

The Time of Labour, the Time of Capital

On the Question of Time in Ricardo's Value Theory.

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INTRODUCTION

In modern assessments of the relationship between Ricardo and Marx, and, in particular, of the status of Marx's extensive critique of Ricardo, the influence of Piero Sraffa has been considerable. The authenticity of the Sraffian approach to the history of classical economics as a whole, however, has recently been challenged. According to Blaug, the Sraffian interpretation is one of a variety of 'rational reconstructions' in which the structure and techniques of modern analysis are read into the works of authors from an earlier time to the detriment of any real historical understanding. In particular a core version of classical economics is identified in the writings of the leading figures of classical political economy which is taken to include an exogenously given technology, aggregate social product and real wage. As Blaug summarises the procedure:

"We assume that perfect truth is found in *Production of Commodities*, and then we read backward, finding Sraffa in much of Ricardo and Marx, although much less in Smith and Mill, and forget about almost everything else in classical economics because it will not fit the Procrustean bed of the interpretation."²

In an article which examines the Sraffian interpretation of the whole history of classical economics, Blaug argues that "Smith, Ricardo and Mill aside, it is when [the Sraffians] consider Marx that we come face-to-face with the historical misrepresentation of technology as an exogenous variable in classical economics." Insisting on the importance of labour process analysis in Marx's theory, Blaug takes exception to the Sraffian interpretation because "Marx did not take as given the 'technical conditions of production'"³

In a similar vein, Peach (1999) has forcefully rebutted the Sraffian version of the history of economics, placing particular emphasis on the manner in which central elements of the works of Smith, Ricardo and the whole classical tradition are disregarded. In the case of Marx, logic reaches breaking point for, as Peach notes:

"It may be granted that Marx was also a *kind* of surplus theorist. But as anyone remotely acquainted with Marx's writings will be aware, *his* surplus theory was developed in terms of *his* labour value categories. How then can he be enlisted in a tradition which rejects *all* labour theories?"⁴

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² Blaug (1999: 215.)

³ Ibid221 See also the replies to Blaug by Garegnani (2002) and Kurz and Salvadori (2002)

⁴ Peach (1999:458) emphasis in original

Neither Blaug nor Peach express any partisan sympathy for Marx, both taking as their standpoint the search for an 'historical reconstruction' of the history of economic thought. For our purposes it should simply be noted that both authors reject the distortion of Marx's ideas as part of a broader, systematic Sraffian 'rational reconstruction' of the history of economics.

It is worth contrasting their views with those recently expressed by Samuel Hollander. Hollander examines the hypothesis that Sraffa, in his introduction to Ricardo's *Principles* and in *The Production of Commodities*, was imposing a specifically Marxian 'rational reconstruction' upon classical economics in general and upon Ricardo's thought in particular. Hollander cites Bronfenbrenner's view that "Sraffa was a Marxist, a refugee from Mussolini's Fascist regime.... Since Marx professed himself an admirer of Ricardo – as nearly a disciple as Marx could ever admit being of any predecessor - it may have seemed natural to attribute the same system first to Ricardo, and thence to classical economics in general."⁵ That Sraffa's interpretation of Ricardo bore the hallmarks of a rational reconstruction is undeniable. Hollander notes Sraffa's statement in *The Production of Commodities* that the 'corn ratio' interpretation of the early Ricardo, "which is never explicitly stated by Ricardo"⁶ suggested itself only after Sraffa had developed the concept of a standard commodity and the distinction between basics and non-basics.

I do not intend, however, to examine the roots of Sraffa's interpretation of Ricardo as such, nor do I dispute that Sraffa's reading of Marx may have coloured his view of Ricardo. My purpose is rather to argue that the Sraffian interpretation of the relationship between the theories of Ricardo and Marx is not a simple, one-way street in which a fundamentally Marxian framework is imposed upon Ricardo's thought, as Hollander appears to believe. Rather, the blurring of the distinction between the works of Ricardo and Marx by Sraffa⁷ has also led to a rational reconstruction of Marx's work, which bears little relation to his theoretical framework. Sraffa's view cited by Hollander, that "Marx published the Capital [sic] in which his critique of capitalism is entirely based upon Ricardo's theory of value"⁸, is surely as revealing about Sraffa's view of Marx as it is of his interpretation of Ricardo. Hollander cites Porta's judgement, that: "Sraffa [chose] to disguise Marx in a Ricardian garb"⁹, without noting that, if true, those who followed Sraffa's lead would likely confuse the identities of *both* authors.

Hollander's contribution does not claim to consider in detail the various attempts by Sraffian authors to assess Marx's own extensive writings on Ricardo. We should be aware though that while for some the aim of the Sraffian project appears to be to construct a bridge between Marx and Ricardo, there is a group of authors sympathetic to Sraffa's approach who have wholeheartedly rejected Marx's critique of Ricardo, finding in Ricardo's value analysis a clarity and consistency which has evaded a body of less committed interpreters.¹⁰

According to Steedman (1982), on the central question of Marx's treatment of Ricardo's analysis of value and cost price, Marx's criticism of Ricardo's value theory turns upon "a mere verbal muddle on Marx's part". Marx, it seems was imposing his own rational reconstruction on Ricardo, by falsely interpreting Ricardo's value categories as though they were his own.¹¹ In a similar vein, Caravale (1991) argues that; "most of Marx's criticism of Ricardo – in the light of contemporary analytical results based on Sraffa's work (and of course, on Bortkiewicz's writings before him) – appears devoid of foundations."¹² In an even more severe judgement of Marx's intellectual abilities, Feess has

⁵Bronfenbrenner (1989) cited in Hollander (2000: 193.)

⁶ Works I: xxxi

⁷ Sraffa, of course, was not alone in this. Hollander (2000: 192 fn8) notes Dobb's view that Sraffa rehabilitated 'the Marx-Ricardo approach to problems of value and distribution'

⁸ Hollander (2000:221)

⁹ Hollander (2000:193) See Porta (1986) and (2002). For a response see Mongiovi (2002a)

¹⁰ On this point see De Vivo (1982:87-88)

¹¹ Steedman argues that due to Marx's 'misinterpretation', "the differences between, Ricardo and Marx have, perhaps as a result, been somewhat exaggerated." (1982: 115)

¹² Caravale 1991:169

advanced the view that Marx “could not understand the basic concepts – or even the basic questions – Ricardo was dealing with.”¹³ Feess claims that in his paper “The chapter ‘On Value’ in Ricardo’s *Principles* is shown to be a consistent and rigorous treatment of the determinants of prices of production.”¹⁴

Having thus dismissed Marx’s critique of Ricardo, the Sraffian claim is then advanced that Marx was wrestling with essentially the *same* issue as Ricardo. Thus, to take a typical example, Mongiovi argues that:

“As with Ricardo, [Marx’s] labor-value analysis is a technical device designed to isolate an objective relationship, between wages and the profit rate, that he was not equipped to expose by other means.”¹⁵

But where is the textual support for this claim? Certainly Marx discussed the wage/profit rate relation in the work of *other* authors, notably that of Ricardo. But it plays no significant role in *his own* analysis in *Capital*. He devotes just a short chapter of five pages to the matter in Volume Three when he examines the ‘Effects of General Wage Fluctuations on Prices of Production’. That chapter concludes with his summary of the issue:

“The question merely was, how a general rise or fall in wages affected the assumed prices of production of commodities. *This is but a very secondary question* compared with the other important points analysed in this part. *But it is the only relevant question treated by Ricardo and as we shall see, he treated it one-sidedly and unsatisfactorily.*”¹⁶(emphasis added)

In this paper I will argue that there is a fundamental difference between the value theories of Ricardo and Marx, and will address it from the standpoint of their respective treatments of ‘time’ – a subject that has been mostly neglected in the secondary literature. Two kinds of time are at issue. The first is ‘labour time’ or working time. According to Marx, it is a subject that Ricardo ignores. Labour time is of course central to Marx’s whole social theory. For Marx, all forms of society capable of producing a surplus have been based upon the extraction of surplus labour time from one part of the population. In classical antiquity, the work of the slave was the precondition for the free development of the master, providing him the leisure to participate in public life.

“This surplus labour is on the one hand the basis of society’s free time, and on the other hand, by virtue of this, the material basis of its whole development and of civilisation in general.” (MECW 30: p196)

But in such pre-capitalist societies the extent of surplus labour time was limited by needs and the production of use values. Only with the development of merchant capital, as expressed in the formula M-C-M’, does monetary value become the dominant subject, leading to capital’s ‘boundless thirst’ for surplus value.

“But in all situations where use value predominates, the labour time is a matter of less consequence, provided only it is sufficiently extended to provide, apart from the means of subsistence of the workers themselves, a certain mass of use values, a kind of patriarchal wealth for the rulers. However, in proportion as *exchange value* becomes the determining element of production the lengthening of labour time beyond the measure of natural requirements becomes more and more the decisive feature.” (Ibid p19)

¹³ Feess 1998:277

¹⁴ *ibid* 291

¹⁵ Mongiovi 2002: 397

¹⁶ Marx

I will discuss the question of working time in the next section. The other variety of time could be labelled the 'time of capital', whether conceptualised in terms of a capital structure of different dates, or time within the circuit of capital. That theme will form the basis of the third section. In the final section I will attempt to draw some conclusions.

SECTION 2

*"Moments are the elements of profits"*¹⁷

According to Marx, writing in *Capital*, there is a serious defect at the heart of Ricardo's theoretical framework in that he assumes working time to be constant - "He recognises no change either in the length of the working day or in the intensity of labour, so that with him the productivity of labour becomes the only factor."¹⁸ Let us examine the validity and significance of Marx's argument for it forms the basis of a fundamental difference between the two authors in their approach to questions of value.

In the evolution of his critique of Ricardo, from the *Economic and Philosophic Manuscripts of 1844* onwards, it appears that Marx was not immediately aware of the issue himself, for he repeatedly refers to Ricardo's measure of value as being based upon 'labour-time', despite Ricardo's consistent use in the *Principles* and elsewhere of the ambiguous phrase 'quantity of labour', which could either denote 'hours of labour' or 'number of workers'. As I shall argue below, Ricardo was not concerned with the question of working time and it plays no part in his economics.

It is only in the *Theories of Surplus Value* written between 1861-3 that Marx's clear break with Ricardo on this point is firmly established. While still crediting Ricardo with a measure of value based upon labour time, Marx introduces into his critique the idea that Ricardo takes working time to be fixed. It may be instructive for our appreciation of Marx's method to first consider the process whereby Marx was led to this understanding.

By far the greatest proportion of Marx's extensive commentary on Ricardo's work represents an 'immanent' critique of his theory and method, in an attempt to draw out and develop what Marx saw as contradictions in his thought. There is here, however, the danger of creating a simplistic view of Marx's approach. In asserting the centrality of Marx's 'immanent critique', it is important to note that when identifying flaws in Ricardo's system, Marx did not see those antinomies as simple logical faults. They were, in part at least, the necessary reflection of the difficulties inherent in comprehending a changing reality at a time when economic society itself was in the process of a profound transformation. Whether or not Marx's treatment of the complex relation between theory and history is considered satisfactory, this element in his outlook must be kept in mind when considering his critique of political economy.

Marx's method, 'historical materialism', with its insistence upon historical context, sits uneasily with the notion of a purely immanent critique. However radical, such a critique must inevitably remain within the theoretical confines of classical political economy. How then should we appraise Marx's reading of Ricardo on this score? According to one author, either the logical or the historical modes of critique could have been applied:

"In the so-called historical mode of critique of previous theories, they are collated with the same historical facts on the basis of which they were created. For instance, if Marx had chosen the historical mode of critique of Ricardo's theory, he would have had to compare this theory with facts of Ricardo's time - that is the facts of capitalist development of the late 18th-early 19th century... Yet this mode of critique assumes that the facts themselves have

¹⁷ Marx (1976) p352 quoting the Report of the Inspectors of Factories

¹⁸ Marx (1976) p660

been studied well or must be studied well, whereas in this case the facts were not studied or comprehended scientifically, moreover they had not been even collated and summed up. Under these conditions, the historical method of critique was apparently inexpedient...Therefore Marx preferred the so-called logical mode of critique.”¹⁹

If this view is accepted, what should we make of Marx’s argument that Ricardo ignores variations in the working time? Ricardo’s analysis was predominantly agricultural in nature and as Marx himself conceded, in agriculture, the extension of labour-time - i.e. the augmentation of absolute surplus value - is only possible to a limited degree. As Marx was aware “One cannot work by gaslight on the land.”²⁰ If the question of working time was simply not an issue when Ricardo was writing, it is difficult to imagine how it could form part of an immanent critique. Did Marx then effectively import the issue illegitimately into his reading of Ricardo, a purely ‘rational reconstruction’, based upon his own detailed studies of factory condition during a much later phase of industrialisation? To answer this question, it is important first to establish that Marx’s economic writings do contain the fragments of a systematic empirical critique of Ricardo based upon an historical outline of the period. Wherever possible, Marx drew upon the historical evidence available to him, to check the results of his logical critique.

It may be argued that Ricardo was no empiricist, and that it is illegitimate to assume that his mainly deductive theoretical system was drawn from, and can be tested directly against, the economic history of his time, as in places Marx attempts to do. On the other hand, Ricardo’s analysis was closely tied to the policy issues of the day. In his study of the empirical content of Ricardian economics, for example, Blaug argues that: “the body of doctrine which Ricardo bequeathed to his followers rested on a series of definite predictions about the course of economic events which were subject to empirical verification in the strictest sense of the term.”²¹ In a similar vein, De Marchi expresses the view that, whilst Ricardo was sceptical of the empirical approach to the *discovery* of economic laws, he believed that even his most abstract analysis “retained a high degree of explanatory correspondence to reality.”²² Notwithstanding the abstract nature of Ricardo’s framework, the *Principles* is replete with references to the economic circumstances of his time. Indeed Ricardo was quite content to support his argument in places with reference to parliamentary speeches and reports made in the same year that the first edition was published, and he was clearly of the opinion that his theoretical propositions reflected contemporary conditions and were capable of influencing policy legislators.

Let us first remind ourselves why the variability of working time is central to an understanding of the differences in the value - theoretical framework of the two authors. It is clearly not the sole distinction. The contrast between Marx’s approach, based upon the dual categories of concrete and abstract labour on the one hand, and Ricardo’s notion of embodied labour, on the other, has been well documented in the literature and I will not rehearse those issues in this paper. For Ricardo, the ‘quantity of labour’ served principally as an approximate measure of value that allowed him to generalize his analysis from the ‘corn calculations’²³ of the *Essay on Profits* to the full model in the *Principles*. According to Marx however:

“Ricardo...investigated neither the origin of surplus value nor absolute surplus value and therefore regarded the working day as a given magnitude...therefore, *his law* - that surplus value and wages (he erroneously says profit and wages) in terms of exchange value can rise or fall only in *inverse* proportion - *is incorrect*.” (emphasis and parentheses in original)²⁴

¹⁹ Ilyenkov (1982) p203

²⁰ Marx (1969) Vol II p20

²¹ Blaug 1956 p41

²² De Marchi 1970

²³ By the time of writing of the *Essay on Profit*, Ricardo was already well aware of the problems of such ‘corn calculations’ as a result of Malthus’s promptings.

²⁴ Marx (1969) Vol 2 p408.

There is one notable passage early in the *Principles* that does refer directly to working hours. In the first section of the Chapter, *On Value*, Ricardo recites the well-known hunting example from the *Wealth of Nations*, quoting Smith: “It is natural that what is usually the produce of two days’, or two hours’ labour, should be worth double of what is usually the produce of one day’s, or one hour’s labour.”²⁵ Ricardo, however, immediately reverts to the ambiguous phrase ‘the quantity of labour’ when, in the subsequent passage, he asserts the superiority of this measure of value over Smith’s alternative standard of ‘labour commanded’. In the 1815 *Essay on Profits*, the meaning of an increased ‘quantity of labour’ is clear:

“If the money price of corn, and the wages of labour, did not vary in price in the least degree, during the progress of the country in wealth and population, still profits would fall and rents would rise; because *more labourers* would be employed on the more distant or less fertile land, in order to obtain the same supply of raw produce; and therefore the cost of production would have increased, whilst the value of the produce continued the same.”²⁶ (emphasis added)

In formulating the more complex structure of the *Principles*, Ricardo essentially retained the same conception. Thus, in a key passage in the chapter ‘On Profits’, for example, he argues that with a decline in agricultural productivity, the corn price will rise due to an increase in the ‘quantity of labour’:

“[T]he farmer on new land would probably be obliged to *employ an additional man*, and therefore to pay an additional sum of 25*l.* for wages; and the farmer on the old land would be obliged to pay precisely the same additional sum of 25*l.* for rent; without which additional labour, corn would not have risen, nor rent have been increased.”²⁷

Clearly, then, when Ricardo argues for the ‘quantity of labour’ as the regulator of relative values he means the number of labourers. Marx notes Ricardo’s argument later in the *Principles*, that: “The labour of a million of men in manufactures, will always produce the same value” commenting that, “this is wrong, or is only true where the same normal working day – taking into account the various difficulties etc. in different branches of labour – has been generally established”²⁸ How should we regard Ricardo’s apparent indifference to the issue of working time? Nowhere, for example, in the *Principles*, does Ricardo consider the possibility that the fall in the profit rate induced by declining agricultural productivity could be offset by longer working hours.²⁹

Marx’s study of the historical evidence, beginning in the *Theories of Surplus Value* and carried through in summary form into *Capital*, appears to have developed in parallel with, and also cross-fertilized, his theoretical work on Ricardo. Drawing upon an array of sources, including the movement of wheat prices, the operation of the Poor Laws and the writings of Ricardo’s contemporaries, Marx sought to overturn Ricardo’s theories of rent, money, pricing and distribution. In particular Marx challenged Ricardo’s lack of appreciation of the significance of the length and intensity of the working day.

In *Capital* we read that:

“In the period between 1799 and 1815 an increase in the price of the means of subsistence led in England to a nominal rise in wages, although there was a fall in real wages, as expressed in the quantity of the means of subsistence they would purchase. From this fact,

²⁵ Ricardo (1951-73) Vol 1 p13

²⁶ Ricardo (1951-73) Works II p18

²⁷ Works I: 111-2 Emphasis added.

²⁸ Marx (1969:414)

²⁹ While variability in working time *is* central to Marx’s theoretical outlook, we do not seek to impose upon Ricardo, Marx’s conceptual framework. Ricardo neither had, nor sought, a theory of exploitation.

West and Ricardo drew the conclusion that the diminution in the productivity of agricultural labour had brought about a fall in the rate of surplus value, and they made this assumption (which was purely a product of their own imagination) the starting point of important investigations into the relative magnitudes of wages, profits and ground rent. But as a matter of fact surplus-value had at that time increased both in absolute and in relative magnitude, thanks to the increased intensity of labour, and to the prolongation of the working day which had been forced upon the workers.”³⁰

The same argument appears in scattered places throughout Marx’s economic writings.³¹ The most important source for Marx’s assertion was the evidence presented in the two parliamentary reports published in 1814 on the Corn Trade and described by Marx as: “so far the most valuable and almost unexploited contributions to the history of wages in the 19th century”³² Witnesses before the committees confirm the increasing practice of task or piece work in agriculture, which was associated with ‘greater industry’ - an increased intensity of labour and longer hours.³³ In addition, the increasing employment of women and children in agriculture during the war years, the ‘petticoat harvests’, has been widely noted.³⁴ The clearest evidence on the trend towards longer working hours in both agriculture and textiles is contained in the 1814 Lords Committee report. There are consistent statements from several witnesses linking wages to hours of work. Rising corn prices during the war years had tended to lower real hourly wages and induced longer working hours from labourers attempting to sustain the weekly wage basket. Thomas Joyce, for example, a cloth manufacturer informed the committee:

“When wheat was extremely dear two years ago, we suffered them (manufacturers of piece-work) to work extra hours, to make it better for them; instead of leaving work on Saturday in the morning, we suffered them to keep on working the whole day, and to come in early in the morning.”³⁵

Empirical evidence in support of this principle was provided for the committee by other witnesses³⁶ including Lord Lauderdale, who demonstrated the inverse relationship between rising grain prices and the lower labour cost of weaving muslin during the years 1790-1814, in consequence of a lengthening of the working day.³⁷

³⁰ Marx (1976) p665-6

³¹ The principal sources are, Marx (1969) p133-5,408,459-60, Marx (1976) p665-6, 698,829-30.

³² Marx (1981) p765

³³ See e.g. the evidence of Birkbeck and Joyce, Lords Committee Reports respecting Grain and the Corn Laws (1814) pp27-8

³⁴ E.L. Jones (1964-5) p323

³⁵ op cit p28 In the most authoritative study of the history of working hours during this period, Bienefeld confirms that in the domestic trades; ‘The hours of work varied inversely with the level of real wages.’ p27.

³⁶ Patrick Milne M.P., a Scottish landowner, elucidates the same principle in evidence before the committee: “I have always considered that when grain and other provisions rose, both manufacturing and agricultural labour fell; on the contrary when provisions and grain fell, manufacturing and agricultural labour rose; the reason’s obvious: Supposing there are in any one parish 100 labourers, who are able to do the work of that parish, if provisions rose, those labourers will do double work; of course, there being only a certain demand for labour, the labour falls.” op cit p50

³⁷ Thus Lauderdale argues;

“In dear years a working manufacturer, finding himself deprived of his usual enjoyments, is naturally excited to greater industry, and is desirous of working extra hours, for the purpose of obtaining those comforts he has been accustomed to; and this disposition in the manufacturers must naturally increase the supply of labour in the market; for example, supposing in any country, there existed a thousand manufacturing labourers, who on an average worked an eight hour day, it is obvious that the stock of manufacturing labour per week would be 48,000 hours of labour. If in a dear year, the desire of securing their usual enjoyments induced them to work ten hours a day, the stock of manufacturing labour would become 60,000 hours per week; and if the demand for it remained the same, the value of it, on all general principles must inevitably fall.” Ibid p85 Lauderdale argues that the same mechanism applies equally in agriculture and manufacturing where task work is employed.

It is clear that Ricardo had read the Lords Report, as he confirms in correspondence with Malthus.³⁸ Indeed, several of the witnesses were prominent public figures and included Ricardo's own land agent, Edward Wakefield. The evidence of longer working hours certainly made an impact on Malthus. In his 1815 pamphlet on the Corn Laws, *An Inquiry into the Nature and Progress of Rent*, Malthus writes that:

“With regard to the unusual exertions made by the labouring classes in periods of dearness, which produce the fall of wages noticed in the evidence, they are most meritorious in the individuals, and certainly favour the growth of capital. But no man of humanity could wish to see them constant and unremitted...I own I do not see, with pleasure, the great extension of the practice of task work. To work really hard during twelve or fourteen hours in the day, for any length of time, is too much for any human being.”³⁹

Marx notes Malthus's argument, adding:

“All honour to Malthus that he lays stress on the lengthening of the hours of labour, a fact to which he draws attention elsewhere in his pamphlet, whereas Ricardo and others, flying in the face of the most notorious facts, make invariability in the length of the working day the groundwork of all their investigations.”⁴⁰

Malthus carries the link between falling real wages and a lengthening of working hours forward into his main works. The mechanism is introduced, for example, as an addition into the 1817 edition of the *Essay on the Principle of Population*.⁴¹ In the first edition of the *Principles of Political Economy*, published in 1820, Malthus even gives *prima facie* support for Marx's contention that it served to sustain the rate of profit during the war period from 1793 -1813. Thus Malthus writes that:

“The increasing practice of task-work during these twenty years, together with the increasing employment of women and children, unquestionably occasioned a great increase of personal exertion; and more work was done by the same number of persons and families than before...I am inclined to think, therefore, that the increased rate of profit from 1793 to 1813 did not arise so much from the diminished quantity of agricultural produce given to the labourer's family, as from the increase in the amount of agricultural produce obtained by the same number of families.”⁴²

In his extensive *Notes on Malthus's Principles of Political Economy*, Ricardo typically ignores Malthus's several references to this issue. On one occasion Ricardo does respond to Malthus's argument, demonstrating his awareness of the link between wages and working hours. Expressing his concern, based upon popular opinion at that time, that rising living standards among the labouring class would lead to a preference for leisure or 'indolence', Malthus cautions: “That the necessity of employing only a small portion of time in producing food does not always occasion the employment of a greater portion of time in procuring conveniences and luxuries.” Ricardo's reply is unequivocal: “Certainly not, if the choice be in the power of the labourers, in which case their wages must be high, or rather they must be well paid for their work. As certainly yes, if labour be low, and the choice be in the power of the capitalists.”⁴³

³⁸ Letter to Malthus 30 Aug 1814. Ricardo added the comment, “but how ignorant the persons giving evidence appear to be of the subject as a matter of science.” As the evidence covers a wide array of subjects, it is not certain what issue Ricardo referred to.

³⁹ Works of Malthus Vol. 7 p139

⁴⁰ Marx (1976) p666 fn7 As the Ricardo correspondence was unavailable to Marx, he would not have known that Ricardo had also seen the Parliamentary Reports.

⁴¹ Malthus (1989a) Vol. 1 p434

⁴² Malthus (1989b) Vol. 1 p322-4

⁴³ Ricardo. Works Vol II p349

In a letter to Malthus dated 21 October 1817, six months after the publication of the first edition of his *Principles*, the same mechanism is outlined by Ricardo but on this occasion with a clear recognition that working hours must have an impact on profits. Ricardo writes:

“I make profits and wealth to depend on the real cheapness of labour, and so do you, for you say that the evils of a dearth will often be more than counteracted as regards wealth by the great stimulus which it may give to industry. I say the same for I contend that the evils of a dearth fall exclusively on the labouring classes, that *they perform frequently more labour not only without receiving the same allowance of food and necessaries, but often without receiving the same value for wages or the same recompense in money whilst everything is dearer. When this happens profits which always depend on the value of labour must necessarily rise.*”⁴⁴ (emphasis added)

To repeat however, this principle of variable working time plays no part in Ricardo’s theoretical system in the *Principles*.

It was not in agriculture, but in the newly emerging textile factories that the issue of working hours took on the greatest significance. Social historians have carefully documented the attempt by employers to eradicate customary habits of work and to inculcate new forms of labour discipline. The Act of 1819, restricting the hours of children, followed upon the Report from the ‘*Select Committee on the State of the Children employed in the manufactories of the United Kingdom*’ established by Peel in 1816. The list of witnesses contained the names of many leading industrialists, including Josiah Wedgwood, Richard Arkwright and Robert Owen. Once again, Ricardo was familiar with the report,⁴⁵ even arranging to despatch a copy to his friend and fellow economist, Trower. In Bienefeld’s authoritative history of working hours, the evidence presented to that Committee represents a most important primary source on conditions at the time, leading Bienefeld to conclude that: “The textile mills that sprung up in the last quarter of a century ran roughshod over the customary hours of employment and introduced working days of thirteen, fourteen and even more hours.”⁴⁶

To summarise, Marx’s critique of Ricardo on working time appears to have some substance. During the period in which Ricardo was writing, the variability of hours in agriculture and in the textile factories was discussed in pamphlets and noted in parliamentary reports. Ricardo was familiar with those reports, their evidence was corroborated in the principal works of his closest co-thinker, Malthus, and correspondence between them suggests that Ricardo was at least aware of the link between wages and hours.

The purpose of this section is not to arraign either Marx or Ricardo before the court of history, in an attempt to provide an empirical test of their respective theories. Such an exercise, requiring a more detailed examination of the period, taking into account regional variations and the experience of the different sectors of the economy, lies beyond the scope of this paper. Certainly Marx never claimed to have provided a comprehensive historical rebuttal of Ricardo’s model. His investigations rather took the form of marginal notes, not intended for publication, which served as a check on the results of his more substantial theoretical endeavours. Nevertheless those investigations are important, and for several reasons. First, they establish that, in his critique of Ricardo, Marx was not indifferent to the historical context. The force of his criticism of Ricardo’s theory of value on the question of working hours would surely have been lessened had Marx adduced no evidence to support his argument, as the notion of a purely ‘immanent critique’ requires. Second, they also have potentially important repercussions for Ricardo’s theoretical framework. Malthus, as we have seen, was of the opinion that increasing hours and intensity of work were of sufficient importance to affect the course of the rate of

⁴⁴ Letter to Malthus 21 October 1817

⁴⁵ Ricardo (1951) Vol 7 p146. Opposition to the Bill from the House of Lords appealed to “that great principle of Political Economy, that labour ought to be left free.” Blaug 1958 p 213

⁴⁶ Bienefeld (1972) p20 The view that conditions for factory textile workers were representative of the general trend in all industries has been challenged by Hopkins (1982)

profit during that period. Finally, they help in clarifying the substantive difference between Marx and Ricardo on the key question of value and should alert us to the problem, inherent in modern mathematical treatments of the authors' 'models' in particular, of the undifferentiated use of the potentially ambiguous term 'quantity of labour'. Marx's investigations led to his more extensive studies in *Capital* of the whole question of the production of 'absolute surplus value'. For Marx, the origins of the total mass of surplus value had first to be established before its distribution between capitals could be understood in the process of the formation of an average rate of profit. It was, Marx believed, Ricardo's concept of the working day as a 'fixed magnitude' which led directly to his failure to analyse the source and total mass of surplus value and hence of profit.⁴⁷

SECTION 3

"The master had no time for anything but money, the servant no time for anything but labour" Marx⁴⁸.

Before making an assessment of the development of Ricardo's value theory, and his treatment of the 'time structure of capital' with its primary emphasis on the problems posed by the existence of different ratios of fixed and circulating capital, it will be useful to consider Marx's own treatment of the *same* subject. In value debates, it has been common to compare the difficulties that Ricardo encountered on this score, with the separate issues that arise in Volume III of Marx's *Capital*, due to the existence of capitals with different organic compositions. This has at times led to a considerable confusion, with a tendency to conflate the structure of the two authors' arguments.

For Marx, of course, the primary division within capital is that between constant and variable capital within the production process placing emphasis on the nature of value creation. Marx appears to have studied the subject of fixed and circulating capital for the first time in late January and February 1858, in Notebooks V and VI of the *Grundrisse*. At about the same time, Marx sought practical assistance from Engels on the question, asking in correspondence: "Can you tell me how often you renew the machinery, in your factory for example?"⁴⁹ In his notebooks, Marx considered the circuit of capital in motion through its different forms, giving an initial abstract determination of the fixed/circulating distinction. Thus:

"As the subject moving through all phases, as the moving unity, the unity-in-process of circulation and production, capital is *circulating* capital: capital as restricted into any of these phases, as posited in its *divisions*, is *fixated* capital, *tied-down* capital."⁵⁰(emphasis in original)

For Marx, the 'fixation' of capital, arising from whatever source within the overall circuit of capital was perceived as a barrier for capital, a limit to the production of new value and an obstacle to be overcome. On the basis of his reading of Ricardo⁵¹ and the whole history of classical economics, Marx also demonstrated his awareness of the various sources of those fixations. Interruptions to the production process, the duration of the production process, the need for the product to lie idle, time to bring the product to market and different proportions of fixed and circulating capital within the production process are each identified in turn.⁵² Their common feature, according to Marx was that

⁴⁷ Marx (1969:404)

⁴⁸ Cited in Booth (1991) fn41. Booth's paper provides an excellent short introduction to the role of time in Marx's work.

⁴⁹ Marx letter to Engels, 2 March 1858 (Marx and Engels : Letters on Capital 1983:52)

⁵⁰ Marx (1973:621)

⁵¹ Marx illustrate his point with a simple 'Ricardian' example: "If one imagines two workers who exchange with each other, a fisherman and a hunter; then the time which both lose in exchanging would create neither fish nor game." (ibid 632)

⁵² ibid 602

they represented ‘not-labour time’ i.e. time when no surplus labour is being created and capital is delayed in its return to the ‘money form’. Consequently:

“The maximum realization of capital, as also the continuity of the production process, is circulation time posited as = 0.” and further: “ *Circulation without circulation time* – i.e. the transition of capital from one phase to the next at the speed of thought – would be the maximum.”⁵³

Whatever the source of the fixation, within the whole circuit of capital, it represented a loss for capital as a whole, according to Marx. Taking the example of an individual capital A, whose circulation time is interrupted for whatever reason, Marx argued:

“This capital A would regard the smaller new value which it could produce as a positive loss, just as if it had so many more outlays to make in order to produce the same value. It would thus charge relatively more exchange value for its products than the other capitals, in order to share the same rate of gain. But this could take place in fact only if the loss were distributed among the other capitals.”⁵⁴

In the equalisation of the rate of profit through competition, the general rate of profit, *conceived as a rate per period of time* was reduced according to Marx, despite the ‘false appearance’ from the standpoint of the individual capital A. The negative effect would appear as positive to the ‘compensated’ fraction of capital.

In the second volume of *Capital*, Marx gave a more systematic account of fixed and circulating capital within the whole turnover of capital, distinguishing not only between production time and circulation time, but also recognizing the distinction between production time and working time. In industries involving natural processes such as agriculture, forestry, pottery and wine making, the actual working time was considerably less than the production time. Only in the former period was new value created. It was an issue that had perplexed Ricardo as we shall see below.

In considering the turnover time of the different components of capital, it should be noted that Marx prioritizes the time taken to return to the money form and not merely the passage of time due to the ‘durability’, of the elements involved.

“In calculating the overall turnover of the productive capital advanced, we therefore take all its elements in the money form, so that the return to the money form concludes the turnover.”
Cap II p263

He also insists that the effects of the turnover of fixed and circulating capital must be understood within the context of the overall framework of the formation of the rate of profit⁵⁵. Thus he writes:

“When the social surplus value is distributed between the capitals invested in different branches of industry, differences in the various times for which the capital is advanced (for example, varying lifespans in the case of fixed capital) and different organic compositions of capital (thus also the different circulations of constant and variable capital) have similar effects in the equalization of the general rate of profit and the transformation of values into prices of production.”⁵⁶

⁵³ *ibid* 629 – 631

⁵⁴ *ibid* 546

⁵⁵ Marx had enhanced his understanding of the subject of fixed capital, forms of depreciation, maintenance costs and wear and tear, through an empirical study of the first industry to employ large quantities of fixed capital, the railways. Marx drew in particular on the 1867 Royal Commission on Railways. (Marx 1973:248 et seq.)

⁵⁶ *ibid* 294

Thus, the existence of fixed capital (or other forms of ‘fixation’ within the overall circuit of capital), however necessary to the production process, will result in a lower average rate of profit per period. The formation of a general rate of profit will occur through branches of industry with above average degrees of ‘fixated’ capital being compensated by a higher price. According to Marx, this was not understood in the writings of the classical economists:

“But what political economy sees is only the appearance, i.e. the effect of the circulation time on the valorization process of capital in general. It conceives this negative effect as positive, because its results are positive. It sticks all the more firmly to this illusion, as it seems to provide it with the proof that capital possesses a mystical source of self-valorization that is independent of its production process and hence of the exploitation of labour, and derives rather from the sphere of circulation.”⁵⁷

As Marx explains in the fully developed version of his argument in Volume 3 of *Capital* “Thus everything appears reversed in competition.”⁵⁸ In the formation of an average rate of profit, systematic differences in capital structures were taken to be “grounds for compensation”⁵⁹ by disadvantaged capitalists.

Marx felt that he was able to reach his conclusion that the impact on the overall rate of profit was negative because he had a theoretical conception of how a general rate of profit was formed. In contrast, he argued that Ricardo ‘smuggled in’ a general rate of profit in the first chapter of the *Principles*, when discussing the determination of value by labour without realising that a number of intermediate steps were needed. In particular, Marx argued, in his chapter *On Value*, Ricardo identified the difference between fixed and circulating capital as the primary distinction within capital, and then proceeded to examine the effect of a change in wages on relative prices and the profit rate on the assumption that circulating capital consists entirely of wages. According to Marx:

“The all-important distinction between variable and constant capital is thereby obliterated, and with it the whole secret of surplus-value formation and of capitalist production.”⁶⁰

Marx’s conclusion is stark. Due to his ‘faulty architectonics’, “Ricardo has no means for determining a general rate of profit”⁶¹ Let us briefly outline the development of Ricardo’s attempts to wrestle with the issue, paying particular attention to his treatment of time.⁶²

Following the publication of the *Essay on Profits* (1815) and having already fixed upon the quantity of labour as a measure of ‘the difficulty or facility of production’, it was in October 1816, while working on the first edition of the *Principles* that Ricardo first noticed the ‘curious effect which the rise of wages produces on the price of those commodities which are chiefly obtained by the aid of machinery and fixed capital.’ (1951-2:VII: 82) Ricardo’s ‘pure’ labour measure of value was clearly compromised by the problem of commodities produced by different capital structures.

In support of Marx’s critique we should note first that in every example in the first edition of the chapter *On Value*, Ricardo merely *assumes* a given rate of profit, usually 10 %, applied across all ‘industries’, without any clear explanation of its determination. Secondly, in those same examples, circulating capital is exclusively identified with wages. Raw materials are simply ignored and the primary emphasis is on the difficulties caused by the different proportions and durability of fixed capital.

⁵⁷ *ibid* 204

⁵⁸ Marx 1974:209

⁵⁹ *ibid*: 209

⁶⁰ Marx 1973 296

⁶¹ Marx 1969: 427

⁶² I shall not consider Ricardo’s search for an ‘invariable measure of value’, a quest which Marx regarded as ‘spurious’. Marx 1972:134

The nature of Ricardo's distinction between fixed and circulating capital is revealing. His explanation, retained in all three editions of *the Principles*, is that:

“The food and clothing consumed by the labourer, the buildings in which he works, the implements with which his labour is assisted, are all of a perishable nature. There is however a vast difference in the time for which these different capitals will endure: a steam-engine will last longer than a ship, a ship longer than the clothing of the labourer, and the clothing of the labourer longer than the food which he consumes.

According as capital is rapidly perishable, and requires to be frequently reproduced, or is of slow consumption, it is classed under the heads of circulating, or of fixed capital.”⁶³

According to Marx, the problem arises in part due to Ricardo's tendency to confuse the natural properties of the different forms of capital with their socially determined place within the overall circuit of capital. The food and clothing of the worker, having been already sold are irrelevant to the question. Thus Marx argues that whilst the physical durability of their use values is a factor, it is not the essential issue:

“The more or less fixed character of the means of labour is a function of their degree of durability, i.e. of a physical property. According to their durability, they are worn out more quickly or more slowly...and thus function for a longer or shorter time as fixed capital. But it is in no way simply this physical property of durability which leads them to function as fixed capital. In metal works, the raw material is just as durable as the machines with which it is processed...Thus it is not its material, physical nature, its greater or lesser propensity to perish, which makes the same metal in one case fixed capital and in the other case circulating capital”⁶⁴

In the period before the publication of the second edition of the *Principles* in 1819, Ricardo was led to confront the question of circulating capital. Discussions with Torrens in 1818 prompted Ricardo to write the *Fragments on Torrens*.⁶⁵ Torrens had pointed out to Ricardo that not only fixed capitals but also circulating capitals could be of unequal durability, (which was identified with ‘different times it takes to market’).⁶⁶ Ricardo's response to Torrens is significant for understanding the nature of the qualifications that Ricardo was by now making to the ‘simple’ labour theory.

In his clearest example, Ricardo assumes that one employer hires five men to work for a year in producing iron, which is sold at the end of the year at a profit. The total revenue is sufficient to hire six workers the following year and this process of accumulation continues, with an additional worker each year, for twenty years, yielding at the end of that year a revenue of £100. Another employer, with the same initial capital, also hires five men to work for the first year only, planting acorns on rent-free land. At the end of twenty years, the wood should also be worth £100, Ricardo tells us, in order to produce the same profit on equal capitals despite the fact that “the whole quantity of labour realized in the wood is only that of 5 men for a year, that employed on the iron very considerably exceeds the labour of 100 men employed for a year. Here then are two commodities of equal value one of which is the production of more than five times the quantity of labour employed on the production of the other.”⁶⁷

Ricardo has discovered that the principle of his ‘pure’ labour measure of value is once more breached, not this time by the varying amounts and durabilities of fixed capitals, but by the different turnover periods of circulating capitals. It is the same problem as that of the case of ‘wine in the cellar’ whose

⁶³ Works I: 31

⁶⁴ Marx 1978: 298

⁶⁵ Works IV: 305-318

⁶⁶ Sraffa. Introduction. Works I: xlii

⁶⁷ Works IV: 312. Ricardo miscalculates. It should read “more than twenty times the quantity of labour”

value increases without any additional expenditure of labour that was later to exercise the minds of Ricardo, McCulloch and James Mill.

It should not be imagined that the problem can be dismissed on the grounds that it only arises in exceptional or marginal cases – wine production, forestry or agriculture - where the more ‘normal’ conditions of production do not hold. Marx’s argument suggests that the working period is shorter than the production period in most if not all industries and is certainly shorter than the time taken to complete the whole circuit of capital.⁶⁸

In the chapter *On Value* in the new 2nd edition, the debate with Torrens led to Ricardo’s concession that:

“the circulating capital may circulate, or be returned to its employer, in very unequal times. The wheat bought by a farmer to sow is comparatively a fixed capital to the wheat purchased by a baker to make it into loaves. One leaves it in the ground, and can obtain no return for a year; the other can get it ground into flour, sell it as bread to his customers and have his capital free to renew the same, or commence any other employment in a week.”⁶⁹

In itself, wheat is inherently perishable, but to the farmer it is a part of his outlay from which he will obtain no return for a year. Is it then circulating or fixed capital? Ricardo had recognized that there was more to the question than the physical properties of the use values involved.

In addition to Torrens questioning, Ricardo continued to meet persistent criticism from Malthus on the same issues during this period. In a letter to McCulloch in June 1820, Ricardo was to ‘show signs of weakening’⁷⁰:

“I sometimes think that if I were to write the chapter on value again which is in my book, I should acknowledge that the relative value of commodities was regulated by two causes instead of by one, namely, by the relative quantity of labour necessary to produce the commodities in question, and by the rate of profit for the time that the capital remained dormant, and until the commodities were brought to market” adding that, “*all the exceptions to the general rule come under this one of time*”⁷¹(emphasis added)

According to Sraffa, ‘this conception was the one to which he finally adhered’ and the recognition of the ‘time-profiles’ of capital was much more in evidence when the third and final edition of the *Principles* appeared in 1821. The simple numerical exercises from the first edition were excised, and in their place in section four of the chapter *On Value*, Ricardo introduced two-period examples that took explicit account of the impact on relative values of the different time-structure of production processes. In this new approach, Ricardo explained that:

“[C]ommodities which have the same quantity of labour bestowed on their production, will differ in exchange value, if they cannot be brought to market in the same time... The difference in value arises ..from the profits being accumulated as capital, and is only a *just compensation* for the time that the profits were withheld.”⁷²(emphasis added)

The elements of an abstinence theory of profit had crept into Ricardo’s analysis in the *Principles*. Profits were now to be added to compensate those capitals having a longer production process in

⁶⁸ Due to the different structure of his theory, Ricardo does not consider the impact on the rate of profit of different rates of turnover of variable capital.

⁶⁹ Works I: 53 fn 1

⁷⁰ Sraffa. Introduction. Works I: xxxix

⁷¹ *ibid*

⁷² Works I: 37

order to ensure equal profit rates. The contrast with Marx's own analysis of the negative impact of longer turnover times on the overall rate of profit could not be more complete. What Ricardo was seeing was surely the 'false appearance' whereby according to Marx, the negative effects were conceived as positive, as 'grounds for compensation'.

In an attempt to help Ricardo out of his difficulties, his loyal follower McCulloch proposed an alternative solution to the problem. In a letter to Ricardo dated 11 August 1823 he wrote that:

"I need not say to you that time of itself produces no effect whatsoever; it only affords space for really efficient agents to produce effects. But whether these agents be men, or the processes which nature herself carries on in the production of commodities seems to me to be wholly immaterial provided it require equal capitals to set them in motion. If you give men wages, they only give you back an equivalent for these wages, and for the period of their advance, just as natural agents do when you employ them."⁷³

It is commonly referred to as the 'labour [embodied in capital] goes on working' explanation.⁷⁴ The idea that an increase in the value of a commodity, during a period of time when no further labour was added, could be explained by calling natural processes 'labour' did not convince Ricardo and in an unfinished draft he replied to McCulloch that:

"The continued agency of a machine worth only 2/ may, after a very long period, produce a commodity worth £100, but surely strictly speaking there is no more labour in the commodity than what was originally bestowed on the two shilling machine."⁷⁵

Marx excoriated McCulloch's attempt to resolve Ricardo's value problem in this way:

"Thus, with the identification of use-value and exchange-value ends this vulgarisation of Ricardo, which we must therefore consider as the last and most sordid expression of the decline of the Ricardian school as such."⁷⁶

Marx and Ricardo then could at least agree that the solution to the conundrum did not lie in such a contrived 'physicalist' solution.

At the heart of Ricardo's difficulties with the whole question of value, according to Marx, lay his confusion between 'value' and 'cost price'. In Ricardo's 'pure' labour theory, quantities of labour regulate exchange values with profits as a residual, the "leavings of wages". When dealing with cost prices (or 'cost of production') however, Ricardo often identifies quantity of labour with wages – the cost of labour – to which profits are an addition. Thus, for example, in a passage in the *Notes on Malthus* Ricardo argues that:

"Mr. Malthus accuses me of confounding the very important distinction between cost and value. If by cost, Mr. Malthus means the wages paid for labour, I do not confound cost and value, because I do not say that a commodity the labour on which cost a £1,000, will therefore sell for £1,000; it may sell for £1,100, £1,200 or £1,500, - but I say it will sell for the same as another commodity the labour on which also cost £1,000; that is to say, that commodities will be valuable in proportion to the quantity of labour expended on them. If by cost Mr. Malthus means cost of production, he must include profits as well as labour."⁷⁷

⁷³ Works IX: 342-3 McCulloch had first proposed the idea to Ricardo in a letter of 5 Dec 1819.

⁷⁴ See O'Brien 1970:130 et seq.

⁷⁵ op cit p353

⁷⁶ Marx 1972: 185

⁷⁷ Works II: 34-5

Ricardo's argument however will only hold in the case of commodities produced with capitals having identical 'time-profiles' as he himself demonstrated in his own examples in the *Principles* and elsewhere.⁷⁸ Ricardo's 'cost of production' approach was in stark conflict with his 'pure' labour theory. The dichotomy formed the basis for Marx's extensive critique of Ricardo's theory of cost-price in the second volume of the *Theories of Surplus Value*. While Marx's proposed solution to the problem is distinctively his own, we should be clear that there is nothing inherently Marxist in asserting that the two principles are fundamentally in conflict. On this point we can agree with Peach "Marx's interpretation of Ricardo can be located within an interpretative tradition that extends back to Ricardo's own time"⁷⁹. As noted above, Ricardo's own contemporaries were perplexed by the issue and the question of whether Ricardo held a 'labour value' or 'cost of production' theory has been central in the long debate over Ricardo's legacy down to the present day, his many interpreters emphasising one or other approach.⁸⁰ To take a single example, Hollander summarises Schumpeter's view of Ricardo's problem as follows:

"Schumpeter emphasized that Ricardo did in fact maintain that profits were a 'just compensation of waiting', and concluded that the system contained a ruinous internal contradiction since profits were also treated by Ricardo as a residual: 'We have then "profit" determined by "wages" (in general, uniquely). If thereupon we declare, as Ricardo did, that the same profits are a 'just compensation' (i.e. obviously a price) of waiting his system seems to become overdetermined: a quantity that is determined already is being subjected to an additional condition.'"⁸¹

Naturally enough, authors in the 'orthodox' tradition, such as Alfred Marshall, wishing to establish a Ricardian lineage for neo-classical economics have emphasised the 'cost of production' element in Ricardo's work. Conversely, Sraffa has defended the 'no retreat from the labour theory' interpretation. The attitude of some authors writing in the Sraffian tradition does not fit easily into either camp. Feess, for example, finds Ricardo's approach to value and 'cost of production' perfectly consistent, and Marx's critique devoid of content. Noting the distinction between Ricardo's two standards, Feess argues that Ricardo "employed the two available standards of value and chose whichever suited him to treat the matter at hand. He followed neither the labour theory of value, nor did he stick to prices of production (sic), nor did he confuse these concepts. He used both and did so at distinct steps of his argument. And he had to do so since he realized very well that the two properties were exclusive."⁸² It is an interpretation based upon an omniscient Ricardo which finds little support either in the original texts or in the extensive secondary literature, which documents Ricardo's long and tortuous struggle with his value problems.

According to Steedman, Marx is wrong since Ricardo treated the two terms as synonyms.⁸³ Steedman achieves this reconciliation by denying that Ricardo used the term 'value' to mean the amount of labour required for the production of a commodity,⁸⁴ a proposition not easily supported by the texts. Steedman argues that "for Ricardo, then, the terms value, cost of production and natural price were simply synonyms, all meaning what Marx was later to call 'cost price' in *Theories of Surplus Value*, or 'price of production' in Volume III of *Capital*."⁸⁵ Certainly Ricardo may have devoutly wished they were synonymous terms, but as his own labours demonstrated they are not, except in the case of identical capitals. Nor are they the same as Marx's cost price/price of production which, as Marx demonstrated, could only be arrived at through a number of intermediate steps via the process of formation of an average rate of profit.

⁷⁸ See e.g. the example at Works I p37

⁷⁹ *ibid* 19

⁸⁰ For a careful outline see Peach 1993 Ch 1

⁸¹ Hollander 1979: 267fn 205

⁸² Feess 1998: 278

⁸³ Steedman 1982:117 The identical position is advanced by Caravale 1991:183

⁸⁴ *ibid*: 116

⁸⁵ *op cit* 117

CONCLUSION

This paper began by examining the notion that Sraffa and his followers have produced a rational reconstruction of Ricardo's ideas based upon a Marxian reading. It has been argued that this is an oversimplified conclusion, which does not help to explain why authors from within the same school of thought have overwhelmingly rejected Marx's critique of Ricardo. In an attempt to gain a clearer understanding of the issues involved, I have examined a defining characteristic of their respective outlooks, the treatment of time, an issue that receives scant attention in the Sraffian literature. Time occupied a central role in the value analyses of both Ricardo and Marx, but in very different ways. For Marx, capital's drive for the maximum prolongation of working time- the 'time of labour', went hand in hand with its striving to minimise overall circulation time - 'the time of capital'. For Marx, of course, the former set the limit to the total surplus value produced, whilst the latter played a subsidiary role in the distribution of that surplus value through the formation of an average rate of profit. In contrast, I have argued that Ricardo's indifference to the question of working time introduced serious ambiguities into his theory of value and that Marx's critique on this score is largely justified. Ricardo's lack of clarity over the idea of the 'quantity of labour' as a 'measure of value', and his primary focus on the distinction between fixed and circulating capital, led him step by step towards an essentially mercantile conception of time. Time within the sphere of circulation came to be treated as an independent source of profit. Looked at in this perspective the theories of Marx and Ricardo are not merely different they are diametrically opposed.

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