

‘Nous marchons sur un autre terrain.’
The reception of Ricardo in the French
language: episodes from a complex history

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A journal (*Edinburgh Review*, n. 59, June 1818) ... announces [Ricardo's *Principles*] as having provoked, in political economy, the greatest step forward since Adam Smith. However, we feel so much that we are walking on a different ground [*nous marchons sur un autre terrain*] that we would hardly have had the occasion to quote this book ... were it not because its fame obliged us sometimes to do so. (Sismondi 1819, 1 : 58-59)

His [Ricardo's] writings might be found beautiful, but reading them without an authorized guide is perhaps no less dangerous for the scientific truth than, for the Catholic religion, reading the Bible without the commentaries of the Church. (Puynode 1866, III : 5)

On 4 September 1820, alluding to his *Principles of Political Economy and Taxation*, Ricardo wrote to Malthus that he ‘did not expect’ he ‘had so many readers in France as the number of copies of the French translation which ... have been sold would seem to imply’. He was of course pleased, but without

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any illusions about the quality of the reception of his ideas. He thus added : ‘I am not surprised that you found few who understood my theory correctly, and still fewer who were disposed to agree with me’ (Ricardo 1951-73, 8 : 227). Ricardo was not far from the truth, and the reception of his works in France does indeed present an intriguing and complex history. The two quotations with which this chapter is headed give some idea of the tone of some French reactions to the *Principles*.

This chapter aims to provide a first precise picture of the French reception of Ricardo’s works and ideas. The subject is certainly wide and the authors to be taken into account are numerous. We therefore had to make a choice. While limiting our study to the nineteenth century — with some unavoidable references to later works — we have selected some periods, authors and themes that, we think, give a significant idea of debates of the time about the various aspects of Ricardo’s theories.¹ Some topics had to be omitted, like the discussions about machinery, wages and profits, and employment. Some other discussions too, about international trade or socialism, have been discarded : in these debates, Ricardo’s works and ideas were not a main concern. On international trade, for example, the main question was free trade or protection, and the theory of comparative advantage, when it was correctly understood, was probably considered by most writers to be a simple extension of Smith’s ideas.² And for the various socialist movements — outside the Marxist currents that developed late in the century — Ricardo was not a reference : it was Smith who was read and commented. Ironically enough, those who referred to Ricardo in relation to socialism were certain liberals frightened by the possible consequences of the Ricardian theory of rent.

This chapter is organized as follows. Section 1 sets the stage and briefly describes the context of this reception. Section 2 presents the various translations and editions of Ricardo’s writings in the French language. Section 3 deals with some methodological aspects of Ricardo’s approach to political economy. The following sections are devoted to more specific topics : value and wealth

1. Some very partial studies are, however, available : see for example Gehrke and Kurz on Say and Ricardo (2001, 2003) and Kurz and Salvadori on Walras and Ricardo (2002).

2. See for example Bloomfield 1989. It should also be stressed that in England, Ricardo’s theory of comparative advantage had to wait for John Stuart Mill’s publications in the 1840s to be fully understood.

(section 4), rent (section 5), money and banking (section 6) and Say's law of markets and crises (section 7).

1 Ricardo : '... deadly boring for the reader'?

The reception of the works of David Ricardo in the French language stands in sharp contrast to what happened in England. Today, almost all Ricardo scholars have in mind the enthusiastic lines Thomas De Quincey wrote in his *Confessions of an English Opium Eater*, recalling his first reading of the *Principles of Political Economy and Taxation* and quoting the Bible, Books of Samuel : 'Thou art the man!'

Had this profound work been really written in England during the nineteenth century? Was it possible? I supposed thinking had been extinct in England. Could it be that an Englishman, and he not in academic bowers ... had accomplished what all the universities of Europe, and a century of thought, had failed even to advance by one hair's breadth? ... Mr. Ricardo had deduced, a priori, from the understanding itself, laws which first gave a ray of light into the unwieldy chaos of materials, and had constructed what had been but a collection of tentative discussions into a science of regular proportions, now first standing on an eternal basis. (De Quincey 1863 : 255)

A neo-Smithian context

To say that the French readers were less enthusiastic is certainly an understatement. Look at the press, for example, that shaped the opinion of the general learned public of the time. In 1819, *Le Journal des Débats* announced the publication of the translation of the first edition of Ricardo's *Principles* in the following terms :

The book ... that has just been published in French with notes by M. J.-B. Say incited us to read again Say's praised *Traité* and to make a comparison with the new English writer. This comparison fully confirms that ... when foreigners and French authors deal with the same subjects, the former can write a book in which there is some good stuff; but only the latter know how to write a good book ... In sum, M. Ricardo's book is very useful while not always pleasant; but we do not need it. (12 February 1819 : 3)

Three years later, in 1822, and while Ricardo was not the only target of the critique, the *Revue Encyclopédique* — despite being an open-minded periodical — was even more negative : ‘MM. Ricardo, Malthus and others . . . have written some books that are difficult to apply to the needs of life, and deadly boring for the reader’ (XIII : 631), adding :

French translations of the *Political Economy* of Ricardo and Malthus have been published ; people we consulted on these books admitted that they were unable to read them to the end. (XIII : 631 n.1)

Of course, not all reactions were so negative, and some were also fortunately better documented, but these quotations nevertheless set the tone of many comments. They induced the reader to think, moreover, that there was an opposition between a French and an English political economy. In fact the situation was much more complex than seems at first sight, and Ricardo’s theories, while not enthusiastically acclaimed and accepted, actually had a real influence on the evolution of French thought.

On the one hand, at the beginning of the nineteenth century, the writings of Ricardo, Malthus, McCulloch and others reached a French public influenced by the Physiocrats, Turgot and above all Say, and who had long since read, discussed and on the whole accepted *and adapted* the work of Adam Smith (the *Theory of Moral Sentiments* and the *Wealth of Nations* : see Faccarello and Steiner, 2002). At that time, French public and authors were imbued with specific interpretations of the *Wealth of Nations* — by Germain Garnier, Jean-Baptiste Say, Antoine-Louis-Claude Destutt de Tracy and Jean-Charles Léonard Simonde de Sismondi for example — and could not accept without reluctance the new and so very different view of Ricardo : they were and they remained ‘neo-Smithian’ (Béraud, Gislain and Steiner, 2004). A passage from Auguste Walras’s *Esquisse d’une théorie de la richesse* expresses this general attitude quite well :

God forbid ! We do not deny in Ricardo some interesting research and instructive observations ; but in our view, his theories of value and rent are simply an exaggeration of the vice Adam Smith introduced in his system : ascribing to human labour alone the whole creation of social wealth Had it had some success, Ricardo’s book would have caused a regression in political economy ; but his theory was not successful Thus, until now, there are

only two famous names in political economy . . . : *François Quesnay* and *Adam Smith*. All political economy prior to *Adam Smith* comes under *Quesnay*. All modern political economy is tied up with *Adam Smith*. (1844 : 437)

As stated eloquently by Sismondi in the first quotation heading this chapter, French economists were ‘walking on a different ground’. This explains the critical tone of the reception of the works of Ricardo — in this respect Malthus was more fortunate with his *Essay on the Principle of Population* and his *Principles of Political Economy*, on many points closer to the French ideas and approaches.

However, this is not to say that the French reactions were only negative and without consequences on the evolution of French economic thought. Firstly because among the French-speaking economists, although none can be characterized as a disciple of Ricardo, some of them accepted certain specific Ricardian doctrines, either on the distribution of income or on monetary questions. And secondly because the discussions of Ricardo’s theories often provoked the evolution and modification of their own points of view, forced as they were to delve deeper into the subjects under examination.

Before turning to some of the episodes in this complex reception of Ricardo’s writings in the French language, however, we must set the stage more completely and some preliminary remarks are in order : firstly on the opinions expressed on Ricardo’s personality ; secondly on the many strands of literature to be taken into account ; and thirdly on the fact that the enquiry must not be limited to France but extended to other French-speaking countries.

A positive opinion of Ricardo, the man

In the first place, it should be noted that Ricardo, the man, was respected by the French economists. In almost all their writings — there are only few and marginal exceptions — they stressed his intelligence, honesty and intellectual disinterestedness. ‘Like his friend Jeremy Bentham, Ricardo only listened to advice from the general interest’ (Comte 1833 : 89-90). ‘He was neither Whig nor radical. His tactic was that of his reason, and not of his ambition or the ambition of others’ (Fonteyraud 1847 : xlv). They noted the fact that he was a poor orator, quoting his own confession that, in the House of Commons, ‘I have

twice attempted to speak, but I proceed in the most embarrassed manner, and I have no hope of conquering the alarm with which I am assailed the moment I hear the sound of my own voice' (Ricardo to McCulloch, 7 April 1819, 8 : 21). His peculiar written style was also often highlighted and most of the time criticized as being too dense, highly theoretical and almost mathematical. 'Never was a man less possessed with the demon of dissertation' (Fonteyraud 1847 : xv). Hence some rather embarrassed judgments, such as Joseph Garnier's in a note to his 'Ricardo' entry in the influential *Dictionnaire de l'économie politique* :

As a thinker, Ricardo appears to be superior, original and profound ; as a writer, he sometimes obscures his thought in abstract formulations, the rigour of which is only apparent — but we do not mean to say that he is mistaken when he is obscure. (Garnier 1853 : 531 n3)

Finally, French authors were also fascinated by Ricardo's 'success story' as a broker and financier, permitted by his 'sound and cold capacity to judge, his penetrating sagacity' (Garnier 1853 : 530). This certainly stood in sharp contrast to the poor entrepreneurial capacities of J.-B. Say, for example.

As a broker at the London stock exchange, he acquired a vast fortune, further increased since then by some always judicious speculations and the greatest order in his business ; so much that he was said to be in possession, when he died, of more than forty million in our currency. One might be tempted to say : '*who minds the millions ?*' because he used his wealth in such an excellent way that they became respectable. (Comte 1833 : 86)

The many receptions of Ricardo's writings

In the second place, and even limiting our inquiry to the nineteenth century, we have to deal with a huge set of literature of many theoretical origins. The various groups of liberal economists — Jean-Baptiste Say and his followers, the Doctrinaires, etc. — are of course the most directly concerned in this story. But the many 'associationist' or socialist writers are also part of the picture, and so are the various tendencies of the so-called Christian political economy, not to speak of some original and rather independent writers like Cournot and A. and L. Walras. Their evaluation of the works of Ricardo are far from

homogeneous, and the positions evolved through time — sometimes because of the many political events that shook France during the century,³ in which our protagonists often played a role. Moreover, their opinions varied greatly according to the different topics dealt with — method, value and prices, income distribution, money and banking, machinery and employment, pauperism, etc. — and it is also natural that the interest in some Ricardian themes faded away as the century progressed.

Broadly speaking and to greatly simplify the picture, three periods can be distinguished in the reception of Ricardo's writings.

The first covers the Napoleonic era and the Restoration, i.e., approximately, the early nineteenth century until the death of Say (1832), a period during which the many currents of the liberal school opposed the political regimes of the Empire, the Restoration and their economic policies. These eventful decades were indisputably dominated by the writings of Say and Sismondi. The neo-Smithian wisdom of our authors was challenged by Ricardo's writing, provoking a re-examination of many points of doctrine. As a consequence, almost all the theoretical themes were addressed and discussed — sometimes with Ricardo himself — and, a point of no mean importance, the technical vocabulary was also considered and fixed.

The second period includes the July Monarchy, the 1848 Revolution and the Second Republic. This period is also fertile in economic and political events. Certain liberal economists, the *Doctrinaires*, were in power : after J.-B. Say died in 1832, Guizot and the Duke of Broglie asked Pellegrino Rossi (much closer to Ricardo's ideas than Say was) to go to Paris and succeed him to the chair of Collège de France. Some other liberals, more radical — the so-called School of Paris, with many followers of Say — were heavily attacked from all corners and attempted to organize themselves to fight for their free market ideas ; and this was the time of the emergence and affirmation, from the late 1820s and the early 1830s on, of new currents of thought who challenged the economic wisdom of Smith and Say : the many 'associationist', socialist

3. 1789 : French Revolution. 1804 : First Empire. 1814 and 1815 : fall of the Empire, the Cent Jours and the Restoration of the Bourbon dynasty. 1830 : July Revolution. 1848 : February Revolution and Second Republic. 1852 : Putsch by the President of the Republic, Louis-Napoléon Bonaparte, and Second Empire. 1870 : fall of the Empire. 1871 : Civil war of the Paris Commune. 1875 : Third Republic.

and Christian schools. As time went by, the positions sharpened and, around 1848, on the occasion of the economic crisis and the revolutionary events, they crystallized into clear political and theoretical opposition. During this period, the perception of Ricardo changed markedly, becoming much more diverse even among the liberal authors : Bastiat, for example, moved away from both Say and Ricardo, while Dupuit and Molinari adopted some Ricardian themes.

The third period covers the Second Empire and the first decades of the Third Republic, during which the various schools developed their positions in sharp contrast to each other. It is striking to see how the figure of Ricardo progressively became a moment in the history of economic thought, and how his doctrines were less and less topical, except perhaps for certain socialist or Christian authors. He was, in a way, replaced by John Stuart Mill. However, for various reasons to be analyzed, he never disappeared from the debates within the liberal schools and was even the object of a kind of liberal rehabilitation, even on the subject of ground rent.

Perspectives from the French-speaking community

In the third place, we are concerned here with French-speaking countries in general, not just France. This involves firstly Switzerland (and more specifically Geneva), a point whose importance we must stress, and secondly Belgium, after its independence from the Low Countries in 1830.

There were significant links between Geneva and France during the first half of the century, thus continuing a tradition which, during the eighteenth and at the turn of the nineteenth century, was exemplified by Jean-Jacques Rousseau, Jean Herrenschand, Jacques Necker, his daughter Germaine Necker de Staël, and Benjamin Constant. Some Genevan economists played a prominent role in relation to our subject : first and foremost Jean-Charles Léonard Simonde de Sismondi (1773-1842) and Antoine-Élisée Cherbuliez (1797-1869). We should not forget Bentham's friend Étienne Dumont, and remember that Say, although born in France, came from a Genevan family — 'our fellow citizen Say' (*Bibliothèque Universelle*, 1818 :11) was always considered as an eminent member of the community by the other Genevan writers.

There are also less well-known figures who are important for the beginning of our story : Marc-Auguste Pictet (1752-1825), his brother Charles Pictet de Rochemont (1755-1824), Pierre Prévost (1751-1839) and his son Guillaume — respectively the brother in law and the nephew of Jane Marcet, herself of Swiss origin.⁴ They were almost all scientists and philosophers and played a not unimportant part in the political life of the city. They also had family and intellectual links with Britain and were personally acquainted with English writers (Prévost knew Malthus well). Ricardo visited them during his 1822 travel on the continent. Napoleon spoke angrily of Geneva — a French ‘département’ during the Empire, the ‘département du Léman’ — as ‘this town where people know far too much English’. Sismondi himself described Geneva as ‘an English town on the Continent, an advanced post for political and religious enlightenment’ (Sismondi 1814 : 4), ‘a town where people think and feel in English but speak and write in French’ (Sismondi 1814 : 7). As stated in 1816 in the first issue of the influential *Bibliothèque Universelle* :

It is above all as thinkers and scholars that the English and Scottish men of letters appear in the great market for human knowledge. All that supposes long meditations, strength in the analysis and a logical sequence of ideas belong to them as their own. Their success in philosophical studies, the progress and dissemination of the best principles of political economy and legislation, depend on this faculty for reflection and great capacity for serious studies that distinguish them among all others. (*Bibliothèque Universelle*, 1816 : 9)

M.-A. Pictet and P. Prévost introduced Sismondi and Cherbuliez to political economy, informing them of the English and Scottish authors in the field. Pellegrino Rossi, who also played an important role in the French debates, lived and taught for a time in Geneva and was acquainted with all of them.

They also had an intense editorial activity. In 1796, during the post-Thermidorian period and before the annexation of Geneva to France, the Pictets founded the *Bibliothèque Britannique* — called the *Bibliothèque Universelle*

4. Her father, Antoine François Haldimand, was Swiss. In 1799, she married Alexandre John Gaspard Marcet, himself Swiss, who was banned from Geneva in 1794 and became a British citizen in 1800. Pierre Prévost married two of Alexandre’s sisters successively : Louise in 1788, who died the same year, and Jeanne in 1795.

from 1816 on⁵ — with a clear intellectual programme referring to the Scottish philosophy as an antidote to what they considered the foolish and dangerous ideas of the time.⁶ In 1816, in the paper introducing the first issue of the new formula, the *Bibliothèque Universelle*, the discourse remained the same and the reader was reminded that one aim was ‘to fight, with the weapon of reason, all kinds of subversive principles and their pernicious influence on the younger generation’ (*Bibliothèque Universelle* 1816 : 10).

The series ‘Littérature’ of the *Bibliothèque*, directed by P. Prévost from 1803 on, contained excerpts of English books and even full translations of some papers — some of them, for example, in the 1820s, were originally published in the *Edinburgh Review*. Charles Pictet also published separately a French translation of Henry Thornton’s *Paper Credit* (1802).⁷ Pierre Prévost translated works by Adam Smith,⁸ Benjamin Bell,⁹ Dugald Stewart,¹⁰ Hugh Blair¹¹ and Malthus’s *Essay on the Principle of Population* — first some excerpts from the second edition, in 1805 in the *Bibliothèque Britannique*, and then the entire third edition in 1809, the subsequent versions being revised by his son Guillaume. Guillaume Prévost also translated into French Jane Marcet’s *Conversations sur l’économie politique* (1817), her *Conversations sur la philosophie naturelle* (1820) and J. R. McCulloch’s *Discours sur l’origine, les progrès, les objets particuliers, et l’importance de l’économie politique* (1825),

5. *Bibliothèque Universelle des Sciences, Belles-Lettres et Arts, faisant suite à la Bibliothèque Britannique, rédigée à Genève par les auteurs de ce dernier recueil.*

6. ‘There is a science, the principles of which we particularly wish to propagate : the books of the English and Scottish moralists contain its precious lessons. No one, better than these philosophers, ever knew how to develop and cultivate this instinct of justice and guide this passionate and blind desire of happiness to which all the secret workings of the human heart tend. The moral doctrine of these writers is luminous and pure, its colours pleasant and attractive. Never the mistakes of a wrong philosophy and the evils that are overwhelming mankind ever made this antidote more necessary’ (*Bibliothèque Britannique*, 1796, 1, Préface : 6-7).

7. *Recherches sur la nature et les effets du crédit du papier dans la Grande Bretagne*, Geneva : Imprimerie de la Bibliothèque Britannique, 1803. The quality of this translation is questionable.

8. *Essais de philosophie, précédés d’un Précis historique sur sa vie par Dugald Stewart*, Paris : Agasse, 1797.

9. *De la disette*. Geneva : Imprimerie de la Bibliothèque Britannique, 1804.

10. For example Stewart’s *Éléments de la philosophie de l’esprit humain*, Geneva : Paschoud, 1808.

11. *Cours de rhétorique et de Belles lettres*, Genève : Manget et Cherbuliez, 1808.

all published by J. J. Paschoud in Geneva. It is also interesting to note how quickly these translations were published after the publication of the original works in Britain.¹²

The case of Belgium after its independence in 1830 is no less important. A prominent and original liberal economist like Gustave de Molinari (1819-1912) was Belgian, lived in Paris for a time and played a significant part in French intellectual life during his long life. Christian political economists also had very close ties with Belgium. Charles de Caux (1787-1864), one of the ‘founding fathers’ of the movement, though French, held the first chair of political economy at the new Catholic University of Malines (later to become the Catholic University of Louvain), and his Belgian disciple and successor at the chair, Charles Périn (1815-1905) — almost the exact contemporary as his liberal fellow countryman Molinari — played a prominent role in the French Catholic movement during the second part of the century.

2 The French translations of Ricardo’s works

The first step in our enquiry is to note which among Ricardo’s writings were translated, by whom and when. Appendix 1 recapitulates the various editions in the French language published during the nineteenth century. Those from the twentieth century, while not included in our period, are nevertheless listed in Appendix 2.

From Paris to Geneva : the first translations into the French language

Our story starts in Paris. The first work translated was the third edition of Ricardo’s *High Price of Bullion*. It was published in September 1810 in the quasi-official *Gazette nationale, ou le Moniteur universel*, in three instalments. The occasion was the debate about the organization of the French banking system and the role of the Banque de France (founded in 1800). The problems of monetary circulation and its unification also created fear among the public

12. The 1825 translation of McCulloch’s *Discourse*, made on the first edition (1824) also contains the additions McCulloch introduced for the second edition (1825).

— especially the fear of seeing the creation of paper money again after the disastrous collapse of the assignats system — and led to the monetary and then economic crisis of 1810-1811. Ricardo's ideas on money and banking were thus quickly noticed and they were often referred to in the debates during the following decades. The subsequent publications by Ricardo, about the Corn Laws and an economic and secure currency, were published after the fall of the Empire, when French people had many other concerns, and this might explain why they were relatively neglected at that time, together with the fact that the *Principles of Political Economy and Taxation* appeared soon afterwards.

To take this new element into account, we must cross the border to Geneva and the Pictet/Prévost group around the celebrated *Bibliothèque Britannique* (1796-1815), renamed *Bibliothèque Universelle* in 1816 to show that, while the British authors were still a major reference, the editors wanted to widen the horizons of their fellow citizens and draw their attention to other valuable intellectual productions. Immediately after the publication of the first edition of Ricardo's *Principles*, two excerpts were translated and published in the November 1817 and January 1818 issues of *Bibliothèque Universelle (Littérature)*. Both were drawn from the first chapter of the *Principles*. The first excerpt was the translation of pp. 1-11 of the first edition, i.e., the opening pages where Ricardo criticizes Adam Smith's theory of value. The second was the translation of some passages, together with the summary of certain developments, from the rest of Chapter 1 : pp. 19, 21, 22, 23-25, 31-36, 41-42, 44-48 — the final pages of the chapter — of the 1817 edition of the *Principles*, mainly devoted to the influence of distribution on prices.

Each excerpt is followed by an unsigned commentary :¹³ while the first is entitled 'Observations du traducteur' and the second, 'Observations du rédacteur', they are by the same author. The first commentary concludes with the remark that only the most important chapters of Ricardo's book will be analyzed. The second ends with the mention 'to be continued', but the table of contents of the issue indicates that this was the 'second and last excerpt' : and, in fact, the following issues do not contain anything more. The publication thus

13. Guillaume Prévost referred to them in his 1825 remarks on McCulloch's *Discourse*. There he notes, in relation to the idea that the capital could be evaluated by the labour which was necessary to produce it : 'We see this idea already stated by the author of three articles on Ricardo's book in the *Bibliothèque Universelle*, vol. 6 and 7, *Littér.* 1817, 1818.' (G. Prévost 1825b : 183 n. 2). Guillaume mentions three papers, but only two were published.

stopped suddenly. The translation is unsigned as well, but some passages in the text indicate that the translation and the comments are by the same person, Pierre Prévost.¹⁴ We know that he was interested in political economy¹⁵ and a very active translator. Moreover he was just back from a four-month stay in London (Cherbuliez 1839 : 54) and at that time he was interested in income distribution : ‘I would like some day to publish a book on political economy entitled *Of Labour*, in which I would show the necessity of raising wages’, he wrote on 4 April 1817 in his diary. Ricardo’s book, no doubt, challenged his Smithian ideas.

Back to Paris, via Lisbon

The next stage in the story deals with the publication of Ricardo’s *Principles* in their entirety. This also happened quickly : the French translation of the first edition was published in Paris in 1819, in 2 volumes, by J.-P. Aillaud, a publisher who was later described as being partly specialized in Portuguese books. As a matter of fact, the translator was a cosmopolitan Portuguese intellectual, Francisco Solano Constâncio (1777-1846), who was active in Paris at that time as a kind of diplomatic agent and collaborated there, between 1818 and 1822, on a journal in Portuguese, *Anais das Ciências das Artes e das Letras por huma Sociedade de Portuguezes Residentes em Paris* (Annals of Science, Arts and Letters) published by A. Bobée.¹⁶ He was interested in political economy and especially in the controversy between Malthus and Say about the possibility of general gluts. In addition to his translation of Ricardo’s *Principles*, Constâncio also published with Aillaud a translation of Malthus’s

14. The first commentary ends with a note signed ‘P.P.p.’ and, in the second commentary, the commentator refers to one of his previous paper, published in the *Bibliothèque Britannique* and also signed in the same way. From some publications in *Bibliothèque Britannique*, and from the tables of this journal, it appears that ‘P.P.p.’ means ‘Pierre Prévost prof.’ (Professor Pierre Prévost) — Pierre Prévost was teaching at the Genevan Académie.

15. In 1783, when he was in Berlin at the Academy of Sciences, Pierre Prévost published an essay entitled *De l’économie des anciens gouvernements comparée à celle des gouvernements modernes. Mémoire lu dans l’Assemblée publique de l’Académie royale des sciences et belles-lettres de Prusse du 5 juin 1783*. Berlin : G.-J. Decker.

16. On Constâncio, see Cardoso (1999, 2009) and Chapter 3 of the present book.

*Principles*¹⁷ in 1820 and a French version of William Godwin's refutation of Malthus's *Essay on the Principle of Population* in 1821.¹⁸

Constâncio's translation of Ricardo is important because the French learned public could read the *Principles* in their own language as soon as 1819, because Ricardo's text was supplemented by a series of notes by J.-B. Say, and finally because this text, revised in 1847 by Alcide Fonteyraud (see below), formed the basis for most subsequent editions and remained the main reference in France for almost a whole century, until the new 1992 translation published by Flammarion (on all these points, see Appendices 1 and 2).¹⁹ It was, however, defective, with many errors and approximations that obscured the meaning of some chapters — the chapter on rent in particular.

The 1819 translation was nevertheless republished twice in 1835. First by J.-P. Aillaud in Paris, in two volumes, and then in one volume by H. Dumont in Brussels (probably an unauthorized edition, Belgium being specialized in this kind of publishing during the nineteenth century). The Paris edition was misleadingly presented as the 'second edition', and the Brussels edition as the 'third edition' : but both were in fact simply the republication of Constâncio's translation of the 1817 text. The notes by Say were also reprinted, and a preface was added : 'Notice sur la vie et les écrits de Ricardo, publiée par sa famille' (Memoir on the life and writings of Ricardo, published by his family). Despite what the French sub-title indicates, this Memoir is not the text published by Moses Ricardo in 1824, but the translation of McCulloch's eulogy first published in 1824 in *The Edinburgh annual register for 1823* and then independently, in 1825, as *Memoir of the life and writings of David Ricardo, Esq. M.P.* — although this text does, it is true, make extensive use of Moses's obituary.

17. *Principes d'économie politique, considérés sous le rapport de leur application pratique.* Paris : Aillaud, 2 volumes.

18. *Recherches sur la population et sur la faculté d'accroissement de l'espèce humaine, contenant une réfutation des doctrines de M. Malthus sur cette matière.* Paris : Aillaud, 2 volumes.

19. Some excerpts of the Constâncio/Fonteyraud translation were revised and published in 1889 with Guillaumin and the entire translation was still republished in 1971 with Flammarion. An alleged new translation by Charles Debyser was published in 1933-1934 — and also republished in 1971 with Calmann-Lévy — but it borrowed in fact a lot from the former ones, even reproducing some of their mistranslations and errors.

The Fonteyraud edition in Guillaumin's 'Collection des principaux économistes'

The third stage in our story took place when the economists, for the most part liberal and followers of Jean-Baptiste Say, started to organize themselves to defend their ideas when, after the first modern economic crises, they were attacked from all corners on the question of pauperism and a number of important issues were being discussed — like free foreign trade for example. One entrepreneur played an important part in this movement : Gilbert-Urbain Guillaumin (1801-1864), a publisher. He started publishing the *Journal des économistes* in 1841 and before that, in 1840, the famous series 'Collection des principaux économistes', intended to present the most important texts in the recent history of economic theory. Fifteen thick volumes were published during the following decade. The 13th of the series, a tall 8° of more than 800 pages, was devoted to Ricardo and entitled *Œuvres complètes de David Ricardo* (1847).

The editor was a young liberal economist who was to die prematurely, Paul Henri Alcide Fonteyraud (1822-1849). In the first part of the book, Fonteyraud republished Ricardo's *Principles*. He was supposed to revise Constâncio's translation and take into account the changes made by Ricardo in the third edition. However, the result is almost appalling : 'the version of the *Principles* which it presents is no better than a pastiche of the first and third original edition' (Sraffa in Ricardo 1951-1973, 10 : 375).

The revision is superficial. While the new chapters of the third edition are translated, it is at the cost of many additional mistranslations . . . ; a certain number of new texts and notes inserted into the last English edition were omitted ; and some passages of the first edition suppressed in the third were maintained. . . . It thus happens that the 1847 Guillaumin edition . . . is neither the translation of the first English edition nor of the third, but a kind of hybrid of the two. (Delmas et alii, 1992 : 11)

In the second part of the book — entitled 'Œuvres diverses relatives à des questions de monnaies, de banque, de finances et de liberté commerciale' — Fonteyraud published his translations of some other major publications by Ricardo : *The High Price of Bullion*, *Reply to Mr Bosanquet's Practical Observations*, the *Essay on Profits*, the *Proposals for an Economical and Secure Currency*, *On Protection to Agriculture*, the *Plan for the Establishment of a*

National Bank, and ‘Funding system’.²⁰ These translations also remained the reference in France for more than a century, the *Essay on Profits* only being retranslated in 1988, and some monetary writings (1809-1811) in 1991. Fonteyraud, who contacted and visited Ricardo’s family for this work, added a long and interesting introduction to this collection— on which more below — simply entitled ‘Notice sur la vie et les écrits de David Ricardo’ (Fonteyraud 1847). This ‘Notice’, declared Adolphe-Jérôme Blanqui in February 1848 at the Académie des Sciences Morales et Politiques, is ‘the most perfect that has been written on any economist’.²¹

This volume of the ‘Collection des principaux économistes’ was republished in 1882 — a preface by Maurice Block being added — and again in 1966. Only two other minor publications are to be noted during the nineteenth century. In 1865, Ricardo’s 1818 evidence on the usury laws was translated in Paul-Jacques Coulet and Clément Juglar’s *Extraits des enquêtes parlementaires anglaises sur les questions de banque, de circulation monétaire et de crédit. Enquêtes de 1810, 1811, 1819, 1841*, together with his 1819 evidence on the resumption of cash payments. A few years later — in 1889 according to the catalogue of the Bibliothèque nationale de France — some excerpts from the *Principles* were edited by Paul Beauregard. They consisted of eight chapters of the book (see Appendix 1). The Constâncio/Fonteyraud translation was used but revised by Charles Formentin. As for Ricardo’s correspondence, only the letters to Say were translated and published twice, first in Say’s *Mélanges et correspondance d’économie politique* (1833) and then in *Œuvres diverses* (1848).

3 Methodological approaches to political economy

Against abstract principles

It was Say’s opinion — and most French economists shared this point of view — that one of Smith’s greatest achievements had been to apply

20. As Sraffa remarked, the Fonteyraud volume contains all the works published by McCulloch in his 1846 edition of the works of Ricardo ‘with the exception of the two papers on Parliamentary Reform’: ‘Observations on Parliamentary Reform’ and ‘Speech on Voting by Ballot’ (in Ricardo 1951-1973, 10 : 375).

21. *Séances et travaux de l’Académie des sciences morales et politiques*, vol. 13, 1848 : 211.

... to political economy the new mode of scientific investigation, i.e., not looking abstractedly for principles but ascending instead from facts the most constantly observed to the general laws which govern them, thanks to a rigorous manner of reasoning and without relying on simple assumptions. (Say 1814 : 34)

He criticized Ricardo for doing precisely the reverse : reasoning from abstract principles whereas political economy, ‘in order to be useful, should not teach ... what should *necessarily* happen, but show how what really happens is the consequence of another real fact’ (Say 1819 : 45). Discussions on abstractions are endless, useless and dangerous. People argue about words, the reader is bored and ends up believing that in political economy, authors are unable to agree on any truth (Say 1825 : 270). Dismissing both the followers of Quesnay and those of Ricardo, he insisted again on the complexity of the reality :

They keep on generalizing and I am afraid that they have all moved away from the path of nature that only shows us complicated phenomena — the result of several combined actions — and moves towards its goal in its own way and despite the rules that we wish to impose on it. (Say 1825 : 270)

Pierre Prévost was of the same opinion. In his series of observations on Ricardo’s *Principles*, he wrote : ‘All is extreme in this system of thought. No consideration is paid to modifying circumstances, and consequences are inferred from each other with too much confidence’ (P. Prévost 1818 : 14).

François Ferrier, who did not share Say’s liberal ideas, also stressed the same point. ‘Would you like to know what Ricardo proved in his two volumes ? Nothing M. Ricardo usually reasons on hypotheses : *I suppose that...*’ (Ferrier 1822 : xxix-xxx). The legitimacy of a deductive approach that draws all the consequences from a series of hypotheses is thus rejected. On this point, Sismondi’s opinion is not different from Say’s or Ferrier’s and will also, with variations, be shared by some other currents of thought, like the Saint-Simonians for example.

Adam Smith’s followers moved away from his doctrine and still more from his way of searching for the truth. Adam Smith considered political economy as a science based on experience. His new disciples ... have thrown themselves into abstractions that make us absolutely lose sight of reality. In their hands, science is so speculative that it seems to be removed from any practice We

believe that in so doing, it has moved away from both truth and clarity. (Sismondi 1819, 1 : 57)

This kind of criticism was in general accepted by a majority of authors and was repeated during the following decades. A liberal author, Gustave du Puy-node, wrote for example half a century later : ‘When dealing with the economic science, one has the impression that he [Ricardo] does not remember that it is a question of men and of societies ; he only speaks of them as a mathematician facing rigorous and dry theorems’ (Puynode 1866, III : 51). But there were also some dissenting voices that were more radical, either intensifying the critique of ‘abstraction’ or on the contrary opposing the usual wisdom and stressing the fact that Ricardo, in his attempt to reason in a rigorous way, did not go far enough.

A more radical view of abstraction

Among those who held a more radical position are a number of authors who, during the 1830s and 1840s, sought to develop a Christian critique of the new industrial society and of political economy. In their opinion, the massive phenomenon of pauperism and the first modern economic crises were due to the adoption of a new social system based on free markets and first advocated by the English political economists. From this point of view, Ricardo’s theories represented the most perfect achievement of an approach that, basing its reasoning on abstractions — and here the words ‘abstract’ and ‘abstraction’ have a different and more aggressive meaning than in Say —, lost sight of men and only focused on things, in other words they lost sight of the political, moral and religious principles and only focused on material interests and the economy. Let us note what two eminent Christian writers wrote at that time : first Jean-Paul Alban de Villeneuve-Bargemont, whose voluminous *Économie politique chrétienne* (1834) is a landmark in the field, and, second, Eugène Buret, who unfortunately died at a young age after the publication of his celebrated *De la misère des classes laborieuses en Angleterre et en France* (1840). Moreover, Buret’s book is an important step in the dissemination of Ricardo’s works and ideas : Marx, when in Paris, first read Ricardo in Buret’s book and the excerpts from Ricardo’s *Principles* that are to be found in the celebrated 1844 *Manuscripts* are drawn from it (Hattori 1994, Vatin 2001-2, 2005).

One can mainly criticize Ricardo, Villeneuve-Bargemont stated, ‘for having considered wealth in an abstract and absolute way, without consideration for the lot of the workers. Like most English economists, he was more concerned with the collective power of nations than with the individual well-being of their citizens, and very often he considered men as instruments instead of treating them with care as sensitive beings’ (Villeneuve-Bargemont 1841, 2 : 396). His attitude, like that of his followers, is ‘the inflexible absolutism of the manufacturing system which consists in pushing the products and manhandling the producer, if not with indifference then at least through an abuse of principles’ (1841, 2 : 397). The ‘exaggerated disciples of Smith’, Villeneuve insisted, aimed at ‘governing, settling everything’.

Whenever one wants to fight one of their principles with moral or political arguments, they answer : ‘You go beyond the limits of science, this is not our concern : our task is just to show how wealth is created.’ That’s a fine idea! But in this case allow us to neglect some economic considerations when it is the matter of the great interests of the morals and happiness of the people. Since the writings of Smith and MM. Say and Ricardo, one would not deny that political economy has the form and attributes of a real science. But in order for its principles be accepted as true and absolute, they still have to prove that they spread well-being in all the classes of the human society — and it is doubtful that they will ever succeed in doing this. (Villeneuve-Bargemont 1834, 1 : 32)

It is interesting to note that the critique also concerned Jean-Baptiste Say and his followers, who were considered as bad as their British counterparts.

Buret made this critique his own and developed it in the long introduction to his *Misère des classes laborieuses*. Villeneuve-Bargemont was very critical of Smith : in his opinion, the evil started with the *Wealth of Nations* :

It is certain that Smith almost always disregards moral and religious considerations : with the consequence that, basing the principle of work and civilisation on a continuous excitement of the needs, he founded the theory of the production of wealth on industrial monopoly, sensationist philosophy and the selfish morals of personal interest. (Villeneuve-Bargemont 1836, 87)

Buret partly saved Smith from this original sin : ‘he is the least exclusive economist of his school’ (Buret 1840, 1 : 5). In his eyes, Smith did not limit himself to the study of the production of wealth but also dealt with some

‘high questions of social philosophy’ (Buret 1840, 1 : 6). But after him political economy confined its field to the abstract theory of value and production, with no consideration of morals, religion and politics. ‘Its aim is to be a fully positive science like mathematics, and in this perspective it claims for its principles the privilege of absolute certainty’ (Buret 1840, 1 : 7). The real culprit for this negative evolution was of course Ricardo, the ‘ingenious metaphysician’ of land rent : ‘For M. Ricardo, men are nothing, products are all that matters’ (1840, 1 : 6n).

The most complete and exaggerated expression of this political economy that we would call absolute, can be found in the books of M. Ricardo, the ingenious metaphysician of the ‘fermage’.²² There all social tendencies have disappeared. Nations are now only considered as productive workshops ; — man as a productive and consuming machine, and human life as a capital. — All is weighted and calculated, and economic laws inevitably govern the world. (Buret 1840, 1 : 6)

Unfortunately, a science that limits itself to studying the ‘abstract phenomena of wealth’ is an impossibility : ‘It is much more difficult to separate the various branches of the social science than those of physical sciences : the tree of moral knowledge cannot be mutilated without danger’ (Buret 1840 : 12). The best proof of this is to look at the practical consequences of this ‘science’ : pauperism, crises. ‘We are not playing on words when we say that, opposite the picture of the wealth of nations must stand the picture of the poverty of nations’ (1840, 1 : 13). And he asked : ‘Which man, which Christian would not recoil in front of the complete implementation of the economic system advocated by the books of the English school?’ (Buret 1840, 1 : 38-39).

From arithmetic to mathematics : hurrah for abstraction !

A few authors, however, were not afraid of abstraction — in yet another meaning of the word. Say and Sismondi rejected Ricardo’s deductive methodology. They proposed an inductive reasoning — but they lacked any meaningful data as well as any adequate statistical method. Rossi, in his lectures, challenged this view. ‘The science of political economy, to the extent that it concerns

22. On the word ‘fermage’, see below, section 5.

what is general and invariable', he wrote, 'is rather a science of reasoning than a science of observation' (Rossi 1836-1838, 1 : 32) : it is 'speculative economics' and in his eyes it was important to distinguish 'rational political economy' from 'applied political economy' and 'social economics'.

Some authors also looked favourably on deduction and 'abstraction', in keeping with the French intellectual tradition of *mathématique sociale*. 'We must bind men to reason through the precision of ideas and the rigour of proofs, thus placing the truths out of reach of the eloquence of words or the sophism of interest' (Condorcet 1793 : 109). The theory of value and prices must serve this purpose (1793 : 166). Auguste Walras belonged to this tradition, as did Cournot. To prove a proposition, it is impossible to limit oneself to giving a numerical example that simply illustrates it. One must go further and use algebra, as he wrote in *Recherches sur les principes mathématiques de la théorie des richesses* : no elementary algebra like Ricardo, but arbitrary functions :

Some authors, like Smith and Say, wrote on political economy while preserving in their style the amenities of a purely literary form ; but others, like Ricardo, dealing with more abstract questions or in search of greater precision, could not avoid algebra but disguised it in the form of arithmetical calculations of a tiring prolixity. . . . In this essay I intend to show that the answer to the general questions raised by the theory of wealth essentially depends, not on elementary algebra but on this branch of calculus that deals with arbitrary functions. (Cournot 1838 : 4-5)

Cournot's position was odd in the French context. Even Auguste Walras declared he had 'never well understood' Cournot's 1838 book. And he added : 'but from what I could grasp, I suppose that M. Cournot translated into algebra the metaphysics of Ricardo' (Auguste to Léon Walras, 18 May 1861, in A. Walras 2005 : 490). However, the idea that political economy should become a mathematical science, in order to acquire the rigour that Ricardo was aiming at, gradually spread.

4 Value and wealth

The French context

Value theory and the definitions of wealth and productivity were considered of the utmost importance among French economists, who realized that many problems in economics required the clarification of such basic concepts. This was not new : Turgot, for example, called for rigour and developed a fascinating subjective theory of value. But in the first half of the nineteenth century this was still a novelty and Ricardo and Say were often considered responsible for this evolution. ‘All that pertains to the exchange value is fundamental in political economy. David Ricardo declared it and J.-B. Say repeated it after him’ (A. Walras 1849 : 505). But it was also obvious that there was, on the whole, little agreement on these topics on both sides of the Channel.

Two main opinions on the origin of exchange value dominate the economic world today. We can call the first the opinion of the English economists : it is based on the authority of Smith, Ricardo and McCulloch. The second can be called the French doctrine, and is linked with the names of Condillac and J.-B. Say. (A. Walras 1849 : 506)

At the beginning of the century, before the publication of Ricardo’s *Principles*, Say, Sismondi and Destutt de Tracy had developed their own theories of value. We cannot of course enter into details and analyze the differences between these theories here. However, one common feature must be stressed : they all confer a fundamental role on utility and demand — the legacy of Turgot and Condillac. While not neglecting the cost of production, they thought that, in markets, it forms a kind of floor below which the price cannot permanently fall. But the effective price, the ‘valeur vénale’ of a commodity, is determined by demand and supply — again Turgot’s legacy. On the whole, these authors used the idea of ‘gravitation’, first proposed by Turgot and developed by Smith, but they adapted it to their purpose. For Say, for example, the market price is supposed to gravitate around a natural price²³ understood as the sum of the remuneration of the services of labour, capital and land ; for Destutt, the

23. ‘I do not like the expression *natural price*, because this rate at which the commodity is not sold is no price’ (Say, marginal note to the *Wealth of Nations*, in Hashimoto 1980 : 70).

cost of production is but a floor, the lower limit below which a price cannot remain for a long time. Moreover, Say and Destutt stressed again and again that production, through the transformation of things, is only the production of utility. Ricardo shared none of these points of view.

In this context, Destutt de Tracy's writings nevertheless attracted Ricardo's attention. Basing his analysis on the first edition of Say's *Traité*, powerfully developing the French sensationist tradition, this key figure among the Idéologues developed a political economy in the last part of his *Éléments d'idéologie* entitled *Traité de la volonté et de ses effets*, 1815, and his *Commentaire sur l'Esprit des lois de Montesquieu*.²⁴ Criticizing Say on this point, Destutt stressed that all wealth finds its origin solely in the use by men of their own faculties, thus advancing the paramount importance of labour activity and denying the existence of other factors of production like land and capital — itself the product of labour :

The old French economists ... have not then sufficiently studied the nature of man, and particularly his intellectual predispositions. They did not perceive that in our faculties and in the manner in which our will employs them, all our treasure consists, and that this employment, *labour*,²⁵ constitutes the only wealth that in itself has a natural and necessary primitive value, which it communicates to all things upon which it is employed, and which have not other. (1811 : 185-186)

In the *Traité de la Volonté*, he specified :

... as it is certain that our physical and moral faculties are alone our original riches, the employment of those faculties, labour of some kind, is our only original treasure, and that it is always from this employment, that all those things are created which we call riches It is certain too, that all those things only represent

24. The *Traité de la volonté* was published in English in 1817 as *A Treatise on Political Economy*, the translation being revised by Thomas Jefferson (Destutt de Tracy 1817). As for the *Commentaire*, its American translation by Jefferson — *A Commetary and Review of Montesquieu's Spirit of the Laws*, 1811 — was published long before the French original text in 1819 (Destutt de Tracy 1811, 1819). It is also to be noted that, in France, an unauthorized and anonymous edition of the French version was published in 1817.

25. Jefferson's 1811 translation reads here 'this employment of nature' instead of 'this employment, *labour*' in the French edition (Destutt's italics, 1819 : 282). It is not clear, however, whether this difference comes from a change later made by Destutt for the French edition of his *Commentaire*.

the labour which has created them, and if they have a value, or even two distinct values, they can only derive them from that of the labour from which they emanate. (Destutt 1817 : 64)

While Destutt's approach is not independent of his views on the determination of prices — fixed by the interaction of demand and supply, they measure 'the value of things, and of the labour which produces them' (1817 : 31) — this and other aspects of his writings were obviously of interest to Ricardo, who referred to them in the paragraphs he inserted in 1821 in Chapter XX, 'Value and Riches, their Distinctive Properties', of the *Principles* (1817-1821 : 284-285). Ricardo met Destutt in Paris during his 1822 journey on the continent :

M. Destutt Tracy [is] a very agreeable old gentleman, whose works I had read with pleasure. I do not entirely agree with him in his Political Economy,— he is one of Say's school :— there are nevertheless some points of difference between them. (Ricardo to Malthus, 16 December 1822, in 1951-73, 9 : 248)²⁶

Say was thus unfair — and inaccurate in his interpretation — when, after the death of Ricardo, reviewing Prévost's translation of McCulloch *Discourse*, he wrote :

Not only has Ricardo's book been given an importance that I feel to be exaggerated ; but it was also granted, with as little justification, the merit of originality and novelty. According to M. McCulloch, the publication of this book opens a *new and memorable era*, and it is stressed that he [Ricardo] discovered that all exchangeable values are but the price of labour, and land does not influence prices ; but M. Destutt de Tracy, in his *Commentaire sur Montesquieu*

26. Ricardo was obviously also interested in the idea Destutt stated, after Turgot, that to measure a thing, we must compare it to another thing of the same kind. And he contrasted Destutt with Say on this point. 'I cannot agree with M. Say — he wrote in the third edition of the *Principles* (1951, 1 : 284) — in estimating the value of a commodity, by the abundance of other commodities for which it will exchange ; I am of the opinion of a very distinguished writer, M. Destutt de Tracy, who says, that "To measure any one thing is to compare it with a determinate quantity of that same thing which we take for a standard of comparison, for unity. To measure, then to ascertain a length, a weight, a value, is to find how many times they contain metres, grammes, francs, in a word, unities of the same description." A franc is not a measure of value for any thing, but for a quantity of the same metal of which francs are made, unless francs, and the thing to be measured, can be referred to some other measure which is common to both. This, I think, they can be, for they are both the result of labour ; and, therefore, labour is a common measure, by which their real as well as their relative value may be estimated. This also, I am happy to say, appears to be M. Destutt de Tracy's opinion.' Ricardo is however certainly deluding himself about the degree of agreement between his approach and that of Destutt.

— which, even before the 1814 events, had been translated into English by the renowned Jefferson, former President of the United States — had advanced the same principles that he repeated in his 1815 *Traité de la volonté*. (Say 1825 : 275)

The first discussions

Say was in England from September to December 1814, sent by the French Government — he subsequently published *De l'Angleterre et des Anglais* in April 1815. There he met James Mill, Jeremy Bentham and David Ricardo. Say took the opportunity to send Ricardo a plan for a reform of the French currency system inspired by the Appendix of *The High Price of Bullion*. After his return to Paris, he sent him his *Cathéchisme d'économie politique*. Ricardo replied on 18 August 1815 and a correspondence started between them, mainly devoted to the discussion of Ricardo's critiques of Say's theory of value.

While at this time neither Ricardo's nor Say's approaches were fixed — and consequently the theoretical vocabulary was still vague and hesitant — this first debate before the publication of the *Principles* is important for understanding the nature of their divergence. It turned on the role of utility. Both admitted that utility is 'the foundation of value', but they did not give the same meaning to 'foundation'. Ricardo specified that 'a commodity must be useful to have value' (to Say, 18 August 1815, in Ricardo 1951-1973, 6 : 247). In his answer²⁷ (10 September 1815, *ibid.* : 270-273) Says asserted that Ricardo in fact shared his analysis of value, and that utility is not the sole but the primary cause of value. In order for a commodity to be produced :

... the price that its utility determines people to accept must be sufficient to repay the expenses incurred in its production I thus say, like you, that these expenses of production determine the lowest limit for its price ; but that they are not the primary cause of the price that people offer for it. (*ibid.* : 271)

27. Curiously, the text of Say's letters to Ricardo is different in the edition of Charles Comte (Say 1833) and in that of Sraffa. In the present case, the letter found in Ricardo's papers was dated September 10, but that of the 1833 edition is dated December 2. Sraffa suggests that Say forgot his first answer and wrote a second letter that he did not send when he realized his mistake.

In fact, Ricardo criticized Say on three points. First, he criticized him for having stated that utility is the measure of value : ‘the degree of utility can never be the measure by which to estimate value’ (ibid. : 247). Say denied having made such a statement : rather, value is the measure of the utility.²⁸

Second, Ricardo criticized Say for having written that ‘a man is superlatively rich, although he has few valuables, who can procure easily or for nothing those things which he wishes to consume’ (ibid. : 248, cf. Say 1814 : 1194 and 1815 : 95). Ricardo took the example of a man who :

... may only wish to consume bread and water and may be able to procure no more. He cannot be so rich as his neighbour who has abundance of valuables which he can exchange for all the luxuries of life, which it is his desire to consume. (Ricardo 1951-1973, 6 : 248)

He concluded : ‘Riches are measured by the quantity of valuables which a man possesses, not by the moderation of his wants’ (ibid.). Say denied having said that a man is all the richer for having less desires, but repeated that a man is all the richer when he can satisfy his desires at a lower cost.

Third, Ricardo criticized Say for having stated that an entrepreneur ‘must make an inventory of all that he possesses, valuing each commodity at its current price’ (Ricardo ibid. : 248, cf. Say 1814 : 184 and 1815 : 21) in order to know whether his capital has increased : this is misleading, according to Ricardo, because the calculation will reflect the evolution of prices. Say replied that the value of money is assumed to be unchanged : to measure the increment of capital by its capacity to employ labour, as Ricardo suggests, is to return to Smith, which is unfortunate because the price of labour is more variable than the price of money.

Two problems emerged from this exchange. The first is the question of the link between utility and exchangeable value, considered here from the point of view of the measure. However, this debate came to a sudden end when Ricardo quoted the correct sentence from the second edition of Say’s *Traité* : ‘Price is the measure of the value of things, and their value is the measure of their utility’ (Ricardo 1817-1821 : 282, cf. Say 1814 : 83). He did not comment directly on

28. This assertion appears in the letter dated December 2, but not in the letter Ricardo received (see the previous note).

this sentence but neither did he change his mind. Utility remained linked in his eyes with value in use. The last sentence of the *Principles* leaves no room for ambiguity : ‘value in use cannot be measured by any known standard ; it is differently estimated by different persons’ (Ricardo 1817-1821 : 429).

The second problem is the question of the definition of wealth. Disregarding here the evolution of Say’s thought on this point, it is enough to note that in the fourth edition of the *Traité*, wealth is defined as ‘the things we possess and that can be used to satisfy our needs’ (Say 1819 : 1156). Say however, while giving up the idea that ‘the value of things measures the quantity of wealth’ when two countries are compared, implicitly admitted that it is still possible to proceed in this way for two men living in the same place and facing the same price system. As for Ricardo, he ended in the *Principles* with the assertion that, like for Smith, wealth or riches ‘consist of the necessaries, conveniences, and enjoyments of human life. One set of necessaries and conveniences admits of no comparison with another set’ (Ricardo 1817-1821 : 429). It is then impossible to consider riches as a sum of values, as Say did. ‘Value . . . essentially differs from riches, for value depends not on abundance, but on the difficulty or facility of production’ (Ricardo 1817-1821 : 273).

The subsequent debates : some examples

In spite of its importance in the French context, the controversies about the nature of wealth and how to measure it will be left aside here : the subsequent discussion between Say and Ricardo, and the reactions and developments it generated, especially from Pellegrino Rossi, Augustin Cournot and Jules Dupuit, are analyzed in a former paper (Béraud 2005). It should also be noted that many authors contested the fact that wealth was solely to be apprehended in purely economic and material terms : the emerging Christian political economy forcefully denounced this way of thinking — but so did some other authors independently of their political inclinations, the best example being the ultra-liberal Charles Dunoyer. The following will instead focus on the theories of value and prices.

We know how Ricardo, in the *Principles*, specified what he meant by value in use and value in exchange, and by reproducible or non-reproducible commodities, and how his theory of value worked in each case. It is also well-known

that Say, especially in the notes he appended to the French translation of the *Principles*, rejected the idea that the value of a commodity is determined by the quantity of labour necessary for its production. In this context, one apparently insignificant assertion by Ricardo — namely, that the exchange value of a commodity rises with the quantity of labour spent in its production — generated a discussion and an evolution in Say's own conceptions.

To Ricardo's assertion, Say objected that the demand for that commodity must also increase in order for its value to rise with its cost of production. But, without entering into too much detail, Say's argument is puzzling. In fact Say faces two difficulties here. In the first place, the concept of demand is not clearly defined : is 'demand' the quantity demanded, or a relationship between this quantity and the price? In the second place, the idea that 'the value of every commodity always rises in direct ratio to the demand, and in inverse ratio to the supply' is, as Ricardo states (1817-1821 : 382-385), a source of error : it led Say to maintain wrongly that, in order for the price to rise with the costs, there must be an unchanged proportion of demand to supply. He wrote in his notes to Ricardo's *Principles* :

When costs of production increase, it would be necessary for the proportion of demand to supply to remain the same for the price also to increase ; it would be necessary for demand also to rise ; but actually it decreases ; and it is impossible, all circumstances being the same, for it not to decrease. Exchange value cannot rise like the costs of production. (1819, 1 :10)

This proposition seems paradoxical and even absurd. It can be interpreted as follows. For a rise in the cost of production to be fully transferred to the current price, the demand must increase — more specifically : the demand price must increase like the supply price. However, Say's analysis of the determination of prices through the interaction of demand and supply remains too vague to form the basis for a theory of prices.

To answer Ricardo, Say was thus obliged firstly to explain what he meant by 'demand'. In his *Cours complet d'économie politique pratique*, he insisted both on the choice of individuals and on the role of income distribution. 'Men . . . make a kind of classification of their needs according to the degree of importance they attach to the satisfaction of each of these needs' (Say, 1828-29, 1 : 356). Each man, according to his income, satisfies the most urgent need

first. When the price of a good is high, only the rich can afford it. If the price falls, it becomes accessible to a greater number. The notion of demand was thus clarified : it is the quantity of a commodity demanded by those who can pay for its costs of production.

In the second place, the shape of the relation was specified : when the price decreases, the demand increases because there are more buyers. Its shape can even be analyzed. Income distribution can be represented as a pyramid : the rich are fewer than the poor. In this perspective, a reduction in price affects the demand for a commodity all the more when the price was initially rather low, and the concentration of incomes influences the shape of the demand function. The idea that demand is a function of the price — in the mathematical meaning of the term — is not to be found in Say, but Cournot and Dupuit took inspiration from Say's text to formulate it. It is thus not unreasonable to think that the first attempts to build a demand function owed something to Ricardo. The influence was indirect : his criticism of Say induced a more accurate study of the concepts used in demand and supply analysis.

In the last editions of the *Traité*, Say re-examined the idea that the costs of production determine the value of products. He concluded that Ricardians were right to some extent :

... in that products never could be sold for a long time at a lower price than their costs of production ; but when they said that the demand for these products does not influence their value, they were wrong ... because demand influences the value of the productive services. (Say, 1826a : 619)

Some other opinions

While Jean-Baptiste Say was certainly the prominent figure in this debate, some other writers held different views. Louis Say (Jean-Baptiste's brother), for example, put forward a very different opinion. In his 1822 book, *Considérations sur l'industrie et la législation*, Chapter 8 is devoted to an 'Examen de l'ouvrage de M. David Ricardo, intitulé : *Des Principes de l'économie politique*', in which his intention was to intervene in the controversy between Ricardo and his brother on value and wealth and state his own position (1822 : 158-59). He rejected the Smithian opposition between value in use and value in exchange as

well as the idea that the exchange value measures utility. Prices are important for an individual, but only the utilities that he can buy with his income really matter. ‘If the word value has to be used in political economy, it can only be understood as the degree of utility possessed by things It is this utility possessed by a thing which forms its real effective value’ (L. Say 1822 : 158). Louis Say thus agreed with Ricardo, against his brother : ‘as M. Ricardo states rightly, exchangeable value is no measure of utility’ (1822 : 161). But the solution he proposed was of course totally different from that of Ricardo.

In the same perspective, some years later, Auguste Walras criticized Ricardo for having contrasted two kinds of commodities : those which are rare, and those of which the quantity can be increased through industry. But, Walras remarked, a commodity is always produced because it is rare. ‘It is impossible to distinguish among the commodities . . . between those that are rare and those that are not. All the goods that exist in limited quantities are rare ; and only unlimited goods form an exception’ (1831 : 183). To make things more precise, A. Walras redefined certain concepts. According to him, scarcity is the relationship between demand and supply, but absolute demand and supply. Absolute demand is defined as the demand ‘which is the expression of all the needs taken together . . . disregarding the means men have to satisfy them’ (1831 : 235-236). The absolute demand for a thing is thus the quantity that would allow everyone to fully satisfy his need for it. Absolute supply is simply the quantity of a thing that exists at a given point in time. When the absolute demand for a good exceeds the absolute supply, it is said to exist in limited quantity. It is rare and its value is in proportion to its scarcity. While A. Walras gave ‘scarcity’ a meaning that is now ours, he had difficulty specifying the links between value and scarcity. As we know, his son took up the torch, with success : scarcity was defined as ‘the intensity of the last need satisfied’ and ‘scarcity is the cause of exchangeable value’ (Léon Walras 1874 : 144, 145).

Finally, let us note two other important consequences from the debates generated by Ricardo. In the first place, Dupuit discarded Say’s assertion that the prices of things measure their utility. He replaced it with the idea that ‘the greatest sacrifice that we would be prepared to make to get a thing we desire, or the price at which you would decide to do without it, can act as a measure of utility’ (Dupuit, 1849 : 205). In the second place, Cournot, just like Ricardo, asserted that there is no fixed measure of the utility of things. But then he

drew a different conclusion : he held that riches must be understood as the value of the products, not as their utility.

We must totally identify the meaning of the word *riches* with that of these other words *exchangeable value* We must accurately distinguish the abstract idea of riches . . . from the secondary ideas of utility, scarcity, suitability to the needs and enjoyments of man, which the word riches still suggests in the ordinary language. (1838 : 8)

We must acknowledge that riches can vary without affecting the public utility or the general well-being : it is also possible for riches to increase while well-being decreases. In any variation of income, it is thus necessary to distinguish the real and the nominal variations. Cournot showed that to measure the real increment of riches, it is necessary to reason, as we now do, with constant prices.

As for Pellegrino Rossi — certainly the most Ricardian of the writers of the time in France — his analysis is mainly grounded on a theory of value based on the costs of production. No doubt demand and supply, he argued, play an important role in the true explanation of the determination and variations of prices. But these concepts are difficult to understand and to work analytically with them is almost impossible. This is the reason why economists should resort to another law, a kind of approximation and certainly a better analytical tool, the determination of the value of commodities by the quantity of labour necessary for their production (Rossi 1836-38, 1 : 89-90). From the quantity of labour he then moved on to costs of production in general, including the profits of the entrepreneurs but not the rent of land : like Ricardo, he thought that rent is a consequence of prices and not an element of cost.

News from the Genevan Front

Many other aspects of Ricardo's theory of value and prices were discussed, especially during the first half of the century. Without entering here into too much detail, some other important points are to be noted : they came from Switzerland, from the group of authors around the *Bibliothèque Universelle*.

Pierre Prévost's commentaries (1817, 1818) on the first chapter of the *Principles* are not really developed but are interesting because they show, more

clearly than the case of Say, for example, the reactions of a Smithian reader to Ricardo's attacks in the field of the theory of value and prices. He raised two main criticisms. In the first place, and with great clarity, Prévost defended Smith's 'adding-up' theory and the measure of value through the labour a commodity can command. It is not true, he wrote, that Smith is inconsequent, as Ricardo affirmed. He does not have two theories of values, one for the rude and primitive state of society and another for the commercial society with private land property and accumulation of capital. Labour commanded is the measure of value in both societies.

When Smith said 'The real price of every thing . . . is the toil and trouble of acquiring it', he was establishing his doctrine of the measure of value. We know that the basis of this doctrine is the labour that a commodity commands. But when he said 'In that early and rude state of society . . . the proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstance which can afford any rule for exchanging them for one another',²⁹ he was dealing with the distinction between the component parts of a price, and his aim was to dissipate a cloud that could rise on this discussion. He remarked in consequence that there is a stage, in social life, when these two measures — the labour that a commodity commands and the labour spent in his production — are almost the same, and when consequently the distinction is not really necessary. (Prévost 1817 : 217-218)

So Ricardo was not a good reader, and Smith was not inconsequent. In the second place, Ricardo was accused of introducing new and unclear definitions for concepts that were defined by Smith in an appropriate way — the distinction between fixed and circulating capital for example (Prévost 1818 : 12-13) — and thus creating a lot of confusion. But Prévost simply did not understand the pages where Ricardo discusses the influence of a change of income distribution on relative prices and the relationship between wages and the rate of profits — that was, in his eyes, incomprehensible because he stuck to an 'adding-up' theory of value — and his criticism petered out.

29. The original quotation is here restored. Prévost wrote a summary — 'à l'origine des sociétés, le travail dont une marchandise est chargée, le travail nécessaire pour la produire, est la mesure de la valeur' — because the full quotation was written some page before as quoted by Ricardo in Chapter 1 of the *Principles* (P. Prévost 1817 : 217 n. 2).

Another interesting criticism came from Sismondi, because he simply did not accept Ricardo's process of economic adjustment through the mobility of capital and labour. 'M. Ricardo does not leave the abstractions on which he founded his system, and it is difficult to bring them closer to the facts' (1819, 2 : 215), he wrote in the *Nouveaux Principes d'Économie Politique*. After some perturbation in the economy, it is not true that things return easily to equilibrium, simply because it is not correct to consider capital and labour as mobile.

Let us beware of this dangerous theory of an equilibrium that restores itself! . . . Some equilibrium, it is true, is again reached in the end, but through incredible suffering. One can take it as certain that capital only leaves an industry through the bankruptcy of the owner, and men only leave a job through the death of the worker : all those who find a job or move more easily must be seen as the exception and not the rule. (1819, 2 : 217)

Some other reasons — a long apprenticeship or experience necessary for the production, the investment of an important amount of fixed capital — explain the relative immobility of factors of production. With the notable consequence that there is no uniformity in wages and in the profit rates among the different sectors.

. . . we do not admit the foundations of M. Ricardo's reasoning or a continuous equilibrium of profits in all industries. We believe instead that, because it is impossible for the owners of fixed capital to withdraw it and invest it elsewhere, they keep this capital in the same industry for a long time after it has started to yield a much lower income than all others. Their persistence in the same industries is also strongly augmented by their reluctance to lose the skilfulness they have acquired in them, and their incapacity to embrace another vocation. (1819, 1 : 277-278)

It is however worth noting that Sismondi — like Say, as we will show below — somewhat misinterprets Ricardo on this point, insisting on short term difficulties. In Chapter IV of the *Principles*, 'On Natural and Market Price', Ricardo actually describes a more complex process of readjustment, introducing finance capital into the picture. And, at the beginning of Chapter XIII 'On Taxes on Gold' and extensively in Chapter XIX 'On Sudden Changes in the Channels of Trade', he insists on the fact that a reallocation of capital between industries

could take a long time, be difficult and entail important negative consequences in the short term.

5 The nature and evolution of rent

Setting the stage

Even more than the theory of value, the question of the nature and evolution of ground rent remained topical among French-speaking economists during almost the entire century. It was, of course, the theory of income distribution that continuously raised lively discussions, especially around the question of pauperism — later the ‘social question’. But it went much further : the problem of rent considered as a monopoly income challenged firstly the legitimacy of the status of the landowner, and secondly, over and above the question of land property, the legitimacy of private property. This was of course the danger, as stated by Hippolyte Passy in his entry ‘Rente du sol’ in the *Dictionnaire de l’économie politique* :

For some authors, rent is a monopoly that forces those who do not possess land to pay a greater price for their subsistence than it really costs to those who possess it ; for others, it is, using Scrope’s phrase, a limitation to the enjoyment of the gifts that God gave to men for the satisfaction of their needs. From these opinions to the celebrated axiom : *La propriété, c’est le vol*,³⁰ there is only one step that was quickly made. (Passy 1853 : 518)

Some decades later, the same problem was still topical.

Ricardo’s theory, well stated by Rossi in France and J. Stuart Mill in England . . . was accepted by the economists when the 1848 Revolution happened and socialism came openly to the light. Ricardo said : ‘a part only of the money paid to the landlord is paid for the use of the original and indestructible powers of the soil’.³¹ Proudhon and the German refugees in Paris took over this idea not only to attack land property but property in general. (Courcelle-Seneuil 1892 : 711)

30. ‘Property is theft’. Passy is alluding here to Proudhon.

31. Courcelle-Seneuil is obviously misquoting Ricardo here. Ricardo wrote : ‘Rent is that portion of the produce of the earth, which is paid to the landlord for the use of the original and indestructible powers of the soil’ (Ricardo 1817-1821 : 67).

The most varied opinions were thus expressed on rent and the discussions went well beyond economic theory. But the economists were of course standing on the front line, and the subject was often discussed at the Société d'économie politique and in the *Journal des économistes* — so much that some readers of the *Journal* complained.³² In the 1850s, a number of books were still published on the question, either in favour of Ricardo's theory, like Mathieu Wolkoff's *Opuscules sur la rente foncière* (1854), or to criticize it, for example along the lines developed by Bastiat just before his death, as in Roger de Fontenay's *Du revenu foncier* (1854). The Académie des science morales et politiques of the Institut launched a competition on the theory of rent three times, the prize being eventually awarded to Auguste Boutron, who later published his book on the subject : *Théorie de la rente foncière* (1867). The report on this competition, by Hippolyte Passy, was published in 1858 in the *Journal des économistes* (Passy 1858). In 1866, the Société d'économie politique, at the suggestion of Frédéric Passy, organized one more discussion on the theory of rent, with this question : 'Is ground rent different from interest on capital?' (*Journal des économistes*, June 1866 : 447-467).

Before examining the positions developed during these controversies, three remarks are in order.

In the first place, and contrary to a generally accepted opinion, Ricardo's theory of rent, while having faced strong criticism, also had influential advocates *within* the liberal current of thought and not only among its opponents. The case of Pellegrino Rossi (Rossi 1836-1838) is well-known. But Antoine-Élisée Cherbuliez (on whom more below) is also a central figure in this story, as well as the uncompromising liberal Gustave de Molinari. The case of Charles Coquelin is worth citing. The following is a testimony by Molinari taken from the 'Notice biographique sur Charles Coquelin' he wrote for the second (post-humous) edition of Coquelin's *Du crédit et des banques*, entitled *Le Crédit et les banques* (1859) :

He came across Ricardo only later ; but Coquelin had already found by himself ... this ingenious theory of rent which is one of the main claims to fame of the renowned English economist. He later

³². 'Some readers criticized us ... for having devoted too much space to the question of the rent ; but some also levelled the opposite complaint' (*Journal des économistes*, 15 April 1854 : 128).

said to his friends how much he was surprised — and up to a point frustrated — when he found in Ricardo's writings what he thought his own discovery. This incident, during his first studies of political economy, explains the enthusiasm with which he defended the theory of rent when it was challenged by M. Carey and ... Bastiat. Charles Coquelin considered more or less Ricardo's theory as his own. (Molinari 1859 : 7)

A similar acceptance also came unexpectedly from one of the main authors who developed Catholic Christian political economy during the second half of the century and inspired the so-called social doctrine of the Church (as promulgated by Pope Leo XIII in his 1891 encyclical letter *Rerum Novarum*), namely the Belgian economist Charles Périn. He was the successor to the Frenchman Charles de Coux — the co-founder, even before Villeneuve-Bargemont, of this current of thought — at the chair of political economy at the Université Catholique de Louvain. Villeneuve-Bargemont accused the 'English school' in general, and Ricardo specifically, of having only developed the laws of the production of wealth, and neglected its distribution. Périn stressed instead the progress made by Ricardo in distribution theory.

In Ricardo's view, the main problem in political economy is the determination of the laws of the distribution of wealth. Unfortunately, the nature of his mind was fond of abstraction and he lost the fruit of this genuine conception of the economic science. (1880 : 66)

In particular, too much emphasis was placed on the theory of value : 'Contrary to what was alleged, all political economy does not lie in the theory of value' (1880 : 67). In spite of this, Ricardo is granted 'the merit of having, the first, laid the foundations for a theory of the distribution of wealth' (1880 : 68). The positive point is his conception of rent, which Périn himself used in his writings together with Malthus's principle of population.

Second, the vocabulary employed by Smith and Ricardo raised a problem for French-speaking economists. The word 'rente' was already widely used in the French language to designate something that has nothing to do with ground rent : it referred mainly to the constitution of life annuities. To translate 'rent', many French writers thus used the word 'fermage' but also progressively adopted 'rente' to this context. The reluctance to call the revenue of the landowner 'rent' also had theoretical bases. For Say, for example, the global revenue of the landowner is the 'fermage' which includes the profits on the capital he invested

in the land and the ‘profits of the land’, i.e., the bare income from property — what Ricardo calls rent.³³

What is ground rent? asked Hippolyte Passy in the *Dictionnaire de l'économie politique*: ‘It is the share of property. It must not however be confused with “fermage”, although it is one element thereof. Any “fermage” . . . includes an additional part: the payment to the landowners because of their spending, at different times, with a view to facilitating labour or multiplying the product’ (Passy 1853 : 509), in other words because of the capital landowners themselves invested in the land. Some other writers included both elements — the property income and the remuneration of the capital invested — under the same term of ‘rente’.

The problem was raised very early on. F. S. Constâncio, the translator of the first edition of the *Principles*, translated the title of the chapter ‘On Rent’ by ‘Du fermage ou profit des terres’ (Ricardo 1819, 1 : 63), i.e., ‘Of ‘fermage’ or profit of land’. In the text, he sometimes used “fermage”, sometimes ‘profit des fonds de terre’ because, as he explained in a footnote (in Ricardo 1819, 1 : 64), they have different meanings — while his translation of the title of the chapter makes them appear to be equivalent!

I thus was obliged to translate the very vague English word ‘rent’ sometimes by *profit des fonds de terre*, and sometimes by *fermage*, which are two things that the author does not distinguish enough: the first refers to the profit that land gives to the cultivator, the second to the rent [*loyer*] that the farmer pays to the landowner who does not himself farm his property. (Constâncio, in Ricardo 1819, 1 : 64n)

Constâncio’s comment shows that he did not understand Ricardo properly, and we can imagine what the French readers might have understood during 30 years whenever they did not have access to the English text. This question induced Alcide Fonteyraud, in 1847, to add a long footnote at the beginning of the Chapter ‘On Rent’ of his revised translation of the *Principles*. He rightly chose to adopt the term ‘rente’ everywhere.

33. Moreover, for Say, because of the old French meaning, ‘rente’ designates a ratio: the ratio of the income from land ownership to the price of land.

We did not hesitate to substitute ... the word 'rente' for the word 'fermage' which most writers used to translate the English 'rent'. Before us, people were afraid to introduce an uncommon term into the scientific nomenclature ... [but] every new idea in science ... brings its form, its expressions. (1847 : 38)

The word 'fermage' was also to be rejected for a theoretical reason : 'This is something more than a mere lexicographic rectification, this is above all a scientific rectification' (1847 : 39) because otherwise Ricardo's theory appears absurd and incomprehensible.

In political economy, what do we mean by the word 'fermage'? It is the sum paid by the cultivator ... to the landowner. Now what do we mean by 'rente'? Following the very definition of Ricardo, it is that portion of the produce of the earth, which is paid to the landlord for the use of *the original and indestructible powers of the soil*. The difference is here obvious, essential ... and the author dedicated a series of arguments to making it stand out. Moreover, after having well established that the portion of the produce given to the owner for the interest on the capital he devoted to the betterment of land ... etc, cannot be called rent, he ... says that *in popular language the term is applied to whatever is annually paid by a farmer to his landlord, and that Adam Smith often conformed to this mistake made by most writers*. Rent is thus a fee attached to the ground itself, to property rights. (1847 : 38)

In the third place, for sake of brevity, some comments on the origin of the theory of rent — concerning Anderson, West, and Malthus — will be omitted here. French authors at least agree on one point : Ricardo's version is the most rigorous statement of it. Some other criticisms must also be omitted, though they were heavily debated at the time, such as, for example, the problem of the order in which different plots of land are cultivated — some authors contesting that the most fertile are cultivated first. We also exclude the interesting point that the order of fertility is not a physical property given once for all but can change according to the techniques employed by the farmers, as well as the possibility and consequences of technical progress in agriculture — on all this see for example Fonteyraud (1847) and G. du Puynode (1866) as well as the above-quoted books on rent.

Say's critique

What characterises Say's views on rent is twofold — two consequences, probably, of his faithfulness to Smith's analysis — : rent enters into the formation of prices, and intensive rent is disregarded.

My argument respecting rent, profit and taxes — Ricardo wrote to Say — is founded on a supposition that there is land in every country which pays no rent, or that there is capital employed on land before in cultivation for which no rent is paid. You answer to the first proposition, but you take no notice of the second. The admission of either will answer my purpose. (Ricardo to Say, 11 January 1820, in 1951-73, 8 : 149-50)

Hence an interesting debate with Ricardo which provoked, significantly, an evolution in both positions : Say was led to accept, in some specific cases, the existence of a marginal land deprived of rent as well as the existence of an intensive rent ; and Ricardo admitted that, in some specific cases also, an absolute rent can arise.

For Say, 'fermage' is a component part of the prices of commodities. It remunerates the productive capacity of the land and the capital irreversibly invested in it. Rent thus includes a kind of monopoly income because land is limited in quantity and private property of it is socially and economically useful — an argument which was of course taken up and developed by the liberal economists. 'Were the landowner not certain of enjoying his fruits, who would accept to advance the labour and money necessary for its cultivation ?' he wrote in his notes to Ricardo's *Principles* (Say 1819b : 83). A social convention — land property — increases productivity. 'This is why land could supply a quantity of products useful to men ten times, a hundred times, superior' (1819b : 83). Could not we say, he insisted, 'that the owner fulfils a productive function because without it [private property] production would not take place ?' (1819b : 92). Say thus accepted the existence of an absolute rent on land. In the same notes to the *Principles*, he wrote that, 'in populous and productive countries, the pieces of land of worst quality, from the moment they are cultivated, always yield some *fermage* and consequently some income from land property' (Say 1819b, 1 : 95).

At the same time, however, Say recognized that in some situations, a marginal piece of land may not yield any rent to its owner. In his marginal notes to the *Wealth of Nations*, he remarked that ‘plots of land which are not worth being cultivated’ can exist (in Hashimoto 1980 : 77) and the income of the owner be nil. This idea is picked up in slightly different forms in the successive editions of the *Traité*. In the fifth edition, for example, he wrote :

... a plot of land which does not yield any profit can still be cultivated provided that the cultivator can find compensation for the capital and labour invested. As it is impossible to find a farmer for such a piece of land, it is usually cultivated by its owner. (Say 1826a : 805-807)³⁴

But this is, in his eyes, an exceptional case. Disregarding the possibility of increasing corn production through the adoption of more intensive techniques, Say’s normal situation is the following. In rich countries where agricultural production reaches its limits, where the demand for agricultural products is high and exceeds production, the price of corn — fixed by the interaction of demand and supply — is always a monopoly price in excess of the cost of production on marginal land. It generates an income for its owner, i.e., a rent on the marginal land.

Ricardo, for his part, was willing to accept this possibility. But, in his opinion, the situation judged normal by Say was instead exceptional :

The corn and raw produce of a country may, indeed, for a time sell at a monopoly price ; but they can do so permanently only when no more capital can be profitably employed on the lands, and when, therefore, their produce cannot be increased. (Ricardo 1817-1821 : 250-251)

At the end of his life, Say somewhat reconsidered his analysis of ‘fermage’ in the fifth edition of his *Traité* and in his *Cours complet d’économie politique pratique* (1828-1829). It is likely that the evolution of his thought was due to his past debate with Ricardo.

On three points he appeared to have moved closer to Ricardo. First, he accepted in the fifth edition of the *Traité* that some marginal land, when

34. Hollander considers that this is ‘an instance of *silent adherence* to Ricardo’s position’ (2005 : 56).

cultivated by its owner, may not yield any rent (Say 1826a : 805, see above). Second, he acknowledged that :

... the supply of the produce of land is not limited as long as there remains some uncultivated land on our earth ; if demand goes on increasing when Beauce is totally cultivated, there is still some land in Berry that is not yet under cultivation.³⁵ (Say 1828-1829, 2 : 96)

Of course, the costs increase when the product comes from a more distant place : but this last remark matches Ricardo's theory. Thus the idea of a normal case with a limited supply and a rent on the marginal land faded away in *Cours complet*.

Finally, when criticizing the notes McCulloch appended to his edition of the *Wealth of Nations*, Say seemed to acknowledge the existence of an intensive rent : 'on the entire capital employed in agriculture, a portion of it does not give any profit for the land [*profit foncier*]' (McCulloch, quoted by Say 1828-1829, 2 : 111). But he did not think that it brought a new element to the discussion. This gave him instead the opportunity to reaffirm his approach — and implicitly that of Ricardo. McCulloch realized, Say stressed, 'that the idea which considers the land of bad quality as the cause of the profit on the land of better quality is ridiculous', and this is the reason why he switched to the other formulation (just cited above). Quoting Malthus instead of Ricardo,³⁶ Say insisted that the cultivation of land of bad quality and the increase in 'fermages' are the consequence, and not the cause, of the rise in agricultural prices. And he added :

... the theory of rent did not introduce any new truth into the science of political economy and ... does not explain any phenomenon that cannot be more naturally explained by the already established truths. I shall refrain from any supplementary discussion on that topic, to avoid the reproach levelled at the debates that have taken place hitherto, i.e., of being incredibly boring and of having put many people right off a study [of political economy]

35. Beauce and Berry are two French provinces. Beauce, a very fertile and rich province, is traditionally called the granary of France.

36. Say (1826a : 808) attributed also this proposition to Ricardo. But it seems that Ricardo never advanced such an assertion.

so attractive because of its applications and its influence on the lot of mankind. (1828-1829, 2 : 111-112)³⁷

Fundamentally, Say's approach remained the same in spite of some specific developments. Agricultural products should be dealt with in the same way as the other products, and land like the other factors of production. On the one hand, land generates a productive service that, like any other productive service, is bought by the entrepreneur. And the productive service of land is the basis of 'fermage'. 'Fermage' can differ according to the fertility and the location of land. This is a general phenomenon : the price that an entrepreneur is willing to pay for a productive service depends on the importance of its contribution to production. On the other hand, agricultural products behave in the same way as other commodities. Whenever the demand for corn increases, plots of land of bad quality will be cultivated and costs and prices will increase. This happens for all kinds of products.

The products cost more as they come from farther afield If the producers who are closer do not produce enough for the needs of society, the price of the product in demand increases and is then sufficient to pay for the production costs of the quantity one is obliged to bring from a more distant place. When a manufacturer succeeds in enjoying a specific advantage, as a more favourable location, he earns more than the one who necessarily incurs higher costs of production. (Say 1828-1829 : 109)

More on the French theoretical landscape

We know that Pellegrino Rossi, who succeeded Say to the chair of political economy at the Collège de France, was in favour of Ricardo's theory of rent and stated this in his lectures (Rossi 1836-38). While modifying Ricardo on some points — it was his opinion that rent also depends on the 'absolute' and not only comparative productive power of land — he basically accepted his theory. He criticized Say for supposing that the supply of agricultural products could meet a limit and for denying that the marginal capital invested in land yields no rent : to Rossi's mind, Say does not understand that the fact that no land remains without rent is no proof of his denial, simply because rent is not

37. Fonteyraud also wrote that the doctrine of the rent 'has only been an opportunity to argue endlessly and to practice high scholastics' (1847 : xliii).

only extensive but also intensive. A land can thus on the whole yield a rent while the last portion of capital invested in it only produces the usual rate of profit and no rent.

We also know that Coquelin and Molinari accepted Ricardo's theory of rent. But between the time of Say and the Second Republic, other economists developed different opinions. Let us briefly mention two of them : Adrien de Gasparin and Frédéric Bastiat.

Gasparin was a friend of François Guizot and thus probably close to Rossi too. The theory of rent was important in his view because he was mainly interested in agricultural economics and legislation. In his 1829 *Guide des propriétaires des biens ruraux affermés*, he wrote that Ricardo's theory of rent was certainly the most satisfactory but he also confessed that, in the end, he did not see much difference between Ricardo's and Say's ideas.

Ricardo's theory is . . . identical to M. Say's. As a matter of fact, the more land is in demand and the more plots of land of inferior quality are cultivated, the more the rent increases on land of better quality . . . and this demand will always stop, in both cases, at the point where land only pays for the costs of production. (1829 : 46)

Gasparin tried to reformulate some points in Ricardo's theories of value and rent but, using odd definitions and vocabulary, he eventually ended with the same results. More polemical, but incomplete because of his death, is Bastiat's attempt to reformulate the question of rent.

Bastiat wrote his pamphlets on land property and rent at the time of the 1848 Revolution during which the liberal camp took a tougher stand against the various socialist movements. These essays, together with others, already published or not, were included in his posthumous *Harmonies Économiques* (1850, with a second enlarged edition in 1851). Bastiat's position was radical — like that of Henry Charles Carey at that time, who accused Bastiat of plagiarism. In order to fight the socialists, Bastiat simply denied that rent resulted from a monopoly power, linked to property rights and not corresponding to any human service or labour : 'The theory of rent is an illusion.' According to Bastiat, what is called rent is nothing other than the just remuneration of the capital and labour invested by landowners to make land suitable for cultivation. Hippolyte Passy summed up Bastiat's arguments well :

Now M. Bastiat acknowledges that rent may well rise without the landowner having to make any sacrifice to benefit from this increment; but this case, he remarks, is not specific to land property. What creates the value of any service rendered by human industry ... is not only the effort incurred by the producer, but also the effort spared to the consumer : any time his needs increase, the latter pays more for the service he buys, which spares him the more important efforts he would have been obliged to make to get it himself. (H. Passy 1853 : 510)

Now the liberal economists were aware of the fragility of this thesis. 'It is unfortunate', H. Passy went on, 'that his death did not give M. Bastiat enough time to specify and coordinate his ideas more rigorously' (H. Passy 1853 : 510).

To have an idea of the last step in the evolution of the debates on rent, let us jump to the *Nouveau dictionnaire d'économie politique*, edited by Léon Say (Jean-Baptiste's grandson) and Joseph Chailley, published in 1891-1892 with Guillaumin. The author of the entry 'Rente (loi de la)' was Jean-Gustave Courcelle-Seneuil, already active for some decades and the translator of John-Stuart Mill's *Principles*. His text shows how the liberal discourse changed during these decades. Courcelle-Seneuil's is a defence of the theory of rent which, he said, although forcefully accepted or attacked in the past, was never properly understood. The law of rent, he argued, is in fact more general than initially thought by Ricardo. Some authors, however, generalized it too much : after von Thünen, for example, who enlarged its purpose, 'it was thought that the law of rent was not specific to agriculture, mining industries or locations ; it was claimed that it was general and was felt in all branches of industry, including trade' (1892 : 713).

But this evolution is questionable, Courcelle-Seneuil claimed, because in this way the law loses any precision. He preferred another, more usual perspective. Referring to the production of all kinds of agricultural products and raw materials, he reformulated the law in the following way : 'As the number of men rises and want to satisfy new needs, they consume in greater quantities the raw products supplied by nature, the quantities of which are limited' (1892 : 715). This formulation simply refers to industries that produce with increasing costs. Thus understood in a rather loose way, the law of rent is opposed to the 'law of markets' interpreted as a law of increasing returns experienced in the other industries and in trade. While the old names of 'law of rent' and 'law of

markets' are still retained and used, Courcelle-Seneuil noted, it is also possible 'to speak, like some English authors, of a "law of decreasing returns" for the first, and a "law of increasing returns" for the second' (1892 : 717). He was, however, using the new phrases with reluctance. 'We do not think that these new names must be preferred to the old ones : the latter have the advantage of reminding us of the works of Ricardo and Jean-Baptiste Say' (ibid.). With one important qualification : the law of diminishing returns is not an inevitability, thanks to science and technical progress.

Back to Geneva

In Geneva, the Ricardian theory of rent was immediately received as an important development in economic theory, all the more so since one of the origins of Ricardo's ideas was Malthus. In the December 1824 issue of *Bibliothèque Universelle*, Charles Pictet (Pictet 1824) commented on a review — translated from the *Edinburgh Review*³⁸ — of a book by John Cazenove on the accumulation of capital and its effects on prices. He explained Ricardo's views on rent quite accurately, but the paper itself — a discussion of the possible consequences of an abolition of the corn laws — did not go deep into the subject : Pictet in fact could not fully understand Ricardo because he could not get rid of the idea that prices are determined by adding up wages, profits and rent. Guillaume Prévost also discussed briefly the Ricardian principle of rent in the 'Réflexions du traducteur sur le système de Ricardo' he appended to his translation of McCulloch's *Discourse* (G. Prévost 1825b). He developed an idea similar to that of Say, that rent affects the price of commodities because, due to the institution of private property, there is no land that does not pay any rent. Referring to James Mill's defence of Ricardo's principle in his *Elements of Political Economy* (Chapter 2, section 1 on rent), he accepted that the rent on marginal land could be very small, even negligible as Mill wrote,³⁹ but it nevertheless exists (G. Prévost 1825b : 172-175).

38. 'Considerations on the accumulations, etc. Considérations sur l'accumulation des capitaux, et sur ses effets relativement aux valeurs échangeables. *Edinburgh Review*. Mars 1824'. *Bibliothèque Universelle*, October and November 1824. The name of John Cazenove was not mentioned.

39. '... the rent paid for the barren mountains of Scotland is anything but a trifle' (J. Mill 1824 : 35). It is to be noted that Mill only accepted this idea temporarily in order to dismiss the objections made to Ricardo's theory and to restate it.

A radically different picture is given by Sismondi's writings. In his 1803 *De la richesse commerciale*, Sismondi used Smith to reject the Physiocratic propositions. Rent, he wrote, is a mixed income that partly remunerates property rights on uncultivated land, and partly the labour accumulated on that land in order to make it suitable for cultivation. This part of the rent which is not the counterpart of human labour :

... results from a kind of monopoly that landowners enjoy against their fellow citizens It is the sole part of the product of labour that is purely nominal, and does not correspond to anything real ; it is in fact the result of the increase in price that a seller obtains because of his privilege, though the thing which is sold is not worth more. (Sismondi 1803, 1 : 49)

However, like Say, he qualified this heretical assertion by stressing the fact that the monopoly of the landowners is useful to society, because only privately appropriated land can be properly cultivated.

When dealing with the Ricardian theory of rent, in the *Nouveaux principes*, he limited himself to referring to Say's notes, which he found excellent. He still thought that rent ['fermage']⁴⁰ is a monopoly income but, to clarify this opinion he had to analyze the determination of the price of the product and the way in which the net product is shared between the farmer and the landlord. In this perspective, he used his own theory of prices and his rejection of the hypothesis of mobility of capital and labour. His starting-point is the idea — later attributed to Ricardo by Sraffa — that in agriculture the product and the means of production are homogeneous (Sismondi 1819, 1 : 279-282), viewed here from the perspective that agriculture can form a vertically integrated sector where labour is the sole primary input.

As farming is the only work that meets [the needs of] life, it is also the only work that can be appreciated without any exchange. Land can provide a man with all the necessaries of life if he cultivates it. If he clothes himself in the skins of his sheep, as he eats their meat and the seeds he harvests, and builds his hut from the wood of his forests, he can compare directly the quantity produced by his labour with the quantity used during his work, and he can thus

40. It is interesting to note that while Sismondi, in 1803, used the French word 'rente' [rent], this is no longer the case in 1819 where he employs the word 'fermage'. On this question of vocabulary, see above.

see that the latter is smaller than the former. He sees with his own eyes the emergence of a net product ... , absolutely free of any competition, any market demand, any value against which he might exchange this product. (Sismondi 1819, 1 : 282)

The farmer thus knows the physical size of the surplus. If we assume a gross product of 25 sacks of wheat, the means of production (seeds) requiring 5 sacks and his own consumption another 5 sacks, then he can immediately see that the net product amounts to 15 bags (Sismondi 1819, 1 : 281-282). But sharing this surplus depends on the relative price of the agricultural product and the relative bargaining powers of the landlord and the farmer. The price of wheat depends on the supply and demand for it in the *local* market. If this market is in excess demand, the farmer raises his price and the equilibrium is reached when the price allows ‘the producer the most distant from this market to sell in it although he spent as much to produce the wheat and incurred the additional cost of bringing it from his distant fields’. After having negotiated the price under these conditions, the farmer has to negotiate the amount of rent he must pay the landlord, and in this process he must be aware of the competition of other farmers wishing to rent the same land. In spite of its lack of precision, Sismondi’s discourse is clear. The general result depends on the relative bargaining powers of the participants — the consumer, the landlord and the farmer — and what each of them gets of the surplus can vary greatly :

... the mercantile value [of the *produit net*] can be determined through a double or triple struggle [*lutte*] so that, according to circumstances, it will sometimes entirely go to the landowner ... ; sometimes it will partly go to the farmer ... ; and the consumer will also often benefit from it. (Sismondi 1819, 1 : 284-5)

In this process, however, the landowner has a prominent role that ensures the positivity of the rent and of the price of wheat :

Property rights, or the monopoly warranted by society, that any landowner has against two classes of people — those who demand foodstuffs [the consumers] and those who offer labour to produce them [the farmers] — prevent the price of ‘fermage’ on the one hand, and that of foodstuffs [‘denrées’] on the other hand, from being too much reduced in value (Sismondi 1819, 1 : 286).

What about the circumstances that Ricardo proposed to explain the existence and level of the differential rent ? They are, Sismondi stated, of secondary

importance. ‘It is only after these three causes worked with infinite variations and according to the circumstances, that the other causes acknowledged by M. Ricardo are felt’ (1819, 1 : 286). From this point of view, part of the criticism raised later by A. Walras is formulated along the same lines :

Malthus’ and Ricardo’s doctrine to explain the origin of ‘fermage’ is certainly most ingenious but it is wrong. To explain the origin of ‘fermage’ by the inequality of land is like explaining wages by the unequal capacities of workers. The inequality of the workers explains the inequality of wages, just as inequality of land explains the inequality of ‘fermages’. But the origin of ‘fermage’ and the origin of wages, considered in themselves independently of their levels, comes from another source than the inequality that can be found between one worker and another or one plot of land and another. (A. Walras 1830 : 16)

Finally, yet another different point of view on rent was advanced by Antoine-Élisée Cherbuliez, a renowned utilitarian politician and intellectual, and a collaborator of the *Bibliothèque Universelle* — now *Bibliothèque Universelle de Genève* — who was to play an important part in the group of liberal economists in France. He was already the celebrated author of the *Théorie des garanties constitutionnelles* (1838), was teaching at the Genevan Académie and was a member of the Conseil Représentatif de Genève. Drawing some inspiration from ideas expressed by P. Prévost and Sismondi, he published a book entitled *Riche ou pauvre, exposition succincte des causes et des effets de la distribution actuelle des richesses sociales* (Cherbuliez 1840) which was an acute analysis of the economic and social consequences — unequal distribution of income, insecure condition of the workers and pauperism, etc. — of the new industrial order. Contrary to Ch. Pictet and G. Prévost, he understood perfectly the Ricardian theory of rent — intensive⁴¹ as well as extensive — and accepted it. His conclusions, however, were radical and like Ricardo, he affirmed the conflicting interests between the landowners and the other classes in society. He heavily stressed that, while landowners can also marginally accumulate capital on land and earn a profit from it, rent is an income they get without any labour or activity of their own. This income, moreover, was steadily increasing with population growth and accumulation of capital, thus

41. An unusual fact at the time. Cherbuliez started with intensive rent and addressed extensive rent after that.

favouring the ‘interests of the past’ — the landowner’s — against those of the dynamic elements of the new economic and social order : the capitalists and the workers.

Landowners are idle persons kept at the expense of the public without any advantage for either industry or the general welfare of society. They form a powerful class, an unavoidable aristocracy whose interests are isolated and distinct from the interests of the other members of the association. (Cherbuliez 1840 : 205)

These are men who receive an ever-increasing part of the social income, without doing any physical or intellectual activity, without incurring any risk, without making any sacrifice, solely by virtue of a right that the law confers on them over the ... territory of their nation. (Cherbuliez 1840 : 163)

To remedy this damaging situation and referring to the Physiocratic single tax project, Cherbuliez imagined a tax on rent — he rejected the idea of a land tax levied on landowners independently of the fertility of their property — which would replace all existing taxes and thus suppress their negative impact on the accumulation of capital, while allowing the State to finance its expenditure. The consequences on the economy would be positive because the landowners are generally not inclined to save and accumulate from their income, and because they would be unable to transfer the new tax onto any other social group (Cherbuliez 1840 : 203-204). It is, however, Cherbuliez’s opinion that this scheme, although just, could not be implemented for practical reasons :

Unfortunately, it is impossible to levy a tax on rent and rent alone ; because while it is already difficult, for the land exploited under the regime of farming leases, to know which portion of ‘fermage’ corresponds to the rent itself — i.e., which does not represent the profit of any portion of agricultural capital — this difficulty turns into an absolute impossibility for the plots of land exploited by their owners. (Cherbuliez 1840 : 204)

The only solution, then, is more radical : ‘why should we not go one step further and abolish the private appropriation of land?’ (Cherbuliez 1840 : 205). The State should replace private landowners. It would not cultivate the land itself, but rent it out to farmers.

The abolition of the private ownership of land would not change anything in the causes that give rise to the rent, and this rent would still exist. But it would be received by the State . . . and land would be leased to individuals in possession of sufficient amounts of capital to exploit it. . . . The State would find in this revenue the means, first to supply the ordinary needs of the administration, and then to cover the country with canals and roads and create all kinds of establishments favourable to industry and to the increase of the general welfare. All direct and indirect taxes would be suppressed Finally, industry, emancipated and unfettered, would expand in an unprecedented manner, while the cultivation of land, under free competition, would rapidly go from progress to progress! (Cherbuliez 1840 : 206-207)

Needless to say, *Riche ou Pauvre* caused a huge scandal in Geneva. But it was read with interest in France where an edition — probably unauthorised — was published in Paris in 1841 under a slightly different title, *Richesse et pauvreté*, on the initiative of a confidential social Christian movement named the ‘Solidairunis’.⁴² A preface was added and signed P. G.-B.,⁴³ entitled : ‘Résumé de la doctrine des Solidairunis’ — stating that while Cherbuliez’s analysis was right, he hardly proposed anything to remedy the dramatic situation of the workers. But the book was on the whole well received, even outside the ‘leftist’ circles of the time.

Contemporaries could see an heir to Cherbuliez’s 1840 ideas, or an echo of them, in Auguste and Léon Walras’ well-known proposal for the nationalization of land. However, it should be noted that Auguste Walras — with, strikingly, almost the same phrases as those employed by Cherbuliez — had already formulated his proposal in a manuscript entitled ‘De l’abolissement de l’impôt et de l’établissement de la loi agraire, telle qu’elle peut être conçue et pratiquée au XIXe siècle’, written ten years *before* the publication of Cherbuliez’s book (A. Walras 1830). This is all the more interesting since A. Walras’ theoretical background was different : and this shows how Ricardo’s assertion that lan-

42. ‘Solidairunis’ is the contraction of ‘solidaires’ (people showing solidarity with each other) and ‘unis’ (united).

43. Probably a physician, the doctor P. Gallier-Boissière according to Charles Louandre and Félix Bourquelot, *La littérature française contemporaine*, Paris : Félix Daguin, 1846 — ‘The ‘solidairunis’ are a kind of communists; the author of the Résumé is M. Gallier-Boissière, physician in Paris’ (2 : 617).

downers benefited from the situation and threatened capital accumulation and economic growth caught the imagination of his readers.

As for Cherbuliez, he later repudiated his former ideas and, in his *Précis de la science économique et de ses principales applications* (Cherbuliez 1862), while still sticking to the Ricardian theory, defended the institution of private land ownership.

6 Money and banking

Ricardo's ideas on money and banking, developed in his monetary pamphlets and in the *Principles*, were received by the French economists with both interest and reluctance. They all stressed the great expertise of Ricardo in the field, and respected his rigour and action during and after the Bullion controversy. Some of them even considered that the originality and importance of Ricardo in the post-Smithian debates lay precisely in his theory of money and banking :

... there we find all that most entitles him to the admiration of the economists. It is strange that the relative merits of his works have been so misjudged and that his entire glory usually rests on the theory of rent. (Fonteyraud 1847 : xxvi)

Say's opinion was not different (below). Whatever their opinions on this point, however, French economists mainly considered Ricardo's monetary doctrines with the greatest suspicion. From Ricardo's chapter on money and banking in the *Principles*, the majority of French economists retained three intertwined propositions : (i) the quantity of paper money determines its value ; (ii) the convertibility of the paper money is not necessary to preserve its gold parity ; (iii) the most perfect currency is made of paper.

The first proposition was in tune with the most generally accepted theory of value which, with variations from one author to another, conferred an important role on the interaction between supply and demand. It was nevertheless widely discussed (see below the remarks on the definition of paper money and the need to distinguish it from money proper and bank notes). In addition, disregarding the coherence of Ricardo's assertions in the field, many authors jumped at the opportunity of accusing him of inconsistency. In their eyes, the role of the quantity of money in the determination of its value was in total

contradiction to his general theory of value. Say, for whom the debate about value was of paramount importance, was only too willing to take this opportunity :

It is amusing to see — he wrote — that Ricardo's doctrine in this field is precisely grounded on the principle of the proportion between the quantities supplied and demanded — principle the influence of which he refuses to acknowledge. He irrefutably proves that the medium of exchange is a commodity of the same nature as any other, and he denies that the others are subject to the same influences. (Say 1825 : 278)

The denunciation of this alleged inconsistency was subsequently repeated by French authors. Auguste Walras, for example :

Had gold and silver a value proportionate to the quantity of labour employed in their production, one should not say that the value of money is regulated by its quantity ; and were the quantity of money existing in a country the real rule for its value, one should give up stating that the value of money stems from the quantity of labour used in the production of gold and silver. (A. Walras 1831 : 179)

The second and third above-mentioned propositions were in general opposed. The fact that Ricardo was in favour of a paper currency raised serious doubts about the pertinence of his theory : as a matter of historical fact, John Law's bankruptcy and the recent disaster of the assignats were still very much present in French minds. Consider the opinions expressed by some of them in the 1820s : Charles Ganilh, François Ferrier, Isaac Péreire and Louis Say, for example. They did not go deep into theoretical investigations nor analyze the historical experience from which Ricardo's proposal stemmed : their reaction was instinctive. Some other French economists — in fact, the majority — developed a more documented position. They opposed Ricardian ideas because they were attached to a theory of commodity money : money can only be made out of a commodity which, also serving for other purposes, has its own value. Finally, the reception of Ricardo's monetary theory also depended in France on the debate between central banking and free banking.

Reactions against paper money

To explain how an object without intrinsic value could act as money, Ricardo used the quantity theory. He first explained that, provided the State has the monopoly of coinage, a limitation on the quantity of coins could raise their value to any level so that the seigniorage could increase without limit. He then asserted that this principle regulates the circulation of paper money. With this conclusion : ‘though it has no intrinsic value, yet, by limiting its quantity, its value in exchange is as great as an equal denomination of coins, or of bullion in that coin’ (Ricardo 1817-1821 : 353). Ganilh exclaimed : ‘What! Paper money has a value provided that its quantity is limited to the needs of the circulation!’ (Ganilh 1821, 2 : 137). He did not deny that an object deprived of any intrinsic value could theoretically act as a means of payment, but he thought that, if such money were issued by a Government, citizens would think that it was risky to accept it. They would prefer to hold commodities rather than money and would accept the latter only when they could not do otherwise. Trade would quickly decline. It is certainly possible to imagine theoretically how paper money could circulate, but this circulation would be impossible in practice.

Moreover, contrary to Smith, Ricardo asserted that :

... it is not necessary that paper money should be payable in specie to secure its value ; it is only necessary that its quantity should be regulated according to the value of the metal which is declared to be the standard. (1817-1821 : 354)

Ganilh was puzzled. He admitted he did not understand this theory and reasserted the traditional analysis that opposes the banknote to paper money. The former, at least, is convertible. ‘The former is guaranteed by all the commercial values that it circulates . . . , the latter depends solely on public trust [‘foi publique’] which is rarely well kept’ (1821, 2 : 142).

Ricardo also concluded that ‘a currency is in its most perfect state when it consists wholly of paper money, but of paper money of an equal value with the gold which it professes to represent’ (Ricardo 1817-1821 : 361). Ferrier (1822 : 205) feared the worst and prayed God that France would avoid a third experience of paper money. Isaac Péréire was puzzled and cautious. He warned his audience : ‘You all still have in mind the disorders that paper money has

provoked' (Péireire 1832 : 16). As for Louis Say, Ricardo's formulation was a *non sequitur* because paper money has no value in the Ricardian sense of the word (L. Say 1822 : 229). One should speak of its purchasing power [*capacité acquisitive*]. Ricardo should have written that the most perfect money is a paper the purchasing power of which is equal to that of the gold it represents. L. Say seems to play on words, but his acceptance of Ricardo's opinion is not evident. When Ricardo asserted that a perfectly safe paper redeemable in fifteen years is of equal value to a paper redeemable on request (Ricardo 1817-1821 : 356), L. Say disagreed. People are cautious, he argued, and would always prefer the latter : 'they would get more cheaply what they acquire with a paper redeemable on request than with a paper redeemable in fifteen years' (L. Say 1822 : 230).

Say's dissenting voice

In the 1820s, surrounded by this chorus of criticism, Say's voice is resolutely out of tune. He supported Ricardo's ideas and made them his own. In a review of G. Prévost's translation of McCulloch's *Discourse*, he did not hesitate to write : 'To come back to Ricardo, I think that his only claim to fame is his doctrine on money' (Say 1825 : 278).

His position was not new. Ten years before, his reading of *The High Price of Bullion* led him to reconsider the analysis of paper money he had proposed in the first edition of his *Traité* (1803). His opinion, at that time, was not clear. On the one hand, he stressed that 'money is a commodity having its own value' (1803 : 456), this value being determined, like that of any other commodity, by supply and demand : with the consequence that 'the adoption of a commodity as money considerably increases its intrinsic value' (1803 : 458). But, on the other hand, he acknowledged that a commodity deprived of any utility — he gave the example of the cowry — could also act as money. The problem was then for him to explain the value of paper money defined as notes 'that do not oblige the issuing authority to reimburse them, at least not immediately' (1803 : 502). In 1803 and in the second edition in 1814, Say maintained that such a money deprived of intrinsic value can nevertheless have a value for three reasons : (i) it can be used to pay taxes ; (ii) it can be used to buy commodities at given prices, because the Government 'oblige the producers not to refuse

to give such quantity of goods in exchange for this quantity of paper money' (1803 : 504) ; (iii) people's need to use money can give paper some of the value that its role as medium of exchange confers on metal. Say's ambiguity lies in the fact that it is not clear whether this third reason is sufficient per se.

Say's journey to England during the last months of 1814 gave him the opportunity to reconsider the question. His analysis of the British monetary problems and his reading of Ricardo's *High Price of Bullion* prompted a change in his thinking. He probably evoked this development in a letter to James Mill, who in turn referred to it in a letter to Ricardo dated 9 November 1815 :

I have a long letter from our Parisian friend He says he is rectifying his chapters on money to a conformity with your ideas, for the third edition of his book, which will probably appear next year. (in Ricardo 1951-73, 6 : 321)

In 1815, Say stated clearly that the value of the notes issued by the Bank of England did not depend on the flimsy hope for future convertibility into gold : it was only determined by their quantity.

It is . . . the proportion of notes and not the discredit that influences their value ; discredit, whatever it can be, does not possess the least influence on that value Were I asked what time I believe the Bank of England would repay its bank notes on demand, I would answer that I do not know . . . and that my answer would also be of no importance. (Say 1815 : 75)

The Bank of England, he added, can control the value of its notes. To restore them to par, it is sufficient to reduce the amount of discounted paper in order to diminish their quantity.

In 1814, before returning to the continent, Say wrote down a plan for the reorganization of the banking system in France. He sent it to Ricardo who replied that it was similar to the proposals he himself had made for the Bank of England as set out in the 1811 Appendix to the *High Price of Bullion* (Ricardo to Say, 24 December 1814, in 1951-73, 6 : 165). The only difference, stressed by Ricardo himself, was that in Say's plan the Government was supposed to be the issuer of the notes. Ricardo thought that this clause was dangerous because no Government could resist the temptation of misusing this power.

Say subsequently⁴⁴ showed some interest in Ricardo's plan to reform the English banking system set out in his 1816 *Proposals for an Economic and Secure Currency*. He made them his own in the third edition of the *Traité* :

The extraordinary circumstances that have occurred in England in respect to money . . . have given a decisive proof, that the mere want of a medium of exchange . . . is sufficient to support the value of a paper money destitute of security for its convertibility, provided it is limited in amount to the actual needs of circulation. Whence some English writers . . . have been led to conclude, that . . . it was possible to use, for that purpose, some substance less costly than the precious metals : paper, for instance, due attention being paid to keep the amount of the paper money within the needs of the circulation. The celebrated Ricardo has, with this object, proposed an ingenious plan, making the Bank or corporate body invested with the privilege of issuing the paper-money, liable to pay in bullion for its notes on demand. (Say 1817 : 555)

He repeated his approval in his 1819 notes to the French translation of the *Principles* (Say 1819b, 2 : 236-237). He justified his position by referring anew to the English experience and to the fact that, when the war against France was over, the inconvertible notes of the Bank of England were again at par. This appreciation of the notes, he stressed, was not caused by trust but by the fact that the quantity of circulating notes corresponded to the needs.

However, Say's approval faded away. The above quotation from the *Traité* no longer appeared in the fifth and sixth editions. Obviously Say — who, at the end of his life, wanted to stand apart from Ricardo — became increasingly sceptical and eventually accepted the common monetary wisdom of the time. In 1826, in the fifth edition of the *Traité*, he reconsidered the question. He maintained, it is true, that Ricardo's proposal was clever but specified that its implementation supposed 'a Government that could offer all the desirable guarantees, together with an independent bank' (Say 1826a : 513). While he was not explicit on this point, it is not difficult to imagine that in his eyes,

44. In the Bibliothèque Nationale de France in Paris, there is a 'Plan d'une nouvelle monnaie dans le genre de Ricardo' — 'Plan for a new money in Ricardo's style' — (manuscript 11 739 : 66-68 ; the reference is indicated by Jacoud 2010 : 29 n. 58 and translated in Say 2013 : 237-239 ; see also Jacoud 2013). This paper is going to be published in one of the forthcoming volumes of Say's *Œuvres complètes* (Paris : Économica). The manuscript is undated. It is not clear whether it is a re-elaboration of the plan Say sent to Ricardo, nor when it was rewritten.

these conditions were not fulfilled in France. He quoted Smith's celebrated phrase on the 'Daedalian wings of paper money' (1776 : 321) and eventually accepted Tooke's cautious attitude : even if the convertibility into coins is more expensive than the convertibility into bullion, it is safer and should therefore be preferred.

Central or free banking ?

The reaction of most French economists against paper money has been noted above. Their own ideas must be briefly stated at this point because the name of Ricardo was used during the controversies that raged between them about the best way to organize a monetary and banking system.

Basically, most liberal economists were of the opinion that money should be made of a commodity having a value of its own. In a traditional way, they thought that the choice of the commodity to act as money was a practical choice based on the physical properties of the good. The other forms of medium of exchange — bills of exchange or any paper that circulates through endorsement, bank notes, or the most modern form at that time : cheques — result from operations of credit and are not money as such. Bank notes, for example, are just a different and more developed form of bills of exchange, an evolution permitted by the creation of modern banking institutions. The banker substitutes his signature for that of the issuer of the bill, and himself issues another bill — his bank note — which, contrary to the original commercial paper, circulates without endorsement, does not entail any redemption date but is instead redeemable to the bearer on demand. Hence, obviously, the importance of the convertibility into money i.e., in specie or bullion.

This scheme was reassessed several times (see for example Charles Coquelin 1842, 1848, 1852a and b, 1859, or Michel Chevalier 1850, 1853) especially against the many projects that, during the century, aimed at reorganizing the monetary and banking system along the most diverse lines of thought. In this perspective, French liberals insisted on the fact that bank notes are not money. To state that notes replace money is 'a fatal doctrine . . . , the poisonous source of all wrong systems' (Coquelin 1848 : 46).

All these bonds and credit instruments are substitutes for money — Chevalier stressed —but none of them is money, and it is impossible

to deny their difference without important risks. This would be the same kind of mistake as mixing a portrait with the original or the shadow with the substance. (Chevalier 1853 : 216)

Along the same lines, they warned that bank notes should not be confused with paper money. The latter is an inconvertible paper issued by the State, generally through a bank granted with a monopoly of issue : ‘it is the creation of the political power . . . ; the bearer of paper money has no right to any exchange against specie’ (Courcelle-Seneuil 1853 : 316).

In this perspective, how was it possible to organize the monetary system in an efficient way ? Roughly speaking, discarding the idea of the establishment of paper money, two broad solutions were possible : a system with a central bank, i.e., a convertible but monopolized bank note — sometimes called paper money by its opponents — or free banking. The historical context in France favoured the debates : it witnessed the development of the Banque de France, created in 1800 and progressively transformed during the century into a monopolized institution with the privilege of issue on the entire territory.

At first sight, Ricardo’s writings — his 1816 Proposals and especially the 1824 *Plan for the Establishment of a National Bank* — together with his widely discussed assertion that the most perfect currency is made of paper, could be interpreted as supporting the first system. It was the opinion of most French liberal economists that Ricardo’s plans were adopted in Great Britain in 1844, even if there were some differences that they considered minor (Fonteyraud 1847 : xxvii-xxviii, Courcelle-Seneuil 1857 : 545-547). Some supporters of the Central bank system only criticized Ricardo for having limited the convertibility of notes to bullion alone. Alfred Sudre, for example, thought that this measure was intended to avoid runs, the depletion of the Bank of England’s gold reserves and the contraction of the level of activity, and asserted that it would be ineffective against these evils.

Finally, we must remember that the celebrated economist Ricardo had outlined a plan for a bank the notes of which would have been redeemed . . . in bullion This plan, rather unworthy of the reputation of its author, could only hinder the demands for reimbursement of small holders of banknotes — these mass panics called *runs* by our neighbours. But these panics have not recurred since half a century, and experience shows that the cause of the demands for precious metals that assail banks at the time of

commercial crises does not lie in the fears of the notes-holders but solely in the deterioration of the exchange and in the needs of the commercial world [*haut commerce*] for exportation. Now, the reimbursement in bullion at a fixed rate would not have any effect in this case, because the bankers and the tradesmen can export ingots as well as species. . . . Ricardo's *Bullion system* would be powerless to protect the reserves of the banks and to avoid a rise in the discount rate and the contraction of circulation, all measures taken by these institutions in time of crisis. (Sudre 1865 : 18-19)

Faced with Ricardo's authority, which they also respected, supporters of the free banking idea reacted in various but converging ways. Gustave du Puynode, who published a series of three papers on Ricardo (Puynode 1866) in the *Journal des Économistes*, again accused him of inconsistency : while advocating free trade everywhere, he was favouring monopoly in the banking sector.

Who has ever studied in a better way than him the questions of money and credit ? And after having stated so many profound and ingenious considerations on these questions, does he not end with the iniquitous and the impossible, with the monopoly of credit and the sole circulation of paper ? (Puynode 1865, I : 12)

In addition, Ricardo was accused of imagining 'that banks could arbitrarily decide on their issues without any need to adjust them to the demands of trade' (Puynode 1865, I : 12), i.e., of not understanding how strong the free banking approach is and how dangerous a National bank. Finally, he was accused — and this may be the source of all his mistakes — on confusing bank notes with paper money (Puynode 1865, II : 14) : he did not pay sufficient attention to the question of credit, and left it unsolved (Fonteyraud 1847 : xxviii-xxix).

In our opinion, the problem [the question of the 'science of credit'] slipped out of Ricardo's hands without having been solved, and this because of two distinct reasons. In the first place, he did not reach, in his skilful analyses, the very sources of the circulation ; — in the second place, he did not acknowledge the check and regulatory power that credit exercises on itself, so that he was led to seek aid and assistance from the State, and to see in illusory regulations an equilibrium that would naturally ensue from a regime of liberty. (Fonteyraud 1847 : xxix)

Finally, some authors tried to explain what Ricardo really meant by his assertion that the most perfect currency is made of paper. They interpreted it by referring to a basic idea of Ricardo's plan : the currency had to be economical.

A Bank has fulfilled all its useful functions when it has substituted paper in the circulation for gold ; when it has enabled us to carry on our commerce with a cheap currency, and to employ the valuable one which it supplants productively. (Ricardo 1822 : 233-234)

Ricardo added : 'provided it fulfils this object it is of little importance at what rate of interest it lends its money' (Ricardo 1822 : 234). He was speaking of 'a Bank' with a capital B, i.e., the Bank of England or its equivalent, any Central Bank in modern parlance. In the French translation, however, 'a bank' is written without the capital B, implicitly generalizing the assertion to all kinds of bank, and this may have been a source of confusion.

As a matter of fact, Chevalier noted, the development of notes brought about an important saving in the cost of circulation. But this saving, he stressed, was somewhat limited for a time, because people still needed specie whenever a bank note was of too high a denomination. The development of commercial accounting, clearing houses, cheques and bank transfers, while greatly favouring economic activity, allowed further reduction in the metallic circulation (see also Puynode 1865, II : 15 & sq), thus fulfilling Ricardo's prediction. At that time, at least in Great Britain and the United States, Chevalier insisted, the quantity of specie and even of banknotes was very small compared to the mass of other instruments used for the same purpose, and this is the real meaning of Ricardo's famous assertion.

It is in this sense, and not literally and in an absolute meaning, that Ricardo's expression — so widely discussed but distorted because of exaggeration — must be understood : the most perfect state of money is to be made of paper. (Chevalier 1853 : 216)

But while admitting that a saving in the cost of circulation is not to be neglected, and disregarding the fact that Ricardo was speaking of a Central Bank, Coquelin disapproved of Ricardo's assertion. In his view, the function of a bank is not primarily to issue notes in that purpose, but to develop credit, i.e., to advance money to entrepreneurs and to incite them, simply by their presence and function, to grant credit to each other (1848 : 316).

At this point, of course, the positions could not be reconciled. ‘Our utopia’, Fonteyraud wrote, would be to see a strong monetary circulation based on precious metals and on credit made by free banks whose accounts and situation are permanently in public view; a flexible and secure circulation that would give life to economic activity and resist, because of its flexibility, the most important shocks; a ‘democracy of credit’ replacing the oligarchy that governs the stock exchanges. In a word : ‘by dint of freedom and publicity, we would join the interest of the banks with that of the population’ (Fonteyraud 1847 : xxxv). With this parable as a conclusion and a warning :

A nice legend ... says that a saint, who took refuge in a poor cottage in Brittany, took off his wet coat ... and, not finding any coat-peg, hung it on a sunbeam. The circulation of paper such as the alleged economists of the day would like it, exactly represents this sunbeam : and this is, we think, a far too fragile support to entrust to its care the wealth of a whole generation. Freedom alone has foundations wide enough to resist shocks, and were Ricardo alive now ... , he would not hesitate to seek in freedom, like us, the true solution of credit. (Fonteyraud 1847 : xxxvi-xxxvii)

7 Say’s law and crises

One point is expected a priori to be unproblematic : the question of the ‘loi des débouchés’ — Say’s law. We know that Ricardo accepted this law, and the majority of French economists who dissented on this point criticized primarily Say and his followers, not Ricardo. However, things did not happen exactly in this way, and there are some marked differences between Say and Ricardo on this topic as well. This is all the more interesting since, in dealing with this point, we will again meet the question of money.

Is Say inconsequent ?

Acknowledging the importance of the chapter on ‘débouchés’ in Say’s *Traité d’économie politique*, Ricardo wrote, in his preface to the *Principles*, that ‘it contains ... some very important principles, which I believe were first explained by this distinguished writer’ (1817-1821 : 7). Further on in the book, he explained his opinion :

M. Say has, however, most satisfactorily shewn, that there is no amount of capital which may not be employed in a country, because demand is only limited by production. No man produces, but with a view to consume or sell, and he never sells, but with an intention to purchase some other commodity, which may be immediately useful to him, or may contribute to future production. By producing, then, he necessarily becomes either the consumer of his own goods, or the purchaser and consumer of the goods of some other person. (1817-1821 : 290)

At the same time, however, he criticized the way in which Say analyzed the effects of the accumulation of capital on the evolution of profits. Later, when reading Say's letters to Malthus, he thought that Say 'has said a great deal for the right cause, but not all what could be said' (Ricardo to Malthus, 4 September 1820, in 1951-73, VIII : 227). It is therefore questionable to suppose that Say and Ricardo had the same conception of the law of markets (Forget 2003, Gehrke and Kurz 2003). In the discussions in this field, it is legitimate to ask to what extent the critical remarks of Ricardo influenced Say's thought.

When Say examined the determination of the interest rate, he asserted that 'the greater the abundance of capital in proportion to the extent of its employment, the lower the interest on the capital that is lent' (1814 : 765). He also specified that only the available capital — still in circulation and not yet invested — influences the rate of interest. To put it briefly, he maintained that the rate of interest is determined on the loanable funds market. Ricardo thought this proposition to be incompatible with the law of markets. 'If capital to any extent can be employed by a country', he wrote, 'how can it be said abundant, compared with the extent of employment for it?' (1817-1821 : 290). In a note to the *Principles*,⁴⁵ Say seemed at first to accept the criticism :

From the principle established in my *Traité*, M. Ricardo infers here a perfectly correct consequence. He explains satisfactorily the decrease in the capital-profits, or interest, with the increase in capital

45. There is a problem of interpretation here. Hollander (2005 : 65) stresses the fact that Say did not indicate precisely where his note was to be placed. In the 1819 edition, the publisher placed the note in such a way that it seems to refer to the law of markets. In a more recent edition, however (Ricardo 1992 : 303), the note seems to refer to Smith's analysis of the decline of profits in Holland. The principle to which Say is thought to have alluded would have been the idea that a rise in wages reduces profits. The first interpretation seems more adequate. But the fact that Say left unchanged the passage of the *Traité* where he analyzes the influence of the abundance of available capital on the rate of interest is an argument in favour of the second.

while the occasions to use it multiplies with it. It is also certain that I was wrong when I said that capital can be more or less abundant compared with its employments because I proved elsewhere that these employments multiply in proportion to the abundance of capital. (Say 1819b, 2 : 107)

Did Say change his mind after this self-criticism? Surprisingly, he did not. Moreover, the passage criticized by Ricardo is one of the few that remained unchanged throughout the various editions of the *Traité*. Why? Two reasons may explain this fact.

A question of definition

The first reason has something to do with the subject of the analysis. In Chapter XXI of the *Principles* to which this note is appended, Ricardo dealt with the ‘Effects of Accumulation on Profits and Interest’. In his opinion, the accumulation of capital only provokes a lasting fall in profits if wages rise, and he criticized Smith’s assertion that the fall in profits can be due to capital competition resulting from accumulation :

The increase of stock, which raises wages, tends to lower profit. When the stocks of many rich merchants are turned into the same trade, their mutual competition naturally tends to lower its profit : and when there is a like increase of stock in all the different trades carried on in the same society, the same competition must produce the same effect in them all. (Smith, 1776 : 105)

For Ricardo, the evolution of profits determines that of interest. If demand is only limited by production, competition in the goods market cannot explain the fall in profits when accumulation increases. He did not understand how Say could speak of an abundance of capital compared with its employments while asserting that ‘a product is no sooner created than, from that very moment, it affords a market for other products to the full extent of its own value’ (Say 1814 : 250).

In Say’s opinion, Smith and Ricardo, under the term ‘profit’, confused ‘the income that the entrepreneur gets from his industry, his talent, and the income coming from his instrument, his capital’ (1826a : 691). The nature and evolution of these two kinds of income are different. When Say referred to capital competition, he examined how the interest rate is determined. The capital he

referred to is the available capital — the loanable funds. The interest rate is determined by supply and demand for these funds. When supply increases — when a greater amount of capital is available — the rate of interest decreases. This evolution does not imply that capital accumulation entails greater competition in the goods market. In Say's view, there is no conflict between the law of market and the proposition that an increase in the capital available provokes a fall in the interest rate. On this point, Ricardo's criticism did not incite him to change the view he advanced in the second edition of the *Traité*. But he had to make his point clearer.

The nature of adjustment

There is also a second reason why Say did not change his mind. In the first edition of the *Traité*, Say maintained that 'when a nation has too many products of one kind, the way to sell them is to create products of another kind' (Say 1803 : 246). It is the lack of counterpart that explains the glut in some markets.

It is because the production of the *lacking commodities* suffered that the *superabundant commodities* cannot be sold and their value falls. To use a more hackneyed phrase, many people have bought less, because they have earned less; and they have earned less, either because they have had difficulty in the employment of their means of production, or because these means have themselves been deficient. (Say 1814 : 252-3)

He explained that 'when crops are deficient, *manufactured products* do not sell well, because part of these *manufactured products* is bought with the product of crops' (Say 1814 : 1104). On this point, it seems that Say's analysis conflicted with that of Ricardo, who explained that crises were due to 'sudden changes in the channels of trade' and the mistakes of capitalists when choosing the activities in which to invest their capital.

Say subsequently reformulated his opinion and wrote that 'one can only speak of a complete production when all the services needed for it are paid with the value of the product' (1827, in 1833 : 309-10). This new formulation of the law of market has been considered as inadequate (Baumol 1977 : 159). But the problem is real. It is perfectly possible that entrepreneurs made wrong

choices and that their production cannot be sold at a high enough price to cover their costs. The supply of such goods cannot finance the purchases and there is no reason to think that, in the budget constraint of the firms, the products must be valued according to their costs of production. Say always accepted that an unfortunate allocation of capital could provoke an overproduction of some commodities and, as a consequence, some disequilibrium in other markets. The law of markets does not deny the possibility of such crises : it dismisses the idea that economic growth cannot be sustainable because of insufficient consumption.

Ricardo and Say agreed on this point. But what is at issue, and a subject of controversy between them, is the process of adjustment. While Ricardo suggested that equilibrium is restored through a reallocation of the means of production, Say's opinion was that the readjustment necessitates an increase in the production of the commodities in excess of demand. Say wrote to Malthus :

I uphold that, whenever there is a glut, a superabundance of some kinds of commodities, it is because some other commodities are not produced in amounts sufficient to be exchanged with the former ; if their producers could produce more . . . then the former could find the sales they are lacking. (Say 1820 : 227)

Ricardo disagreed :

In one point I think he [Say] falls into the same error as Torrens in his article in the *Edinburgh Review*. They both appear to think that stagnation in commerce arises from a counter set of commodities not being produced with which the commodities on sale are to be purchased, and they seem to infer that the evil will not be removed till such other commodities are in the market. But surely the true remedy is in regulating future production, — if there is a glut of one commodity produce less of that and more of another but do not let the glut continue till the purchaser chuses to produce the commodity which is more wanted. (Ricardo to Malthus, 4 September 1820, in 1951-73, t. 8 : 227-228)

However, while Say proposed the development of the activities where supply was falling short, he did not explicitly exclude a transfer of means of production from the branches where they are superabundant to those where they are lacking. But there are obstacles. Some of them are purely political or pertain to a wrong economic policy :

Major causes . . . like natural or political disasters, the greediness or incompetence of Governments, necessarily maintain somewhere this shortage that creates a glut elsewhere. Whenever this political disease stops, the means of production go where production is insufficient ; and, in this way, they favour the progress of production in all other branches. A kind of production would seldom be in excess, and its product seldom depreciated if they all would enjoy an entire liberty. (Say 1826a : 253)

The analysis of the effects of taxation raised a similar debate. Say thought that ‘a tax on a commodity does not raise its price by the whole amount of the tax’ (1814 : 1018) because, if that were the case, this would mean that the demand for it remains the same — which is impossible because any increase in the price of a commodity reduces the number of buyers. Ricardo, on the contrary, asserted that the price of the commodity would rise by the amount of the tax because if the price of the commodity ‘did not rise by a sum equal to the tax, it would not give the same profit to the producer which he had before, and he would remove his capital to some other employment’ (Ricardo 1817-1821 : 243). But Say rejected this hypothesis and, on this point, his arguments are similar to those advanced by Sismondi (see above) when he objected to the process of gravitation :

. . . M. Ricardo, too generally and without restriction, admits that capital and industry leave a production that does not generate profits equal to those of other trades. In almost all kinds of industry, there are stocks so completely invested that it is impossible to withdraw them from their employment without considerably damaging their value. Talents and industrial labour themselves do not change object without serious disadvantages. People prefer working in an activity that is less remunerative because they would incur greater losses if they changed ; and this effect lasts sometimes for half a century. (Say 1819b, 2 : 3)

And he added :

It is impossible to neglect the circumstances that influence so powerfully the results ; there is a great risk of being mistaken when one’s attention is only focused on some great principles, the modifications they receive from some other secondary considerations being neglected. Circumstances act following principles that are equally undisputable. (Say 1819b, 2 : 3-4)

In conclusion, like Sismondi, Say disagreed with Ricardo on the pertinence of a seemingly ‘empirical’ hypothesis. If the structure of demand changes, it was Ricardo’s opinion that the allocation of the existing capital would be modified in consequence. By contrast, in Say’s view, the allocation would not be modified and the adjustment would only take place through new investment. Of course Say’s judgment — like that of Sismondi — in part reflects an incomplete understanding of Ricardo’s position, as already noted above.

Money and crises

From the first edition of the *Traité* onwards, Say stressed the beneficial effects of the active circulation of money and commodities : the more rapidly a commodity is produced and sold, the more swiftly the stock immobilized can be devoted to a new productive employment. There is no opposition here between money and goods : both ready cash and stored commodities are idle capital. In order to lose as little as possible on the interest on the invested capital, entrepreneurs accelerate the turnover of their capital. Interest influences the velocity of the circulation of money. The latter is slow in periods of fear and uncertainty ; it accelerates in the event of inflation.

When money . . . depreciates, people try to exchange it, to get rid of it by all means. This is the reason why there was such prodigious circulation when the discredit of the assignats was increasing. Everyone endeavoured to find an employment for paper money of which the value was vanishing every hour : one only received it to employ it immediately ; it seemed to be burning everyone who touched it. (Say 1826a : 268)

This implicitly acknowledges that money can be hoarded. In his *Lettres à Malthus*, Say explicitly admitted this point. He criticized Ricardo for his assertion that ‘all saved capital is always employed On the contrary, many savings cannot be placed during hard times’ (Say 1820 : 272). Money is hoarded during a crisis and, in this case, a general glut can occur : but hoarding is a consequence, not a cause, of the crisis.

In 1826, Say analyzed the commercial crisis in England in a paper published in the *Revue Encyclopédique* : ‘De la crise commerciale en Angleterre’. Against

Sismondi, he developed a monetary theory of crises.⁴⁶ He explained that an excessive issue of banknotes greatly encouraged speculation because anybody who wanted to create or develop a business could obtain the required amount of money.

What happened ? The abundance of the medium of exchange (coins and banknotes) caused its depreciation with respect to bullion ; and from the moment a gold coin was no longer equal in value to an ingot of the same weight, people ran to the bank to convert banknotes into gold coins, and gold coins into ingots As a consequence . . . the banks, obliged to convert their banknotes and being incapable of issuing new ones, could no longer discount the bills of exchange presented by entrepreneurs Obligated to pay their liabilities, and having no real capital, entrepreneurs went bankrupt after having turned everything into cash and sold their commodities for next to nothing. (1826b : 241)

What is puzzling is that Say argued that the commercial crisis could be explained according to Ricardo's principles concerning money, although Ricardo never stated a monetary theory of crises in this way. Say probably wanted to assert that his analysis followed logically from Ricardo's theory of money, and especially from the idea that the quantity of banknotes 'is necessarily limited by the needs of circulation . . . [and cannot] without danger exceed this amount' (1826b : 241).

Sismondi's critique : back to the adjustment process

At first sight, it seems paradoxical that Ricardo could influence Sismondi's theory of crises, since their opinions on that topic are supposed to be radically different. But the question deserves closer examination.

As early as 1815, in his entry 'Political Economy' of the *Edinburgh Encyclopaedia*, Sismondi asserted that

. . . surely none will maintain that it can be advantageous to substitute a machine for a man, if this man cannot find work elsewhere ; or that it is not better to have the population composed of citizens

46. Say repeated this analysis in his paper 'Économie politique' (1826b : 251) published in Guizot's *Encyclopédie progressive*, and in his *Cours complet* (1828-29, 1 : 474).

than of steam-engines, even though the cotton cloth of the first should be a little dearer than that of the second. (1815 : 76)

In his *Nouveaux principes d'économie politique*, he developed this thesis, basing his arguments on four ideas.

(i) An increase in production leads to a general glut whenever it is not caused by an increase in income and demand but by the accumulation of capital (Sismondi 1827, 2 : 398).

(ii) The knowledge that entrepreneurs obtain of the market for their product, through prices, is too patchy to guide their decisions in an efficient way.

Someone who lives from commercial wealth depends on a metaphysical public, on an invisible and unknown power ; he must satisfy its needs, anticipate its tastes . . . ; he must guess without it speaking, and he cannot allow himself to misunderstand it without risking his subsistence because of a miscalculation. (Sismondi 1819, 1 : 301)

(iii) The mobility of the means of production is low : 'Workers can seldom do another job Fixed capital cannot be employed for another use Finally the manufacturer himself needs his industry to get his living, and he does not abandon it easily' (Sismondi 1819, 1 : 308-9).

(iv) The introduction of new techniques of production does not necessarily have a positive result, since it can destroy employment.

Whenever the discovery cannot increase the number of consumers, while serving them more cheaply, either because they are all already provided with the commodity or because they do not need it, whatever its price, the discovery becomes a calamity. (Sismondi 1819, 1 : 321)

Sismondi answered Torrens and Say, but he did not comment on the chapters of Ricardo's *Principles* that analyzed the phenomena he was trying to understand : the consequences of a misallocation of resources and of the introduction of machines. However, he reported three times (1824 : 264-298 ; 1827 : 408-458 ; 1837 : 81-91) the discussions he had with Ricardo when the latter visited him in Geneva during his journey to the continent in 1822.

They assumed a closed economy with three sectors : agriculture (wheat), manufactured necessities and luxury goods. They also typically abstracted from

numéraire and thus from the role of money in crises. The model is characterized by the fact that consumption of commodities produced in the first two sectors cannot be increased. They further assumed a discovery that allows a 50 per cent increase in the agricultural product. The consumption of wheat being fixed, two situations can be envisaged : in the first, the number of workers in agriculture is reduced ; in the second, nobody is sacked but wages decrease. In both cases, the demand of the agricultural workers for manufactured products diminishes, which causes a diminution of the level of employment and output in that sector. The landowner, however, has a surplus in wheat that he wishes to exchange for luxury goods. For Ricardo, the solution lies in the transfer of some means of production to the third sector : not only will the workers who had become redundant in agriculture be employed there, but it will also be possible to employ new workers. Sismondi stressed that this solution was difficult to implement. It would be necessary to extend the factory that produces luxury goods or build a new one, train the workers to their new jobs, build machines, etc. He concluded :

When a discovery in the productive powers of labour is applied to agriculture without having been required by a previous demand for labour ; when, moreover, a single man is the owner and all others supply their labour to get their living, a single one benefits from the discovery suggested by the progress of sciences ; stocks, materials, men, industry, all are lacking to put the rest of society in equilibrium with the too rapid pace of agriculture. (Sismondi 1824 : 279)

Ricardo's influence is manifest but very specific. Sismondi accepted neither his opinions nor the law of markets. But using a scheme of Ricardian flavour, he tried to show how the introduction of machines can reduce employment, and — as before in his critique of the hypothesis of the mobility of the factors of production — stressed the complexity of the adjustment process that would be necessary to reach a new equilibrium.

8 Conclusion

Even though this chapter has been limited to the first three quarters of the nineteenth century and to some main topics which generated lively debates (method, value and wealth, rent, money and banking, Say's law of markets and

crises), it shows how the reception of the works and ideas of Ricardo among French-speaking economists was complex. Ricardo the man, no doubt, was highly appreciated and respected, and even admired for the financial skills that allowed him to build up a sizeable fortune. His writings, however, were received in a theoretical context marked by Turgot's writings and a widely-accepted French adaptation and development of Adam Smith's *Wealth of Nations* by Jean-Baptiste Say which, among other things, emphasised a theory of value and distribution based on supply and demand.

At the beginning of the nineteenth century, the French approach to political economy was also in a sense the result of severe traumas that had affected the country in the more or less recent past : the bankruptcy of John Law's system at the beginning of the eighteenth century, for example, but first and foremost the French Revolution with its erratic economic policy and the dramatic monetary episode of the assignats. It is therefore not surprising, in this context, to see most of the French economists mistrusting abstract principles and asking for concrete and practical reasoning — thus paving the way for a suspicious and even hostile reception of Ricardo's writings. If we add their selective reading of the *Principles*, according to their immediate preoccupations, and the poor translation of some strategic chapters — like the chapter on rent — we can understand why no French economist could be considered as a Ricardian, except perhaps Pellegrino Rossi, and then with qualifications. The first economic crises of the industrial age and the appalling development of pauperism also generated deep mistrust of what was called 'English' political economy, of which Ricardo was the main representative.

However, this does not mean that Ricardo was not influential in France. Quite the contrary. But his legacy was fragmented, and French-speaking economists only retained the aspects of Ricardo's doctrines that were of interest to them, discarding or criticizing the rest.

One of the best examples is certainly Ricardo's theory of rent : it was accepted by some liberal writers like Rossi, Cherbuliez and Molinari and inspired some doctrines that other writers (Léon Walras for example) made their own and developed afterwards. Other examples can also be advanced. There is no doubt that Cournot was positively struck by Ricardo's abstract way of reasoning, which might have strengthened his project to develop a mathematical

theory of market forms. Rossi also, while rejecting or neglecting some important aspects of Ricardo's doctrines, developed some interesting points out of the *Principles* : his concept of 'rational economics' was subsequently taken up and developed by Léon Walras, and his rehabilitation of the opposition between use value and exchangeable value — questioned by most of the other French economists — was probably a source of inspiration for Dupuit.

But Ricardo was also influential in another, more diffuse way. His writings obliged some authors to react to and discuss his ideas, thereby also driving them to clarify and develop their own theories. This was obviously the case for Say and Sismondi — who had furthermore the opportunity to discuss directly with the author of the *Principles*.

Last but not least, the French reception of Ricardo's ideas and doctrines was of the utmost importance on the continent. As time went by, and for the major part of the century, Say and the French economists exerted a great intellectual influence abroad — first through their writings and then, from the 1840s on, through the Société d'Économie Politique and the *Journal des Économistes*. In this way, they also shaped, for a time, the reception of Ricardo on the continent, as the following chapters show.

Appendix 1.

Publications of the works of David Ricardo in the French language during the nineteenth century

(1810). 'Le haut prix de l'or et de l'argent, considéré comme une preuve de la dépréciation des billets de banque. Troisième édition revue et augmentée.' *Gazette nationale, ou Le moniteur universel*, 24, 25 et 26 September : 1050-1052, 1054-1056, 1058-1060. — [Translation of the third edition of *The High Price of Bullion, a Proof of the Depreciation of Bank Notes*.]

(1817). 'On the Principles, etc. C'est-à-dire, Des principes de l'économie politique et des taxes ; par D. Ricardo. Londres, 1817. Un vol. in-8° de 600 pages. (Premier extrait.)' *Bibliothèque Universelle. Littérature*. VI(3), November : 207-215. — [Translation of some excerpts from Chapter I of the *Principles*.]

(1818). 'On the Principles, etc. C'est-à-dire, Des principes de l'économie politique et des taxes ; par D. Ricardo. Londres, 1817. Un vol. in-8° de 600 pages. (Deuxième extrait.)' *Bibliothèque Universelle. Littérature*. VII(1), January : 1-11. — [Translation of some excerpts from Chapter I of the *Principles* (continued).]

(1819). *Des Principes de l'économie politique et de l'impôt, par David Ricardo, traduit de l'anglais par F.-S. Constancio, avec des notes explicatives et critiques par J.-B. Say.* Paris : J.-P. Aillaud. 2 vols.

(1833). 'Correspondence with Ricardo', in Jean-Baptiste Say, *Mélanges et correspondance d'économie politique, ouvrage posthume ... publié par Charles Comte.* Paris : Chamerot, pp. 92-136.

(1835). *Des Principes de l'économie politique et de l'impôt, par David Ricardo. Traduit de l'anglais par F.-S. Constancio, D. M., etc., avec des notes explicatives et critiques par J.-B. Say Deuxième édition, revue, corrigée et augmentée d'une notice sur la vie et les écrits de Ricardo, publiée par sa famille.* Paris : J.-P. Aillaud. 2 vols. — [Misleadingly indicated as 'deuxième édition' (second edition).]

(1835). *Des Principes de l'économie politique et de l'impôt, par David Ricardo. Traduit de l'anglais par F.-S. Constancio, D. M., etc., avec des notes explicatives et critiques par J.-B. Say Deuxième édition, revue, corrigée et augmentée d'une notice sur la vie et les écrits de Ricardo, publiée par sa famille.* Bruxelles : H. Dumont. 1 vol. — [Misleadingly indicated as 'troisième édition' (third edition).]

(1847). *Œuvres complètes de David Ricardo, traduites en français, par MM. Constancio et Alc. Fonteyraud, augmentées de notes de Jean-Baptiste Say, de nouvelles notes et de commentaires par Malthus, Sismondi, MM. Rossi, Blanqui, etc., et précédées d'une notice par M. Alcide Fonteyraud.* Paris : Guillaumin. — [Volume XIII of the Collection des principaux économistes.]

(1848). Correspondence with Ricardo, in Jean-Baptiste Say, *Œuvres diverses.* Paris : Guillaumin, pp. 406-429.

(1865). (a) 'Enquête sur les lois qui limitent le taux d'intérêt. Déposition de M. Ricardo. Séance du 30 avril 1818'. (b) 'Enquête sur la reprise des paiements en espèces. Déposition de M. Ricardo. Séance du jeudi 4 mars 1819'. (c) 'Deuxième déposition de M. Ricardo. Séance du vendredi 19 mars 1819'. In Couillet, Paul-Jacques and Clément Juglar (eds). *Extraits des enquêtes parlementaires anglaises sur les questions de banque, de circulation monétaire et de crédit. Enquêtes de 1810, 1811, 1819, 1841. Bullion report. Intérêt de l'argent. Paiements en espèces.* Paris : Furne & Guillaumin, pp. 69-76, 188-205, 205-216.

(1882). *Œuvres complètes de David Ricardo, trad. en français par MM. Constancio et Alc. Fonteyraud; augm. de notes de J.-B. Say, Malthus, Sismondi... [et al.]; précédées d'une notice biographique sur la vie et les travaux de l'auteur par M. Alcide Fonteyraud; et d'une préface par M. Maurice Block.* Paris : Guillaumin. (Collection des principaux économistes)

(1889). *Ricardo : rentes, salaires et profits*, éd. par Paul Beauregard; trad. revue par M. [Charles] Formentin. Paris : Guillaumin. Petite bibliothèque économique française et étrangère. — [A selection of 8 chapters from the Principles, under 4 headings : Value (chapters I and IV), Rent (chapters II, XXIV and XXXII), Wages (chapter V) and Profits (chapters VI and XXI). The Constâncio-Fonteyraud translation is revised by Formentin.]

Appendix 2.

Publications of the works of David Ricardo in the French language during the twentieth century

(1933-1934). *Principes de l'économie politique et de l'impôt. Avec introduction, notes et appendices de E. C. K. Gonner. Traduit de l'anglais par C. Debyser*. Paris : A. Costes. 2 vol. — [This translation was made on the Gonner 1891 English edition of the Principles. It borrowed in fact a lot from the former translations, even reproducing some of their mistranslations and errors.]

(1966). *Œuvres complètes de David Ricardo, trad. en français par MM. Constancio et Alc. Fonteyraud; augm. des notes de Jean-Baptiste Say; de nouvelles notes et de commentaires par Malthus, Sismondi, MM. Rossi, Blanqui, etc.; et précédées d'une notice biographique sur la vie et les travaux de l'auteur par M. Alcide Fonteyraud*. Osnabrück : Otto Zeller. (Collection des principaux économistes, vol. 13.) — [This is the fac-simile of the 1847 edition.]

(1971). *Principes de l'économie politique et de l'impôt. Préface de Christian Schmidt*. Paris : Calmann-Lévy. — [Republication of the 1933-4 Debyser translation in the series 'Perspectives de l'économie. Les Fondateurs de l'économie'.]

(1971). *Des Principes de l'économie politique et de l'impôt, introd. de Pierre Dockès; trad. de P. Constancio et A. [Alcide] Fonteyraud*. Paris : Flammarion. — [Republication of the 1847 Constâncio-Fonteyraud translation in the series 'Sciences'. Republished in 1977 and afterwards in the series 'Champs'.]

(1973). *Croissance et progrès? textes [de] Jean-Baptiste Say, David Ricardo, John Stuart Mill, Karl Marx... [et al.]; réunis et présentés par J.-Marie Hervé*. Tours : Mame. — [Some texts by Ricardo, included in a book of readings.]

(1988). *Essai sur l'influence d'un bas prix du blé sur les profits, [trad.,] présentation et comment. de M.-F. Jarret et F.-R. Mahieu*. Paris : Economica.

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1810, of the fourth edition of *The High Price of Bullion, a Proof of the Depreciation of Bank Notes, 1811*, and of the Reply to M. Bosanquet's Practical Observations on the Report of the Bullion Committee, 1811.]

(1992). *Des principes de l'économie politique et de l'impôt, traduction par Cécile Soudan en collaboration avec B. Delmas, T. Demals, F.-R. Mahieu... [et al.]; présentation de François-Régis Mahieu*. Paris : Flammarion. (Classiques de l'économie politique.)

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