RICARDO'S SIDE OF THE MALTHUS PAPERS IN THE COLLECTION OF KANTO
GAKUEN UNIVERSITY
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Abstract

In 1997 and 2004, John Pullen and Trevor Hughes Parry published a set of manuscripts by and relating to Thomas Robert Malthus held at the Kanto Gakuen University in Japan. Their achievement is impressive. However a few important elements relating to these manuscripts escaped their attention. These elements concern Malthus, but also his very good friend and theoretical opponent David Ricardo. The purpose of this article is to point out these elements inasmuch as they enable 1) to establish the correct dating and contextualisation of some manuscripts, and 2) to attribute the true authorship of some other material.

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RICARDO'S SIDE OF THE MALTHUS PAPERS IN THE COLLECTION OF KANTO GAKUEN UNIVERSITY¹

I. INTRODUCTION

In 1986, a box containing a large collection of manuscripts relating to the Malthus family came on the market. This collection which included a great deal of papers belonging to Thomas Robert Malthus (1776-1834), had remained for a long time in the Malthus family. A few excerpts from these documents were published soon after Malthus's death: four letters were quoted by William Otter in the introduction to the second edition of Malthus's *Principles of Political Economy* (Malthus 1836, pp. xiii–liv) while three other letters were cited in the obituary published in 1837 in the *Edinburgh Review* by William Empson. Finally,

¹ I am very much indebted to Jun-ichi Matsudaira, the chairman of the Kanto Gakuen, and to Toru Haneda, the Director of the Kanto Gakuen University Library, for allowing me to examine Malthus's manuscripts. I would also like to sincerely thank Keiji Kunikata and Satoyuki Yamane (Kanto Gakuen University), Susumu Takenaga (Daito Bunka University), and Masashi Izumo (Kanagawa University) for their assistance in establishing contacts with the administration of the Kanto Gakuen University. Finally, I am very grateful to Ghislain Deleplace, who commented extensively on early drafts of this article, and to the participants to the “International Workshop on Classical Monetary theory” organised by Yuji Sato at Rikkyo University on 14 and 15 March 2019 where a first version of this article was presented. I take full responsibility for any remaining shortcomings.

James Bonar was also able to access to the collection and made use of it in the second edition of his book *Malthus and his Work* (1924).

The collection was lost sight of when the last Robert Malthus –a great-great-nephew of T. R. Malthus– brought it from Dalton Hill to the Isle of Wight where he moved. Patricia James who was aware of the existence of the collection tried unsuccessfully to locate it, and Robert Malthus appeared either to have forgotten its existence, or to have minimized its significance, since he did not mention the collection when asked by Mrs. James. In 1972, Robert Malthus died and the papers passed to Miss. Jane Catchpole, a residual legatee who had been the servant of Robert Malthus and his wife for a long time. In 1986, Miss Catchpole passed away, also without direct heirs, and in June 1986, the papers, described merely as a “Box of old documents”, were sold on auction. The “box” was noticed by the late London bookdealer Mr Colin Frost who bought it in conjunction with Maggs Bros. In 1987, after having been catalogued with the assistance of Mrs. James, the collection was sold to K. D. Duval, a Scottish bookseller, who approached Maruzen & Co to find a suitable owner in Japan. The task was not easy and lasted a long time. However, in March 1991, the Kanto Gakuen University acquired the whole collection.

Takeo Satoh, who was at that time at the head of the Kanto Gakuen University Library, explained that “from the outset, it was the University’s intention not to jealously guard the papers in a secret vault, but to make them available to the world-wide community of Malthus scholars and researchers. It was realised that the simplest way to achieve this aim would be to transcribe the manuscripts and publish them in book form” (*in* Malthus 1997-2004, vol. 1, p. xii). Indeed, as stated in the note on “editorial procedure”, “although the University is happy to welcome visits from scholars with an interest in Malthus, it recognises that the relative inaccessibility of Japan will render such visits difficult for many” (Pullen and Hughes Parry *in* Malthus 1997-2004, Vol. 1, p. xvii; Vol. 2, p. xii). The task of publishing

Malthus's papers was taken by Trevor Hughes Parry, who deciphered and transcribed the manuscripts, and John Pullen who provided the introductions to the chapters and the explanatory editorial notes. Two volumes were published by Cambridge University Press in 1997 and 2004: *T.R. Malthus: The Unpublished Papers in the Collection of Kanto Gakuen University*.

The result is impressive and several historians of the economic thought rightly paid a tribute to Pullen and Hughes Parry for this achievement². However, a few important elements relating to these manuscripts appear to have eluded the scientific editors. These concern Malthus, but also his very good friend and theoretical opponent David Ricardo (1772-1823). The purpose of this article is to point out these elements inasmuch as they enable: first, to establish the correct dating and contextualisation of some manuscripts; second, to attribute the true authorship of some other material. Section 2 deals with a set of manuscripts by Malthus which are directly related to Ricardo –even though they have not been identified as such. Section 3 brings to light a set of documents in Ricardo's handwriting which have been wrongly attributed to Malthus.

II. MANUSCRIPTS BY MALTHUS RELATING TO RICARDO

The papers held in the Kanto Gakuen University library include a couple of manuscripts in Malthus's handwritings directly connected to Ricardo. However, as far as I

² See Porta 1999; Watarai 1999; Hollander 2004; Waterman 2006a, p. 508; 2006b, p. 144.

Petersen (1998, p.397) has more reservations, especially with respect to the systematic marking of "misspelling" by the editors.

know, these manuscripts have never been clearly identified as such in any publication. These, along with other documents, were published by Pullen and Hughes Parry in the second volume of their edition of Malthus papers under the heading “eight brief miscellaneous items” (Malthus 1997-2004, Vol. 2, pp. 275-85).

A comment on Ricardo's Appendix to the fourth edition of the High Price of Bullion.

The first item is a note by Malthus which Pullen and Hughes Parry entitled “Whether to pay for imports by exporting either precious metals or commodities” (*in* Malthus 1997-2004, vol. 2, pp. 280-81). This document is in fact a comment by Malthus on Ricardo’s *Appendix* to the fourth edition of *The High Price of Bullion a Proof of the Depreciation of Bank Notes*. This statement is based on a series of evidences listed below.

In this manuscript, Malthus stated: “it is never meant to be said that a nation will pay a debt with the precious metals when it can pay it cheaper by the export of any other commodities” (Malthus 1997-2004, 2:280). This is obviously a reference to a passage of the *Appendix* (Ricardo 1951–73, vol. 3, pp. 100-1) where Ricardo discussed and quoted an extract from Malthus’s article “Depreciation of paper currency” -published anonymously in February 1811 in the *Edinburgh Review*. The passage by Malthus discussed by Ricardo reads “it is unquestionably true, as stated by Mr. Ricardo, that no nation will pay a debt in the precious metals, if it can do it cheaper by commodities” (Malthus 1811, p. 345). In the *Appendix*, Ricardo showed why, according to him, this statement was “directly contradictory” with Malthus’s other assertion that “the exportation of the ‘precious metals is the *effect of a balance of trade*, originating in causes which may exist without any relation whatever to redundancy or deficiency of currency”” (Ricardo 1951–73, vol.3, p.101; Malthus 1811, p.

342). The note on “Whether to pay for imports by exporting either precious metals or commodities” is Malthus’s answer to Ricardo.

Another clue leads to the same conclusion. This is the “strong case” of England exporting sugar to France in exchange for corn. Indeed, it is to be found in both Ricardo’s *Appendix* and Malthus’s manuscript. In the *Appendix*, Ricardo criticised the “reviewers”, viz. Malthus, for considering “coin and bullion as things essentially differing in all their operations from other commodities” (Ricardo 1951-73, vol. 3, p. 103). According to Ricardo, Malthus forgot the request he had previously made to his reader to consider money and bullion as subject to the same rules as other commodities:

“Thus the Reviewers, if they had been speaking of coffee or of sugar, would have denied the possibility of those articles being exported from England to the continent, unless they were dearer there than here. It would have been in vain to have urged to them, that our harvest had been bad, and that we were in want of corn; they would confidently and undeniably have proved that to whatever degree the scarcity of corn might have existed, it would not have been possible for England to send, or for France (for example) to be willing to receive, coffee or sugar in return for corn, whilst coffee or sugar cost more money in England than in France” (Ricardo 1951–73, vol.3, p.104).

The manuscript on “Whether to pay for imports by exporting either precious metals or commodities” includes an answer to this objection. Malthus first agreed with Ricardo that “no person ever thinks of sending a *commodity* abroad which sells at a higher price at home; no person will send sugar to France even in exchange for a commodity which he values much more than sugar, if sugar will sell for a higher price at home than in France” (Malthus 1997-2004, vol. 2, pp. 280-1). However, he challenged Ricardo’s point in asserting that if “the medium in which commodities are valued were not capable of being exported; [...] it appears

[...] quite certain that commodities would sometimes be sent to a market where they were not estimated so highly as at home” (Malthus 1997-2004, vol. 2, p. 281). Thus, in that case –and contrary to Ricardo’s point on the impossibility of articles being exported, unless they are dearer abroad than at home-, France would export corn to England in exchange for sugar even though both of these commodities would be dearer in England than on the continent.

Now, with respect to the date at which this draft was written, it was obviously not before early April 1811 and the publication of the *Appendix* to the fourth edition of the *The High Price of Bullion*³. The manuscript might have been part of a first draft of Malthus’s unfinished paper entitled by Pullen and Hughes Parry *An essay on foreign trade* (Malthus

³ As noted by Sraffa, the fourth edition of *The High Price of Bullion* was “advertised in *Monthly Literary Advertiser* for 10 April; the earliest advertisement in the *Morning Chronicle* did not appear till 27 April” (*in* Ricardo 1951-73, vol. 3, p. 11n). The *Appendix* was also published as a separate pamphlet under the title: *Observations on Some Passages in an Article in the Edinburgh Review, on the Depreciation of Paper Currency; also Suggestions for Securing to the Public a Currency as Invariable as Gold, with a Very Moderate Supply of That Metal. Being the Appendix, to the Fourth Edition of “The High Price of Bullion,” &c.* (see Sraffa *in* Ricardo 1951-73, vol. 3, p. 99n). Malthus appears to have read the *Appendix* quite early since he wrote to Francis Horner on 7 April: “I have this moment been reading Mr. Ricardo’s observations on the Review, but remain quite unconvinced- indeed there is no point on which I feel more sure than of the incorrectness of attributing the variations of the exchange exclusively to redundancy or deficiency of currency” (*in* Ricardo 1951-73, vol. 3, p. 12).

1997-2004, vol. 2, pp. 143-58)⁴. This “essay”, intended for publication in the *Edinburgh Review*, was very likely written between April and May 1811 (see Pullen and Hughes Parry in Malthus 1997-2004, vol. 2, p. 141). It investigated “whether [the transit of the precious metals from one country to another] originates exclusively in a comparative redundancy of currency, and ought to be considered as the cause of an unfavourable balance of trade and payments rather than the effect” (Malthus 1997-2004, vol. 2, p. 143-4). In other words, this “essay” dealt with the same kind of issues than the manuscript on “Whether to pay for imports by exporting either precious metals or commodities”: does an export of bullion necessarily mean a redundancy of currency?

The weakness of Malthus’s argument, in his manuscript on “Whether to pay for imports by exporting either precious metals or commodities”, could be the reason of its omission in the latest draft of *An essay on foreign trade*. Indeed, Ricardo’s statement that it would have been impossible for England to send coffee or sugar in France “whilst coffee or sugar cost more money in England than in France” was part of his more general doctrine stating that a country sent abroad his “cheapest exchangeable commodity”. Ricardo had written in his *High Price of Bullion*:

“If in France an ounce of gold were more valuable than in England, and would therefore in France purchase more of any commodity common to both countries, gold would immediately

⁴ The paper of these two items is different. The manuscript on “Whether to pay for imports by exporting either precious metals or commodities” is a bi-sheet in 2° measuring 24.2 cm width and 39.4 cm height. It bears a watermark representing a fleur-de-lys with the “1808” vintage. As for the unfinished manuscript *An essay on foreign trade*, it is written on seven bi-sheets in 2° measuring 32 cm width and 41 cm height. All of these seven bi-sheets have a watermark depicting a “Britannia” with a “1809” vintage.

quit England for such purpose, and we should send gold in preference to any thing else, because it would be the cheapest exchangeable commodity in the English market” (Ricardo 1951–73, vol.3, p.57).

So, when gold is the “cheapest commodity”, it purchases less of any other goods at home than abroad and thus, any good costs less money abroad than at home. In this case, gold will be exported, provided it is an *exchangeable* -viz. an exportable- commodity. In case it is not, as supposed by Malthus, it is still the cheapest exchangeable commodity - sugar in Malthus’s example- that will be exported, even though in comparison to the “un-exchangeable” commodity “gold”, it is more valued in France than in England.

Comments on Ricardo's conception of “redundancy of currency”.

Two other manuscripts by Malthus joined together by Pullen and Hughes Parry and published under the title “Redundancy of currency” (*in* Malthus 1997-2004, vol. 2, pp. 281-2) deal with the issue of what a redundancy of currency is. Even though there is no definitive evidence -like in the former item- that these are comments or reflexions upon Ricardo’s theory, they obviously appear to be so.

In the first manuscript, Malthus seems to furnish a counter-example to the case of a regular flow of bullion from America to England considered as the “proof of a redundancy of currency in America”. Malthus distinguished two situations. In the first one, England and America traded with other countries from which America imported bullion, and to which England exported bullion. Malthus concluded: “it is clear that this traffic might continue for any length of time without our being able to say with propriety that it was occasioned by a redundancy of bullion in one country, and a comparative deficiency in the other” (Malthus 1997-2004, vol. 2, p. 282). In the event America and England traded with no other nations,

the increase in the amount of currency and in prices in England as well as the decrease in the amount of currency and in prices in America should restore the equilibrium of the balance of trade and stop the flow of bullion. Malthus nevertheless listed different cases in which such an adjustment may fail. The manuscript ended with the first lines of a new paragraph stating: “The grand leveller of the value of the precious metals is corn. The only necessary condition in an exchange that the...”

The paper on which this manuscript was written has no watermark. However, it is obviously the same as the paper of the manuscript on “Whether to pay for imports by exporting either precious metals or commodities”. Furthermore, the manuscript on “Redundancy of currency” consists in a sheet in 4° measuring 19.7 cm width and 24.2 cm height. This is exactly half the format of the bi-sheet on which the manuscript on “Whether to pay for imports by exporting either precious metals or commodities” is written. It is therefore likely that these two items are contemporary.

With respect to its content, the manuscript on “Redundancy of currency” also clearly asks the question dealt with in Malthus’s unfinished *Essay on foreign trade*, that is, whether an unfavourable balance of trade and an export of bullion necessarily mean a redundancy of currency. Thus, like the manuscript on “Whether to pay for imports by exporting either precious metals or commodities”, it is likely that this document was a preliminary draft of Malthus’s unfinished *Essay on foreign trade* and that it was written between April and May 1811.

Now, what about Malthus’s argument that in the case of countries re-exporting the bullion they had previously imported, it could not be said “with propriety that it was occasioned by a redundancy of bullion in one country, and a comparative deficiency in the other”? Actually, in his *Reply to Bosanquet*, Ricardo had considered a similar case of a Nation “importing from the north the bullion which she is exporting to the south”. However, he did

not appear to see any contradiction between his doctrine and a fact he explained in the following manner: “she may be collecting it from countries where it is relatively abundant, for countries where it is relatively scarce” (Ricardo 1951-73, vol. 3, p. 171). Thus, Malthus’s case appears irrelevant against Ricardo’s doctrine that “money will never be exported, unless it is relatively redundant with commodities, as compared with other countries” (Ricardo 1951-73, vol. 3, p. 101). Indeed, insofar as redundancy and deficiency are for Ricardo only relative terms, there is no contradiction in asserting that money is redundant in a country with respect to another one, and that, at the same time, it is deficient with respect to a third nation.

The second item⁵, published by Pullen and Hughes Parry under the title “*redundancy of currency*”, is a reflexion by Malthus on whether “a rise of prices is the same thing as a redundant currency” (Malthus 1997-2004, vol. 2, p. 282). More precisely, the case under consideration was one of a bad harvest and of a rise in the price of corn that was less than compensated by the fall in the price of other commodities. Malthus wrote that in such a situation, “a rise of prices has taken place upon the whole but a rise of prices is equivalent to a redundancy of currency” (Malthus 1997-2004, vol. 2, p. 282). However, his sentiment was that if “a redundancy of currency will always shew itself in a rise of prices, [...] it may be doubted whether a rise of prices necessarily indicates redundancy of currency” (Ibid.).

⁵ Pullen and Hughes Parry noted with respect to this manuscript: “on the same sheet, but upside down and apparently written at another time and without reference to the words on this sheet, there are two calculations showing that the ratio of 38:7 is approximately equal to 100:18, and the rate of 35:4 is approximately equal to 100:11” (Pullen and Hughes Parry *in* Malthus 1997-2004, vol. 2, p. 282).

These reflections might have been the consequence of a discussion which took place between Malthus and Ricardo on 9 July 1811 (see Malthus *in* Ricardo 1951-73, vol. 6, p. 31-33). Indeed, five days after this meeting, Malthus wrote to Ricardo:

“in the use of the term redundant as applied to currency, I have been, as far as I recollect, always consistent. I have always applied it to such a state of things as tends to produce a comparative rise of prices, generally, without a tendency to lower the prices of any commodities; and never to a state of things where a rise in the prices of one set of commodities is necessarily accompanied by a fall in the price of others, as in the case of a scarcity of corn or of any necessary articles; and I still think that these two states of things which lead to two such different consequences ought to be differently designated” (Malthus *in* Ricardo 1951-73, vol. 6, p. 34).

If this chronology is accepted, it means that Malthus wrote this note between the 9th and the 14th of July 1811.

This reflexion by Malthus highlights an important difference between him and Ricardo on the nature of the possible causes of a redundancy of currency. A general increase in prices, caused by a monetary shock, such as an over-issue of bank notes, would lead for Malthus to a redundancy of currency. At the opposite, a real cause, such as a bad harvest, even though it leads to an increase in the price of corn and an export of gold, would not be considered as leading to a redundancy of currency. As for Ricardo, insofar as they lead to an export of gold, both of these causes -whether monetary or real-, produce a redundancy of currency. Thus, as he explained in the answer he wrote to Malthus on 17 July, Ricardo saw no reason to exclude a bad harvest from the causes which may produce an excess of money:

“the definition which you give of the word redundant, as applied to the currency, is not satisfactory to me. Though it should be allowed that the rise in the price of one commodity, in the case of a scarcity of corn, should be accompanied with a fall in the prices of all others, why should a redundancy of currency be impossible under such circumstances? The currency must, I apprehend, be considered as a whole and as such must be compared with the whole of the commodities which it circulates. If then it be in a greater proportion to commodities after than before the scarce harvest, whilst no such alteration has taken place in the proportions between money and commodities abroad, it appears to me that no expression can more correctly describe such a state of things than a ‘relative redundancy of currency’. Under these circumstances not only money but every other commodity would become comparatively cheap as compared with corn, and would therefore be exported in return for the corn which would be in demand in this country. By relative redundance then I mean, relative cheapness, and the exportation of the commodity I deem, in all ordinary cases, the proof of such cheapness” (Ricardo 1951-73, vol. 6, pp. 34-5).

An extract from a draft letter to Ricardo on saving and spending

The last item in Malthus’s handwriting connected to Ricardo is: “An extract from a draft letter to an unnamed correspondent on saving and spending” (Malthus 1997-2004, vol. 2, pp. 278-80). This draft was in fact intended for Ricardo. Indeed, on several occasions, Malthus explicitly comments on the letter that Ricardo had sent to him on 16 September 1814. For example, Malthus wrote: “you say also in reference to the will to purchase, that the true question is, whether if money should retain the same value next year as at present, any man would want the will to spend half as much again, if he had it, as he now does”. (Malthus 1997-2004, vol. 2, p. 278). This is obviously an answer to the part of Ricardo’s letter stating that “the real question is this; If money should retain the same value next year, would any man (if he had it) want the will to spend half as much again as he now does” (Ricardo 1951–

73, vol.6, p. 134). Again, Malthus's statement "I of course agree with you entirely in that the tendency of an increased capital is to beget an increased inclination for luxuries of all descriptions" (Malthus 1997-2004, vol. 2, p. 279) is an answer to Ricardo's query: "does not an increase of capital beget an increased inclination for luxuries of all description" (Ricardo 1951-73, vol.6, p. 134).

The letter sent by Malthus in answer to Ricardo is dated 9 October. It gives the key to identify clearly what the "draft letter on saving and spending" really is. The antepenultimate paragraph of Malthus's letter states:

"I cannot by any means agree with you in your observation that 'the desire of accumulation will occasion demand just as *effectually* as a desire to consume['] and that 'consumption and accumulation equally promote demand.' I confess indeed that I know no other cause for the fall of profits which I believe you will allow generally takes place from accumulation than that the price of produce falls compared with the expence of production, or in other words that the *effective* demand is diminished" (*in* Ricardo 1951-73, vol.6, pp.141-2)

As for the manuscript in the Kanto Gakuen collection, it starts with the following words:

"for the fall of profits, which I believe you will allow usually takes place from accumulation, than that the price of produce falls compared with the expence of production, or in other words that demand does not increase in proportion to supply" (Malthus 1997-2004, vol. 2, p. 279).

Obviously, the manuscript from the Kanto Gakuen Library is an extract from a draft of the letter sent by Malthus to Ricardo on 9 October 1814.

The comparison of the draft and the letter is rather surprising. Indeed, in some respect, the draft appears more convincing and more elaborated than the letter itself. In the draft,

Malthus's discussion of the role of demand -and supply- on the fall of profits stopped after the passage quoted above. This issue was developed further in the letter. Malthus re-asserted his definition of effective demand as the "excess of the price of produce above the expence of production" (Malthus *in* Ricardo 1951–73, vol.6, p. 142). Then, as he considered no other cause for the fall of profit than the fall of the price of produce compared with the expense of production, he concluded: "according to this interpretation, [...] you would surely allow that the effective demand would always be greatest when the quantity of capital was comparatively the smallest, or the profits of stock highest"⁶. However, this conclusion looks more like a mere *petitio principii* than a real demonstration. Insofar as Malthus's definition of effective demand fitted with what he considered as the sole cause for the variation of profits, effective demand was necessarily greatest when the profits of stock were the highest.

On another hand, the draft includes an interesting development which has no equivalent in the letter. In the draft, Malthus applied his' "doctrine of proportions"⁷ to

⁶ Ricardo had written to Malthus on 30 August 1814: "I sometimes suspect that we do not attach the same meaning to the word demand. If corn rises in price, you perhaps attribute it to a greater demand,—I should call it a greater competition. The demand cannot I think be said to increase if the quantity consumed be diminished, altho much more money may be required to purchase the smaller than the larger quantity. If it were to be asked what the demand was for Port wine in England in the years 1813 and 1814, and it were to be answered that in the first year she had imported 5000 pipes and in the next 4500 should we not all agree that the demand was greater in 1813, yet it might be true that double the quantity of money was paid for the 4500 pipes" (Ricardo 1951–73, vol. 6, p. 129).

⁷ On Malthus's application of his doctrine of proportions, see Pullen 1982.

consumption and saving. He thus supported the view that “it is a mean between the two extremes of frugality and expence, varying according to the state and natural resources of the country that tends to produce the greatest quantity of wealth in proportion to a given extent of territory”(Malthus 1997-2004, vol. 2, p. 279). Unfortunately, the manuscript ends before Malthus had drawn out all the implications of this statement. Moreover, it is likely that Malthus gave up before he had finished this task. Indeed, he concluded the letter he sent to Ricardo in a quite elusive manner: “The principal difficulties on the present question appear to me to arise from the very different effects of an increase, or diminution of capital on the land, and in manufactures and commerce; particularly with regard to price, occasioned by the different nature of the instruments employed, one set naturally growing worse, and the other generally growing better. But I have no room for more, so adieu.” (*in* Ricardo 1951-73, vol. 6, p. 142).

III. MANUSCRIPTS IN RICARDO’S HANDWRITING

In addition to these materials by Malthus, the Kanto Gakuen collection also includes manuscripts by Ricardo himself. Unfortunately, Ricardo’s handwriting has not been identified and the authorship of these items was wrongly attributed to Malthus.

Papers on bullion trade transactions

A first document in Ricardo’s handwriting is not reproduced in *T. R. Malthus: the Unpublished Papers*. It is nonetheless mentioned amongst unpublished “pages of detailed statistics” and described as:

“three pages of manuscript (numbered 595-597 in the Kanto Gakuen Collection) giving information on exchange rate, the prices of gold and silver, and the price of wheat and oats, for specified days over the period from 24 November 1811 to 10 December 1813, in five centres: Amsterdam, Paris, Hamburg, St Petersburg and Riga” (Pullen and Hughes Parry *in* Malthus 1997-2004, vol. 2, p. 131).

Actually, these statistics do not run till 10 but 14 December 1813. This point escaped the attention of Pullen and Hughes Parry probably because the column including the Amsterdam statistics for 14 December appears before the one for 10 December.

Considering the dates of these statistics, it is likely that this manuscript was written in the end of 1813. This fits with the indications given by Pullen in his introduction to the paper of the Kanto Gakuen Collection dealing with “Bullion trade transactions” –to which Ricardo’s “pages of detailed statistics” undoubtedly belong:

“It is not possible to set a precise date on when these bullion notes were assembled. Many are on pages watermarked 1813. One of the sheets must have been written on or soon after 14 December 1813: it states ‘Gold coming in at present at the rate of above ten per cent. December 14th 1813’. A number of other calculations also use dates from the beginning of December 1813” (Malthus 1997-2004, vol. 2, pp. 56-7).

Ricardo’s manuscript is reproduced in Appendix A.

The second item in Ricardo’s handwriting deals with the calculation of the par of exchange between London and Amsterdam; the determination of gold movements between

these two countries and the value of a ducat in Flemish guilders in Amsterdam when gold is to silver as 15.21 to one, that is, the mint ratio in England.

Instead of being published *ne varietur*, this manuscript has been divided into five different parts (Malthus 1997-2004, vol. 2, p. 74, p.78, p. 81, p. 83, p.134). These were not published one after the other. Indeed, texts by Malthus have been inserted between these parts -between part 1 and 2 for example-, or combined with Ricardo's text -as in the case of part 4. Finally, the last part of Ricardo's manuscript has been published as if it were a separate item. Ricardo's genuine text has been restored and the unaltered transcript of the manuscript is given in Appendix B.

This document has to be connected with the previous one. Indeed, the statistics contained in the manuscript reproduced in Appendix A -especially those on the price of gold in Holland and on the exchange between Amsterdam and London- are data necessary to compute, at one date, the profit obtained by exporting gold from one place to the other, and then determine "from which country gold is passing" (Ricardo *in* Malthus 1997-2004, vol. 2, p. 83). Thus, these two manuscripts complement one another.

Furthermore, these manuscripts were written on sheets of similar paper and of the same size.⁸ The absence of seal, of seal mark and of any postal inscription on any of these documents indicates that they were folded and inserted in one or two envelopes now lost. The

⁸ The "pages of detailed statistics" are in the form of a bi-sheet in 2° measuring 22.5cm width and 37cm height. As for the manuscript on the exchange and gold movements between London and Amsterdam, it is composed of one bi-sheet in 2° measuring 22.5cm width and 37 cm height, and of one sheet in 4° measuring 18.5 cm width and 22.5 cm height. Besides, all of these sheets have vertical and horizontal traces of fold.

material similarities between these two sets of documents suggest that they were transmitted by Ricardo to Malthus together or in extremely close time proximity.

Finally, both of these manuscripts are related to the “Amsterdam table” sent by Ricardo to Malthus on 30 December 1813 (Ricardo 1951–73, vol.6, pp.98-9). While explaining the operation of this table to Malthus, Ricardo (1951–73, vol.6, p.99) used an example supposing the price of gold at £ 5. 10s. in London, at 16% premium in Amsterdam and the exchange between these two places at 31. The price of £ 5. 10s. was reached in London on December 1813 (House of Lords. 1819, p. 350). As for the two other figures, they just appear to be the average values for December 1813, of the statistics of the table reproduced in Appendix A.

Now, with respect to the manuscript published in Appendix B, Pullen and Hughes Parry observed while annotating the first table -giving the par of exchange between English pounds and Flemish schellings for different prices of gold in Holland when gold was at its mint price in England- that it

“does not correspond to Ricardo’s Amsterdam table that was included in his letter of 30 December 1813 to Malthus. There is nothing in MS to indicate whether Table I was calculated by Malthus, or whether it was supplied to him by Ricardo in another (now missing) letter, or whether Malthus obtained it from another source” (*in* Malthus 1997-2004, vol.2, p. 79).

It is true that the first table in the manuscript of the Kanto Gakuen University does not perfectly fit with Ricardo’s “Amsterdam table”. The first one gives the par of exchange between England and Holland for a series of prices for a mark of pure gold in Holland for the years 1790 (one item), 1791 (two items), 1794 (three items) and 1809 (22 items). The second one (columns 2 and 8) gives the par of exchange for a series of prices for a troy ounce of standard gold in Amsterdam, increasing gradually from *f* 355 (the mint price of a

marc of standard gold in current guilders) to f 429.55. However, even though these two tables do not strictly correspond to one another, they are equivalent in terms of information. The only substantial difference in the calculation of the corresponding par of exchange lies in the estimate of the agio between current and bank guilders. It amounted to 5% in the manuscript of the Kanto Gakuen University. It was estimated at 3% in the “Amsterdam table”⁹.

As for the second table of the manuscript transcribed in Appendix B, it gives the multiplier factors to be applied in calculating the par of exchange when the price of gold in England departs from £3. 17s. 10^{1/2}d. These two columns are the same than those numbered 9 and 10 in the “Amsterdam table”. In spite of this, Pullen and Hughes Parry hypothesised that the second table “was extracted by Malthus from the Amsterdam table contained in the letter sent from Ricardo to Malthus on 30 December 1813 [...] The first entries in columns 9 and 10, viz. ‘£4’ and ‘.973’, were not copied by Malthus into the table. The rest of Malthus’s copy is the same as in Ricardo’s table.” (Pullen and Hughes Parry *in* Malthus 1997-2004, vol.2, p. 80).

A last point deserves mention. It deals with the mint ratio of gold to silver in London. It is stated in the manuscript reproduced in Appendix B at 1 to 15.21. However, in the *Reply to Bosanquet* -printed in the end of December 1810- (Ricardo 1951–73, vol.3, p. 167, pp. 177-8, p. 195) as in his notes on Vansittart’s Counter-Resolutions –written between the end of April and the beginning of May 1811- (ibid, p. 417), Ricardo valued the mint ratio of gold to

⁹ As Ricardo observed in the “Amsterdam table”: “the agio is variable but is supposed to be constant in this table for the purpose of calculation” (Ricardo 1951–73, vol.6, p. 98). The statistics of the manuscript published in Appendix A show that between 6 March 1812 and 14 December 1813, the agio varied from 2 to 5%.

silver in London at 15.07. He probably took this figure from Mushet's *Enquiry into the Effects Produced on the National Currency and Rates of Exchange, by the Bank Restriction Bill* (see Ricardo 1951–73, vol.3, p. 167). However, as stated by Deleplace,

“The figure of 15.07 was obtained by dividing the legal price of an ounce of standard gold in coin (£3. 17s. 10^{1/2}d.) by the legal price of an ounce of standard silver in coin (62d.). But one neglected thus that the fineness of standard gold (22/24, that is, 916.667/1000) was below that of standard silver (222/240, that is, 925/1000). Taking this difference into account gave a mint ratio of 15.21 instead of 15.07” (Deleplace 2017, p. 40).

In the manuscript reproduced in Appendix B, Ricardo did not take Mushet's figure at face value but introduced the difference of fineness between gold and silver standards. He thus explicitly stated what is only implicitly present in his “Amsterdam table”¹⁰.

It follows from these observations that the manuscripts of the Kanto Gakuen collection reproduced in Appendix A and B were probably written by Ricardo and transmitted to Malthus at the same –or nearly the same- date, that is, soon after 14 December 1813. Indeed, Appendix A and B complement each other and Appendix A includes statistics that run till mid-December 1813. Furthermore, Appendix A appears as a preliminary draft of the “Amsterdam table” sent by Ricardo to Malthus on 30 December 1813. Indeed, even though both of these documents deal with the same issue, -movements of precious metals from one country to the other according to their market prices- the “Amsterdam table” is more

¹⁰ The « Amsterdam Table » does not state the mint ratio of gold to silver. However, it includes the necessary data for such a computation: the mint price of standard gold (£3. 17s. 10^{1/2}d.), the mint price of standard silver (62s.), the fineness of standard gold (11 fine 1 alloy) and the fineness of standard silver (11.2 fine 18 dwts. alloy).

extensive. It considers both movements of gold and silver while the Kanto Gakuen manuscript focuses only on gold. Thus, it would have made no sense for Ricardo to give Malthus Appendix A after he had sent him a more exhaustive version of it. At the opposite, the fact that Ricardo was “amusing [him]self for one or two evenings in calculating the exchanges, price of gold, &c,—at Amsterdam” (Ricardo 1951–73, vol.6, p. 97) was probably the consequence of a previous discussion with Malthus on these issues. The manuscript held in the Kanto Gakuen University library might then very likely be the immediate by-product of such a discussion and constituted a first draft of the “Amsterdam table”.

A couple of documents from the Kanto Gakuen collection indicate that Ricardo also sent to Malthus a “Hamburgh Table”. Indeed, one manuscript in Malthus’s handwriting mentions “Mr R Table” while another one includes a “Table for Hamburgh upon Mr Rs Plan” (Malthus 1997-2004, vol.2, p. 110; p. 104). Pullen and Hughes Parry indicated that this table, which includes three columns “is presented twice in MS. The second presentation [...] is the same as the first except that the middle column and the right-hand column are transposed [...]”. What Malthus meant when he said that this table is ‘upon Mr Rs Plan’ is not clear” (*in* Malthus 1997-2004, vol.2, p. 104n). The first column gives the price of a ducat (a gold coin) in Hamburg expressed in stivers banco (a money of account based on a silver standard). The first entry of the column (98.46) corresponded to a relative value of gold to silver in Hamburg as 15.21 to one, that is, the English Mint proportions. Then, this relative value of a ducat was supposed to increase from 98.46 to 105. The second column gives the corresponding prices of an ounce of standard gold (22/24 fine) in Flemish schillings in Hamburg -one Flemish schilling being equal to 6 stivers banco. Finally, the third column gives the corresponding prices of one pound sterling in Flemish schillings in Hamburg when gold is at its mint price of £3, 17 S. 10½ d. per ounce in London.

As Pullen and Hughes Parry noted, “[this] Table [...] does not correspond to either of the two tables (the Amsterdam table and the Hamburg table) included in Ricardo’s letters of 30 December 1813 or 1 January 1814 to Malthus”. They added: “it is possibly an extract from another table that was sent by Ricardo but is now missing. The reference in [a manuscript by Malthus] to ‘the third column of Mr R[’s] Table’ suggests that Table III was in fact constructed by Ricardo. Alternatively, Table III might have been constructed by Malthus himself, following a method used by Ricardo in a missing table. (*in* Malthus 1997-2004, vol.2, p. 104n).

That the method followed in the “Table for Hamburgh upon Mr Rs Plan” is the one used by Ricardo to calculate the “real par of exchange” between London and Hamburg is quite clear. As Deleplace (2017, p. 43-4) showed, this procedure is to be found in Ricardo’s “Observations on Vansittart”. It consisted in determining the par of exchange between London and Hamburg when the relative value of gold to silver in Hamburg is as 15.21 to one and to apply a factor corresponding to the deviation of the relative value of gold to silver in the market from the English Mint parity. The relative price of gold to silver in London was thus taken as a proxy to its level in the Hamburg market, even though these two magnitudes were not the same¹¹.

The data of the “Table for Hamburgh upon Mr Rs Plan” are also very likely to have been computed by Ricardo. It is clear from Malthus’s manuscripts (p. 118; p. 119) that the figure “98.46” as the price of a ducat expressed in stivers banco when gold is to silver in Hamburg as 15.21 to one, was obtained by the following calculation: $96 \times 15,21 / 14,83$ (see also Pullen and Hughes Parry *in* Malthus 1997-2004, vol.2, p. 105). In this calculation, 96 was the price of a gold Ducat in stivers banco in Hamburg, 15.21 the relative value of gold to

¹¹ See Ricardo 1951–73, vol. 3, p. 175

silver at the English Mint proportions, and 14.83 the relative value of gold to silver in Hamburg. It should be noted that 96 stivers was not the mint price but a market price of the gold Ducat since Hamburg was on a silver monometallist system. Thus, there was no official gold par between London and Hamburg and no official ratio between gold and silver in Hamburg. As noted by Chipman (2008, p. 48)¹², 96 stivers banco per Ducat “was called the ‘normal (and sometimes, but improperly, the ‘par’) value” of a ducat. As for the figures 15.21 and 14.83, they had to be calculated from the legal or conventional definitions of the monies in gold and in silver. The calculation leading to 15.21 as the mint ratio of gold to silver in London has been explained above. It replaced Mushet’s figure of 15.07 that Ricardo used till May 1811. As for the estimate of the conventional ratio between gold and silver in Hamburg – based on one ducat being equal to 96 stivers banco- it varied with the “conflicting information concerning the amount of gold contained in a ducat”. John Parish’s estimate led to a relative value of gold to silver as 14.7933 or 14.8632 to one, depending on whether one takes the silver selling price of 27.75 or the silver buying price of 27.625 marks banco per mark Cologne weight of fine silver at the Bank of Hamburg. As for Baring, his estimate led to a relative value of gold to silver as 14.7963 or 14.8602 to one (see Chipman 2008, p. 313). Although these estimates are close to one-another, none of them gives the figure “14.83” used in the “Table for Hamburg upon Mr Rs Plan”. Actually, this figure was stated by Dr. Kelly in the “Appendix and Accounts” to the Bullion Report. Furthermore, it is worth noting that Ricardo knew Kelly’s figures quite well. Indeed, he had used Kelly’s tables to correct Mushet’s figures regarding the silver par between London and Hamburg in his *Reply to Bosanquet* (Ricardo 1951–73, vol.3, p. 168).

¹² See also in Ricardo 1951–73, vol.3, p. 186.

As a consequence, even though no “Hamburgh Table” in Ricardo’s handwriting appears in the Kanto Gakuen collection, there is every reason to believe that the two “Hamburgh tables” considered above were built by Ricardo. Like the manuscript dealing with the calculation of the par of exchange between London and Amsterdam, Ricardo might have given this “Hamburgh Table” to Malthus before 1 January 1814, that is, before he sent to Malthus his extensive “Hamburgh Table”.

A sentence on the determination of the rate of interest.

The last item regarding Ricardo in Malthus’s papers is a page consisting of a single sentence in Ricardo’s handwriting with nothing on the verso. It reads: “Nothing has a tendency to raise the rate of interest but an increased [rate of] facility ~~of~~ [in] obtaining the means of subsistence”¹³. Once again, Ricardo’s authorship has not been established by Pullen and Hughes Parry and the sentence has been put in the end of another manuscript by Malthus as if it were in Malthus’s handwriting (Malthus 1997-2004, vol. 2, p. 278). This mistake may have been the consequence of Ricardo’s sentence being written on a sheet of the same paper than the manuscript in Malthus’s handwriting. The manuscript by Malthus is a bi-sheet in 2° measuring 32 cm width and 38.4 cm height and the sentence by Ricardo is written on a sheet in 4° measuring 19.7cm width and 32 cm height. Both bear a watermark “Golding & Snelgrove” with the vintage “1811”.

¹³ Here as in the transcripts published in the two appendix, the following symbols have been used: ~~word~~: crossed word; [word]: added word; word [?]: uncertainty on the transcript of a word.

This sentence is part of Ricardo's early reflexions on the theory of profit. As stated by Sraffa, "by August 1813, [...] the question under discussion between Malthus and [Ricardo] had become the relation between the increase of capital and the rate of profits" (Ricardo 1951–73, vol. 4, p. 3). At this period, Ricardo equally mentions the rate of interest or the rate of profit as if it were the same thing. This is obvious from one of the first letters -dated 17 August 1813- dealing with this issue. Ricardo started writing: "that we have experienced a great increase of wealth and prosperity since the commencement of the war, I am amongst the foremost to believe; but it is not certain that such increase must have been attended by increased profits, or rather an increased rate of profits, for that is the question between us" and finished: "my conclusion is that there has been a rapid increase of Capital which has been prevented from shewing itself in a low rate of interest by new facilities in the production of food" (Ricardo 1951–73, vol. 6, pp. 94-5). The association between these two concepts, which lasted till August 1814 (Ricardo 1951–73, vol. 6, p. 121), makes sense since, for Ricardo, the rate of interest is determined by, and follows closely changes in the rate of profit (see Ricardo 1951–73, vol. 6, p. 129).

Ricardo's writing "rate of interest" instead of "rate of profit" in the sentence found amongst Malthus's papers is significant with respect to the dating of this document. Indeed, Ricardo started discussing the issue of profits with Malthus in August 1813 and ceased using "rate of interest" as synonymous with "rate of profit" in August 1814. Another important point regarding the dating of this manuscript is that Ricardo's sentence is the only inscription on this page. It goes along with no date, no salutation, no signature, no seal mark and no fold marks that could suggest that it was sent by the post. Therefore, it is very likely that the sheet of paper on which it is written was no part of a letter, nor sent to Malthus along with a letter. It is more probably the product of a work session during which Ricardo and Malthus seated side by side. Yet it appears from their correspondence that Ricardo and Malthus did not meet

from June 1814 till January 1815¹⁴. It is then very likely that Ricardo wrote this sentence between August 1813 and June 1814, that is, before the writing of *An Essay on the Influence of a Low Price of Corn on the Profits of Stock*.

Now, with respect to the content of Ricardo's text, it of course echoes the issue of the "rational foundation" of Ricardo's early theory of profit and of Sraffa's interpretation in terms of a "corn-ratio" approach (see Sraffa *in* Ricardo 1951–73, vol.1, pp. xxxi-ii). This sentence does not explicitly define a material rate of profit and, even though it may fit with Sraffa's interpretation, it is no definitive proof of a corn-ratio theory in Ricardo's thought.¹⁵ It is nonetheless interesting in terms of phraseology. Ricardo first wrote: "nothing has a tendency to raise the rate of interest but an increased facility of obtaining the means of subsistence". Then, he modified the sentence to connect the rate of interest -of profit- not with the "facility of obtaining the means of subsistence", but with "*the rate of facility in obtaining*"¹⁶ them.

¹⁴ In the end of June 1814, Malthus was in Bangor in North Wales and Ricardo in London (Ricardo 1951–73, vol. 6, p. 107). Ricardo left London and arrived at Gatcomb with his daughter Sylla on 24 July (Ricardo 1951–73, vol.6, p. 113). On 5 August, Malthus wrote to him: "I was in town almost immediately after my return from Wales, and called in Brook Street with the hope of seeing you before you left town. Mrs. Ricardo, whom I had the pleasure of finding at home told me of your expedition with Sylla" (Ricardo 1951–73, vol.6, pp. 115-116). At the time he wrote this letter, Malthus was already at the East India College in Hertford where he stayed till January 1815 (Ricardo 1951–73, vol.6, p. 171).

¹⁵ For an overview of this debate, see Ciccone and Trabucchi 2015, pp. 92-104.

¹⁶ Emphasis added.

This introduction of the word “rate” indicates a clear concern with the issue of comparing two magnitudes. It implies a calculation consisting in dividing the production by the means necessary for it and thus supposes that these two magnitudes are homogenous –whether they consist of corn or are expressed in a common measure. Finally, this finding seems to confirm that working sessions were organised by Ricardo and Malthus between August 1813 and June 1814. This is clearly not insignificant since Sraffa suggested that Ricardo “must have formulated [his “corn-ratio” argument] either in his lost ‘papers on the profits of Capital’ of March 1814 *or in conversation*” (*in* Ricardo 1951–73, vol. 1, p. xxxi. Emphasis added).

4. Conclusion

The re-discovery of the Malthus papers now held in the Kanto Gakuen University Library aroused great curiosity amongst Malthus scholars. It is, however, to be regretted that no expert on Ricardo expressed a genuine interest in this discovery or was invited to join the editorial team of *T.R. Malthus: The Unpublished Papers*. This would have probably contributed to bring to light “Ricardo’s side” of these manuscripts which remained unnoticed until now.

The manuscripts by Malthus and Ricardo introduced above add to our knowledge of these two figures and of their relationship, albeit in different manners. Malthus’s drafts, on whether an unfavourable balance of trade and an export of bullion necessarily mean a redundancy of currency, show Malthus’s early attempts to refute Ricardo’s thesis that an excess of money is the sole cause of an unfavourable balance of trade and of an export of gold. These manuscripts are also testimony of Malthus’s reflections on what a “redundancy of currency” is. Finally, the draft letter of September 1814 brings to light several pages dedicated

to the doctrine of proportions, that Malthus hid behind an apparently insignificant sentence, in the letter he finally sent to Ricardo: “but I have no room for more, so adieu” (Malthus *in* Ricardo 1951–73, vol.6, 142).

As for the manuscripts in Ricardo’s handwriting, they all belong to the period between mid-August 1813 and the end of June 1814. Material from this time is quite scarce in the Malthus-Ricardo correspondence. Indeed, Sraffa’s edition of Ricardo’s *Works* comprises only two letters for this period. These are the letters written by Ricardo on 30 December 1813 and 1 January 1814 to which the Amsterdam and the Hamburg tables were attached. The manuscripts on bullion trade transactions found in the Collection of Kanto Gakuen University complement these documents to which they are closely related. Finally, the sentence on the rate of profit -interest- appears as one of the first formulations by Ricardo of profit –interest- as a “rate” in the difficulty of obtaining food. It thus marked a significant step toward the statement made by Ricardo on 26 June 1814 that “the rate of profits and of interest must depend on the proportion of production to the consumption necessary to such production” (Ricardo 1951–73, vol.6, 108).

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Appendix A

Tables giving the exchange rate, the price of gold and silver, and the price of wheat and oats, from 24 Nov. 1811 to 14 Dec. 1813 in Amsterdam, Paris, Hamburgh, St Petersburg and Riga

[f.2v]

Petersburgh

	24 Nov. ^r 1811	7 May 1812	31 May 12 22 Jan ^y . 1812	13 Feb 1812	4 June
Wheat p ^r Chetvert	19	25	25	23	
Exch ^{ge} sight London	15 ³ / ₄ a 16		14 ³ / ₄ ⁷ / ₈		14 ⁵ / ₈
Dutch Ducats	10 ³ / ₄		12 ¹ / ₂		12 ¹ / ₂
Exch. Hamburgh			10		10
Amsterdam			11		10 ⁷ / ₈ -11
Specie Ruble			403		405

Petersburgh

	30 July 1812	10 Aug.	Sept 1812	1 March 1812	7 May
Wheat			28 ¹ / ₂	23 a 25	25
Exch London	20	23 ¹ / ₂ a 24	24 ¹ / ₂ a ³ / ₄		
Ducats		8			
Exch Hamburgh			16		

Amsterdam			17		
Specie Ruble	392	3R.°	348		

	April 1813-8 th	2 May 1813	June 6-1813	18 May 1813	19 Aug ^t
Wheat				31	33 a 35
Ducats			11.65		
Exch Ham					
Amsterdam					
Specie Ruble	391	393	292 ⁺		402
Exch London	15 $\frac{7}{8}$ $\frac{3}{4}$	15 $\frac{7}{8}$ $\frac{3}{4}$	16 $\frac{3}{8}$	15 $\frac{3}{4}$	14 $\frac{1}{8}$ $\frac{1}{4}$ $\frac{5}{16}$ $\frac{2}{8}$

[f.1v]

Petersburgh

	7 Oct ^r
Wheat	33 a 35

[f. 2v]

1 Chetvert = 5 $\frac{2}{20}$ Winchester Bushels

9 Ashens = 7 yards 36 English ~~Pounds~~ = 1 Pood

1 Ruble = 100 Copecks

[f.1r]

Amsterdam

	6 March 1812	23 April	4 th June	25 Sep ^t	27 Oct ^r .
Exch. ^{ge} London	29/10			28/3	27/6
Hamburgh	34 ¹ / ₈	33 ⁷ / ₈		34 ¹ / ₁₆	34 ¹ / ₁₆
Price of Gold		13 ⁷ / ₈ a 14 ¹ / ₈	14 ¹ / ₂	14 ³ / ₄ 15 ¹ / ₄	15 ¹ / ₂ a 16
Ducats		<i>f</i> 5.18 a <i>f</i> 6.1		<i>f</i> 6.2	
Agio	3 ⁵ / ₁₆	3 ¹ / ₂		3 ³ / ₄	4

Amsterdam

	24 Nov ^r	29 Dec ^r	19 Jan 1813	4 May 13	14 May
Exch. London	27/8	28/4	29	31/1	} Exch ^{ge} as usual
Hamburgh	33 ⁷ / ₈	33 ³ / ₄	33 ⁵ / ₁₆	35 ⁵ / ₈	
Price of Gold	16 ¹ / ₄	15 ¹ / ₂	15 ¹ / ₂		13 ³ / ₄ – 14 ¹ / ₄
Ducats	<i>f</i> 6.2 a 5		<i>f</i> 5.18 a <i>f</i> 6		
Agio	5	5	5	/	/
Fine Silver					25/16

Amsterdam

	26 March 1813	Dec ^r 1813 30 Nov ^r	7 Dec. ^r 1813	14 Dec. ^r	10 Dec. ^r
London	30/10	30/4	31/8.6	31/-	31/4
Hamburgh	34	35 ³ / ₈	35 ³ / ₈	35 ³ / ₈	35 ³ / ₈

Gold	14 ³ / ₄ a 15 ¹ / ₄	15 a 16		15 ³ / ₄ 16 ¹ / ₂	
Ducats				f5.19 f6.2	f5.18 f6.1
Agio	2			2	

[f.1v-f.2r]

Riga

	18 jan ^y 1812	21 March 1812	May 9 th 1812	15 May 1813
Wheat	120 p ^r . last	100 a 110	140	140 a 145
Exch. London				
Cop, Silver Roble per £ sterling	395	380	440	382
Oats	42		55	

	5 June 1813	31 July 1813	4 Sept 1813
Wheat	145. 73/9 p ^r . Quarter	140-67/8 p ^r . Quarter	135-61/2 p ^r Q ^r
Exch. London			
Cop, Silver Roble per £ sterling	370 a 365	385	415
Bank notes ? Per silver Ruble	400	402	400
Oats	50 - 21/5 p ^r . Quarter	42 - 17/5 D ^o .	40 - 15/7 p.r Qr.

[f.1v-f.2r]

Paris

11 Oct.^r 1813

Or Fin a 24 Karat. Soit les 1000/1000} 105 20 l'once

Argent fin a 12 deniers soit les 1000/1000} 54 05 l'once le marc

Hamburgh

11 May 1813

Exch.^{ge} Amsterdam 109

London 26/10

Appendix B

Calculation of the par of exchange between London and Holland when the price of gold is at its Mint price in England and when it is deviated from the mint price. Value of a ducat in guilders when gold is to silver as 15.21 to one (the English mint proportions).

¹⁷One Dutch Mark weight is equal to 3798 grains troy.

3798 grains troy pure gold = 4143 grains standard

4143 grains standard gold at £3.17.10^{1/2} or 934 ^{1/2} Pence per ounce = 80659 Pence =

130.1 ounces of standard silver or 120.34 oz pure silver = 57763.2 grains troy = 15.21 marks weight.

¹⁷ The text preceding the first table is reproduced in Malthus 1997-2004, vol. 2, p. 74.

∴ 1 mark of pure gold = 15.21 pure silver

1 mark = 5120 Assen

200 assen of pure silver are contained in 1 guilder

778.75.2 Assen = 15.21 marks

∴ 1 mark = $389 \frac{3}{8}$ guilders

80659 Pence = 778.52 assen of pure silver

∴ 240 Pence or £1 sterling = *f* 11.11.8 or 38/7 currency

which reckoning the agio at 5pc. is equal to 36/8 Banco.

When the mark of gold sold in Amsterdam for $389 \frac{3}{8}$ guilders, & the exchange was at 36/8 no [flv] advantage could be made in Holland either by the exportation or the importation of gold bullion whilst gold was at its standard price in England

18

	Price of Gold in Holland	Par of exchange whilst gold was at its mint price in England
1791	<i>f</i> 390.10	36/9
	378.1	35/7
1792	396.14	36/10
1794	408	38/5
	415	39/-
	419	39/5
1809	426	40/1
	372	35

¹⁸ The following table is reproduced in Malthus 1997-2004, vol. 2, p. 78

	374	35/3
	376	35/5
	378	35/7
	380	35/9
	382	35/10
	384	36/1
	386	36/4
	388	36/7
	390	36/9 [f2r]
	392	36/11 continued
[f2r]	394	37/2
	396	37/4
	398	37/6
	400	37/8
	402	37/10
	404	38/-
	406	38/3
	408	38/5
	410	38/7
	412	38/9

¹⁹When the price of Gold in England is £4. - p^r - oz the par of exchange, as above, for £3.17.10^{1/2}, must be multiplied by .973 to obtain the true par for £4 - because as £4 : £3.17.10^{1/2} ::100: .973

When at	£ 4.1	By .961
	4.2	.949
	4.3	.938
	4.4	.927
	4.5	.916
	4.6	.905

¹⁹ This paragraph as well as the following table are reproduced in Malthus 1997-2004, vol. 2, p. 81. However, Ricardo's text has been placed after the table while it is placed before it in the original manuscript. It was introduced in Malthus (1997-2004, vol. 2, p.80) as such: "The following table was extracted by Malthus from the Amsterdam table contained in the letter sent from Ricardo to Malthus on 30 December 1813. It shows the multipliers to be used in calculating the par of exchange between England and Holland when the price of gold in England increases from its mint price (£3.17.10.1/2 per ounce) to £4, £4.1.0, £4.2.0, ... £5.10.0. The left-hand column here is column 9 in the Amsterdam table, and the right-hand column here is column 10. Column 9 is headed 'When the price of gold in London in Bank notes is pr. oz.' Column 10 is headed 'The bullion Par must be multiplied by'. The first entries in columns 9 and 10, viz. '£4' and '.973', were not copied by Malthus into the table. The rest of Malthus's copy is the same as in Ricardo's table. Columns 9 and 10 in the Amsterdam table are repeated in the (un-numbered) columns 6 and 7 in the Hamburg table".

	4.7	.895
	4.8	.885
[f2v]	£4.9	.875
	4.10	.865
	4.11	.856
	4.13	.838
	4.15	.820
	4.17	.803
	4.19	.786
	5	.779
	5.2	.764
	5.4	.749
	5.6	.735
	5.8	.721
	5.10	.708

²⁰By the foregoing table it is easy to see from which country gold is passing, if the price of gold in the two countries & the rate of exchange is known.

²⁰ The next three paragraphs are published in Malthus 1997-2004, vol. 2, p. 83 as if they were the end of another manuscript in Malthus's handwriting -detailing the different steps allowing to establish the par of exchange between London and Amsterdam. However, the method described by Malthus differed slightly from the one stated by Ricardo in the Kanto Gakuen manuscript. Indeed, Ricardo calculated the par of exchange by determining the gold and silver pars of the currencies in pure gold and pure silver, instead of standard gold and standard silver as it is the case in the manuscript by Malthus. However, it is likely that this writing by

Thus suppose the exchange to be 28/-, the price of gold in Holland 10pc.^t p.^m or 390.5 & the price in England £5.10 - for standard.

By the first table the par against 390.5 is 36/9 or 441 grotes, which multiplied by 708 the [f3r] multiplier against £5.10 gives 312 grotes or 26/-, but the exchange is 28/- therefore gold can be exported to Holland with a profit of 7 pc.^t

²¹70.6 ducats are coined from one mark therefore a ducat when gold is to silver as 15.21 to one, the english mint proportions, a ducat is worth *f* 5.11 nearly.

Malthus is a note on the method used by Ricardo in the table he sent to him on 30 December 1813 since in this document, Ricardo used standard gold and silver to state the real par of exchange between London and Amsterdam (see *supra*).

²¹ This paragraph is published independently of the rest of Ricardo's manuscript under the title "A note on the value of a ducat" (Malthus 1997-2004, vol. 2, p. 134).