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**Equilibrium, from Germain
Garnier to the French Liberals**

The shaping of a concept

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Equilibrium, from Germain Garnier to the French Liberals

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Résumé

Cet article montre que c'est à un physiocrate français, Germain Garnier (1754-1821), que l'on doit l'apparition du mot "équilibre" dans les traductions françaises de la *Richesse des nations* de Smith. En anglais, le texte ne contenait qu'une seule occurrence non conceptuelle du mot, qui était encore assez nouveau en économie à l'époque. Mais à travers sa traduction de l'ouvrage de Smith, Garnier impose une interprétation de la *Richesse des nations* en termes d'équilibre entre l'offre et la demande, de loi d'équilibre et d'état d'équilibre. Pendant près de 200 ans, sa traduction est restée la seule version française disponible de cet ouvrage. L'appareil critique associé par Garnier à sa traduction a été sujet à louanges, et fut retraduit dans de nombreuses langues, dont l'anglais. Cet appareil critique est reconnu comme un prisme majeur à travers lequel l'Europe et les États-Unis ont lu Adam Smith.

Mots clefs : Équilibre, Adam Smith, Germain Garnier, Physiocratie, Traduction

Abstract

This paper shows that a French physiocrat, Germain Garnier (1754-1821), is responsible for the word "équilibre" (equilibrium) appearing in French translations of Smith's *Wealth of Nations*. The English original contained only one not conceptual instance of the word, and the term was still quite new in economics at the time. But through his translation of Smith's book, Garnier imposes an interpretation of *Wealth of Nations* in terms of equilibrium between supply and demand, the law of equilibrium, and the state of equilibrium. His translation was the only available French version for almost 200 years. His commentaries were highly praised and retranslated into many languages, including English. They are known for being a major prism through which Europe and the United States read Adam Smith.

Keywords : Equilibrium, Adam Smith, Germain Garnier, Physiocracy, Translation

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Introduction

A forgotten French physiocrat, Germain Garnier (1754-1821), is responsible for the appearance of the word "équilibre" (equilibrium) in French translations of Smith's *Wealth of Nations*. Nowadays one still can find authors who talk about Smith's notion of equilibrium², but I argue that such a vocabulary is the result of a long process of extrapolation from the text of *The Wealth of Nations*—in which the vocabulary was built hand in hand with the concept. In Smith's masterpiece, the English word "equilibrium" appears only once, and is not used in any technical sense but as a metaphor for the balance of trade. It is Garnier who imposes an interpretation of WN in terms of equilibrium between supply and demand, the law of equilibrium, and the state of equilibrium through his translation of and commentary on Smith's masterpiece.

Whereas "equilibrium" only appears once in WN, in Garnier's translation, the French word "équilibre" appears twenty-seven times—7 occurrences in the text itself and 20 occurrences in the critical apparatus of the 1822 edition.³ The text was first published in 1802, with a preface and commentaries by the translator. He then modified the latter, and the translation was republished in 1822. It is this translation that spread throughout Europe, read in French—which was the language of reference at the time, thanks to which non-English speakers could access Adam Smith's work—and it served as the basis for the translation of *The Wealth of Nations* into even more languages.⁴ Garnier's work immediately took precedence over all previous French translations—notably Roucher (1790) and Blavet (1778) (Dellemotte, 2013b). None of these used the term "équilibre": Garnier was the first to do so.

It was not until Paulette Taieb's new translation in 1995, more than 190 years later, that another translation was made available to the French-speaking reader that replaced Garnier. In other words, everyone who read the *Wealth of Nations* in French-speaking countries saw Smith through the prism of Garnier. Moreover, the reading guide to Smith that Garnier provided in his commentaries

survived in all French editions to mid-century; and, translated into English, in more than thirty editions of the text from 1805 to 1869. [...] From this, we might reasonably infer that Garnier's views on Smith's narrative strategy would have been, for at least two-thirds of the nineteenth century, those most commonly encountered by the average reader, not only in Britain and America, but also in most of Continental Europe. (Tribe, 2015)

Garnier's editions of WN are thus a prism that deserves to be scrutinized in order to understand an important element in the reception and spread of "Smithean" ideas. My contribution follows Keith Tribe's (2015) attempt to detach Smith's text from what its reception has made of it. Germain Garnier's translation has not been studied much, and the sources on Garnier's life are limited⁵. Allix (1912), elaborates on Garnier's will to reconcile Smith and physiocracy on the question of value. Breton

² "[Smith's] vision of transient growth from invention and capital accumulation, which is brought to an equilibrium end with a low rate of profit and a high total of land rent, is isomorphic with the model of Ricardo, Malthus and Marx." (Samuelson, 1977, 42, my emphasis) Other examples can be found in Cartelier (1991), De Vroey (1995), Hill (2001).

³ This includes all the forms of the term "équilibre", i.e., as a noun, as a verb, conjugated or not.

⁴ See Carpenter (2002) and Cardoso (2013).

⁵ For short biographies, see also Dacier (1822), Renaudin (1891), and "Germain Garnier" in the *Dictionnaire des parlementaires français* (Anonymous, 1891).

(1990) shows that Garnier is not only a translator, but also a thinker; he details Garnier's evolution from physiocracy to his version of Smith. So does Steiner (1995), who explains the death of physiocracy through Garnier's resistance to Ricardian theories—among others. Staum (1996) dedicate three pages to Garnier, and in particular his physiocratic position on fiscal policy. Dellemotte (2013a; 2013b) digs into Garnier's mistranslation of "self-love" into "égoïsme", which means selfishness (Dellemotte, 2013b). But it has not been noticed that it is Garnier who introduced into WN the notions of equilibrium between supply and demand, of the state of equilibrium, and the law of equilibrium⁶.

Now, first things first. The only occurrence of the term "equilibrium" in *The Wealth of Nations* is the following:

Nothing, however, can be more absurd than this whole doctrine of the balance of trade (...). When two places trade with one another, this doctrine supposes that, *if the balance be even*, neither of them either loses or gains; but *if it leans in any degree to one side*, that one of them loses, and the other gains in proportion to its declension from the exact equilibrium. (Smith, 1979, IV.iii.c.2, 489, *my emphasis*)

Smith uses the term "equilibrium" within a metaphor that assimilates trade and that apparatus for weighing we call a "balance". "Equilibrium" is here to describe the state reached by this apparatus, which is said to be even or to *lean to one side* – the latter expression indeed calls forth the image of a scale's plates. In other words, Smith's solitary use of the word "equilibrium" in the *Wealth of Nations* is not conceptual but metaphorical. However, the twenty-six other appearances of the term "équilibre" in the French translation suggest the contrary.

In this article, I will show how Garnier's use of the term "équilibre" shaped the interpretation of *The Wealth of Nations*, and thus highlight Garnier's role in the French transformation of Smithean thought.

First, I will explain that Garnier's purpose is to improve Smith's work by his commentaries. The purpose of his translation is less clear, but I will demonstrate that Garnier's physiocratic background can explain the presence of the word "équilibre" in his version of WN.

I will then compare systematically the original and the translation. Garnier mostly translates a very rare meaning of "balance" as "équilibre": when the English word "balance" means that some resources (labour, capital) are shared the way they should be (across the territory, among various people, etc.). Hence, there is one precise meaning of "équilibre" in the core of Garnier's version of Smith's text.

But in the critical apparatus, "équilibre" takes a different meaning. Garnier keeps the same word but changes its meaning in order to interpret Smith in terms of "équilibre" between supply and demand, of "la loi d'équilibre" and of "l'état d'équilibre". Between the first (1802) and the second edition (1822), Garnier strengthens his interpretations, and he imposes a binary notion of "équilibre"—which does not come from his contemporaries.

The last part of the paper will question the consequences of Garnier's work, in particular its influence on the pre-Walrasian French liberals. Due to Garnier's action, the word "équilibre" appears in the *Richesse des Nations* (WN's French title) as a conspicuous term, at places where there was nothing worth noticing in Smith. The French liberals have picked up on this word. Yet, they use it in a messy way, without defining it. They content themselves with sometimes tracing it back to Adam Smith—

⁶ In *Theory of Moral Sentiments* (Smith, 1976), the word "equilibrium" only appears once, about passions. It is the same in the French translations (Smith, 1798; 1860).

i.e., to Garnier's translation. Moreover, the binary vision of "équilibre" that comes from Garnier can also be found under the French liberals' pen, and it opened the way to analogies between economics and physics. My paper is then also a contribution to a pre-Walrasian history of equilibrium.

Germain Garnier as a translator

Germain Garnier wanted to improve Smith's theory through his editorial work and his writings. To him, this meant emphasizing WN's deductive reasonings, reorganizing the treatise, eliminating Smith's historical digressions, and sometimes even departing from the master's ideas. He does not say much about his vision of translation itself, but his physiocratic origin suggests that he might have taken the word "équilibre" from Turgot.

Garnier's explicit purposes

Germain Garnier explicitly reproached WN as messy, and too historical. But he only hoped to improve Smith through the broad critical apparatus he added to the book⁷. He claimed that his ambition with his translation was to faithfully render Smith's ideas, and he explains that he only took some freedom with the vocabulary to make the text clearer (Garnier, 1802, cxxvj). But it is not clear what this means exactly to a XVIIIth-XIXth century mind. Forget (2010) demonstrates that it was normal for XVIII and XIXth century translators to take some license with the text they translated, in order to better serve their own ideas. She writes that

a good eighteenth- or nineteenth-century translation is a translation that attracts many readers and spurs commentary and imitation. Arraying translations along a scale from "more faithful" to "less faithful" with the intent of the original author as the sole criterion of quality is, at best, an anachronism. (Forget, 2010)

Moreover, as was the case with all early nineteenth-century editors of WN (Tribe, 2015), Garnier's aim was to correct Smith's mistakes—for example he explains that Smith has misunderstood the physiocrats' idea that agriculture was the only productive factor (Garnier, 1802, cxxvij; 1822, Vol.6, 256 sq.). In the critical apparatus Garnier hoped to improve Smith's work by making the argumentation's deductive links more visible, and by removing from WN what he considered useless—he would keep books 1 and 2 only, without their long "digressions" (Garnier, 1822, xc)⁸.

Garnier's commentary takes its autonomy from Smith's writings, and this is evident in both critical apparatuses he adds to the two editions of his translation. There, he reformulates Smith's ideas and he enriches them with his reflections on Smith's links

⁷ Which completely overlooked the *Theory of Moral Sentiments*.

⁸ Before translating Smith, Garnier published an *Abrégé élémentaire des principes de l'économie politique* (1796), in which he sums up WN—and never refers to the *Theory of Moral Sentiments*. To do so, he moves away from the organization of Smith's book. Moreover, Garnier goes away from Smith's ideas from time to time, as I will explain later. He explicitly writes: "The reader shall not be surprised to see that I have followed a completely different plan from that of Smith, but perhaps I will be less easily forgiven for having deviated, on several important points, from the doctrine of this author, and for having contradicted some of his fundamental principles." (Garnier, 1796, ix) In the present paper I give my own translations of Garnier, and most of the time the originals are reproduced in footnotes.

and oppositions with the physiocrats⁹, and with discussions of authors of the time such as Malthus, Say and Ricardo.

According to Garnier, the price of corn is at the center of a deductive chain that constitutes Smith's contribution.

In a system of political economy, all the truths are linked to one another, and the principle that regulates the price of wheat in money forms such an important ring in this chain of deductions and consequences, that it cannot be moved without disordering all the relations of value and without destroying the entire system¹⁰.

(Garnier, 1822, Vol.1, cxxxvj, my emphasis)

The principle that rules the price of corn is what Garnier expresses in terms of equilibrium between supply and demand ("équilibre entre l'offre et la demande"). By reexplaining WN from that point, he puts these notions at the core of WN.

This was for Garnier's explicit aims.

"Équilibre" in Garnier's physiocratic background

Maybe he did not intend it, but Garnier's physiocratic background also influenced his translation itself. Indeed, the reason why the word "équilibre" was part of his vocabulary is probably because another physiocrat at the end of XVIIIth century had used that word: Turgot (1727-1781). I have found no evidence of any encounter between Garnier and Turgot, but Garnier does mention his name in his writings, and he has obviously read him, as any physiocrat of his time would have.

Turgot used "équilibre" 8 times between 1759 and 1770. Bourrinet (1966) and Perrot (1992) both point out that with time, Turgot clarifies his ideas on "équilibre." One of these formulations is worth quoting here, because Garnier and Turgot share one quite specific metaphor. It appears in Turgot's *Réflexions sur la formation et la distribution des richesses* (1766) :

The different uses of capital thus yield very unequal products, but this inequality does not prevent them from influencing one another reciprocally; and a sort of equilibrium is established between them, as between two liquids of unequal weight, which would communicate with each other through the bottom of an overturned siphon, of which they occupy both branches; they would not be level, but the height of one could not increase without the other also rising in the opposite branch...

⁹ One of his explicit purposes is to show that Smith and Quesnay were compatible even in their theories of value: « C'est dans le sein de la terre que se commencent toutes les richesses ; c'est le travail qui les achève et qui complète leur valeur en les rendant consommables. » (Garnier, 1822, Vol.1, lxj) According to Garnier, only agricultural labour is productive. He also reproaches Smith for not acknowledging enough what he owes to Quesnay (Smith, 1822, Vol.6, 274). See Allix (1912): "What does it matter that agricultural work alone generates the net product, if all the other work is indispensable, if it is the craftsman's labour that alone can realize the only virtual value of the gross product? What does it matter whether the tax is passed on to the property owner, if there is convenience in levying it as indirect contributions? It is true that the earth is the source of all wealth, but work is the means to it and this is the "great truth brought to light by Smith, the most fruitful in consequences, the most useful for practice"" (Allix, 1912, 324, my translation. He quotes Garnier's Préface of 1802, t.1, XVII).

¹⁰ « Dans un système d'économie politique, toutes les vérités s'enchaînent les unes aux autres, et le principe qui règle le prix du blé en argent forme un anneau si important dans cette chaîne de déductions et de conséquences, qu'on ne peut pas le déplacer sans mettre en désordre tous les rapports des valeurs et sans détruire tout le système. »

In a word, as soon as the profits resulting from any use of money increase or decrease, capital is poured into it and withdrawn from other uses, which necessarily changes in each of these uses the ratio between capital and the annual product. The proceeds of money, employed in any given sector, cannot increase or decrease without all investments in other sectors experiencing a commensurate increase or decrease.¹¹ (Turgot, 1766, quoted by Bourrinet 1966, my emphasis).

Garnier's only "équilibre" metaphor, in 1802, is the same—even though it does not characterise the same phenomenon. He writes:

the same real values are represented by abstract values, expressed in figures that are always getting larger and larger, so that *debts and taxes, similar to the two branches of a siphon, always equilibrate and grow both in the same proportion*, consequently the burden of government is not much greater even though expressed by prodigiously enlarged amounts¹² (Garnier, 1802, Vol.5, 434)

In Turgot, the siphon metaphor expresses an interdependency between the returns from different forms of capital. In Garnier, it expresses a constant proportion¹³ between debts and taxes, regardless of the increase in their nominal values. This metaphor appears in Garnier's 1802 critical apparatus, but it is removed from the 1822 version, which is metaphor free—I will deal with this change in the last part of this paper.

To sum up, Garnier takes the word "équilibre" from Turgot, removes its metaphors¹⁴, and inserts it into Smith's system, in an increasingly conceptual way. He places it within the unique principle to explain what he considers the core of Smith's theory: corn's price and value. This is done in the critical apparatus, where Garnier explains Smith's work. But the commentary is prepared from the core of Smith's text, to which Garnier adds "équilibre."

¹¹ « Les différents emplois des capitaux rapportent donc des produits très inégaux, mais cette inégalité n'empêche pas qu'ils n'influent réciproquement les uns sur les autres ; et qu'il ne s'établisse entre eux une espèce d'équilibre, comme entre deux liqueurs inégalement pesantes, et qui communiqueraient ensemble par le bas d'un siphon renversé, dont elles occuperaient les deux branches ; elles ne seraient pas de niveau, mais la hauteur de l'une ne pourrait augmenter sans que l'autre ne montât aussi dans la branche opposée... En un mot, dès que les résultant d'un emploi quelconque de l'argent augmentent ou diminuent, les capitaux s'y versent en se retirant des autres emplois, ce qui change nécessairement dans chacun de ces emplois le rapport du capital au produit annuel. Le produit de l'argent, employé de quelque manière que ce soit, ne peut augmenter ou diminuer sans que tous les autres emplois éprouvent une augmentation ou une diminution proportionnée. »

¹² "les mêmes valeurs réelles sont représentées par des valeurs abstraites, exprimées en chiffres qui vont toujours en grossissant de plus en plus, en sorte que les dettes et les taxes, semblables aux deux branches d'un siphon, se mettant toujours en équilibre, et montant les unes et les autres dans la même proportion, la charge du gouvernement n'est guère plus forte quoiqu'exprimée par des sommes de chiffres prodigieusement grossies."

¹³ One should note that the same metaphor is not used to render a similar idea. Indeed, in Turgot the siphon only means the interdependency, and not that the economic variables would reach a common level: they "ne seraient pas de niveau, mais la hauteur de l'une ne pourrait augmenter sans que l'autre ne montât aussi". On the other hand, Garnier's siphon metaphor means a constant proportion between the variables.

¹⁴ For a detailed account of those metaphors, see Perrot (1992).

What does Garnier translate as “équilibre”?

I will now analyze the passages translated by Garnier. The meaning of “équilibre” in the core of the French text is very precise. Garnier mostly translates it as a rare sense of “balance”, which was extremely original at the time both in English and in French, and also within WN itself. Moreover, “équilibre” replaces or hides Smith’s metaphors. The effect of this translation is to emphasize that new word, which was practically absent in the original text.

A very rare use of “balance”

There are seven occurrences of the word “équilibre” in Garnier’s translation (they are the same in 1802 and 1822), including the translation of the single occurrence of “equilibrium” in Smith’s text that I already mentioned in the introduction. Thus, six occurrences need to be examined here.

To analyse an occurrence of “équilibre”, one should distinguish between *what is* in equilibrium (like “supply and demand”, or “the population”) and *what it means to be* in equilibrium (to be shared evenly—all across the territory, for example—, or to compensate). In what follows, I call the first “the object” of the word “équilibre”, and the second “the signified” of this word—I use this term as semiotics does, i.e. to refer to what one wants to designate by a word, as opposed to “signifier”, i.e. the series of letters that make up a word.

One of the six “équilibre” occurrences has a non-economic object, because it deals with the “balance of the constitution”¹⁵. I will not investigate this occurrence further, but focus instead on the economic ones.

Now, let me characterize the object of the last five occurrences. Twice, the “object” that is said to be in equilibrium is resources (capital, labour). Twice also, it is “the different branches of industry” that are considered in equilibrium. Finally, it is once “the price of commodities” that reaches “équilibre”. This being clear, I can turn to the characterization of the same occurrences’ signifieds. To do so, a detour through the translation is very instructive.

What Garnier translates by “équilibre” is mainly the English word “balance”¹⁶. But he does not do so for all the occurrences of “balance” in Smith: he is just interested in one meaning of “balance”. It is when “balance” means *a proper*¹⁷ *repartition of resources* that Garnier translates it as “équilibre”. In other words, Garnier translates “balance” as “équilibre” when it means that an *object* like industry, labour, or capital, *is shared “the right way”* (signified)—across the territory or between the industry’s branches, for instance.

¹⁵ Smith, 1822, op.cit., IV.vii, Vol.3, 422-423. This can be traced back to Montesquieu (1758).

¹⁶ Surprisingly, it is not “counterbalance” that Garnier translates as “équilibre”, even though it would correspond better to the binary use of “équilibre” he makes in his 1822 commentary. Nowadays, dictionaries like the Larousse or the Cambridge Dictionary give “balance” as a translation of “équilibre”, and “to balance” (Cambridge Dictionary, 2020) or “to counterbalance” (Larousse, 2020) as translations of the verbal form “équibrer”. In French “contrebaler” and “équibrer” are commonly considered as synonymous (Bertaud du Chazaud, 1993).

¹⁷ I voluntarily keep vague this term, between a factual and a moral meaning. This was very common for the physiocrats and during all the XVIIIth century; it is also how Garnier uses it. See footnote 30.

This signified of the word "balance" was a very rare one at the time, in English, in French and in WN itself.

First, it is rare within WN itself: balance is present many times (68 occurrences) in the *Wealth of Nations*, but mostly to talk about balance of trade or balance of accounts (78% of the occurrences). In WN, balance as a proper share of resources represents only 7% of the occurrences¹⁸, under the form of "natural balance of..." industry, employments, etc¹⁹. All of them are translated as "équilibre". Apart from this notion of "natural balance of...", Garnier is not interested in changing the English term "balance".

More generally, such a use of "balance" was very original at the time, both in English and in French. In French, there is no economic meaning of "balance" in Dictionaries and Encyclopedias except "balance du commerce" ("balance of trade") and "balance des comptes" ("balance of accounts") until 1867. The Larousse of 1867 is the first dictionary to associate the notions of supply and demand with "balance". In English, the word "balance" remains associated with accounting and trade only throughout the entire XIXth century.²⁰

Going back to WN, here is a first example of what Garnier chose to translate as "équilibre":

[Drawbacks] do not tend to turn towards any particular employment a greater share of the capital of the country, than what would go to that employment of its own accord, but only to hinder the duty from driving away any part of that share to other employments. *They tend not to overturn that balance which naturally establishes itself among the various employments of the society; but to hinder it from being overturned by the duty.* (Smith, 1979, IV.iv.2, 499, my emphasis)

Germain Garnier translates the passage in the following way:

[Les « drawbacks, ou Restitutions de droits »] ne tendent point à tourner vers un emploi particulier une plus forte portion du capital du pays que celle qui s'y serait portée de son plein gré, mais seulement ils tendent à empêcher que cette portion ne soit détournée forcément vers d'autres emplois par l'effet de l'impôt. *Ils ne tendent pas à détruire cet équilibre qui s'établit naturellement entre tous les divers emplois du travail et des capitaux de la société, mais à empêcher que l'impôt ne le détruise.* (Smith, 1822, IV.iv., Vol.3, 156, my emphasis)

The object here is "the various employments of the society," which Garnier translates directly as "*les divers emplois du travail et des capitaux de la société*". "Équilibre"

¹⁸ The rest being :

- two non-economic occurrences of the term: one of them (1.5% of the total) is part of the metaphor that contains the only occurrence of "equilibrium", quoted at the beginning of this article. Another occurrence is political and refers to the "balance of the constitution" (Smith, 1979, IV.vii.c, 625).
- three times (4%) as a synonym for "counter-balance" (Ibid. Vol.2, IV.vii.c, 629; V.ii.d, 838; V.ii.k, 889),
- three times the term is used in much the same way in the form of "over-balance" (Ibid. Vol.1, I.x.c, 151; Vol.2, IV.vii.c, 609; V.ii.k, 883).
- 4% of cases (3 occurrences) it is "balance of the annual produce and consumption" (Ibid. Vol.1, IV.iii.c, 497).

¹⁹ Smith, 1979, op.cit., Vol.1, IV.iv, 499; IV.iv, 504; IV.v.a, 523; Vol.2, IV.vii.c, 604; IV.vii.c, 625.

²⁰ Sheridan (1790) mentions it, and Webster (1806), Richardson (1838), Walker & Worcester (1847), Walker & Smith (1864) as well. The first edition of the Oxford English Dictionary's letter E (1891) only mentions accounting, and its second edition (1993) adds an economic meaning to "balance", dating it back to Jevons (1871).

takes the same signified as "balance" in the original. Both designate a state in which capital and labor are distributed the right way in society. It is also the case with the other occurrences where "balance" is translated as "équilibre". As I said before, 4 out of the 6 occurrences are of this kind, since they are direct translations of "balance". I will discuss the exceptions later in the paper. But first, it is worth noting another characteristic of Garnier's translation.

The metaphors are hidden

In the passage quoted above, the original is metaphorical whereas the translation is not: Smith's metaphor is contained in the term "overturn", which Garnier removes. Smith does not describe this "natural balance" in any way, but the metaphor is there to replace the description. Such a use of metaphors and analogies is common in Smith and corresponds to his theory of knowledge. Indeed, in *The History of Astronomy* (1980, II.1, 37 sq.), Smith explains that any disruption in the expected course of events "prevents the imagination from moving with ease in the orderly continuity of things" (Fiori, 1996): the mind cannot tolerate it, and may use analogies or metaphors²¹ to fill such "gaps in the familiar course of impressions" (Cremaschi, 2002). This is the reason why metaphors are abundant in Smith's works²². They are a normal tool used by the mind to build theories.

Germain Garnier replaces the tool used by Smith—that metaphor of balance—with the word "équilibre". One could say that this word renders the same metaphor, but in a shorter form. But at the time it could be used in other contexts, to talk about health or hydraulics²³. For that reason, the word "équilibre", used alone as here, gives less information than the original metaphor. Such a removal of Smith's metaphor is voluntary. Indeed, Garnier writes in his commentary that «It is difficult for a scientific language to adjust to these vague and figurative expressions; it needs precise and special terms, to each of which is fixed a specific idea that is not confused with any other.²⁴ » (Garnier, 1822, Vol.6, 264).

Garnier prefers a less metaphorical language because he considers it clearer. But since he does not explain what he means by "équilibre", and since that word can refer to many different mechanisms because it is linked to many domains of knowledge, the result is paradoxically more obscure than Smith's original. The reader has to infer what is meant by "équilibre". This can lead to messy theories, all using the same word, "équilibre", but meaning different things by it—exactly what the pre-Walrasian French liberals did, as I will show later. Garnier said that he wanted to make WN clearer with his translation. This is what he tries to do by removing some of Smith's metaphors and replacing them with "équilibre". But Garnier does not only translate "balance": he also takes more liberty with Smith's writings.

²¹ Some of them contain analogies (see Cremaschi, 2002).

²² Cremaschi (2002) gives a broad panorama of them. See also Kennedy (2011; 2015), Myers (1983), Zaman (2013).

²³ This word's meanings, in dictionaries and encyclopaedias from the XVIIIth and XIXth centuries, belong to politics (e.g. Dictionnaire de l'Académie, 1799), ethics (e.g. Trévoux, 1704), medicine (e.g. Diderot, 1751), mechanics (e.g. Gattel, 1813), hydraulics (e.g. Panckoucke, 1819)—sometimes together with mechanics, sometimes not—, and even painting (e.g. Laveaux, 1820).

²⁴ « Une langue savante s'accommode difficilement de ces expressions vagues et figurées ; il lui faut des termes précis et spéciaux , à chacun desquels se fixe une idée nettement tranchée et qui ne se confonde avec aucune autre. »

Not a translation, but an addition

Twice in the text, "équilibre" is a total addition to Smith's original sentence, instead of a translation of "balance".

In one case, it is only used to complete Smith's explanation, but the term "équilibre" takes the first grammatical role in the sentence, as it becomes the main subject.

Here is the original:

[It] seems to be the only expedient which [...], by gradually diminishing one branch of her industry and gradually increasing all the rest, can by degrees restore all the different branches of it to *that natural, healthful, and proper proportion* which perfect liberty necessarily establishes, and which perfect liberty can alone preserve. (Smith, 1979, IV.vii.c.44, 66)

This becomes, under Garnier's pen:

C'est le seul expédient [...] qui, en diminuant par degrés une branche de son industrie et en augmentant de même toutes les autres, puisse insensiblement rétablir entre toutes les différentes branches, *cette juste proportion, cet équilibre naturel et salubre* qu'amène nécessairement la parfaite liberté, et que la parfaite liberté peut seule maintenir. (Smith, 1822, IV.vii. Vol.3, 383-384)

The term "équilibre" does not replace "proper proportion" (retained as "*juste proportion*"), but is added, maybe as a clarification or one more improvement. In French, the word "salubre" can also have a religious dimension, which is not present in the original metaphor of health – "healthful."

The last passage is worth studying, because it is the only time the word "équilibre" appears in the context of "the price of goods." This particular meaning has to be paralleled with the fact that this passage has been modified even further by Garnier. And he utterly adds "équilibre" there. Indeed, prices were not said to reach any specific state in the original version; it is the translation that adds it. Here is Smith's text:

It is partly owing to the easy transportation of gold and silver from the places where they abound to those where they are wanted, that *the price* of those metals does not fluctuate continually like that of the greater part of *other commodities, which are hindered by their bulk from shifting their situation*, when the market happens to be either over or under-stocked with them. (Smith, 1979, IV.i.14, 437)

Garnier transforms this passage as follows:

C'est en partie à cause de la facilité qu'il y a à transporter l'or et l'argent des endroits où ils abondent à ceux où ils manquent, que *le prix* de ces métaux n'est pas sujet à des fluctuations continuelles comme celui de la plupart des autres marchandises, qui, étant trop volumineuses, ne peuvent pas reprendre aisément leur équilibre quand il arrive que le marché en est dégarni ou en est surchargé. (Smith, 1822, IV.i., Vol.3, 18)

Smith's text was all about the commodities' movement—they were "shifting their situation"—and Germain Garnier's translation adds the term "équilibre" as a necessary result of this change in situation. Here, the word "équilibre" means something like a "right level". This use of "équilibre" is closer to Turgot's. The interesting point here is that when Garnier adds "équilibre" from nowhere, that word does not mean a proper share of resources anymore. Moreover, Garnier modifies further Smith's text to add a state of equilibrium where there was only a movement. This is closer to his own

use of "équilibre" in his commentary, for it is more abstract than the idea of resources that are shared between people or across a territory.

By inserting "équilibre" into his translation of WN, Germain Garnier focuses the reader's attention on that state. He often isolates a very rare meaning of the English word "balance"—a proper repartition of resources—, he translates it into "équilibre" with the same meaning, and he gives that word the first role to the detriment of Smith's original metaphors. In addition, Garnier also adds bluntly the word where there was not even the idea of a state reached. Then, he uses the same word in his critical apparatus, and so the reader can link it to the core of Smith's text. It then looks like a faithful interpretation. But Garnier actually changes the meaning of "équilibre" between the text and his commentary. This is what I will show now.

The critical apparatus: where "équilibre" gets more abstract and conceptual

As I have just shown, Garnier uses the word "équilibre" in the translation to mean a proper share of some resources. I now argue that he reuses it in his commentary to mean a state of compensation. Since the word is identical, this shift is not very visible, and the reader perceives a link between the text and the commentary. Such a twist in meaning already appears in the critical apparatus of 1802, but it is confirmed by the critical apparatus of 1822. The latter brings a clear interpretation of Smith in terms of "équilibre" between supply and demand, "loi d'équilibre" and "état d'équilibre".

The metaphors are hidden

In 1802, Garnier comments on Smith's WN by using "équilibre" 7 times. There, he alternates between "équilibre" as a proper repartition of resources and a more binary vision of "équilibre". Examples of the latter are as follows:

there was another way to keep the equilibrium between the two metals: it was to decrease the weight of the denier, and this operation did evidently place.²⁵ (Garnier, 1802, Vol.5, 36)

And

*This balance between the annual product and consumption seems to have lasted for a period of time that the ephemeral existence of our European societies makes us see as fabulous. Such an equilibrium, once established on its true basis, can only be overturned by political revolutions or external attacks.*²⁶ (Garnier, 1802, Vol.5, 36, *my emphasis*)

There is also the already quoted siphon metaphor, probably taken from Turgot and which will disappear from the 1822 version. Those quotations seem to be derived from already existing meanings of "balance": for the first quote, the scale metaphor

²⁵ « il y avait une autre manière de conserver l'équilibre entre les deux métaux : c'était de diminuer le poids du denier, et certainement cette opération dut avoir lieu. »

²⁶ « Cette balance entre le produit annuel et la consommation paraît s'être maintenue avec une durée que l'existence éphémère de nos sociétés européennes nous fait regarder comme fabuleuse. Un tel équilibre, une fois établi sur sa véritable base, ne peut plus être renversé que par des révolutions politiques ou par des attaques extérieures. »

and, for the second, the balance of national accounts. But those references are not explicit: Garnier moves towards a conceptual use of "équilibre", which only expresses a compensation between two elements.

This movement is confirmed by the 1822 critical apparatus.

Garnier's 1822 additions: supply, demand, equilibrium as a state and a natural law

There are 20 occurrences of the term "équilibre" in the 1822 critical apparatus. Garnier's interpretation puts equilibrium as a reachable state, and gives it the status of a standard, a norm. But first of all, a new theoretical object is added: supply and demand²⁷. He is building a binary vision of "équilibre". Garnier alternates between a balance "entre les offres et les demandes" (between the supplies and the demands), "la somme des offres et celle des demandes" (*the sum of the supplies and the sum of demands*; Ibid., cxxij) and the singular form "l'offre et la demande" (supply and demand; Garnier, 1822, Vol.5, 354). This binary notion could not have fitted into passages dealing with a proper repartition of some resources between various possibilities. Despite that, Garnier's commentary re-explains Smith entirely in terms of "équilibre" between "offres et demandes" (Supplies and demands). For example, he writes:

It is likely that in a few years, the population will fall back imperceptibly within the limits set by the demand for labour. Fewer and less fertile marriages will re-establish the equilibrium that must naturally exist between production and the demand for men²⁸. (Garnier, 1822, Vol.5, 383)

Garnier moves away from the idea that market adjustments create a balance between various branches of industry, or various uses of capital or labour. Moreover, he never uses Smith's invisible hand nor his metaphor of gravitation to explain market adjustments. They do not appear at all in his commentary. He just uses the idea that supply and demand do compensate—a property that he does not question—and he uses no metaphors to describe what is going on: the term is supposed to be self-evident.

Moreover, this new self-speaking term acquires a special role, even if it is not defined or described: Garnier speaks of a "state of equilibrium" ("état d'équilibre"), and a "law of equilibrium" ("loi de l'équilibre"). Both are presented as fundamental for political economy. Garnier insists that the equilibrium state is a norm, to which supply and demand return "sans cesse" (unceasingly). He writes both "the case of an equilibrium between supplies and demands, which is necessarily *the most ordinary state*"²⁹ (Smith, 1822, cxxij, *my emphasis*) and "that right equilibrium in the industrial faculties"³⁰, where "right" has a moral sense (Ibid., Vol.6, 137, *my*

²⁷ Those terms were already standard in 1822, but Smith never used them in the passages translated by Garnier as "équilibre," nor anywhere in association with the word "balance."

²⁸ « Il est vraisemblable qu'en peu d'années, la population rentrera insensiblement dans les limites qui lui sont tracées par la demande de travail. Les mariages moins nombreux et moins féconds rétabliront l'équilibre qui doit naturellement exister entre la production et la demande d'hommes. »

²⁹ « le cas d'équilibre entre les offres et les demandes, ce qui est nécessairement l'état le plus ordinaire ».

³⁰ « ce juste équilibre dans les facultés industrielles ».

emphasis). Hence "équilibre" is both considered actual and morally good³¹. And Garnier extends that norm to a general natural law: « Only in so far as money is a commodity, which like all other commodities is subject to the general laws of equilibrium between consumption and reproduction, can it be converted into cash and fulfill its functions. »³² (Garnier, 1822, Vol.5, 247, *my emphasis*). This idea of a law of equilibrium is also totally new, compared to Smith's text.

Garnier's 1822 vocabulary is a real innovation compared to his contemporaries' texts. It seems like "équilibre entre l'offre et la demande", "loi d'équilibre" and "état d'équilibre" are his own invention. Indeed, if one investigates the authors Garnier quotes in his 1822 commentary, they sometimes use "équilibre", but in a shy and less conceptual way. Luckily, Garnier is quite precise about his sources; when he reads English-speaking authors, he gives the reference of the exact translation he used. The 1822 commentary mentions the publications of J.B. Say (1803), Malthus (1809; 1815; 1820), D. Buchanan (1817) and Ricardo (1819). Buchanan comments on Garnier's ideas in his own edition of Smith, but he does not use "equilibrium". Say, Malthus and Ricardo do use "équilibre" or "equilibrium" a few times, but the word never deals with supply and demand, nor is it linked to a state or a law of equilibrium. Their reading can have encouraged Garnier to continue using "équilibre", but he has not taken his theoretical tool from them.

In Jean-Baptiste Say's *Traité d'économie politique* (1803) "équilibre" appears three times. Say uses the word as Garnier does when he translates Smith, i.e., "équilibre" as a proper repartition of capital and labour. It makes sense, since Say first read Smith in English (Forget, 2010). He does not use "équilibre" to talk about any state of compensation, any natural law, nor does he associate it with supply and demand.

In Ricardo's *Principles*, in the French translation that Garnier uses (1819), "équilibre" appears; so does "equilibrium" in the English text (1817). In this latter, "equilibrium" appears three times, twice as a proper share of resources (Ricardo, 1817, 176; *ibid.*, 276), and once as the right share between profits and wages (*ibid.*, 304). Only two elements are considered there, which makes it resemble Garnier's binary vocabulary, but it does not deal with supply and demand, nor with any state or law of equilibrium. The French version uses "équilibre" at the same places. Constancio, the translator, adds one more occurrence of "équilibre" as a proper share of resources (Ricardo, 1819, 220). Hence, it is not from Ricardo that Garnier has picked up his 1822 vocabulary.

The French version of Malthus's *Essai* (1809) also uses "équilibre", six times, about population, or population and subsistence. In Malthus, as in Say and Ricardo, one cannot find any "loi d'équilibre", "état d'équilibre", or "équilibre entre l'offre et la demande." When "équilibre" is about population alone, it means a proper level of population (Malthus, 1809, I, 64; *ibid.*, 215; II, 34). When it is about population and means of subsistence, "équilibre" means an equivalence between both.

Garnier's commentary also uses "équilibre" to talk about population issues, and it mentions Malthus's works several times. But Garnier reinterprets population

³¹ Garnier gives « équilibre » the status of a norm, and we can consider this through the light of Perrot (1992), who writes about the notion of natural law in economics: "The XVIIIth century gives this vocabulary a triple meaning. Indeed, the rules, laws and principles designate physical, institutional and moral relations. [...] The physiocratic political economy in particular grounds its analysis on the fusion of the three meanings: the optimum assumes a coincidence between the physical laws (the reproduction of wealth), the institutional laws (the allocation of wealth, fiscality) and the moral laws (subsistence "luxury" takes precedence on the decoration "luxury")."

³² « Ce n'est qu'autant que l'argent est une marchandise soumise, comme toutes les autres, aux lois générales de l'équilibre entre la consommation et la reproduction, qu'il peut être converti en numéraire et en remplir les fonctions. »

problems in terms of supply and demand—between which an equilibrium can be reached (see for example Garnier, 1822, Vol.5, 383). This is a use of “équilibre” that will remain very important for the French liberals during the XIXth century.

Hence, Garnier does use “équilibre” as any of these important writers who published between 1802 and 1822 use it. This is what leads me to think that Garnier is probably responsible for his new uses of “équilibre.”

So far, I have shown that Garnier brings a new meaning to the term “équilibre” in his critical apparatus. He moves away from “équilibre” as a proper share of resources, and he proposes his own reading of the Wealth of Nations, in which supplies and demands compensate, and all markets are ruled by a “loi d’équilibre” and reach a state called “équilibre.”

As I have explained, Garnier’s commentary immediately had a wide impact on the readings of Smith. Here is one example of this impact.

French readings of Smith

The word “équilibre” catches the reader’s attention, and so did it for the pre-Walrasian French liberals. Before Walras’ *Elements d’économie politique* (1874), XIXth century French liberals adopted Garnier’s notions of “équilibre”. They did not define the word, but they used it as a concept, which, as some of them explain, they considered demonstrated by Adam Smith—an idea they probably took from Garnier’s version of WN.

The French liberals mostly use the word “équilibre” alone, and one of the objects they can consider in equilibrium is the couple supply/demand. For instance, one can read in the *Journal des économistes* that:

[Ricardo] recognized that the current price, as Smith had already demonstrated, establishes itself according to a law of equilibrium, and that it is always the reverse of the supply and the direct result of the demand. (Boutowski, 1852)³³

Equilibrium is also considered as a state that will be restored by the action of economic laws:

The difference between the labour of man and the power of capital is no less significant when labour is considered in its relationship with the State. Whether there are too many or too few oxen, horses, or steam engines on the market, the public authorities care little about it. If trade is free, if absurd laws do not hinder the interplay of supply and demand in the various markets of the world, equilibrium will soon be restored³⁴. (Rossi, 1844)

Of course, the liberals are not only influenced by Garnier’s translation of Smith. They also read Ricardo, Malthus, Say: they take from their texts other meanings of “équilibre”, and they mix them all together. The result is a messy notion of

³³ « [Ricardo] reconnut que le prix courant, comme, du reste, Smith l’avait déjà démontré, s’établit en vertu d’une loi d’équilibre, qu’il est toujours en raison inverse de l’offre et en raison directe de la demande. »

³⁴ « La différence entre le travail de l’homme et la puissance du capital n’est pas moins sensible, lorsqu’on considère le travail dans ses rapports avec l’État. Qu’il y ait sur le marché trop ou trop peu de bœufs, de chevaux, de machines à vapeur, les pouvoirs publics s’en inquiètent peu. Si le commerce est libre, si des lois absurdes n’entravent pas le jeu de l’offre et de la demande sur les divers marchés du monde, l’équilibre ne tardera pas à se rétablir »

"équilibre"³⁵, which has many "signifieds" but is considered as meaning one thing, so clear that it is not even worth defining it.

But often, the idea of an equilibrium between supply and demand appears. There, one can see Garnier's imprint. Moreover, even if Garnier took away all metaphors, his binary vision of "équilibre" opened the door to an analogy between economics and physics³⁶, and this analogy sometimes appears under the pens of pre-Walrasian liberals.³⁷

Si l'équilibre est rompu entre le consommateur et le producteur, c'est parce qu'une force artificielle, s'interposant entre eux, paralyse une des forces naturelles qui doivent concourir à le produire. (Passy, 1860)

The passage from a notion of "équilibre" in which a resource is allocated the right way between many possibilities, to a binary notion of "équilibre", made such an analogy between economics and physics easier. Garnier had forged a path that French economists just had to follow. His translation was republished by Guillaumin in 1843 and 1859, edited by Adolphe Blanqui and Eugène Buret; Blanqui suppressed the two books of commentary by Garnier and added two occurrences of "équilibre" in the translation, to designate a state of compensation (Smith, 1843, Vol.1, 246; Vol.2, 111). He also added two occurrences of "équilibre" between supply and demand in new footnotes³⁸. Blanqui's work thus follows Germain Garnier's path, inserting one more time into Smith's WN the idea of a state of equilibrium between supply and demand. In 1870, "équilibre" eventually entered the dictionary with an economic meaning (Larousse, 1870): for the first time, it was associated with supply and demand. This is four years before the publication of Walras' *Eléments d'économie politique pure* (1874).

Conclusion

I have shown that through his translation and commentary, Garnier—at least to a certain extent on purpose—places the notions of "équilibre de l'offre et de la demande", "état d'équilibre" and "loi d'équilibre" at the very center of WN. By doing this, he gives the word « équilibre » an unprecedented importance.

The new idea of an equilibrium state started to call for a conceptualization. The French Liberals incorporated this word to their own vocabulary, in a very messy way; the process from the first French occurrences of "équilibre" to a commonly acknowledged concept took around a century, but Garnier's work is surely an important step towards the analogy between economics and physics that will become the new standard of political economy by the end of the XIXth century.

³⁵ For example, compare Royer (1863) and Modeste (1866).

³⁶ Under the liberals' pen, "équilibre" rarely comes together with metaphors, taken from all the other domains with which the word "équilibre" was associated at the time.

³⁷ Other examples can be found in Molinari (1851), Courcelle Seneuil (1855), and Levasseur (1857), among many others.

³⁸ Blanqui adds a critical apparatus made up of a compilation of comments on Smith's work by famous authors. There, two more occurrences of "équilibre" appear in Buchanan's comments translated by Blanqui; again, it is about the supply of and demand for money (Smith, 1859, Vol.1, 145 and 351-352).

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