Crucial Influences on Keynes's Understanding of Say's Law

Steven Kates*

Keynes's General Theory *was a full scale attempt to overthrow the influence of Say's Law on economic theory. The initial idea to attack Say's Law occurred to Keynes as a consequence of his reading Malthus's letters to Ricardo in late 1932. Following this initial acquaintance, Keynes read other authors who had discussed Say's Law in their own works. Amongst these, only J.A. Hobson's influence is well documented. Two other authors, both American, appear to have been of singular importance: Frederick Taylor and Harlan C. McCracken. This paper explores the influence of Taylor and McCracken on the development of Keynes's* General Theory, *with particular reference to their influence on Keynes's understanding of the meaning of Say's Law. Also discussed will be the origin of the term "Say's Law" to describe what had previously been known as "the law of markets" or* "théorie des débouchés".

The *General Theory* is an attack on Say's Law. The origins of this attack lay in Keynes's having come across Malthus correspondence with Ricardo in late 1932 as he was updating his essay on Malthus for inclusion in the *Essays in Biography*.[1] His discovery of Say's Law led Keynes to focus on the failure of effective demand as the cause of recession, but in late 1932 and early 1933, Keynes would have been generally unfamiliar with the literature on Malthus, Ricardo or the law of markets.

Indeed, until the end of 1932, Keynes had shown no interest in the issues surrounding the law of markets and had at no stage written on the subject. Thus, when he encountered Say's Law in reading Malthus's correspondence, he was entering an area which would have been largely unknown to him. It would therefore have been necessary for him to undertake further investigation to better understand the nature of the issues he had accidentally come upon.

As is well known, part of the research effort underlying the *General Theory* was undertaken by others.[2] But in regard to Say's Law, it is likely that Keynes conducted most of his researches himself. Firstly, he was deeply interested in what he had discovered in his reading of Malthus. His excitement is shown in the manner in which he commended the whole of Chapter VII, Section IX of Malthus's *Principles* to readers of his essay on Malthus (CW X: 101n). It is extremely unlikely he would have done so had he not read these passages himself. Secondly, there is no record that any of the early discussions within his coterie at Cambridge revolved around Say's Law, a strong indication that the research that Keynes conducted on Say's Law during 1932 and 1933 was undertaken by him without consultation.[3] Thirdly, whatever assistance he might have received from others, the importance Keynes clearly attached to the issue of Say's Law and effective demand would have ensured that he would have closely studied any material uncovered.

Documented Influences

Hobson's influence is well documented. *The Physiology of Industry* (Hobson and Mummery 1889) is quoted in the midst of Keynes's discussion of Say's Law (CW VII: 19n) and then, in Chapter 23, a further seven pages are devoted to providing a discussion of the *Physiology of Industry* with extended quotations (*Ibid.*: 364-370). Keynes agreed with

Hobson that the constraint on activity is due to demand deficiency. He in fact wrote to Hobson after the publication of the *General Theory* to say, "I am ashamed how blind I was for many years to your essential contention as to the insufficiency of effective demand" (CW XXIX: 211).

Keynes also mentioned two other contemporary authors in his "brave army of heretics", Silvio Gesell and Major Douglas. Keynes provided brief descriptions of their works, but they are unlikely to have provided the same kind of guidance as did Hobson. And, although not mentioned in the *General Theory* itself, Keynes was acquainted with the writings of two other authors who were identified with the under-consumption school during the 1930s, namely the American authors, Foster and Catchings. They had been discussed in the *Treatise* (CW V: 160) and were referred to in an early draft of the *General Theory* (CW XXIX: 82n).

There are, however, two additional writers whose influence on Keynes is worthy of note but whose influence remains undocumented. These are the authors Fred Taylor and Harlan McCracken. Both wrote at some length on Say's Law. The influence of Taylor is more speculative and may have been indirect, but in the case of McCracken it is virtually certain that Keynes read what he had written.

Fred Taylor

In the literature on the *General Theory*, Fred Taylor[4] has not been previously cited as having influenced the development of Keynes's thought. Keynes never mentions Taylor in any of his writings nor were they associates. Yet, there is a possible relationship between Keynes and Taylor which merits investigation, and that is their common interest in Say's Law. The possibility of a direct influence of Taylor on Keynes arises not just because of the similarity of their analysis, but also from the likelihood that it was Taylor who first coined the term "Say's Law".[5]

Taylor first published his *Principles of Economics* in 1921.[6] Chapter XV is entitled "Say's Law" and deals with a certain set of arguments which, Taylor writes, "we shall designate Say's Law" (1925: 196). He then commences his discussion of a series of economic propositions, prefacing his final conclusion with these words:

> "I shall therefore put the proposition we have discussed in the form of a principle. This principle, *I have taken the liberty to designate Say's Law*; because, though recognized by many earlier writers, it was particularly well brought out in the presentation of Say (1803)." (*Ibid.*: 201, italics added)

Taylor clearly believed that, in using the term "Say's Law", he was introducing a new term into the literature of economic theory. And while this expression has become the common way used to describe what was once known as the *théorie des débouchés* or the law of markets, the expression "Say's Law" was not used, as far as my researches have shown, on any occasion prior to Taylor's use of it in 1921.

Taylor, for the largest part of his discussion, takes an utterly orthodox position. As one of the general demand fallacies which he enumerates, he includes "the fears of those who periodically prophesy universal overproduction - a universal glut" (ibid.: 197). In classical fashion, he argued that "demand [is] coincident with product" (ibid.: 199). In saying this, he made the standard classical proviso, that producers must be "producing something demanded and producing that something in the proper proportions to other goods produced" (ibid.). Taylor made the point that demand is constituted by supply by stating that "the demand made by all society for market goods of all kinds can include nothing but goods which the same society has produced and offered on the market" (ibid.: 200). Moreover, demand "must be as great as product" so long as "producers have directed their production in true accord with one another's wants" (ibid.: 200). Taylor emphasised that the goods produced must consist of what others wish to buy and that they must be produced in the proper proportions to each other:

> "A particular product comes to constitute a part of the total demand for goods only in so far as it is a product for which there is a corresponding demand. . . . This implies, it should be noted, that the product in question is demanded in the proportion in which it is produced - when we produce a thing we do not add to demand in proportion to the volume for our product unless we are maintaining the proper proportion between our products and other products." (ibid.: 201)

Taylor then enunciates the principle which he had "taken the liberty to designate Say's Law":

> "**Principle** - Say's Law. The Ultimate Identity of Demand and Product.
>
> "In the last analysis, the demand for goods produced for the market consists of goods produced for the market, i.e., the same goods are at once the demand for goods and the supply of goods; so that, if we can assume that producers have directed production in true accord with one another's wants, total demand must in the long run coincide with the total product or output of goods produced for the market." (ibid.: 201-202)

Following J.S. Mill (1974: 70), Taylor then draws attention to the separation in time between sale for money and the subsequent purchase of other goods using the money receipts. This separation permits the sale of one's own goods without the immediate purchase of another set of goods:

> "Every exchange of product for product is broken into two parts - (1) exchanging one's own product for money or bank credits, and (2) exchanging the money or bank credits thus obtained for the product of the other man. Obviously, an interval of time can be put between these two operations; and, as a matter of fact, such an interval, short or long. almost always intervenes.
>
> "It follows from the facts just brought out that it is possible for us to *postpone* for a long period, even indefinitely, the second part of the operation, thus *cutting down for the time being the general demand for goods, though we have not cut down the amount of production.*" (*Ibid.*: 202, italics in original)

The most important instance where such a discrepancy between production and demand occurs is during a "depression which follows a business crisis" (*Ibid.*: 203). This, too, follows Mill's argument, in which a fall in confidence leads to a desire for liquidity and a resulting fall in the demand for goods (*op. cit.*: 70-71). Where Taylor takes a position different from Mill, and more characteristic of Keynes, is where he supports the use of public expenditure to raise the level of demand during the depression.[7] He argues that:

> "If . . . the public authorities step in and undertake a large program of road-making or building construction or harbor improvements, this will really mean a considerable increase in total demand and so an increase in general prosperity." (*Ibid.*: 203)

The evidence that Keynes read Taylor's analysis is entirely circumstantial. Taylor was the first to use the term "Say's Law" to describe what had previously been referred to as "the law of markets" or the "*théorie des débouchés*". The phrase had to have come to Keynes's attention from somewhere, since he does not suggest he coined the term himself. And, with Keynes's likely interest in deepening his understanding of the concept after his first encounter in Malthus, it is possible that at some stage Keynes became acquainted with Taylor's discussion.

There are also similarities between Keynes and Taylor which are suggestive. The argument presented by Taylor was that Say's Law referred only to the long term, implying, to some extent, that it was irrelevant, or even dangerous, when applied to cyclical activity. Taylor highlighted the fact that the act of purchase and sale was divided into two separate operations, the second of which might occur a long time after the first. There was, therefore, no certainty in the shorter term that everything produced would be bought. Taylor was thus an advocate of public works during depression at least as early as 1921.

On the other hand, Keynes never referred to Taylor in any of his published writings nor in any of his correspondence or drafts. There is thus no direct evidence linking Taylor with Keynes. Taylor also provided a more positive explanation of Say's Law than did Keynes and, more fundamentally, showed that there was no inconsistency between acceptance of Say's Law, recognition of the existence of depression and advocacy of public works. Keynes would thus not have found in Taylor support for his attack on classical economic theory. All things considered, it is unlikely that Keynes would have referred to Taylor's argument in support of his own, but reference to "Say's Law" in the *General* Theory suggests he may have read it.

Taylor's Possible Influence Through Others

A stronger reason for believing that Keynes had another source for the term "Say's Law" is that it is unlikely that he would have wanted to identify his own theory with that of someone else which was both similar to his own and also contradicted his own. It is certainly arguable that, had Keynes been aware Taylor had coined the term Say's Law, he might have been reluctant to adopt it or use it in such an off-hand manner. Keynes may therefore have come across the terms from elsewhere. Other possible sources may have been Arthur Adams's[8] *Economics of Business Cycles* (1925) or works of Alvin Hansen.

Within four years of Taylor's having coined the term, it seems that Say's Law had gone into general currency. Note the following statement by Adams in 1925:

> "Many reputable economists have maintained that there can be no general oversupply of goods. They defend their position upon the proposition, *sometimes referred to as Say's Law*, that demand for goods is always equal to the quantity of goods produced." (1925: 95 - italics added.)

Here "Say's Law" is just a term "sometimes referred to", so it is a term to be used wherever it applies. Had Keynes come across the term in Adams, he would have been less concerned to use the term himself. Moreover, Adams is quite critical of this conception, and applies it in a similar manner to Keynes. Say's Law is, in Adam's view, the proposition that total demand is equal to total supply. It is put in a way which can be read in an aggregative sense: "The ability to buy is always equal to the ability to sell, the ability to sell is, in general, equal to the cost of production (including profits)" (*Ibid.*: 96). Adams considered this a fallacy: "Whatever may be the merits of Say's Law from the long-time point of view, it is undoubtedly fallacious as applied to the everyday business world." (*Ibid.*: 96) His intent is to demonstrate that demand can and does fall short of supply, and that this is a frequent cause of depression, thus invalidating Say's Law.

Hansen, who had been Taylor's student, also used the term "Say's Law", writing that "there may be a limited market in the sense that there is not a sufficient quantity of money offered by buyers to take the goods off the market at the existing level of prices. Say's law of markets failed to take into account the money economy" (1927: 23-24). Hansen then immediately refers to Taylor's discussion, and quotes more than a page from Taylor's *Principles*. No mention is made that Taylor invented the term; the passage is quoted only to corroborate what Hansen is himself writing. Hansen also referred to Say's Law in his *Economic Stabilization in an Unbalanced World* (1932: 162).

The term "Say's Law" had thus entered the business cycle literature of the 1920s and 1930s. It is therefore possible that Keynes, in trying to deepen his understanding of what he had first come across in the Malthus-Ricardo correspondence, read either Taylor or other economists who had been influenced by Taylor, and it was this influence which was ultimately reflected in Keynes's use of the term "Say's Law".

Harlan McCracken

The one book it is certain that Keynes did consult was Harlan McCracken's *Value Theory and Business Cycles* (1933).[9] In a draft of Chapter 2, Keynes makes the following footnote statement in reference to a discussion on Marx: "Cf. H.L. McCracken, *Value Theory and Business Cycles*, [New York, 1933] p. 46, where this part of Marx's theory is cited in relation to modern theory." (CW XXIX: 81n)

One would not be aware from the title that McCracken's book deals with Malthus, Ricardo and Say's Law. The book is a discussion of the difference between a Malthusian "commanded value" theory of value and a Ricardian "embodied theory of value".[10] From his reading of the correspondence between Ricardo and Malthus, Keynes had established a deeply critical view of Ricardian theory. Reading McCracken would have emphasised to Keynes the continuing effects of the Ricardian influence on contemporary economic theory. McCracken described Ricardo in the following terms:

> "*Could there be a General Overproduction?* To this question Ricardo's logic gives an emphatic 'NO!' . . . According to Ricardo the only source of *demand* for goods consisted of a *supply* of other goods. If everyone had an abundance of *supply*, then exchange would be easy, and society would revel in opulence. . . . A temporary maladjustment might be conceivable - a temporary shortage of *certain* goods - but never a general overproduction. . . . Ricardo could not conceive total demand and total supply out of proportion. In fact he took little notice of demand. . . . **A business cycle positively could not happen in Ricardo's assumed economic world.**" (1933: 10-11 - bolding added.)

This is a powerfully stated polemic on Ricardian economic theory. The point made is not just that overproduction could not occur in the Ricardian world, but that it was theoretically impossible even to generate a business cycle. The flaw in Ricardian economics was its virtual refusal even to acknowledge the demand side of the economy and, therefore, to recognise that failure of effective demand held down the level of economic activity. It is this argument, whatever may have been its origins, which provided the *General Theory* with much of its polemical power. McCracken contrasted Ricardo with Malthus in a manner which is today quite familiar, but which was unusual for the early 1930s:[11]

> "Ricardo assumed demand, stating that due to the insatiable nature of human wants, demand was always present when the individual possessed a supply. . . . Malthus, on the other hand, was careful to point out that such was not the case. Exchange value might decrease even though supply increased, due to a failure in demand. And demand might fail either because of a voluntary failure of demand on the part of the rich who might prefer saving to spending or from an involuntary failure of demand on the part of the poor who had keen wants but nor purchasing power. To create exchange value or increase wealth there must be an increase in effective demand as well as in supply." (*Ibid.*: 122)

The celebrated passages dealing with Ricardo's baneful effect on economic theory (CW VII: 32-34) restate McCracken's argument in an even more polemical fashion. Keynes's characterisation of economists as having a Candide-like attitude ought to have been something of a mystery in the face of a well developed theory of the cycle which had existed since at least the middle of the nineteenth century, and which had reached a new pitch of interest during the Great Depression. Even if it had been true that Ricardo himself was little interested in the business cycle, this could not have been said of the economists who followed him. What Keynes appears to have done is to apply McCracken's judgement on Ricardo to the whole of the economics profession of his time. At the very start of the *General Theory*, Keynes specifies that he is opposed to the entire classical theory based, as he saw it, on Ricardian economics:

> "'The classical economists' was a name invented by Marx to cover Ricardo and James Mill and their *predecessors*, that is to say for the founders of the theory which culminated in the

Ricardian economics. I have become accustomed, perhaps perpetrating a solecism, to include in 'the classical school' the *followers* of Ricardo, those, that is to say, who adopted and perfected the theory of the Ricardian economics, including (for example) J.S. Mill, Marshall, Edgeworth and Prof. Pigou." (CW VII: 3n)

The implication is that the flaws, as they existed in contemporary economic theory, were due to acceptance of a theoretical structure which began with Ricardo. The mere fact that Malthus had disputed Say's Law with Ricardo would not, of itself, have led to the conclusion that economists more than a century later were still following in a Ricardian tradition. It is here suggested that this conception may have come from Keynes's reading of McCracken.

There is another feature of McCracken which has its echo in the *General Theory*. It is that the very term "classical" was used by McCracken in referring to the Ricardian tradition. In his discussion of Aftalion's attack on the law of markets, McCracken, on a number of occasions, contrasts Aftalion's theory with "classical" predecessors. Note the following passages from McCracken:

"Aftalion next directs his attention to the classic doctrine that goods exchange against goods." (*op. cit.*: 146)

"Then Aftalion trains his argumentative artillery upon the last defense of the Ricardian Classicists, who are not yet ready to capitulate and grant the possibility of a crisis from general overproduction." (*ibid.*: 147)

"Just as the old classical economics pointed to market values fluctuating about normal values determined by cost of production, so the modern economics show how prices at the moment depend upon final utility but gravitate towards a point of equilibrium as determined by marginal cost." (*ibid.*: 150)

It was Keynes's use of the term "classical" to characterise his contemporaries (especially Pigou) which added to the polemical force of the *General Theory*.[12] McCracken would also have alerted Keynes to the significance of providing a refutation of the law of markets. In a footnote dealing with Aftalion, McCracken emphasised how significant such a refutation would be:

"If Aftalion has succeeded in establishing the possibility of a voluntary failure of demand by those who have purchasing power but insufficient keenness of desire when facing expanded production under the influence of the principle of diminishing utility, then it constitutes one of the greatest contributions to economic theory in a generation. Say's *Law of Markets*, according to which production financed consumption and supply generated adequate demand is in serious need of modification." (*ibid.*: 149n)

To achieve "one of the greatest contributions to economic theory in a generation" would have been a powerful incentive to Keynes. That he felt that he was about to achieve exactly that is shown in his famous letter to George Bernard Shaw (CW XIII: 492-493).

It is perhaps also noteworthy that McCracken uses the phrase "Say's Law of Markets". It is possible that the reason Keynes uses the term Say's Law in so natural a fashion is that he had come across it in the midst of his reading of McCracken.[13] Keynes may merely have truncated the phrase for brevity.

Lastly, Keynes would have been sympathetic to McCracken because of the manner in which McCracken had treated Keynes's previous writings. In an eponymous chapter devoted to discussing Keynes's work, McCracken described Keynes as "one of the most outstanding exponents of a managed currency" (*op. cit.*: 193). And in a passage of extraordinary insight, McCracken, in 1933, opened the chapter with these words:

"Keynes is a true descendent of Malthus with respect to the importance of the 'short-run forces'. . . . Keynes joins the swelling ranks of those economists who insist that major attention, in the face of business instability, should be given to those short-run forces which Malthus alluded to a century ago." (*ibid.*: 193)

This passage is likely to have encouraged Keynes in the direction he was already in the process of moving towards. He had already recognised a kinship with Malthus from his reading of the correspondence. McCracken's comment would have helped solidify these impressions, and assisted Keynes to understand the nature of the conflict between Malthus and Ricardo.

Summary Statement on McCracken

The parallels between McCracken's *Value Theory and Business Cycles* and the *General Theory* are almost certainly more than coincidence. Keynes read McCracken during the period of his writing the early drafts. The reference to McCracken, in fact, occurs just after Keynes first discussion of Say's Law. There is a page missing from the draft, and in Keynes's *Collected Writings* the last paragraph before the missing page reads:

> "The doctrine that supply creates its own demand has dominated classical theory during the century since Ricardo established it. Malthus's powerful arguments against this theory were completely forgotten, partly -
>
> ". . . [A page of manuscript is missing at this point] . . . " (CW XXIX: 81)

This statement, partial though it may be, was fully consistent with the position taken by McCracken. The missing page may have demonstrated an even closer relationship between Keynes and McCracken, but it would not add much to what we can already discern. If one seeks an explanation for Keynes's very harsh criticism of Ricardo, and for those who were his alleged descendants, then McCracken provides that explanation. It is through McCracken that Keynes may have conceived of the notion that his contemporary economists were Candides, attempting to explain the business cycle while always assuming full employment, or at least an automatic tendency to full employment. It is likely that McCracken provides an important link between Keynes's discovery of Say's Law and the attitude that he ultimately took to classical economics. McCracken is likely to have shaped the final polemical style of the *General Theory*, and in this way helped create the intellectual environment which facilitated the Keynesian Revolution. McCracken, in writing a text on Keynesian economics twenty-eight years later (1961: 27), recognises just how similar his ideas had been to those of Keynes. What McCracken could not have known was that he may have had an extraordinarily important influence in shaping the way in which Keynes thought about the issues raised in the *General Theory*.

Notes

* Chief Economist, Australian Chamber of Commerce and Industry, P.O. Box 18008, Collins Street East, Melbourne, Victoria 8003. I am deeply appreciative of the encouragement and assistance provided by John King of La Trobe University. The responsibility for the text, however, remains with the author.

1 See Kates (1994) for a discussion of just how important Malthus's influence on Keynes was. A draft of this article was discussed in Blaug (1994: 1210).

2 But not all. There are detailed notes on Heckscher's *Mercantilism* in Keynes's handwriting in the Modern Archive at King's College, Cambridge (Box GTE/3).

3 Had Keynes discussed Say's Law with anyone, Sraffa would likely have been the one exception. Keynes and Sraffa were in regular contact during the latter half of 1932, as Keynes's letters to Bonar make clear (see Kates 1994: 14-15). Sraffa would have had at least some knowledge of the issues surrounding Say's Law due to his researches into Ricardo, and he was therefore in a position to provide guidance to Keynes.

[4] Fred Taylor (1855-1932) was Professor of Economics at the University of Michigan (1894-1929). He is mostly remembered today for his reply to Mises on the practicability of socialism (Lange and Taylor, 1938).

[5] There has been virtually no discussion on the origins of this term. Thweatt, for example, appears to assume the form of words originated with Keynes (1979: 80).

[6] Earlier drafts had been used by Taylor as a text at the University of Michigan and therefore the first printing in 1921 was the eighth edition. The ninth edition was published in 1925. A list of the changes made to the text in 1925 is found on page v showing that the text on Say's Law had not been amended and thus represents Taylor's position at least as far back as 1921. In light of his discussion of Say's Law it is noteworthy where he wrote, "the body of doctrine herein contained is, on the whole, rather markedly orthodox. . . . I have been at some pains, however, to stress the point that the acceptance of orthodox economic doctrine is entirely compatible with giving support to whatever degree of interference with the working of the present economic order may prove on the whole conducive to the welfare of society" (1925: iv-v).

[7] Even here the difference may not be all that great. See Mill's discussion in the *Principles* on how governments can create additional industry by levying taxes and then spending the proceeds productively (1921: 66). Mill makes it clear in this discussion that the probable consequence will be an increase in employment.

[8] Adams was Dean of the School of Business and Professor of Economics at the University of Oklahoma.

[9] Harlan L. McCracken was lecturer in economics at the University of Minnesota at the time that he wrote *Value Theory and Business Cycles*. He afterwards taught at Louisiana State University.

[10] Spiegel notes that "Smith had offered a number of variants of the labour theory of value, and among these Malthus preferred 'labour commanded' as a measure of value, whereas Ricardo emphasised 'labour embodied'" (1991: 294).

[11] In a later work, McCracken points out "that when *Value Theory and Business Cycles* . . . was published in 1933 . . . one of the reviewers wrote that he had read a great deal about the Malthusian theory of population, but had never heard of his principles of political economy" (1961: 26).

[12] Sowell wrote that "the 'classical' economist was an interesting expository device, which undoubtedly sped the acceptance of Keynesian analysis as an intellectually revolutionary doctrine" (1972: 211).

[13] McCracken being American, may have taken the term either directly or indirectly from Taylor.

References

Adams, Arthur B. 1925. *Economics of business cycles.* New York, McGraw-Hill Book Company, Inc.

Blaug, Mark. 1994. "Recent biographies of Keynes." *Journal of Economic Literature*, vol 32, pp. 1204-1215.

Blaug, Mark and Sturges, Paul (eds.) 1983. *Who's who in economics - a biographical dictionary of major economists 1700-1981.* Brighton, Sussex: Wheatsheaf Books.

Hansen, Alvin Harvey. 1927. *Business-cycle theory: its development and present status.* Boston: Ginn and Company.

Hansen, Alvin Harvey. 1932. *Economic stabilization in an unbalanced world.* New York.

Hansen, Alvin Harvey. 1953. *A guide to Keynes.* London: McGraw-Hill Publishing Co. Ltd.

Hobson, J.A. and Mummery, A.F. 1889. *The physiology of industry: being an exposition of certain fallacies in existing theories of economics.* London: John Murray.

Kates, Steven. 1994. "The Malthusian origins of the *General Theory*: or how Keynes came to write a book about Say's law and effective demand." *History of Economics Review*, vol 21, pp. 10-20.

Keynes, John Maynard. 1972. *Essays in biography.* [1933]. In Moggridge (ed.) *The Collected Writings of John Maynard Keynes.* Vol X. London, The Macmillan Press Ltd.

Keynes, John Maynard. 1973. *The general theory of employment, interest and money.* [1936]. In Moggridge (ed.) *The Collected Writings of John Maynard Keynes.* Vol VII. London, The Macmillan Press Ltd.

Lange, Oskar and Taylor, F.M. 1938. *On the economic theory of socialism.* B.E. Lippincott.

Malthus, Thomas Robert. 1986. *Principles of political economy: the second edition (1836) with variant readings from the first edition (1820).* Volume VI of E.A. Wrigley and David Souden (eds.). *The Works of Thomas Robert Malthus.* London: William Pickering.

McCracken, Harlan Linneus. 1933. *Value theory and business cycles.* Binghampton, NY: Falcon Press.

McCracken, Harlan Linneus. 1961. *Keynesian economics in the stream of economic thought.* Kingsport, Tenn.: Louisiana State University Press.

Mill, John Stuart. 1921. *Principles of political economy with some of their applications to social philosophy.* 7th ed. [1871] Edited with an introduction by Sir W.J. Ashley, London: Longmans, Green, and Co.

Mill, John Stuart. 1974. "Of the Influence of Consumption on Production." In *Essays on Some Unsettled Questions of Political Economy.* 2nd edn. [1874] Clifton, New Jersey: Augustus M. Kelley.

Sowell, Thomas. 1972. *Say's Law: an historical analysis.* Princeton: Princeton University Press.

Spiegel, Henry William. 1991. *The Growth of Economic Thought.* 3rd ed. Durham, N.C.: Duke University Press.

Taylor, F.M. 1925. *Principles of economics.* 9th ed. New York: The Ronald Press Company.

Thweatt, William O. 1979. "Early formulators of Say's Law." *Quarterly Review of Economics and Business*, vol 19, pp. 79-96.