

MALTHUS'S THEORY OF THE 'CONSTANT VALUE OF LABOUR'

GIANCARLO DE VIVO

Università di Napoli 'Federico II'

This paper deals with the conception, put forward by Malthus in his 1823 tract *The Measure of Value* (and also in later writings), that the value of labour is 'constant', and therefore the value of labour (i.e. labour commanded) rather than labour embodied is the true 'invariable measure' of value—thus also the true 'cause' of value. This conception is discussed here and shown to contain interesting points, such as a 'corn ratio' theory of profits, and, more importantly, another route (gone completely unnoticed) to the determination of the rate of profits which also by-passes relative prices. The paper also discusses the hostile reception Malthus's tract met, not only from Ricardo, but from virtually all the major economists of the time. It is argued that this hostile reception mostly derived from a lack of understanding of Malthus's arguments, and from the fact that in the 1820s the majority of economists, abandoning Ricardo's labour theory of value, grew more and more hostile to conceptions of 'absolute value', which underlie Malthus's 'constant value of labour' as well as Ricardo's labour theory of value. It is no coincidence that in 1825 Bailey's fully relativistic approach to value met with virtually universal approval.

JEL Classification: A10; B12; B51

MEASURES AND CAUSES OF VALUE: MALTHUS'S ONSLAUGHT ON RICARDO

Malthus has very often been regarded, by both contemporary and modern critics, as an eminently inconsistent writer. Not only was he accused of not reasoning well (Ricardo himself wrote for instance: 'His arguments are not very cogent; indeed I am often puzzled to find any connection between the premises and conclusions of his propositions'; Ricardo, *Works*, IX, p. 329),¹ he was also accused of not sticking to his opinions, for instance by Torrens, who wrote: 'It is a singular fact that, in the

¹ Among modern writers, perhaps the most unreserved opinion is that of George Stigler: '[Malthus] had one great weakness—he could not reason well. He could not construct a theory that was consistent with either itself or the facts of the world' (Stigler, 1953, p. 311).

leading questions of economical science, Mr. Malthus scarcely ever embraced a principle, which he did not subsequently abandon'² (1815, pp. viii–ix).

At first sight, Malthus's positions on Ricardo's theory of profits could appear to lend strong support to Torrens's claims. In the first edition of his *Principles*, Malthus rejected Ricardo's proposition that profits 'depend upon wages': as Ricardo wrote, Malthus did not fail 'to make the most' of the 'modifications' or 'exceptions' to the rule that commodities exchange according to the labour embodied in them (*Works*, VIII, p. 193), also specifically tailoring his arguments in order to make them bear upon Ricardo's key point on the inverse wage-profit relationship—*viz.*, the assumed constancy in the value of the sum of wages and profits when distribution changes. Malthus in fact rightly noticed that Ricardo's theory that 'profits are regulated by wages'

depends entirely upon the circumstance of the mass of commodities remaining at the same price, while money continues of the same value, whatever may be the variations in the price of labour. This uniformity in the value of wages and profits taken together is indeed assumed by Mr. Ricardo in all his calculations, from one hand of his work to the other; and if it were true, we should certainly have an accurate rule which would determine the rate of profits upon any given rise or fall of money wages. But if it were not true, the whole theory falls to the ground.

And, according to Malthus, this was precisely the case, because, upon a rise in wages,

commodities, instead of remaining of the same price, are very variously affected, some rising, some falling, and a very small number indeed remaining stationary (Malthus, 1820, pp. 326–327).

Three years later, in *The Measure of Value* (and afterwards in other works), Malthus instead accepted the doctrine that profits depend upon the proportion of the whole produce going to labour—though refusing to call this proportion 'real wages' (see 1827, p. 31), as Ricardo had done; correspondingly, he accepted that as wages rise, profits must fall.³

Again, in *The Measure of Value* Malthus agrees that 'the natural value of objects in their more simple forms is composed of labour and profits' (and even quotes Ricardo as an authority: 1823, p. 4), whereas in his *Principles* he had maintained that 'we cannot . . . get rid of rent' (1820, p. 102), and that

The price of any exchangeable commodity, may be considered as consisting of three parts— . . . the wages of the labourer . . . the profits of the capital . . . and the rent of land (1820, pp. 82–83).

² Malthus complained of Torrens's remark in a letter to Ricardo (*Works*, VI, p. 202), and Ricardo answered: 'Torrens has treated you unjustly in his remarks in the preface of his book' (*Works*, VI, p. 205). In the second edition of the book, Torrens added a sentence 'expressing the high sense he entertains of [Malthus's] general merits' (Torrens, 1820a, pp. xx–xxi), and in the third edition he dropped the offending words. (In view of the fact that Torrens changed his opinions widely and quickly, he was not the best qualified person to complain about Malthus's changes.)

³ In his *Definitions*, however, Malthus went back to maintaining that 'the proposition, that as the value of wages rises profits proportionably fall, cannot be true' (Malthus, 1827, p. 31).

The anti-Ricardianism of including rent in the natural price of commodities is obvious enough. (The point is used by Malthus also for the complementary task of emphasizing that himself, not Ricardo, was the true follower of Adam Smith, the champion of the established doctrine against what he dubbed the 'new school of political economy').⁴

Both these changes towards seemingly Ricardian positions in *The Measure of Value*, however, were made by Malthus in order to build upon them an argument, that the value of labour was 'constant', or invariable, by means of which he was able to challenge Ricardo's theory of value, and therefore to strengthen his case for a supply and demand theory of value. Given the position of cornerstone rightly attributed by Malthus to the theory of value in Ricardo's system, this meant an attack upon the whole of this system, irrespective of the fact that Malthus might have been at the same time endorsing some parts of the system itself. It seems to me that Malthus's opposition to Ricardo, and in particular to the latter's theory of value, really provides a unifying motive which can give consistency to Malthus's otherwise puzzling changes of opinion.⁵

As a preliminary to the discussion of the theory put forward in Malthus's *Measure of Value*, it is important to remind the reader that the Classical economists, in their discussions on value, quite often appeared to confuse two different concepts, that of a 'measure' and that of a 'cause' of value. This clearly had its origin in the labour theory of value, where, as Sraffa remarks, 'to the determination of value by embodied labour there corresponds an invariable measure in the shape of a commodity produced by a constant quantity of labour; and in so far as there are exceptions to the theory, to the same extent the accuracy of the measure is affected' (*Works*, I, p. xli n). Thus, in case the theory held, the measure corresponding to it would be

⁴ It was much the same point that Malthus made in a letter to M. Napier (the editor of the *Edinburgh Review*, and of the 1820s *Supplement* to the *Encyclopaedia Britannica*), when he wrote (22 September 1821) to complain of 'the general adoption of the new theories of my excellent friend Mr. Ricardo into an *Encyclopaedia*, while the question was yet *sub judice*' (Napier, 1879, p. 29). McCulloch (who was chiefly responsible for that 'adoption' in the *Supplement* because of his article 'Political economy') retorted in another letter to Napier: 'I think the *Supplement* will gain credit by being among the first publications which has embodied and given circulation to the new, and, notwithstanding Mr. Malthus's opinion, I will add correct, theories of political economy. Your publication was not intended merely to give a view of the science as it stood forty-five years ago, but to improve it, and to extend its boundaries. It is, besides, a very odd error in Mr. Malthus to say that the new theories are all *sub judice*. He has himself given his complete and cordial assent to the theory of Rent, which is the most important of the whole; and the rest are assented to by Colonel Torrens, Mr. Mill, Mr. Tooke, and all the best economists in the country' (in Napier, 1879, p. 31).

⁵ This appears to lend some support to de Quincey's opinion, that the principal aim of Malthus's works after 1815 was to attack Ricardo's ideas, though it does not necessarily imply that the reason why Malthus did so was the one given by de Quincey: 'jealousy of Mr. Ricardo' (de Quincey, 1824, p. 46). Marx was much of the same opinion as de Quincey: 'Malthus' *Principles* and the other works mentioned [*The Measure of Value* and *Definitions in Political Economy*]... were largely inspired by envy at the success of Ricardo's book and were an attempt by Malthus to regain the leading position which he had attained by skilful plagiarism before Ricardo's book appeared' (Marx, 1862-3, III, p. 14). Also Torrens, in his review of Malthus's *Principles*, remarked that the main purpose of the book was 'to controvert the opinions of Mr. Ricardo' (Torrens, 1820b, p. 1).

the invariable standard, and *vice versa*. This had been noticed by Bailey, in the chapter of his *Critical Dissertation* devoted to 'the difference between a measure and a cause of value': 'if quantity of labour is truly the sole cause of value, then it must also be a correct measure or criterion of value' (Bailey, 1825, p. 175). But Bailey rightly did not absolve Ricardo from the fault of making some confusion between the two concepts, and therefore criticized de Quincey, who, notwithstanding his being 'the only writer⁶ to have been fully aware of this confusion of two separate and distinct ideas' (Bailey, 1825, p. 171), had in his *Dialogues* denied any such confusion in Ricardo (de Quincey, 1824, p. 95 ff). And to prove that Ricardo 'has fallen into the same confusion as other economists', Bailey had acutely quoted among other points, one where Ricardo speaks of estimating food and necessities 'by the *quantity* of labour necessary for their production'; contrasting it with measuring them 'by the quantity of labour for which they will *exchange*' (Bailey, 1825, pp. 172–173; the italics are Ricardo's).

It is just the confusion between a cause and a measure of value, that Malthus exploits against Ricardo's theory, in his 1823 *Measure of Value*, and, more specifically, the aspect of this confusion which had made Ricardo see a labour embodied *determination* of value as inconsistent with a labour commanded *measure* of value. Malthus's point, in fact, was to show that 'the value of labour is constant', and that therefore the value of commodities in labour—i.e. the labour they command—was their 'absolute or natural value', their value in terms of an invariable standard. Given the confusion between a measure and a cause of value, this appeared as a disproof of Ricardo's theory of value, and a rehabilitation of Adam Smith's claim that 'labour *alone never varying in its own value*, is alone the ultimate and real standard by which the value of all commodities can at all times and places be estimated and compared'—a statement which Ricardo had criticised and rejected at the very beginning of his *Principles* (*Works*, I, pp. 16–17).⁷

Malthus's argument starts with the usual objection to the labour theory of value, to the effect that if profits are included in the prices of commodities

Some commodities, on which the same quantity of accumulated and immediate labour had been employed, would be of a different exchangeable value, on account of the different quantity of profits which had entered in their composition (1823, p. 9).

Given therefore that commodities do not exchange according to the labour worked up in them,

it cannot then be said with anything like an approximation towards correctness, that the labour worked up in commodities is the measure of their exchangeable value (p. 13).

⁶ As a matter of fact Iso McCulloch (see e.g. 1824a) and Torrens (see, e.g. 1821, p. 59) cannot be accused of making this confusion.

⁷ 'Mr. Ricardo's doctrine is that A and B are to each other in value as the *quantity* of labour is which produces A to the quantity which produces B... This is the Ricardian law... Adam Smith everywhere uses, as an equivalent formula, this—that A and B are to each other in value as the *value* of the labour which produces A to the *value* of the labour which produces B' (de Quincey, 1824, p. 56).

TABLE 1

Malthus's table on 'the constant value of labour' (Malthus, 1823, p. 38).

(A)	(B)	(C)	(D)	(E)*	(F)	(G)	(H)
Quarters of corn produced by 10 men	Yearly corn wages to each labourer	Advances in corn wages	Rate of profits (%)	Quantity of labour required to produce the wages of 10 men	Quantity of profits on the advances of labour	Invariable value of the wages of a given number of men	Value of the product of the labour of 10 men
150 qrs	12 qrs	120 qrs	25	8	2	10	12.5
100 qrs	9 qrs	90 qrs	11.1	9	1	10	11.1

To say that commodities exchange according to labour embodied would amount, according to Malthus, to forget one of the 'two elements' of price, *viz.* profits. It is correct to measure value by labour, but then to the advances measured in labour one must add the corresponding profits (also measured in labour, of course). Therefore

the exchangeable value of those commodities which can be resolved into labour and profits alone, would be accurately measured by the quantity of labour which would result from adding to the accumulated and immediate labour actually worked up in them the varying amount of the profits on all the advances estimated in labour. But this must necessarily be the same as the quantity of labour which they will command (p. 16).

Malthus then goes on to argue that

the variable values of the labour and the profits which compose the value of the variable quantity of corn awarded in wages to a given number of labourers, must necessarily be such that, as the quantity of labour required to produce them increases, ... all the value thus gained by labour is lost by profits. ... Consequently, the value of the variable quantity of produce which ... forms the wages of a given number of men ... must be constant (p. 32).

To illustrate this, he builds his famous table, an extract of which is given above (Table 1).

Malthus's basic argument is that (A) and (B) are given, and the rate of profits is thus determined, i.e. 'determined ... by the proportion which the excess of the produce in the first column above the produce paid to the labourers in the third, bears to these advances' (p. 37). He then applies this *given* rate of profits to column (E)—i.e. to the quantity of labour required to produce the wages paid to the workers who have produced (A). This quantity of labour is of course the labour commanded by the advances to the workers who have produced these wages.⁸ The result is that the amount of profits in the value of the wages of ten men is such that this value is always

⁸ The heading of column (E) is misleading: rather than 'Quantity of labour required to produce the Wages of 10 Men', it ought to be 'Value (in labour commanded) of the wages paid to produce the wages of ten men'. We shall see (note 23) that it actually misled de Quincey.

equal to 10. This would prove the 'invariable value' of labour, but, put in another way, it simply amounts to the truism that the labour commanded by the wages of 10 men is always equal to 10. It seems to me, however, that the table is interesting, both because Malthus uses it rather ingeniously against Ricardo, and because of an aspect of it (which is not explicitly noticed by Malthus or any of his contemporaries who commented on *The Measure of Value*) which foreshadowed some later developments in the surplus theory of distribution. I shall start from the latter point.

It is clear that in Malthus's table co-exist two different ways of determining the rate of profits without passing through the determination of the relative prices of commodities. One, corresponding to columns (A)–(C), is nothing else than Ricardo's 'corn-ratio theory of profits'. It may seem strange to find it some years after Ricardo himself had abandoned it, and even more so to find it in Malthus, who had strongly opposed it several years before, at the time of Ricardo's *Essay on Profits*, and even indirectly caused Ricardo to abandon it with his objections. But there can be little doubt that it is Malthus's idea that columns (A)–(C) determine the rate of profits, as a ratio between the surplus amount of corn, and the amount of it paid as wages⁹ (see the quotation above, where the rate of profits is seen by Malthus as determined by a ratio between two *quantities* of produce).¹⁰ This aspect of Malthus's table is however less interesting for us here. What is more interesting is the other way of determining profits, which Malthus does not spell out, *viz.* the one through columns (E) and (G). The quantity of labour commanded by the wages of ten men is known without knowing the rate of profits, being of course equal to 10 by definition. Therefore it is not the case that 10 in column (G) is determined by the *sum* of (E) and (F), but rather that the amount of profits (F) is determined by the *difference* between the value in labour commanded by the wages of 10 men (G), and the value in labour commanded by the wages paid to the workers employed in the production of the wages of ten men, which is equal to the number of workers employed to produce these wages (E).¹¹ In fact both terms of this difference are known without knowing the rate of profits, simply knowing the commodity wage and the conditions of production of wage goods.¹²

It is of course true that Malthus, particularly when discussing the table, seems not to be aware of this point, and to believe that it is (G) which is obtained as a sum of (E) and (F), but it is also true that Malthus realizes that if say L_n is the labour embodied in the wages of a given number (L) of labourers, then L_n/L is the proportion of the whole produce going to wages (and $1 - L_n/L$ that going to profits):

⁹ A determination of the rate of profits based on corn quantities, and/or the corresponding leading role of agricultural profits more or less clearly stated, can also be found in Torrens (on this, see [de Vivo, 1985, 2001](#)), in [Mill \(1821, p. 60\)](#), and in [McCulloch \(1824a,b, p. 10\)](#).

¹⁰ We may notice that also Bailey noticed that Malthus was determining the rate of profits as a ratio between two quantities of corn ([Bailey, 1825, pp. 148–149](#)).

¹¹ It is clear that all the above reasoning assumes (as Malthus does) that only wage capital is employed in production.

¹² It must be mentioned that this way of determining the rate of profits appears to be present also in the second edition of Torrens's *External Corn Trade* ([Torrens, 1820a, pp. 408–409](#)).

If instead of referring to commodities generally, we refer to the variable quantity of produce which ... forms the wages of a given number of labourers, we shall find that the variable quantity of labour required to obtain this produce will always exactly agree with the proportion of the whole produce going to labour; it is obvious that if to obtain the produce which commands ten labourers, 6, 7, 8, or 9 labourers be required, the proportion of the produce which goes to labour, in these different cases, will be 6/10, 7/10, 8/10, or 9/10, leaving 4/10, 3/10, 2/10, 1/10, for profits (Malthus, 1823, pp. 30–31).

This of course implies a determination of the rate of profits, which would simply be equal to the ratio of the share of profits to the share of wages:

$$\left(\frac{\text{profits}}{\text{product}}\right) : \left(\frac{\text{wages}}{\text{product}}\right) = \frac{\text{profits}}{\text{wages}}$$

Given that only wage capital is considered, the latter ratio is the rate of profits: (4/10):(6/10); (3/10):(7/10); (2/10):(8/10); (1/10):(9/10) in Malthus's examples. This is not fully spelled out in *The Measure of Value*, but the principle that 'profits are determined by the proportion of the produce which goes to pay the wages of the labour which obtained it' is to be found for instance in the manuscripts published in the second (posthumous) edition of Malthus's *Principles* (1836, p. 292), and in other works written after *The Measure* (see for instance Malthus 1824a,b, p. 189 and 1827, p. 31). It may therefore be said that Malthus's point foreruns the contributions of Dmitriev and Garegnani, on the determination of the rate of profits within the wage good sector (see Garegnani, 1984, Section VI).

There are at least two reasons why Malthus does not dwell on the more original aspect of his table. In the first place, this would have shown the truism to which his argument on the 'constant value of labour' amounted—i.e. that 10 in column (G) is given, not the result of applying to (D) the rate of profits determined by (A) and (B). In the second place, that line of reasoning showed that Ricardo rather than Malthus was right in the controversy on the theory of distribution, because it showed that 'profits depend on wages': as a matter of fact, L_m/L is just Ricardo's 'proportional wages'—the proportion of the working day devoted to the reproduction of wages. Malthus, as if to conceal this, argues that neither the quantity of labour embodied in commodities, nor the quantity of produce awarded to the labourers 'can ever determine the proportion of the whole produce which goes to labour and affect profits accordingly' (1823, pp. 29–30). Given that the quantity of labour embodied and the quantity of commodities awarded to the labourers are the determinants of Ricardo's 'proportional wages', this seemed perhaps to imply that 'proportional wages' do not determine the rate of profits. But of course 'proportional wages' are determined by those two quantities taken together, thus Malthus's point does not in the least prove anything against Ricardo.

Malthus instead develops his reasoning along quite different routes, and makes several points which, though not necessarily connected with each other, had the common characteristic of being (or appearing to be) in opposition to Ricardo's

theory. All the points made by Malthus are a sort of corollary of his argument on the 'constant value of labour'. We will briefly examine them here.

- (i) The quantity of labour required to produce the (varying) wages of ten men may vary (see column (E) of the table), yet its value does not (column (G)). This strongly suggests that the labour theory of value does not hold: the quantity of labour embodied changes, yet value does not (p. 39). We may notice however that this point is in fact void. The value of labour is taken as the value unit, therefore by definition it cannot change. It will be the prices of the other commodities that change with respect to it in consequence of the change in the value unit. If the conditions for the labour theory of value to hold obtain, then these changes will be such that the new relative prices will again be equal to relative embodied labours.
- (ii) Given the technical conditions of production (therefore the quantity of labour embodied in each commodity) as corn wages rise the rate of profits falls, and correspondingly prices fall: 'all commodities into which profits enter... must fall on the fall of profits' (p. 41). This point is very much similar to the previous one, and the same kind of objection can be raised against it being seen as a disproof of the labour theory of value: the unit amount of the commodity chosen as the unit of value is changing, therefore the changes in price simply reflect the changes in the value unit. Also in this case, if the conditions for the labour theory of value hold, the changes will be such as to leave relative prices equal to relative embodied labours.
- (iii) Malthus also makes the point that 'the rate of profits and corn wages may both rise at the same time' (p. 41), as if to counterbalance his implicit endorsement of Ricardo's theory that 'profits depend on wages'. But of course Malthus's point does not prove anything against Ricardo: Ricardo himself had shown that commodity wages and the rate of profits could move in the same direction, if productivity changes. Malthus's point, however, might leave a not-too-careful reader with the idea that the inverse wage-profit relationship was being denied. Strangely enough, Ricardo himself falls into this trap in his comment on this passage of Malthus's (Ricardo, 1823, p. 24).

The conclusion which Malthus draws from his points is that 'demand and supply... must be restored to their universal empire, both in reference to the price of commodities, and the dependence of the progress of wealth on the due proportion maintained between them' (pp. 57–58). In fact, given that the value of commodities had been shown to depend upon the rate of profits, which 'again depends mainly upon the demand and supply of corn compared with labour' (p. 43), that conclusion seemed warranted. At the same time, Malthus also argues that he had shown that 'Profits... are determined, not by the varying value of a given quantity of labour compared with the constant value of the commodities which it produces'—the typical Ricardian argument—'but... by the variable value of the commodities produced by a given quantity of labour, compared with the constant value of such

labour; and . . . profits never, on any occasion, rise or fall, unless the value of the produce of a given quantity of labour rises or falls, either from the temporary or the ordinary state of the demand and supply' (pp. 55–56).

Malthus also adds some less important points in favour of his doctrine, and/or against Ricardo's. For instance, the point that 'The labour worked up in a commodity could not, in many cases, be ascertained without considerable difficulty; but the labour which it will command is always open and palpable' (p. 54n). And also that 'wealth and value, . . . though they are by no means the same, they are much more closely connected than they have of late been supposed to be' (p. 56)—by no other than Ricardo, of course, who had written that 'value . . . essentially differs from riches', and that 'riches do not depend on value' (*Works*, I, pp. 273 and 275). Labour commanded was in fact for Malthus not only the measure of value, but also 'the best practical measure of the relative wealth of different countries' (p. 56). Other anti-Ricardian points he made on foreign trade—e.g. that its beneficial effect is that of raising the rate of profits 'owing to its increasing the value of the produce . . . by the extension of demand' (pp. 56–57), whereas Ricardo had argued that 'it is not . . . in consequence of the extension of the market that the rate of profits is raised' by foreign trade (*Works*, I, p. 132).

RICARDO VS. MALTHUS

For a certain period after its publication in April 1823, *The Measure of Value* was the object of a lively debate among economists.¹³ Ricardo was of course prominent in these discussions, and we have three sets of comments by him on Malthus's tract: (i) several letters to Malthus himself, to Mill, to McCulloch, to Trower; (ii) the two versions of his last paper on 'Absolute Value and Exchangeable Value'; (iii) some notes on *The Measure of Value*, which Sraffa decided not to publish in his edition of Ricardo (see *Works*, X, p. 392), and which have subsequently been published (*Ricardo*, 1823).

The first thing which comes out rather clearly from Ricardo's comments is that he did not see the central weakness of Malthus's argument on the 'constant value of labour'—i.e. that it simply amounts to the truism that the commodities which constitute the wages of ten men command the labour of ten men. The nearest Ricardo gets to see this point is in his just mentioned notes on Malthus's book, where, commenting on the latter's claim that he had shown that profits 'are determined . . . by

¹³ It will be remembered that shortly after the publication of Malthus's *Measure* there were the discussions at George Grote's place which originated Mrs Grote's famous utterance on 'the interminable controversy about the 'measure of value'' (see *Works*, IX, p. 301n.). The editor of the posthumous (second) edition of Malthus's *Principles* (probably Malthus's follower John Cazenove: see Pullen, 1978, p. 297) writes that *The Measure of Value* 'attracted but little attention' (see Malthus, 1836, p. x). The quality and quantity of the extant reactions from economists however shows that this was not really the case—although this does not of course imply that Malthus's ideas were received with favour. See also note 14 below.

the variable value of the commodities produced by a given quantity of labour, compared with the constant value of such labour' (a passage we have quoted more fully above), Ricardo writes: 'What can be meant by the words¹⁴ "constant value of labour". Labour is the measure, the standard, its value cannot be otherwise than constant' (Ricardo, 1823, p. 26). But Ricardo does not go beyond this, and the point is not even repeated in his letters, or in his last paper.

That Ricardo had not seen the truism in Malthus's argument is clear enough from the last of his notes on Malthus's book, where Ricardo makes a calculation to check whether Malthus's point was true—and of course he finds it to be so. (Ricardo assumes that wages change, so that the wages of a given number of labourers from being worth 80 units of cloth are now worth 84.21, and writes: 'according to your rule then 84.21 yards of cloth must, after corn has risen, contain the same the same quantity of labour and profits united [i.e. labour commanded] which 80 contained before corn rose—let us see whether this is true'—and obviously finds it is: Ricardo, 1823, p. 33). The fact that Ricardo should have checked the truth of the proposition shows that he had not realized it was true by definition.

It is remarkable that of the numerous comments on *The Measure of Value* by contemporaries, those by Ricardo are among the weakest. This partly at least depends upon the fact that in the last period of his life Ricardo was more than others entangled in the 'absolute value' perspective (as he wrote to Trower: In speaking of exchangeable value you have not any idea of real value in your mind—I invariably have: *Works*, IX, p. 38), while the triviality of Malthus's point on the 'constant value of labour' was to be seen from a 'relative value' perspective. It is no great surprise that the author who most clearly saw it was Bailey, who had the advantage of a fully relativistic position on value. (In the chapter of his *Critical Dissertation on Value* devoted to 'the measure of value proposed by Mr. Malthus' he wrote: 'it is just the same kind of futility to call wages invariable in value, because though variable in quantity they command the same amount of labour, as to call the sum given for a hat, of invariable value, because, although sometimes more and sometimes less, it always purchases the hat': Bailey, 1825, p. 147).

As a matter of fact, Ricardo strongly dissented from Malthus, but often accompanied his dissent with expressions of puzzlement, as when he wrote to Malthus (29 April 1823): 'After the most attentive consideration which I can give to your book, I cannot . . . discover, exactly, what connexion the constant labour necessary to produce the wages and profits on a commodity, has with its value' (*Works*, IX, p. 280).

Ricardo could not really find where Malthus's main argument was wrong, and basically relied on indirect criticism. There is only one criticism which he levels directly at Malthus's point that the value of labour is constant because it is composed of two elements—wages and profits—which vary in opposite directions in such a way as to leave their sum unaltered (and at the connected point, that if L_n is the labour

¹⁴ In the manuscript, the following three words are inserted: 'compared with the'.

necessary to produce the wages of L men, then L_n/L is the proportion of the produce going to wages, and $1 - L_n/L$ the proportion going to profits). Ricardo argues that if a piece of cloth which is 120 yards in length is to be divided between A and B,

it is obvious that in proportion as much is given to A less will be given to B and vice versa. This will be true altho' the value of the whole 120 yards be £100, £50 or £5. Is it not then a begging of the question to assume the constant value because the quantity is constant, and because it is always to be divided between 2 persons (Ricardo to Malthus, 29 April 1823, in *Works*, IX, p. 283).

But Ricardo has clearly missed Malthus's point, which did not rely on an assumed constancy of quantity, being simply based on the fact that the value of labour was equal to a constant sum of wages and profits. Malthus was therefore right in being in turn puzzled by Ricardo's comments. He wrote back:

I am utterly at a loss to conceive what view you are taking of the subject, when you say that you dont understand the connection between the invariability of labour as a measure of value, and my proposition which shews that as the positive value of the labour worked up in the wages of a given number of men increases, the positive value of the profits (the other component part of their whole value) diminishes exactly in the same degree (11 August 1823, in *Works*, IX, pp. 339–340).

This was even more puzzling given that, as Malthus added, the connection was similar to that established by Ricardo himself, between the proposition that the price of commodities produced in the same way as gold is constant, and the proposition that to a rise in the value of wages measured in gold there will correspond a fall in the value of profits to the same extent (*Works*).

Also Ricardo's indirect criticisms were mostly weak. One which he repeats several times is the following:

You have yourself stated, as an objection to my views, that a commodity produced with labour and capital united, cannot be a measure of value for any other commodities than such as are produced under the same circumstances, and in this I have agreed (letter to Malthus of 28 May 1823, *Works*, IX, p. 297).

Ricardo therefore argues that Malthus's measure, which is equivalent to a commodity the price of which is composed of wages only ('shrimps or silver, picked up by labour alone on the sea shore'), cannot be an accurate measure of the value of commodities which are 'the product of labour and capital' (*Works*, IX, p. 298). But Ricardo's point was wide of the mark. He was applying to a labour *commanded* measure an objection which applied to a labour *embodied* measure as an invariable measure. Malthus's had in fact written: 'in the case of a rise in the price of labour, all commodities which still contained the same quantity of labour as precious metals would alter in price, except those very few which were circumstanced exactly in the same manner with regard to capitals by which they were produced as the precious metals' (Malthus, 1820, p. 110). A requisite necessary for labour embodied to be an invariable measure is not so for another measure.

Another point which Ricardo repeatedly made was marred by a similar kind of weakness. He wrote:

Who can say that a plague which should take off half our people would not alter the value of labour? We might indeed agree to transfer the variation to commodities, and say that they had fallen and not that labour had risen, but I can see no advantage in the change (IX, p. 282).

Or else:

Suppose an epidemic disorder were to carry off one fourth of our people labour would rise as compared with all commodities—Malthus would call this a fall in the value of commodities, whereas nothing would have altered except the supply of labour (IX, p. 319).

This simply amounted to contrasting Malthus's with Ricardo's own conception (a change in population causes a change in the 'value of labour') and was in itself no objection to Malthus's idea that the value of labour is 'constant'.

Another point which Ricardo often repeats is that if in a country the rate of wages changes, 'notwithstanding the condition of the labourer is in the one case a very distressed one, in the other a very prosperous one—[you tell us] that the value of the labour has not varied. I cannot subscribe to the rightness of this language' (letter to Malthus, 13 July 1823, *Works*, IX, p. 305). Not only was this merely an objection to the 'language', but Ricardo was certainly not entitled to raise it, given that according to his own definition of 'real wages' as 'proportional wages' it was possible that an improved condition of the labourer be termed, in Ricardo's language, as one of 'lower wages'. This Malthus quickly retorted against him:

it appears to me rather odd that you and Maculloch should particularly object to my doctrine on account of its making the same quantity of labour of the same value while the condition of the labourer is very different, when according to your doctrines the value of labour in America is actually *lower* than the value of labour in the Netherlands (letter to Ricardo, 21 July 1823, *Works*, p. 309).

Ricardo also put forward another objection, which had slightly more force in it. He remarked that if two countries are 'equally skilful and industrious', but 'in one the people live on potatoes in the other they live on the best wheat', then

a commodity . . . of the value of £100 will command 2 or 3 times the quantity of labour in the one country that it would command in the other . . . Here then we should have all things in the 2 countries of nearly the same money value, of nearly the same relative values and yet because they differed only in their power of commanding labour Mr. Malthus would say they were all 2 or 3 times dearer in one than the other (*Ricardo*, 1823, p. 21).

This objection too was strictly linked with Ricardo's conception that a commodity cannot alter in value 'when nothing has occurred to alter the circumstances under which [it] is produced' and could at first sight be regarded as irrelevant as the one mentioned above, on changes in the supply of labour as altering the value of labour. Yet Ricardo here did have a point: great differences in the value of commodities as among the two countries where everything is equal except wages, strongly suggested that the differences must arise from the difference between the standard of measure

(the value of labour)—which therefore was far from constant, contrary to Malthus's theory.

There was another good point made by Ricardo against Malthus's measure, but it was too indirect to be decisive, and it had virtually no weight in the dispute, because apparently Ricardo got at it only a few days before his death on the 11th of September 1823. This point was made by Ricardo in his last letter to Malthus (the famous¹⁵ letter of 31 August which starts: 'My dear Malthus, I have only a few words more to say on the subject of value, and I have done': *Works*, IX, p. 380), to which there was to be no reply from Malthus. The same point was also made in the letter which Ricardo wrote to Trower on the same day. It was not in the draft of Ricardo's last paper, but it is to be found in the later version (written in the last week or two of Ricardo's life). It is also interesting that in this paper Ricardo raises this point first, and appears to rely more on it than on any other objection to Malthus. In fact, before passing to the other objections (basically the ones we have discussed above), Ricardo writes:

If I had no other¹⁶ argument to advance against Mr. Malthus's proposed measure, this is I think conclusive against the claim which he sets up for its universal accuracy and perfection (*Works*, IV, p. 407).

Ricardo's point runs as follows. Malthus had agreed that Ricardo's measure (a commodity always produced with the same quantity of labour) would be a perfect one for all commodities 'produced under the same circumstances' as itself.

If then under certain circumstances mine is a perfect measure, and yours is always a perfect one, under those circumstances certain commodities ought to vary in these two measures in the same degree. Do they so? Certainly not; then one of the measures must be imperfect (letter to Malthus, 31 August 1823, *Works*, IX, p. 380).

This is where Ricardo himself left the question, at his death.

THE ECONOMISTS AGAINST MALTHUS (AND RICARDO)

It has already been mentioned that a number of writers commented on Malthus's *Measure*, from the Mills to Torrens, from de Quincey to Bailey, to Marx.¹⁷ These comments are as varied in quality, inspiration etc., as may be expected from such a heterogeneous group of authors. Yet they have an element in common: they all reject Malthus's theory, often in the bluntest of terms. Even Malthus's friend and

¹⁵ This letter was made famous by Keynes's quotation of it at the close of his essay on Malthus (Keynes, 1924, pp. 123–124). Keynes quoted the final paragraph: 'And now, my dear Malthus, I have done. Like other disputants, after much discussion, we each retain our opinions. These discussions, however, never influence our friendship; I should not like you more than I do if you agreed in opinion with me' (all the commas are not in the original, but inserted by Keynes).

¹⁶ This is Ricardo's first version. He afterwards deleted 'other'.

¹⁷ Actually, Bailey felt obliged to devote a whole chapter of his *Critical Dissertation on Value* to Malthus's *Measure*, because of the attention it had attracted (see Bailey, 1825, p. 139).

biographer, W. Empson (himself not an economist¹⁸) wrote, in his article 'Life, writings, and character of Mr Malthus',¹⁹ that the arguments on which Malthus's conception, was based, that labour is 'a constant measure of value', were 'the least satisfactory part of all Mr Malthus' writings' (Empson, 1837, p. 469).²⁰

Another feature which is common to many of the comments on Malthus's *Measure* is that its arguments are little understood, and the comments are often confined to expressing puzzlement, rather than providing any detailed criticism of Malthus's points. McCulloch's comment is rather typical: 'I have read Mr. Malthus pamphlet—Though he should gain no other palm, he must be allowed praise for having rendered himself so very unintelligible—I have not had time sufficiently to reflect on the subject' (*Works*, IX, p. 290).

It has already been mentioned that Samuel Bailey was one of the few authors who saw the basic weakness of Malthus's book. In Marx's words, 'Bailey ridicules most excellently Malthus's *proof* that the *value of labour* is constant... [and] bitinglly derides the insipid, impressive-sounding tables with which Malthus "illustrates" his measure of value' (Marx, 1862-3, III, p. 28). As a matter of fact, Bailey wrote that Malthus's table 'is certainly one of the most curious productions in the whole range of political economy' (Bailey, 1825, p. 142), and, as already mentioned, he appears to realize that Malthus's 'constant value of labour' could be shown to simply amount to a truism.

Also the comments by John Stuart Mill, in his review of Malthus's book in *The Morning Chronicle*, show an awareness of the central weakness of Malthus's conception. Mill wrote:

Mr. Malthus' argument is a begging of the question. His object is to prove that labour is an accurate measure of value, because the value of wages is invariable. But in order to prove this, he covertly assumes labour as the standard; and then, of course, he can easily prove that the wages of ten men, as compared with labour, are always of the same value, because they can always purchase the labour of ten men (J. S. Mill, 1823, p. 57).

Or also:

Mr. Malthus... proves that the wages of ten men are in value always equal to ten. To ten quarters of corn, ten suits of clothing? No.—To ten of what?... Mr. Malthus informs us that the wages of ten men are invariable in value, because they are always equal in value to the labour

¹⁸ Empson was a colleague of Malthus's at Haileybury, where he was Professor of General Polity and the Laws of England, from 1824 to 1852 (see Pullen, 1978, p. 287). From 1847 to 1852 he was the editor of the *Edinburgh Review*.

¹⁹ In his article Empson claimed that Malthus was 'the first political economist of his age' (Empson, 1837, p. 501), and complained that notwithstanding the efforts of Lord Lansdowne and Lord Holland, he had met with no political preferment (because Lord Liverpool, the Prime Minister, 'had an aversion for political-economy-clergymen', Empson, 1837). To this, Henry Brougham reacted in a letter to Napier, then the editor of the *Edinburgh Review*, stating that he had 'offered Malthus a living, and he declined it in favour of his son, who got it' (see Napier, 1879, p. 187).

²⁰ Empson goes even so far as writing that the last two letters which Ricardo sent to Malthus contain a 'masterly criticism of [Malthus's] pamphlet of 1823 [i.e. the *Measure*]' (Empson, 1837, p. 470).

of ten men! In other words, the wages of a day's labour are always the same, because they are the wages of a day's labour! (J. S. Mill, 1823, p. 56).

Much less perspicuous are the comments by James Mill, who devoted lengthy and detailed notes to Malthus's *Measure*. They are contained in an unpublished manuscript, now in the Mill-Taylor Collection of the British Library of Political and Economic Science.²¹

Many of James Mill's points against Malthus are weak, and often difficult to understand. In the main point he makes, which is similar to one made by Ricardo (see above),²² he seems to argue that Malthus does not demonstrate anything on *value*, because his arguments only refer to *quantity*. He asserts that Malthus simply *assumes* value to be constant, and that nothing can be inferred on 'what determines ... value, & whether it is fixed, or variable' from the fact that wages and profits vary inversely (J. Mill, 1823, comment No. 49). Mill is obviously missing Malthus's point, which was based on the argument that only in the value of labour do profits and wages vary inversely, exactly balancing each other, so as to leave their sum (i.e. the value of labour) unchanged. In the comments on Malthus's table, however, Mill seems to realize, though amid much confusion, that the proposition that wages are always 'equal to the quantity of labour for which they will exchange' is a truism ('[a] singular instance of an identical proposition': comment No. 69d; see also No. 69e).

Also de Quincey's comments are rather poor. In a short paper on Malthus's *Measure* (where he boasted: 'In matter of logic I hold myself impeccable': de Quincey, 1823, p. 34) he made the (right) point that Malthus's theory was based on a confusion between a *measure* and a *cause* of value, but he did not go into any details, to really show where Malthus had made this confusion. He also devoted the last of his *Dialogues* to a discussion of Malthus's theory of the constant value of labour. He wrongly argued that Malthus's table was based on a confusion between labour embodied and labour commanded, whereas it is rather de Quincey who appears guilty of this confusion. Indeed, he seems to think that the eight units of labour necessary to produce the wages of ten men (column (E), first row, in the table above) already include profits, and it would therefore be a duplication to add to them the two units of labour as profits, by means of which addition Malthus gets at ten (the 'constant value of labour': see de Quincey, 1824, p. 107). This means that de Quincey is reckoning values in terms of labour embodied, not in labour commanded (as Malthus is instead doing): the confusion is de Quincey's.²³

²¹ The manuscript is in vol. LIX (fol. 14) of the Mill-Taylor Collection. It belongs to that part of the Mill papers which was purchased by Keynes, and which he wanted reunited to the rest at his death. The manuscript is identified as referring to Malthus's *Measure of Value* in a pencilled leaflet attached to it, and initialled P.S. (also from the handwriting it is clear this is Piero Sraffa). Mill divides the sheet in columns, writing a summary of Malthus's points in the odd columns, and his comments in the even column. These comments cover the central part of the book, including the table.

²² It is curious that there is apparently no mention of Mill's paper in Ricardo's correspondence.

²³ As said above (note 8), the heading of column (E) was misleading, and it must have been this which induced de Quincey in error.

We may last mention Marx's reaction to Malthus's theory of the 'constant value of labour'. Similarly to Ricardo, Marx regarded the 'theory' that commodities exchange according to labour commanded as incompatible with the theory that commodities exchange according to labour embodied (see, e.g. Marx, 1862-3, I, p. 75ff; III, p. 23). He was therefore bound to oppose the theory in Malthus's *Measure*.²⁴ In *Theories of Surplus Value*, Marx virtually confines himself to reproducing Bailey's comments, but he had dwelt at length on that theory in *Grundrisse*. Basically, Marx's position in *Grundrisse* was that Malthus's theory of the constant value of labour was intended to deny what Marx wanted to stress by calling wages (the value of labour) *variable capital*: that the 'part of capital, represented by labour power, does, in the process of production, undergo an alteration of value. It both reproduces the equivalent of its own value, and also produces an excess, a surplus-value . . . This part of capital is continually being transformed from a constant into a variable magnitude. I therefore call it . . . *variable capital*' (Marx, 1867, p. 202). According to Marx

The *value of labour* is constant . . . means nothing other than that all labour time is necessary, i.e. wage-producing labour time. There is no surplus labour time . . . a worker . . . obtains a week of done labour for a week of living labour" (Marx, 1857-8, p. 574).

This inference however seems unwarranted, and Marx himself, in *Theories of Surplus Value*, will later contradict it. Indeed in this work he writes:

The real contribution made by Malthus in his three books [*Measure of Value*, *Definitions*, and *Principles*] is that he places the main emphasis on the *unequal* exchange between capital and wage-labour . . . between a definite amount of accumulated labour and a definite amount of immediate labour (Marx, 1862-3, III, p. 14; but a different view is to be found at pp. 24-26).

CONCLUSION

It may be said that *The Measure of Value* rather weakened Malthus's standing as an economist. No matter how hard he subsequently tried to get his theory accepted,²⁵ his efforts were totally barren of results.²⁶ It can be safely stated that the main reason for such a hostile reception of Malthus's theory was the fact that it (directly

²⁴ Marx vilified this book of Malthus's even more than the others: '*The measure of value stated and illustrated* (London, 1823) is a real example of feeble-minded thought, which winds its way in a casuistical and self-stupefying manner through its own inner confusion, and whose difficult, clumsy style leaves the unprejudiced and incompetent reader with the impression that the difficulty of making sense out of the confusion does not lie in the contradiction between confusion and clarity, but in a lack of understanding on the part of the reader' (Marx, 1862-3, III, pp. 24-25).

²⁵ Malthus again presented his theory in *Definitions*, and in the second edition of his *Principles*, and in two minor papers read at the Royal Society of Literature of the UK. It seems significant however that in all these works he did not put much emphasis on the *constancy* of the value of labour, but only on labour commanded being a suitable standard of value (or as he put it in those minor papers, the measure of the 'natural and necessary conditions of the supply of all commodities': Malthus, 1825, p. 108). One of the few authors to agree with him, on this conception, was John Cazenove (see Cazenove, 1822, in particular p. 33).

²⁶ It has already been recalled that even Empson wrote that Malthus's arguments on the constant value of labour were among the least satisfactory parts of all his writings.

or indirectly) relied on the concept of 'absolute value', to which virtually all the economists in the 1820s (except of course Ricardo) had come to be opposed. It was not only and not so much the particular 'absolute value' chosen by Malthus that caused the rejection of his theory, but the very fact that it relied on that concept. Indeed, also Ricardo's last paper, on 'Absolute value and exchangeable value' was met with a similar reception, and was virtually buried with him in his grave,²⁷ only to be unearthed by Sraffa more than a century later. The fully relativistic position that Bailey expounded in his 1825 *Critical Dissertation* won an easy victory over both Ricardo and Malthus.

REFERENCES

- [BAILEY, S.] (1825). *A Critical Dissertation on the Nature, Measures, and Causes of Value; Chiefly in Reference to the Writings of Mr. Ricardo and his Followers; by the Author of Essays on the Formation and Publication of Opinions*, reprinted, New York: Kelley, 1967.
- [CAZENOVE, J.] (1822). *Considerations on the Accumulation of Capital, and Its Effects on Profits and Exchangeable Value*. London: Richardson.
- [DE QUINCEY, T.] (1823). Malthus on the measure of value. Reprinted in Masson, D. (ed), *The Collected Writings of Thomas de Quincey*, vol. IX, Political Economy and Politics, Edinburgh: Black, 1890.
- [DE QUINCEY, T.] (1824). Dialogues of three templars on political economy: chiefly in relation to the principles of Mr. Ricardo. Reprinted in Masson, D. (ed), *The Collected Writings of Thomas de Quincey*, vol. IX, Political Economy and Politics, Edinburgh: Black, 1890.
- DE VIVO, G. (1985). Robert Torrens and Ricardo's 'corn-ratio' theory of profits. *Camb. J. Econ.*, 9, 89–92.
- DE VIVO, G. (2001). On Torrens's theory of profits. *Camb. J. Econ.*, 25, 685–692.
- [EMPSON, W.] (1837). Life, writings, and character of Mr Malthus. *Edinb. Rev.*, 62, 469–506.
- GAREGNANI, P. (1984). Value and distribution in the Classical economists and Marx. *Oxford Econ. Papers*, 36, 291–325.
- KEYNES, J. M. (1924). Robert Malthus: the first of the Cambridge economists, reprinted in *Essays in Biography*, vol. X of *The Collected Writings of John Maynard Keynes*, London and Basingstoke: Macmillan, 1972.
- [McCULLOCH, J. R.] (1824a). Principles which determine the exchangeable value of commodities and the rate of profit. *The Scotsman*, 21 February.
- [McCULLOCH, J. R.] (1824b). Standard of national prosperity—rise and fall of profits. *Edinb. Rev.*, 40, 1–31.
- MALTHUS, T. R. (1820). *Principles of Political Economy Considered with a View to Their Practical Application*, vol. 2, variorum edition (PULLEN, J. ed.). Cambridge: Cambridge University Press, 1989.

²⁷ Ricardo's last paper must have been sent to James Mill after Ricardo's death by his executors, and Mill must have decided that it was not suitable for publication (see *Works*, XI, p. xxvi). The allusion to the paper in the first versions of McCulloch's memoir of Ricardo was dropped in the later and better known versions: the passage mentioning that Ricardo, in the last days of his life, was engaged in 'investigations concerning the absolute and exchangeable value of commodities' was changed into one stating that Ricardo was engaged in 'inquiries regarding some of the most abstruse economical doctrines' (on all this, see *Works*, IV, pp. 358–359).

- MALTHUS, T. R. (1823). *The Measure of Value, Stated and Illustrated, with an Application of It to the Alterations in the Value of the English Currency since 1790*, reprinted, Fairfield, NJ: Kelley, 1989.
- MALTHUS, T. R. (1825). On the measure of the conditions necessary to the supply of com-Modities. Paper read on May, the 4th at the Royal Society of Literature of the United Kingdom, reprinted, University of Sydney: Sydney, 1953.
- MALTHUS, T. R. (1827). *Definitions in Political Economy, Preceded by an Inquiry into the Rules that Ought to Guide Political Economists in the Definition and Use of Their Terms; with Remarks on the Deviation from These Rules in Their Writings*, reprinted, New York: Kelley, 1971.
- MALTHUS, T. R. (1836). *Principles of Political Economy Considered with a View to Their Practical Application*, 2nd edn. London: Pickering.
- MARX, K. (1857-8). *Grundrisse. Foundations of the Critique of Political Economy (Rough Draft)*. Harmondsworth: Penguin Books, 1973.
- MARX, K. (1862-3). *Theories of Surplus Value*, 3 vv., Moscow: Progress Publishers, 1969–1972.
- MARX, K. (1867). *Capital. A Critique of Political Economy*, vol. I. English translation, reprinted. London: Lawrence & Wishart, 1954.
- MILL, J. (1821). *Elements of Political Economy*. London: Baldwin, Cradock, and Joy.
- MILL, J. (1823). Notes on Malthus's *Measure of Value*, unpublished manuscript.
- [MILL, J. S.] (1823). Malthus's Measure of Value. Reprinted in *Collected Works of John Stuart Mill*, vol. XII. Toronto: Toronto University Press, 1986.
- NAPIER, M. (ed.) (1879). *Selections from the Correspondence of the Late Macvey Napier, Esq. Edited by His Son*. London: Macmillan.
- PULLEN, J. M. (1978). The editor of the second edition of T.R. Malthus' *Principles of Political Economy*. *Hist. Political Econ.*, **10**, 286–297.
- RICARDO, D. (1823). *Notes on Malthus's 'Measure of Value'* (PORTA, P. L. ed.). Cambridge: Cambridge University Press, 1992.
- RICARDO, D. (Works). *The Works and Correspondence of David Ricardo*, vol. 11 (SRAFFA, P. & DOBB, M. H. eds.). Cambridge: Cambridge University Press, 1951–1973.
- STIGLER, G.J. (1953). Sraffa's Ricardo. Reprinted in ID, *Essays in the History of Economics*. Chicago: Chicago University Press, 1965.
- TORRENS, R. (1815). *An Essay on the External Corn Trade*, 1st edn, reprinted in de Vivo G. *Collected Works of Robert Torrens*, vol. 2, Bristol & Tokyo: Thoemmes and Kyokuto Shioten, 2000.
- TORRENS, R. (1820a). *An Essay on the Influence of the External Corn Trade upon the Production and Distribution of National Wealth*, reprinted in de Vivo, G (ed), *Collected Works of Robert Torrens*, vol. 2, Bristol & Tokyo: Thoemmes and Kyokuto Shioten, 2000.
- [TORRENS, R.] (1820b). 'To Political Economists. Mr. Malthus and "The Measure of Value"', reprinted in de Vivo, G (ed), *Collected Works of Robert Torrens*, vol. 8, Bristol & Tokyo: Thoemmes and Kyokuto Shioten, 2000.
- TORRENS, R. (1821). *An Essay on the Production of Wealth*, reprinted in de Vivo G (ed.), *Collected Works of Robert Torrens*, vol. 3, Bristol & Tokyo: Thoemmes and Kyokuto Shioten, 2000.