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Back to Henry Thornton and Some of his Famous Readers: The Role of Gold in Classical Monetary Doctrine

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Back to Henry Thornton and Some of his Famous Readers:

The Role of Gold in Classical Monetary Doctrine

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I am honored to deliver the 2012 Blanqui Lecture to the ESHET annual conference here in London. It goes without saying that it was a great pleasure to hear that my book had been selected for the ESHET Book Prize that carries with it the invitation to give the Blanqui Lecture. Addressing ESHET in London is especially moving since much of my Ph. D. on the Ricardo-Tooke-Marx link in the development of monetary theory was prepared here, working in the great Goldsmith Library (when the internet was a dream) under the supervision of Professor Laurence Harris. I attended the first ESHET conference in Marseille in 1997, and since then consider our association as a crucial one for anyone interested in the history of ideas.

Among the scholars that I consider as "My Heroes" - those who at some point had attracted and influenced me - some, like Hume, Marx and Keynes, still continue to do so. Over the years they did not comprise a uniform set and when I returned to read them from time to time it was naturally a different reading. Regarding the sub-field of the history of

[1] I thank David Laidler, Cristina Marcuzzo and Neil Skaggs for insightful comments on an earlier draft of this address; the usual caveat naturally holds.

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monetary theory, that the monograph which received the Blanqui Prize covers and to which my talk is dedicated, I will always remember my first reading of Thomas Tooke, Knut Wicksell, Friedrich A. von Hayek and John Hicks. However, one major figure, though I personally came to appreciate him only relatively late in my career, after having read many of the others, **Henry Thornton,** stands out. He is often described, and properly so, as the "First and Foremost" among monetary theorists in many respects; analytical depth, originality, and practicality. That almost uniform positive opinion of Thornton reflects a rare consensus among those who have read him. During the first half of the nineteenth century he was well read by the more serious and dedicated scholars including David Ricardo, Thomas Tooke, J. S. Mill and many others. Surprisingly and famously he disappeared from the literature after the 1860's or so till he was rediscovered in the twentieth century, and reintroduced to the literature first by Jacob Viner (1924), but really by Friedrich von Hayek who was responsible for the republication of *Paper Credit* in 1939 [together with some evidence presented to the 1793 and 1797 committees and his 1811 speeches in Parliament]. Hayek wrote an elaborate Introduction to the volume. Thornton then became even better known, especially to mainstream economists owing to the 1967 article of John Hicks which appeared in his *Critical Essays in Monetary Theory*, entitled "Thornton's *Paper Credit*". Over the years, Thornton’s readers have proposed somewhat different interpretations. Thus, today I will talk about variations in reading Thornton by six of his better known readers.

Beyond common appreciation, an immediate question arises: Were Thornton's readers in agreement about what Thornton had said? Not really. The various interpretations of scholars concerning Thornton's views can serve not less as a telling story about the observers than about the observed. As Neil Skaggs (following an idea by David Laidler) proposed to judge later monetary economists by their attitudes to the positions of the Currency School vs. the Banking School in the 1840's, so I would argue that observations about Thornton since the first decade of the nineteenth century, around the time of the famous Bullion Debate, can tell quite a lot about the observers, not only the observed. In the case of Thornton and the Bullion Debate, even more so than in the case of the Currency and Banking Schools and the 1844 Bank Act, the litmus test is more complicated than a simple judgment concerning agreement with or disapproval of a School, since, although there is a consensus over Thornton's greatness, there is no consensus, as we shall see, about his theories. <u>Different people do read him differently</u>. So, what Thornton "really" said is an issue that is still an open question, more than two hundred years since the publication of *Paper Credit*. Well, we might argue, this may be true to some extent about many of the canonical scholars, and certainly the more complex ones.

So what was Thornton saying? What were his central messages? What do we actually mean when we say that Thornton's monetary theory was "innovative," or "ahead of his times"?

First one must state, briefly, what monetary theory was in 1802 when he published his seminal study; and in order to do this we have to say something, as Hicks always argued, about monetary history; the institutions and the facts: [Slide 2 - Hicks quote]

> “Monetary theory is less abstract than most economic theory; it cannot avoid a relation to reality, which in other economic theory is sometimes missing. It belongs to monetary history, in a way that economic theory does not always belong to economic history. … Monetary theories arise out of monetary disturbances … [and] money itself has been evolving." (Hicks (1967) pp. 156-157)

For many years economists understood the advantages of using money and that barter is less efficient than a monetary-economy. This was obvious to David Hume and Adam Smith who both analyzed a monetary system organized around banks, Smith more than Hume, with many competing banks located in the commercial centers all over the British economy. From mid-18th to mid- 19th century historians separated the hundreds of functioning banks into three subgroups: issuing banks who issued their own notes and non-issuing banks who were busy with accepting deposits and making loans but did not issue their own notes. The non-issuing banks were located in London and 65 miles around its center, where the monopoly of issuing was in the hands of the Bank of England. [Slide 3 Table 1] Hence, the issuing banks are divided into two groups: The Bank of England and the numerous country banks. The Bank of England, located at the center of the City, London's financial center, was a very strong and respected bank, that had been established in 1696, with huge capital and monopoly status in London concerning the issuing of notes. However, like all other banks, issuing as well as non-issuing banks in London, the Bank of England was busy taking deposits and giving loans; working with big firms as well as with other banks rather than with the general public.

Up to 1797 the banking system was based on the principle of convertibility, meaning that all bank notes, issued both by the country banks and the BoE, could always be exchanged for gold and silver at a well-known rate, the famous 3£ 17s 101/2d for an ounce of gold. Hence, for simplicity, the literature talks about gold as the anchor of the monetary system or in short the **gold standard**. In February 1797, on a Sunday night before a new week of business was about to open, under the shadow of the Napoleonic wars and general economic instability and as a result of rumors concerning enemy forces landing on the British isles, and the bank runs that followed, the sovereign declared bank notes to be inconvertible. As a result, people suddenly could not exchange the notes of the Bank of England's and the country banks to gold -- this marked the beginning of the famous Restriction period.

After 1797 the debate between those who wanted early return to convertibility and gold payments -- the bullionists -- and those who argued for maintaining inconvertibility -- the anti bullionists – took center stage. Thornton published in 1802 his seminal book; was he a Bullionist? An anti Bullionist? [Slide 4] In my view, Thornton understood that, in principle, **it is possible to have an inconvertible system that will function properly**. Moreover, such a system has some advantages compared with a gold standard. He was not the only one to argue against gold as the only or at least the best possible anchor of the monetary system, but the few others who defended inconvertibility were perceived as some kind of "fringe. They clearly held a minority view up to the end of the nineteenth century; their outlook was never articulated properly and they had no solid theories to offer.

[Slides 5 & 6] In 1802, just five years after Britain was forced to go off gold and the Restriction period started, Thornton's path breaking book ***An Enquiry into the Nature and Effects of the Paper Credit of Great Britain*** was published, . In it, he defended the Restriction and constructed an innovative set of claims. Like Hume and Smith he made claims about money and the exchanges but unlike them he did not assume that money has to be convertible to gold. However, this was not the only line of argument; in *Paper Credit* he: [Slides 7-10]

- **Defended the feasibility of a system without gold as its anchor**
- **Explained the importance of debts and credits, IOU's in modern terms [Schumpeter quotation here] and paved the way to "a credit theory of money … which is practically and analytically preferable to a monetary theory of credit." As Schumpeter (1954) put it.**
- **Explained that a convertible as well as an inconvertible system (i.e. based on gold or not) require management by a central body**
- **Argued that in England there exists such a body that can and should manage the system, that is, the Bank of England (although at the time it was a private, joint stock bank).**
- **Furthermore, the management of the banking system should be based on assessments of the current conditions in the economy and tuning the quantities of money and credit; i.e. modern monetary policy**. And he
- **Understood that not only the payments system needs management, i.e. interventions, but also intermediation; i.e. the process of bridging savings and investments. In this context we find his**

analysis of the rate of interest and its relationship to the rate of profit; an early articulation of Wicksell's two rates analysis that appeared one hundred years later.

- **Concerning the balance of payments, Thornton argued that imbalances could be the result of other reasons than too much money. Thus, real causes (wars, bad seasons etc.) could explain gold flows; not just, monetary expansions could cause gold flows.**

[Slide 10] I will describe the claims concerning the monetary system as Thornton's **Monetary Innovations**; distinguishing between:

  - the possibility of non-gold-standard, i.e. Inconvertibility,
  - the importance of Credits and Debts
  - the position on Monetary Policy and
  - on Two Rates;

- and Thornton's claims concerning the **Balance of Payments** simply as his BoP claims.

By 1802 the argument that the British economy should return to gold as soon as possible, even if the war continues, dubbed the Bullionist position, gained some influence, mainly owing to the inflation of 1800\01 and several pamphlets that appeared at the time (Boyd). Thornton wrote against this trend. Thus, I read, although some disagree, Thornton's *Paper Credit* of 1802 as a theoretical treatise defending the anti-Bullionists, hence, as a theoretical position that went against the conventional wisdom of the time, as represented by David Hume and Adam Smith. [Slide 11]

This begs a question: Why just a few years after 1802 Thornton became a supporter, even one of the three drafters, of the Bullion Report, that famous call for a rapid return to gold? Why in 1810-11, after another inflationary burst, that of 1809, we find him in alliance with the Bullionists (Horner, Huskisson and soon to come to fame, Ricardo) rather than with the anti-Bullionists, whose position he defended in 1802? The answer has a lot to do, so I believe, with a change of heart about the behavior, or misbehavior, of the Bank of England. The fact that the directors of the Bank of England took advantage of inconvertibility to gain more profits, while ignoring their role and responsibilities as those who should guide the banking system, swayed him towards the camp that recommended a return to gold. Thus, Thornton's alliance with the Bullionists around the Bullion Report was the result of his conclusion that a disciplinary measure against the greedy directors of the BoE is necessary. However, Thornton alliance with the bullionists was not a theoretical position that inconvertibility is not an option.

If my reading of Thornton is correct, then in *Paper Credit* he is analyzing an inconvertible monetary system which renders him the prophet of modern monetary policy. He grasped internal price changes and the formation of international exchange rates as the outcome of many complex forces and rejected both David Hume's and Adam Smith's monetary theories: Nor did he accept the famous Specie-Price-Flow mechanism, Hume's analysis, or Smith's Real Bills Doctrine. [Slide 12] Thornton also did not believe that even under convertibility the international system would always tend to equilibrium or that only monetary factors can cause gold flows. Last he rejected the idea that one can leave the determination of the quantity of money to the bankers who under a free banking regime will avoid the creation of too much money. Thornton was not only an independent thinker and an innovator of new theories. He was also well known and influential, a religious leader (of the Clapham Sect); an abolitionist who fought slavery; an MP and a banker. But for historians of economic thought he was first and foremost a theoretician who was ahead of his time by many years.

I would have liked to quote heavily from Thornton but due to time restrictions will limit citations to the more disputed interpretations.

First **Defending the Bank Directors:**

Thornton defended the Bank of England's directors by stressing that the pressures on the exchanges were the result of the war and bad harvests, not only and always the result of an expansion in note circulation. (212-229) [Slide 13] "Our two defective harvests, and the interventions experienced in our export trade, very sufficiently account for the late fluctuations of our exchanges. ... there has been nothing which ought to be deemed extraordinary in the quantity of paper issued by the Bank of England." (225-6).

Thornton's defense of the Bank's behavior is firm. In his view the Bank used its monopoly power in London to guide the system between dangerous alternatives [Slide 14]: "We have been lately placed between two dangers; between that of a depreciated paper currency on the one hand, and that of an interruption to our paper credit, and a consequent stagnation of our commerce and manufacturing, on the other. And, on the whole, we have, perhaps, owed much to that liberal policy of the directors of the Bank of England." (226) Thornton rejects Smith's analysis [RBD] while defending the Bank's directors.

Second, **Defending the Restriction:**

Thornton's support for the Restriction in 1802 is beyond doubt. Britain has been saved from violence on the continent "through the favour of Providence." (275) The island's political strength, however, depends on prosperity, and that necessitates what Thornton calls "mercantile confidence." The enemy tried to upset this confidence and spread "alarms over the kingdom"; hence the measures taken by Britain -- "the law for suspending the cash payments of the Bank of England" -- which Thornton defends in the last paragraphs of his treatise: [Slides 15 & 16]

> In a commercial country, subjected to that moderate degree of occasional alarm and danger which we have experienced, *gold is by no means that kind of circulating medium which is the most desirable*. It is apt to circulate with very different degrees of rapidity, and also to be suddenly withdrawn, in consequence of its being an article intrinsically valuable, and capable of being easily concealed. If, during the war, it had been our only medium of payment, we might sometimes have been almost totally deprived of the means of carrying on our pecuniary transactions; and much confusion in the affairs of our merchants, great interruption of manufacturing labour, and very serious evils to the state, might have been the consequences. (276, emphasis added)

In my view, Thornton's *Paper Credit* cannot be understood as other than a principled defense of inconvertibility and the Bank's directors. While defending inconvertibility he explained how the Restriction new system can function and provide the country with a sound monetary system. Money supply has to be managed. Thornton maintained a consistent position which was critical of other anti-Bullionists like Baring; in particular he rejected their support of the Real Bills Doctrine. <u>However, he disagreed on a theoretical level with the Bullionists' reliance on gold as an automatic device that leaves the system free to regulate itself.</u>

An interesting window into the process and scope of change in

Thornton's positions after 1802 can be found in some of his comments that were written around April 1804,[2] on King *Thoughts on the Bank Restriction* (1804) as they appear in Thornton's copy of that important work, which now can be found in the Goldsmith library.[3] Throughout his commentary on King, Thornton continues to express support for the Restriction and for the feasibility of a well-functioning inconvertible system. In response to King's text Thornton comments on the reason for inflation which King attributed to "Non Convertibility of Paper into Gold": [Slide 17] "A non-convertible Paper *which is limited* and is in full credit may maintain its price just as if it were convertible." (317, emphasis in the original)

One can see here the seeds of modern monetary thinking on inconvertibility. Thornton founds his defense for preserving the inconvertible monetary system -- in spite of the obvious incentives of private interested parties like the banks to expand it -- on a concept of the Bank of England's "responsibility". Thornton questions why the Bank's directors, the ultimate regulators of the English monetary system, should be motivated by public interest rather than by the Bank's private interests. His comments on King's discussion of Irish banking are revealing in this context. His famous

[2] See Thornton ([1802] 1939, 321).

[3] See Hayek's introductory note in Thornton's *Paper Credit*, (1939, 312). In the copy of King (1804) at the Goldsmith Library, the following statement appears: "The Manuscript Notes in this copy are by Henry Thornton Esq. M. P.". Hayek noted that "[T]here seems to be no reason to doubt the correctness of the ascription." The comments are on King's "second enlarged edition" of the original work that had been originally published in 1803.

innovative ideas concerning monetary policy are worth quoting. (1802. 258/9) [Slides 18 & 19 – to skip] but there is no time…

Surprising as it may seem to those who remember Thornton mainly from the Bullion Committee, his 1802 views and also afterwards, place him in the anti-Bullionist camp. His role in the Committee was restricted to expressing his dissatisfaction with the Bank's directors concerning their misunderstanding of the Bank's public role. Thus, in 1810 Thornton gave reserved support to a return to cash payments, but did not accept Horner's and Huskisson's metallic approach. On the Bullion Committee he was and remained the third persona, a defender of inconvertibility, as described in the discussion between Murphy (2003, 2005) and Skaggs (2005).

Let us re-examine some of the most famous responses to this outstanding thinker, first during the first half of the nineteenth century, when he was well known, and then from those who brought him back from oblivion and obscurity after the 1920s and 1930s.

Three Nineteenth Century Readers: David Ricardo

[Slide 20] Ricardo read Thornton's *Paper Credit* before the end of 1809[4] and read him as saying that the Bank is not to be blamed for the inflation; but that there are real rather than monetary reasons for price inflation and, more generally, for gold movements during the Restriction.[5] These conclusions were not acceptable to Ricardo. Thus, throughout his first published pamphlet in 1810 "The High Price of Bullion," Ricardo addresses and rejects Thornton's views in *Paper Credit*. The first few pages of "High Price" are devoted mostly to an argument with Thornton concerning the possibility of excess supply of notes and international bullion flows under convertibility and inconvertibility.

Ricardo's well known analytical conclusion is drawn from his discussion of Thornton: [Slide 21]

> "We should not import more goods than we export, unless we had a redundancy of currency, which it therefore suits us to make a part of our exports. The exportation of the coin is caused by its cheapness, and

[4] See "Notes on Henry Thornton" in *Minor Papers on the Currency Question 1809-1823* (1932) edited by Jacob Hollander, pp.18-22. The notes are focused on the causes for the high price of bullion and the links between the balance of trade, the price of gold and the quantity of notes.

[5] Thornton wrote "If guineas disappear, notes may be substituted in their place; and through that general confidence which may be inspired by the agreement of bankers and other leading persons to take them, they will not fail, provided the issues are moderate, and the balance of trade is not very unfavourable to the country, to maintain exactly the gold price." (p. 123-24 [in the original p. 89]) Commenting on Thornton's arguments Ricardo noted: "The cause mistaken for the effect". (1932, p. 19)

is not the effect, but the cause of an unfavourable balance: we should not export it, if we did not send it to a better market, or if we had any commodity which we could export more profitably. It is a salutary remedy for a redundant currency." CW III p. 61

Ricardo agrees with Smith, not Thornton. [Slide 22]

Disagrees with Thornton's Balance of Payments Arguments

Ignores (or Rejects) his Monetary Innovations

Three Nineteenth Century Readers: Thomas Tooke

[Slide 23] Tooke had been influenced by Thornton, both in his early period (see Tooke (1826)) and when in the 1840s he became the leader of the Banking School.

The leaders of the Banking School knew and appreciated Thornton's views. The major members of the Banking School – Thomas Tooke, John Fullarton and James Wilson and to some extent John Stuart Mill – all quoted Thornton and accepted **some** of his doctrines. Tooke who was the leader of the new school, changed his views radically; he originally held views close to those of Ricardo and in some respects closer to those of Thornton, but ultimately completely rejected Ricardian monetary theory as advocated by the Currency School. Tooke initially accepted both the Quantity Theory and the possibility of disequilibrium in international relations, as Thornton proposed; later, he changed his views and rejected the Quantity Theory.

In the 1844 text that defined the Banking School, *An Inquiry into the Currency Principle* (1844) Tooke wrote: [Slide 23]

> "In a work by the late Mr. Henry Thornton, [*Paper Credit*] which attracted considerable attention at the time, and which formed the subject of an article by Mr. Horner, in the first Number of the Edinburgh Review in 1802, there is a distinct and full description of the manner in which bills of exchange performed in his time the function of money; a description which is strictly applicable at the present day." (Tooke 1844 p. 29)

The sentence is followed with a long quotation from Thornton about the similarities between money and bills of exchange; concerning the latter Thornton writes: "They not only spare the use of ready money, they also occupy its place in many cases", from 1802/1939 pp. 91-92.

Tooke however, did not adopt Thornton other innovations.

[Slide 24] **Tooke adopted Thornton position on the Balance of Payments.**

Did not adopt Thornton's other innovations, neither concerning monetary policy nor that about the feasibility of inconvertibility.

He was, however, influenced by Thornton's analysis of credit in the economy.

Three Nineteenth Century Readers: J S Mill[6]

Famously, J S Mill in his *Principles of Political Economy* (1848) quoted Thornton as an outstanding authority on credit, telling the readers that *Paper Credit*, **[Slide 25]** "published in 1802, is even now [1848] the clearest exposition that I am acquainted with, in the English language, of the modes in which credit is given and taken in a mercantile community." (p. 515n)

On the issue of convertibility Mill's position is clear. Since 1833, in "The Currency Juggle", Mill defended convertibility in principle and the return in 1821 to the gold standard, in particular. (187) He writes against the Attwood brothers who advocated inconvertibility. **[Slide 26]**

> "Mr. Attwood opines, that the multiplication of the circulating medium, and the consequent diminution of its value do not merely diminish the pressure of taxes and debts, and other fixed charges, but give employment to labour, and that to an indefinite extent. If we could work miracles, we would not be niggardly of them." (189)

[6] See Robbins (1967) "Introduction" *Collected Works of John Stuart Mill: Essays on Economics and Society*, Vol. IV, pp. xiii-xxi and Skaggs (1994).

Thus, Mill appreciated Thornton's contributions to the understanding of credit and ignored his writings on inconvertibility. He emphasized, like Tooke, Thornton better understanding of the equilibrating processes in the balance of payments than that of Ricardo. But this was a limited scope of the wide range of Thornton's contributions.

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[Slide 27 & 28]

Two major authors that the monograph covers are missing today. Both Bagehot's *Lombard Street* (1873) and Wicksell's *Interest and Prices* (1898) who returned to Thornton's themes, did not know about him, but possibly were indirectly influenced by him via Tooke and the Banking School (Skaggs (2003). I will not discuss these influences here and move on to the twentieth century. Remember, Thornton was not known from the 1870s on.

The Modern Rediscovery of Thornton and the

Reestablishment of his Fame

Three Twentieth Century Readers: Jacob Viner

[Slide 29] The first to rediscover Thornton was Jacob Viner. In 1924, with the publication of his PhD dissertation ***Canada's Balance of International Indebtedness 1900-1913,*** the name of Thornton reappeared. It is in the context of "an inductive study in the theory of international trade" as the subtitle of *Canada's Balance* states. The history of the equilibrating mechanism in the balance of payments is where Thornton's name re-appears: Thornton is described by Viner as the father of the correct mechanism, a mechanism that has been attributed usually to JS Mill and also, by some, and mistakenly, to Ricardo, but is in fact stated [Slide 29] "apparently for the first time, by Henry Thornton in 1802." (1924, 191)

[Slide 30] Thus, Viner, as did Ricardo more than one hundred years before, admires Thornton's contributions to the international equilibrium mechanism. However, all the other novelties in *Paper Credit* mentioned above would have to wait a few more years.

Three Twentieth Century Readers: Friedrich von Hayek [Slide 31]

Hayek's Studies of Past Theories

After his visit to New York in 1924-5 and before he left for London in 1931, Hayek was planning to write a book, for which he had a contract, on the history of monetary theory. By 1929, he had prepared four chapters; these chapters, written in German, were not published until 1991.

Hayek's most relevant studies in the context of our discussion concern the Restriction period in England (Hayek (1991), chapter 11) and the Banking School debate with the Currency School (ibid, chapter 12). The most compelling theoretician to emerge from Hayek's studies of the past, the one who apparently attracted him the most, was Henry Thornton. Hayek's appreciation of Thornton presents an intriguing puzzle for historians of monetary thought. Hayek read *Paper Credit* (1802), probably in 1928 or 1929, and like so many after him, was profoundly impressed. **[Slide 31]**

"Henry Thornton, one of the most highly respected personalities in the City and a member of parliament, was equipped not only with unusually solid knowledge but also with a rare theoretical talent in his work. **[Slide 32]**

<u>His book deserves to be ranked as one of the few outstanding achievements in the development of monetary theory</u>. Its only flaw, a flaw that often mars theoretical investigations by practical men, is its unsystematic and incoherent

structure, which makes it hard reading." (Hayek (1991), 190-191; my emphasis)

Hayek liked the comprehensive description of the financial system and the thorough analysis, but Hayek was most impressed with the fact that Thornton understood - and Hayek thinks he was the first to do so - the complex process by which exchange rates are determined, an issue that scholars in the 1920s struggled with as well.

When addressing "internal drains," the money shortages that result from a public demand for cash characteristic of times of crises, Hayek writes **[Slide 33]**:

> "The major part of the first half of Thornton's book is devoted to a detailed presentation of the dangers of such a scarcity of money. Suffice it to recognise here its major contribution to economic science: gaining acceptance for the principle that in the face of gold withdrawals caused by such a domestic shortage of money, that is, an 'internal drain', the correct response for a note-issuing bank is to maintain the level of circulating money rather than decrease it, if a panic is to be avoided." (194)

Prior to Thornton, scholars had not discussed the responsibility of the note-issuing policy of the Bank of England for the well-functioning of the economy. Its acceptance by the monetary orthodoxy, as described by Fetter in his classic 1965 work, was a process that took many decades (see Arnon (2011)). Hayek is fully aware in 1929 of the pioneering place of Thornton in this context. He describes the achievement as "Thornton's final and perhaps most significant contribution," [my emphasis] adding dramatically that it "has been nearly neglected until now [1929]." This contribution, he adds, "concerns the foundations of the discount policy pursued by note-issuing banks.[7]" Here is what Hayek writes on this major theoretical breakthrough:

[Slide 34]

"Thornton raises the question whether there exists a natural tendency to keep note circulation within limits that exclude a dangerous devaluation of notes. In answering this question he first demonstrates that neither reliance on the wealth of the borrower nor limitation to genuine commodity-backed notes can, offer assurance against this danger. Even if these two aspects are taken into account, it would not prevent an unreasonable increase in the number of borrowers nor an unwarranted proliferation of commodity-based notes. Thornton reiterates emphatically that every time the prevailing profit rate in business exceeded the interest rate of the bank, there would be a tendency to over-issue notes." (194 - 195)

[7] [Hayek's note] Chapter X, especially pp. 283– 290 of the original edition and pp. 399– 410 of the German translation [these are pp. 251– 256 in the Hayek edition].

Hence, determining the right quantity of notes in circulation could not be left to a “natural tendency.” One should take careful note of Hayek’s description of the two mechanisms that do not guarantee the possibility of such a tendency: One cannot trust either “the wealth of the borrower” or the use of “genuine commodity-backed notes” as assurance against too many notes. Thornton thus rejects two well-known mechanisms, with Hayek in seeming agreement. One is Smith’s Real Bills Doctrine and the other is the convertibility of bank notes.

Furthermore, he anticipated Wicksell’s breakthrough ideas in his seminal *Interest and Prices* almost one hundred years later. Thornton went even further than what the above paragraph argues in the last few pages of his *Paper Credit*. He more than hints there at discretionary monetary policy, directing the quantity of money upwards and downwards as the circumstances call for. In any case, this “significant contribution” made by Thornton and admired by Hayek, reflects a completely different position from a “free banking” based on the “Gold Standard” regime that so many usually associate now with Hayek. Thus, a serious puzzle concerning Hayek’s changing views from the 1920's to the 1970s on free banking and gold, and their relation to Thornton’s views, calls for an answer.

Hayek lists among Thornton's achievements -- as proof of the "height of his intellectual power" -- both his rejection of the RBD and the early exposition of forced saving as well as his discussion of the role of the rate of interest on which Thornton "breaks entirely new ground". Hayek concludes by saying that J S Mill was the last author to do "anything like justice to Henry Thornton." **[Slide 35] Hayek rediscovered and appreciated all aspects of Thornton's innovations.**

Among the economists who ignored Thornton, Hayek always mentioned John Maynard Keynes. When Hayek published Thornton in 1939 he had sent a copy to Keynes. Keynes responded only after receiving a reminder from Hayek; Keynes then related briefly to the republication but only to Hayek's Introduction. Hayek repeatedly alluded to Keynes "ignorance," at least about Thornton, in his later memories. Clearly, Thornton should have become Keynes historical hero much more than that of Hayek's.

The last of Thornton's readers I will discuss is Sir John Hicks.

Three Twentieth Century Readers: John Hicks [Slide 36]

In the mid-1960s, Hicks decided to publish a collection of his better-known papers on money and macro, and to add several new chapters. In an exchange with Hayek at the time he informs him that he has written a new paper on Thornton, "supplementary to your preface [1939], especially on the relation of Thornton to Keynes and Robertson." **[Slide 36]**

"When I wrote these papers, I was rather assuming that you had lost interest in economics, so that I could write about you almost as I have done about Dennis [Robertson], or even about Thornton himself! After your letter, I feel I must present it rather differently." (Hicks to Hayek, Dec. 24, 1965; Hayek Papers, Hoover Archives, Box 24 folder 32)

In Hicks' article, "Thornton's Paper Credit (1802)" he proposes to read Thornton a bit differently from the way that Hayek had in his 1939 *Introduction*.]. **[Slide 37]** That *Introduction* is "in most ways an admirable Introduction" writes Hicks, "But there was one thing Hayek did not say." (1967, 174) Hayek read Thornton as a Bullionist, Hicks notes, one of the drafters of the Bullion Report and hence "one of the fathers of the 'classical' tradition in monetary theory" [the orthodoxy in Fetter's language]. However, Thornton was not one of Keynes's classical economists, argues Hicks. **[Slide 38]** The route Thornton followed in his analysis, though it resulted in classical conclusions, "incorporated some of the chief things which Keynes, 130 years later, was to rediscover."

Thornton's explanation for the economic events in the ten years before 1802 started with "some foundations" (176) Then, tells us Hicks, Thornton proceeds to analyze the influence of the rate of interest on holding cash; "It is not, I think, too much to claim, … that he was quite clearly thinking in terms of what Keynes has taught us to call Liquidity Preference." (177) "Thornton has started off on what we should consider a remarkably Keynesian tack." Thornton added another piece to the foundations by analyzing wage stickiness, Hicks states. (177-179)

Hicks agrees that Thornton defended the Bank Restriction in the first half of the book. Inconvertibility is better than deflation, he thought. But when, in the second part of the book, Thornton moves on to analyze the future structure of the British monetary system, beyond the War and the bad harvests, he "show[s] the other side of the medal; the danger of maintaining inconvertibility when it was not necessary." (181) Furthermore, Hicks concludes with a very strong claim that "Thornton always believed in the Gold Standard." (184)

As a temporary measure, inconvertibility makes sense; but not as a permanent measure. Hence Hicks conclusion: "For the short-term, he is Keynesian; … when it comes to the long-run, Thornton is the hardest of hard-money men". (186) Obviously, Hicks in the mid-1960s is living the Keynesian-Monetarist disputes; are we for rules or discretion? Are wages flexible? How fast are prices and exchange rates coming to their equilibrium levels? Thornton's "essential idea" remarks Hicks in conclusion is that an economy "is liable to unexpected shocks" like the Napoleonic war and bad harvests. Hence, we need institutions that "can stand up to shocks." (187) Thornton assumed, so Hicks, that long-run stability exists, founded on money wages flexibility. But in order to know if we can use the cushions against shocks under modern conditions, many years after *Paper Credit*, we will have to report back to Thornton on "what has happened since his time" to wage inflexibility and long-run price-stability. Hicks always noted that facts are crucial to monetary theory,

Conclusion

As we have seen, Thornton's innovative analysis of the macro-economy relates, generally speaking, to the balance of payments and to the financial system. Various authors who read him with admiration read him differently, appreciating some aspects of his analysis while ignoring, not necessarily explicitly rejecting, others. Why? Why the above scholars (and others) read the same text in different ways? What accounts for these different readings? Are they influenced more by the issues that they encountered than by those Thornton faced? Are they more under the influence of the public image of Thornton (one of the three drafters of the Bullion Report) than by the seminal book he wrote? Are they selective, taking from Thornton what is in line with their own thinking, while ignoring what is not? Are they missing some of the main ideas because Thornton is not always lucid? Clearly, in so many cases we are prone to read into an author (Thornton included) our own ideas not less than his…

Ricardo who was a notable critique of the Bank of England, read Thornton as a defender of the Bank and its directors during the Restriction, because in 1802, in *Paper Credit,* Thornton acquitted them from blame for the balance of payments difficulties and also for the high prices, both of gold and commodities, for which the Bank of England was in Ricardo's view responsible. Thus, Ricardo read Thornton as providing an influential theoretical defense for the anti-Bullionists, particularly their explanation for gold flows and prices. Ricardo repudiated in "The High Price of Bullion" and also in later publications, Thornton's Balance of Payments writings. But Ricardo ignored the monetary and financial aspects of Thornton's thought and also discarded any attempt to depart from the gold standard. Thus, he read selectively. Viner, in the twentieth century, who, as I mentioned, was apparently the first to rediscover Thornton, also addressed, like Ricardo, only the Balance of Payments argument. Though, notably, contrary to Ricardo, Viner accepted Thornton's arguments about the balance of payments. He found in Thornton an early advocate of the claims he made in his 1924 Ph.D.

Tooke agreed with Ricardo on gold as the anchor of the monetary system, but also agreed with Thornton on the equilibrating processes in the balance of payments. That is, he accepted Thornton's explanation for gold flows, attributing imbalances to both real and monetary, rather than only monetary reasons. Tooke also appreciated Thornton's innovative approach to the financial system, departing from monetary theories of credit to make the first attempt to analyze the system from a credit perspective. This translates to the very different approaches to deposits in the analysis of Ricardo and the Currency School versus that of Tooke and the Banking School. However, Tooke did not appreciate, or absorb, the Thorntonian ideas about either central banking or his agreement, in principle, to depart from gold. In Thornton's mind, the two were closely related: you can depart from gold, and give up its disciplinary powers, if you implement cautious management.

JS Mill agreed with Ricardo and Tooke about gold as the standard. On this issue they were all in close agreement to the Restriction's bullionists; though Mill, like Tooke, also preferred Thornton's analysis of the balance of payments to that of Ricardo's belief that "only excess money" can cause a problem in the balance of payments. However, again, Mill, like Tooke and the Banking School, appreciated Thornton's analysis of the monetary system, and in particular his decision to base the analysis on credit. Both Mill and Tooke did not accept, or maybe did not understand, the radical approach of Thornton to monetary policy. They could not adopt the discretionary conclusions that one can identify in Thornton.

Walter Bagehot, who made an important step in the direction of modern discretionary monetary policy - although he did it as a defensive discretionary measure rather than an active one, as the book elaborates - , does not relate any longer to Thornton. That is when Thornton disappeared from the economists' sight. Knut Wicksell, who made the next crucial step in the rediscovery of the rationale for implementing monetary policy, this time active monetary policy in the modern sense, did not know Thornton's name until very late in his life. He became aware of Thornton's name only after he wrote his seminal contributions, hearing about him through Davidson. Wicksell was the scholar who paved the path to a departure from adopting gold as the necessary standard for any reasonable monetary and financial system. Wicksell also, without knowing it, returned to Thornton's two rates innovative analysis. Hence, Wicksell had to rediscover on his own what Thornton had known 100 hundred years earlier.

Now, the events that brought Thornton back to the attention of economists started with Viner. He, like Ricardo, read his analysis of the balance of payments rather than his monetary analysis. Unlike Ricardo, however, he, as well JS Mill argued that Thornton had the upper hand in that debate about the balance of payments.

Thus, it was Hayek's scholarly reading in the late 1920s and 1930s that managed to fully bring to light all the crucial aspects of Thornton’s analyses concerning both the balance of payments and monetary analysis, reintroducing the full scale of Thornton analysis back to economics. That this analysis seems not to be in line with Hayek's own analysis, in particular that of his later writings on money and banking in the 1970s when he became a free banking man and a strong advocate of gold as the anchor, is another puzzle for historians of monetary theory. Hicks, writing just when Hayek was coming back to economics, took the discussion to another sphere. But, he, like many others, placed Thornton, wrongly in my view, in the bullionists' camp.

But that is a story already told.

Blanqui in his *History of political economy in Europe* (1837) writes: **[Slide 39]** "One of the most interesting works published at this period by Mr. Henry Thornton, had for its aim the justification of the suspension of specie payments; and although it abound in errors, no other work has ever given a clearer comprehension of the advantages of the monetary circulation, whether in paper or specie. The author maintained that banks could indefinitely favor labor and multiply production without having need of specie, on the single condition of prudently regulating their issues. He proclaimed the benefits of credit, in full view of a measure which would seem to have annihilated it; and the future has justified his most reasonable predictions."[8]

He got it, I think, almost right; not perfect … But very close to.

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[8] In Ch. XL "Political Economy in England from the beginning of the nineteenth century. – Pitt's system, supported by Thornton, attacked by Cobbett…." p 455

Bibliography

Angell, J. A. ([1926] 1965), *The Theory of International Prices: History, Criticism and Restatement*, New York: Kelley.

Arnon, A. (1984), "The Transformation in Thomas Tooke's Monetary Theory Reconsidered," *History of Political Economy*, vol. 16, pp. 311–326.

Arnon, A. (1987), "Banking Between the Invisible and Visible Hands: A Reinterpretation of Ricardo's Place within the Classical School", *Oxford Economic Papers*, vol. 39, pp. 268-281.

Arnon, A. (1991), *Thomas Tooke: Pioneer of Monetary Theory*, Michigan University Press and Elgar Publishing Press.

Arnon, A. (2009), " Reexamination of Thornton's Innovative Monetary Analysis: The Bullion Debate during the Restriction Once Again", History of Political Economy, Vol. 41, pp. 545-574.

Arnon, A. (2011), *Monetary Theory and Policy from Hume and Smith to Wicksell: Money, Credit and the Economy,* Cambridge: Cambridge University Press.

Bagehot, W. ([1873] 1896) *Lombard Street*: *A Description of the Money Market*, London: Kegan Paul, Trench, Thurner.

Baring, F. ([1797a] 1967), *Observations on the Establishment of the Bank of England and on Paper circulation of the Country*, London: Minerva Press [Kelley Publishers].

Baring, F. ([1797b] 1967), *Further Observations on the Establishment of the Bank of England and on Paper circulation of the Country*, London: Minerva Press [Kelley Publishers].

Baring, F. (1801a), *Observations on the Publication of Walter Boyd*, London: Minerba Press.

Beaugrand, P. (1982), "Henry Thornton: a mise au point" *History of Political Economy*, vol. 14 pp. 101-111.

Blanqui, J. A. (1837), *History of political economy in Europe,* Tr. from the

4th French ed. by E. J. Leonard; with preface by D. A. Wells [1880], New York: Putnam's Sons.

Boyd, W. (1801a), *A Letter to the Right Honourable William Pitt on the Influence of the Stoppage of Issues in Specie at the Bank of England on the Prices of Provisions and Other Commodities*, London: Wright.

Boyd, W. (1801b), *A Letter to the Right Honourable William Pitt on the Influence of the Stoppage of Issues in Specie at the Bank of England on the Prices of Provisions and other Commodities. The Second Edition, 'With additional Notes; and a Preface Containing Remarks on the Publication of Sir Francis Baring, Bart*, London: Wright and Mawman.

Cannan, E. (1919), *The Paper Pound of 1797-1821*, London: P.S. King.

Fetter, F.W. (1955), *The Irish Pound*, Evanston: Northwestern University Press.

Fetter, F.W. (1965), *Development of British Monetary Orthodoxy, 1797-1875*, Cambridge, Mass: Harvard University Press.

Glasner, D. (1985), "A Reinterpretation of Classical Monetary Theory", *Southern Economic Journal*, vol 52, pp. 46- 67.

Glasner, D. (1992), "The Real-Bills Doctrine in the Light of the Law of Reflux", *History of Political Economy*, vol. 24, pp. 867-894.

Grubel, H. G. (1961), “Ricardo and Thornton on the Transfer Mechanism”, *Quarterly Journal of Economics*, vol. 75, pp. 292-301.

Hayek, F.A. (1929/1991), "The Period of Restriction, 1797-1821, and The Bullion Debate in England", in W.W. Bartley and S. Kresge (eds.), *The Collected Works of F.A. Hayek*, *vol. 3: The Trend of Economic Thinking: Essays on Political Economists and Economic History*, W. W. Bartley III and S. Kresge (eds.), Ch. 11, pp. 177-215, Chicago: The University Press.

Hayek, F. A. (1939) *Introduction* to the republication of H. Thornton (1802/1939) *Paper Credit*.

Hetzel, R. L. (1987) “Henry Thornton: Seminal Monetary Theorist and Father of the Modern Central Bank”, *Federal Reserve Bank of Richmond Economic Review*, 73 (4), pp. 3-16.

Hicks, J. (1967), *Critical Essays in Monetary Theory*, Oxford: The Clarendon Press.

Hollander, J.H. (1911), "The Developments of the Theory of Money from Adam Smith to David Ricardo," *Quarterly Journal of Economics*, Vol. 25, pp. 426-470.

Hollander, S. (1985), *The Economics of John Stuart Mill, Volume I Theory and Method, Volume II: Political Economy*, Toronto and Buffalo: University of Toronto Press.

Horner, F. (1957), *The Economic Writings of Francis Horner in the Edinburgh Review 1802-1806*, Edited and with an Introduction by F.W. Fetter, New York: Kelley & Millman.

Horner, F. (1994) *The Horner Papers: Selection from the Letters and Miscellaneous Writings of Francis Horner, M.P. 1795-1817*, Edited by K. Bourne and W. B. Taylor, Edinburgh: Edinburgh University Press.

Humphrey, T. M. (1982), “The Real Bills Doctrine”, *Federal Reserve Bank of Richmond Economic Review*, 68(5) pp. 3-13.

Humphrey, T. M. (1989), “Lender of Last Resort: The Concept in History” *Federal Reserve Bank of Richmond Economic Review*, 75(2) pp. 8-16.

King, P. [Lord] (1804), *Thoughts on the Effects of the Bank Restrictions*, (2nd edition, first 1803), London: Taylor.

Laidler, D. (1981), "Adam Smith as a Monetary Economist", *Canadian Journal of Economics*, 14, pp. 185-200.

Laidler, D. (1991), *The Golden Age of the Quantity Theory*, Princeton: Princeton University Press.

Laidler, D. (2000), “Highlights of the Bullionist Controversy”, Research Report #13, Stockholm School of Economics, Institute for Research in Economic History.

Laidler, D. (2004), "Two Views of the Lender of Last Resort: Thornton and Bagehot”, in *Macroeconomics in retrospect: The selected essays of David Laidler,* pp. 40-56, Cheltenham: Elgar.

Mill, J. S. (1826), “Paper Currency and Commercial Distress”, in The Collected Works of John Stuart Mill, J. M. Robson (ed.), vol. IV pp. 71–124, Toronto: University of Toronto Press.

Mill J. S. (1833), "The Currency Juggle", in The Collected Works of John Stuart Mill, J. M. Robson (ed.), vol. IV pp. 181–192, Toronto: University of Toronto Press.

Mill J. S. (1844), “The Currency Question” [Review of Tooke’s and Torrens’ Inquiries of 1844], The Westminster Review, Vol. 41 pp. 579–598; also in The Collected Works of John Stuart Mill, J. M. Robson (ed.), vol. IV pp. 341–362, Toronto: University of Toronto Press.

Mill J. S. (1848) Principles of Political Economy, seventh edition [1871], in The Collected Works of John Stuart Mill, J. M. Robson (ed.), vol. II & III, Toronto: University of Toronto Press.

Murphy, A. E. (2003) “Paper Credit and the Multi-Personae Mr. Henry Thornton”, *European Journal of the History of Economic Thought*, vol. 10 pp. 429-453.

Murphy, A. E. (2005) “Rejoinder to Skaggs’s Treating Schizophrenia: a comment on Antoin Murphy’s diagnosis of Henry Thornton’s Theoretical Condition”, *European Journal of the History of Economic Thought*, vol. 12 pp. 329-332.

O'Brien, D.P. (2003), “The Lender-of-Last-Resort Concept in Britain” *History of Political Economy*, vol. 35, pp. 1-19.

Parliamentary Papers (1797), *Report from the Committee of Secrecy On the*

Outstanding Demands of the Bank of England, in British Parliamentary Papers, The Bank of England and Commercial Credit, Monetary Policy, General I, Irish University Press.

Peake, C. F. (1978), “Henry Thornton and the Development of Ricardo's Economic Thought”, *History of Political Economy*, 10, pp. 193-212.

Peake, C. F. (1982), “Henry Thornton: An Accurate Perspective” *History of Political Economy*, 14, pp. 115-120.

Peake, C. F. (1995), “Henry Thornton in the History of Economics: Confusions and Contributions” *Manchester School of Economic and Social Studies*, 63, pp. 283-96.

Reisman, D. A. (1971), “Henry Thornton and Classical Monetary Economics”, *Oxford Economic Papers*, 23, pp. 70-89.

Ricardo, D. (1951–1973), *Works and Correspondence of David Ricardo*, edited by P. Sraffa, 11 volumes, Cambridge: The University Press.

Ricardo, D. (1932), *Minor Papers on the Currency Question, 1809–1823*, Edited with an Introduction and Notes by Jacob H. Hollander, "Notes on Thornton's 'Paper Credit' (1802), pp.19-22, Baltimore: John Hopkins Press.

Robbins, L. (1967), "Introduction" *Collected Works of John Stuart Mill: Essays on Economics and Society*, Vol. IV, pp. xiii-xxi.

Santiago-Valiente, W. (1988), "Historical Background of the Classical Monetary Theory and the 'Real Bills' Banking Tradition", *History of Political Economy*, vol. 20, pp. 43-63.

Schumpeter, J.A. (1954), *History of Economic Analysis*, London: Allen & Unwin.

Skaggs, N.T. (1994), "The Place of J. S Mill in the Development of British Monetary Orthodoxy ", History of Political Economy, vol. 26, pp. 539-567.

Skaggs, N.T. (1995), "Henry Thornton and the Development of Classical

Monetary Economics", *Canadian Journal of Economics*, vol. 28, pp. 1212-1227.

Skaggs, N.T. (2003), "Thomas Tooke, Henry Thornton and the Development of British Monetary Orthodoxy", *Journal of the History of Economic Thought*, vol. 25, pp. 177-97.

Skaggs, N. T. (2005) “Treating Schizophrenia: a comment on Antoin Murphy’s diagnosis of Henry Thornton’s Theoretical Condition”, *European Journal of the History of Economic Thought*, vol. 12 pp. 321-328.

Smith, A. ([1776] 1976), *An Inquiry into the Nature and Causes of the Wealth of Nations*, edited by E. Cannan, Chicago: The University Press.

Smith, V.C. (1936), *The Rationale of Central Banking*, London: P.S. King.

Thornton, H. ([1802] 1939), *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain*, (with an introduction by F.A. von Hayek), New York: Farrer & Rinehart.

Thornton, H. (1804), *Notes on King* in Thornton (1802\1939), New York: Farrer & Rinehart.

Thornton, H. (1811), *Speeches 1811* in Thornton (1802\1939), New York: Farrer & Rinehart.

Tooke, T. (1826), Considerations on the State of the Currency, (2nd edition), London: John Murray.

Tooke, T. (1844), *An Inquiry into the Currency Principle: The Connection of the Currency with Prices and the Expediency of a Separation of Issue from Banking*, London: Longman, Brown, Green, Longmans.

Viner, J. (1924), *Canada's Balance of International Indebtedness 1900-1913: An Inductive Study in the Theory of International Trade*, Cambridge: Harvard University Press,

Viner, J. (1937), *Studies in the Theory of International Trade*, New York: Harper.

Wheatley, J. (1803), *Remarks on Currency and Commerce*, London: Burton.

Wicksell, K. (1898), Interest and Prices: A Study of the Causes Regulating the Value of Money, [Translated by R. F. Kahn; Introduction by B. Ohlin] New York: A. M. Kelley, [1936/1965].

Wicksell, K. (1906), Lectures on Political economy Vol. II [Edited with an Introduction L. Robbins], New York: A. M. Kelley, [1935/1978].