker works for himself* (producing or reproducing his wage) to that part of his time which belongs to the capitalist. This is important economically, *in fact* it is only another way of expressing the real theory of surplus value.

(Marx 1989 [1861–3]: 226–7)

Ricardo's concept of 'proportional wages' is indeed merely another way of expressing the relation between the value of the social variable capital ( $v$ ) and the social surplus ( $s$ ). Accordingly, his 'fundamental proposition' that the general rate of profits falls (rises) *if and only if* proportional wages ( $w$ ) rise (fall) is equivalent to the statement that its fall (rise) is conditional on a decrease (increase) in the aggregate rate of surplus value ( $s/v = (1 - w)/w$ ). As against this, Marx put forward the following objection:<sup>28</sup>

In his observations on profit and wages, Ricardo . . . treats the matter as though the entire capital were laid out directly in wages.

(Marx 1989 [1861–3]: 10)

And he stressed that Ricardo's neglect of the non-wage capital implied that for him 'the *rate of profit* and the *rate of surplus value* . . . are identical terms', and therefore

a permanent fall in profit or the tendency of profit to fall can only be explained as the result of the *same causes* that bring about a permanent fall or tendency to fall in the *rate of surplus value*, i.e. in that part of the day during which the worker does not work for himself but for the capitalist.

(Marx 1989 [1861–3]: 73)

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According to Marx, Ricardo's neglect of circular production relations in his observations on the wage-profit relationship had precluded him from identifying the 'true' cause of the falling rate of profit: the fall in the maximum rate of profits which is brought about by an increase in the 'organic composition of capital'. In Marx's words:

The rate of profit falls, although the *rate of surplus value* {i.e.  $s/v = (1 - w)/w$ } remains the same or rises, because the proportion of variable capital to constant capital decreases with the development of the productive power of labour.

(Marx 1989 [1861–3]: 73–4)

#### 4 Conclusion

Sraffa detected two elements in Ricardo's treatment of wages that might be relevant for an explanation of the latter's initial use and subsequent (partial) removal of the curious phrase 'price of wages' in the three editions of the *Principles*. There is, first, the transformation in the notion of cost and the associated transition from 'subsistence wages' to 'wages as a share in income', which led to a rather widespread confusion about the proper use of the terms 'wages' and 'labour'. Ricardo's initial use of the curious phrase could be regarded as merely another example of this terminological confusion, of which traces can also be found in the writings of authors such as Adam Smith or James Mill. Sraffa temporarily appears to have pursued this interpretative line, but then apparently gave it up because he found only insufficient evidence in its support. The second element consists in Ricardo's introduction of the new and unusual concept of 'proportional wages', instead of the common one of 'commodity wages', for measuring real wages. According to Sraffa, the textual changes under consideration might represent traces of an attempt by Ricardo to find a term for explaining his novel conceptualization of wages. However, this explanation is presented rather tentatively, with many warnings to the reader that an element of speculation is necessarily involved in it.

#### Notes

\* For most helpful assistance in the preparation of this chapter, I would like to thank the staff in the Wren Library at Trinity College, Cambridge. I should also like to thank Pierangelo Garegnani, literary executor of Sraffa's papers and correspondence, for granting me permission to quote from them. References to Sraffa's papers follow the catalogue prepared by Jonathan Smith, archivist. As Sraffa frequently used both parentheses and square brackets in his texts, my additions are indicated by curly brackets. Unless otherwise stated, emphases are in the original. I wish to thank Heinz D. Kurz and Arrigo Opocher for useful comments and Jean-Pierre Potier and Philippe Steiner for helping me with checking some French sources.

1 The quoted passage should read 'at least *amongst* Political Economists' (Ricardo, 1951–73, *Works*, IV: 409; emphasis added). The error apparently slipped in when this

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paragraph was rewritten, in Maurice H. Dobb's hand, at proofreading stage in November 1950 (see D3/11/95: 23).

- 2 See folder (D3/11/37: 1–20).
- 3 See, in particular, document (D3/11/95: 25).
- 4 These notes are scattered over several folders; see, in particular, folders (D3/12/2) up to (D3/12/10).
- 5 See the entries in Sraffa's diary for 17–21 March 1930 (Sraffa Papers: E 4); see also Sraffa's letter to Keynes of 22 March 1930 (Keynes Papers: L/S 44).
- 6 The expression was partly removed in edition 2 (see Ricardo, 1951–73, *Works* I: 95, n.3; 96, n. 1, 3, and 4; 111, n. 3), and its elimination was carried further in edition 3 (ibid.: 94, n.1; 303, n. 2; 334, n. 3), although in a few cases it was retained (ibid.: 118, 145).
- 7 The reference is to Marx's *Histoire des doctrines économiques* (1924–25); the page reference (for which space is left open) is missing.
- 8 Cannan's reference is to one of the opening paragraphs in Chapter VII, 'Of the natural and market price of commodities', where Smith used, in a single paragraph, both 'rent, labour, and profit', and 'rent, wages, and profit'; see Smith (1904 [1776]: 58).
- 9 Interestingly, a similar example can also be found in Ricardo's *Principles*; see (Ricardo, 1951–73, *Works* I: 394).
- 10 Sraffa excerpted numerous passages, including those quoted below, from the 1826 edition of James Mill's *Elements*; see (D3/12/9: 106–118). He kept these excerpts in folders relating to *Production of commodities by means of commodities*.
- 11 See also the following passage (which Sraffa also excerpted):

Whenever we say that such and such effects are produced by pure labour, we mean the consumption and operations of the labourer, taken conjunctly. There can be no labour without the consumption of the labourer . . . in all these cases, equally, whenever we speak of his labour, as a thing by itself, a detached, independent instrument of production, the idea of subsistence is included in it.

(Mill, 1844 [1826]: 9)

- 12 The reference is to the edition of 1818, because I had no access to a copy of the 1806 edition of Garnier's 'Method' (to which Sraffa refers in his working note).
- 13 The French term of Garnier was however picked up by Marx, who wrote in his *Theories of surplus value*: 'Adam Smith, like all economists worth speaking of, takes over from the Physiocrats the conception of the average wage, which he calls the *prix naturel du salaire*' (Marx 1988 [1861–3]: 376).
- 14 See Sraffa's working notes in (D3/11/37: 9–11).
- 15 As is well known, in the final stages of the editorial project Maurice Dobb came in to assist Sraffa, 'being associated in particular in the writing of the Introductions to vols. I, II, V, and VI' (*Works* I: x). Hand-written (or type-written) draft versions of the 'Introduction', of which there were presumably many, are not extant.
- 16 This word was inserted at proofreading stage.
- 17 This is suggested by Sraffa's use of the phrase 'adequate, "at least among Political Economists"' as a characterization of Ricardo's concept of proportional wages.
- 18 See Ricardo (1951–73, *Works* IV: 12).
- 19 A first allusion to the new concept can perhaps be found in a letter to Malthus of 14 October 1816 (see Ricardo, 1951–73, *Works* VII: 81).
- 20 It is important to recall that (except in Chapter 1) Ricardo's argument in the *Principles* was generally based on the assumption that prices are invariant with regard to changes in distribution, because commodities exchange according to the amounts of labour embodied in them. Because of this assumption, a greater (smaller) proportion of the value of the total product received by the workers as wages also means that a greater



- (smaller) proportion of the total annual labour is devoted to the reproduction of their wages. See also De Vivo (1984: 46–50).
- 21 An explicit statement of this proposition can be found, for instance, in one of Ricardo's notes on Malthus's *Principles*: 'Profits in fact depend on high or low wages, and on nothing else. The greater the proportion of the value of the whole produce necessary to support the labourer, the higher will be wages' (1951–73, *Works* II: 252). And, in Chapter VII of his *Principles*, Ricardo stressed: 'It has been my endeavour to shew throughout this work, that the rate of profits can never be increased but by a fall in wages' (Ricardo, 1951–73, *Works* I: 132); for a similar statement see (*ibid.*: 411).
  - 22 See, in particular, Malthus (1986 [1827]: 23–36), and Senior (1965a [1826]: 238; 1965b [1836]: 5 and 142–8).
  - 23 See Ricardo (1951–73, *Works* II: 194).
  - 24 See Marshall (1920 [1890]: 458n) and Cannan (1967 [1893]: 269–78).
  - 25 This note is dated 'Michaelmas and Lent term 1928'.
  - 26 See, for instance, Malthus (1989 [1820]: 310) and Schumpeter (1954: 592).
  - 27 John Stuart Mill, in his *Essays on some unsettled questions*, also pointed out that 'Mr. Ricardo's theory is defective: that the rate of profits does *not* exclusively depend upon the value of wages' (1968 [1844]: 101). However, Mill's attempt to remedy Ricardo's erroneous proposition was a failure. According to Mill, 'it is strictly true, that the rate of profits varies inversely as the *cost of production of wages*' (*ibid.*: 103; emphasis added), where by 'cost of production of wages' he means the wages of the labour employed, directly and indirectly, in the production of wage goods, plus 'the *profits* of those who, in any antecedent stage of the production, have advanced any portion of those wages' (*ibid.*: 102). It is clear that Mill's concept of the 'cost of production of wages' is not a useful device for ascertaining the rate of profits, because it depends on it.
  - 28 Marx unfortunately did not succeed very well in expressing his (correct) criticism accurately, so that he has often been misunderstood as asserting that Ricardo had omitted to consider non-wage capital at all – a charge that can easily be shown to be quite wrong. What Marx insisted on was that Ricardo had omitted to take into account the non-wage capital in his analysis of the wage-profit relationship.

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