

Keynes and Say's Law

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Abstract: It seems difficult to exaggerate the importance of Say's Law to Keynes as he wrote the *General Theory*. Much of the *General Theory* is written as a criticism of classical economics, specifically classical economists' beliefs about Say's Law and its implications. The composition of the *General Theory* for Keynes was a 'long struggle of escape': an escape from Say's Law, which for Keynes characterised classical economics. In this paper the role of Say's Law in Keynes's development of the *General Theory* is analysed. The various ways in which Keynes expressed Say's Law are discussed. The many important and varied implications of Say's Law for Keynes are mentioned. The evolution of Keynes's thought about Say's Law and its implications are discussed. Finally, two possible sources for Keynes of the phrase 'supply creates its own demand' that he used to characterise Say's Law are suggested: James Bonar's *Malthus and his Work*, second edition, and H.L. McCracken's *Value Theory and Business Cycles*.

1 Introduction

In the preface to the *General Theory* Keynes said:

The composition of this book has been for the author a long struggle of escape, and so must the reading of it be for most readers if the author's assault upon them is to be successful, – a struggle of escape from habitual modes of thought and expression. The ideas which are here expressed so laboriously are extremely simple and should be obvious. The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds. (Keynes 1973, p. xxiii)

An escape from the doctrines that he had been brought up on by his teachers and had lectured on himself for many years (Keynes 1987b, pp. 35).¹ In a letter to Hawtrey in April 1936, Keynes wrote:

(Classical economists) assume...that, if resources were fluid and could be applied equally well in any direction, there would never be any obstacle to full employment, and there would be no unemployment except that which I describe as voluntary. This is the thesis of theirs which I am denying and which I consider it important to deny. What underlying assumptions have led the classical economists to this conclusion is an obscure subject which I have partially explored, but about which I feel no certainty. (Keynes 1987b, p. 26)

A major difficulty for Keynes, and a chief cause of confusion, was that the classical assumptions were tacit. 'I am under the disadvantage that no one has ever thought it worth while to write down the postulates which the orthodox theory is supposed to require....The postulates which it requires, not having been stated, have escaped notice, with the result that deep-seated inconsistencies have been introduced into economic thought' (Keynes 1987b, p. 106).² Again and again Keynes asked his critics either to explain where there was a clear statement of

orthodox theory or for them to tell him in complete detail what orthodox theory was (for example, Keynes 1979, pp. 223, 229; 1987b, p. 92) He went so far as to challenge Robertson: '(m)y note on Pigou is part of an article in which I am also commenting briefly on Ohlin and you, the part about you being mainly devoted to an attempt to taunt you into producing a theory of the rate of interest which is capable of being criticised' (Keynes 1987b, p. 254).

Hugh Townshend, writing a review of Hawtrey's *Capital and Employment*, wrote to Keynes trying to establish '...what the *basic* postulate of classical economics is which you have found to be wrong' (Keynes 1979, p. 255). Keynes responded: 'I have made various suggestions in the course of my book as to what their premise may be; all my suggestions amount to the same thing, though expressed in different ways. The form of the premise which they are semi-consciously making is, I fancy, much more like Say's Law' (Keynes 1979, p. 256), which, in the *General Theory*, Keynes had said 'underlies the whole classical theory, which would collapse without it' (Keynes 1973, p. 19).

In this paper Keynes and Say's Law is discussed. The concept of Say's Law and its implications permeate the *General Theory*. In section II Keynes's expressions for Say's Law are discussed. How integral Keynes believed Say's Law to be to a number of key classical beliefs is analysed in section III. Say's Law in the context of Keynes's transition from the *Treatise* to the *General Theory* is dealt with in section IV. Keynes may have been the first to express Say's Law as 'supply creates its own demand'. This is examined, and two possible sources of this phrase for Keynes are suggested, in section V. The paper is summarised and conclusions drawn in the final section.

2 Keynes's Expressions of Say's Law³

It seems difficult to exaggerate either the importance of Say's Law to Keynes or its role in the development of the *General Theory*. To Keynes, Say's Law was the crucial premise of classical economics and therefore the chief postulate he had to escape in writing the *General Theory* (Keynes 1979, p. 215).⁴ He went so far as to say, 'I mean by a "classical economist" one who, whether he knows it or not, requires for his conclusions the assumption of something in the nature of Say's Law' (Keynes 1979, p. 270).

Repeatedly Keynes emphasised the importance of Say's Law to classical economics, although 'many modern economists...have not been aware that they were tacitly assuming it' (Keynes 1987b, p. 123). In doing so, Keynes expressed Say's Law in a number of ways, and maintained that it had many important implications. Perhaps the most renowned, or notorious, expression of Say's Law by Keynes, depending on your point of view, is 'supply creates its own demand' (Keynes 1973, p. 18; Rymes 1989, p. 133).

There are two principal themes in the alternative ways in which Keynes expressed Say's Law. In one, Keynes addresses the necessity of the whole of the costs of production being covered by spending in the aggregate, and how it is done. In the second, emphasis is placed on the equality of demand price and sales price of output as a whole.

In the *General Theory*, after first expressing Say's Law as supply creates its own demand, Keynes says this means that 'the whole of the costs of production must necessarily be spent in the aggregate, directly or indirectly, on purchasing the product' (Keynes 1973, p. 18). '(I)f people do not spend their money in one way

they will spend it in another' (Keynes 1973, p. 20). On the same page he expresses it slightly differently: 'the *costs* of output are always covered in the aggregate by the sale-proceeds resulting from demand' (Keynes 1973, p. 20).⁵

In apparently one of the first times, if not the very first time, Keynes used the phrase 'supply creates its own demand' as he developed the *General Theory*, he expanded on what was involved:

From the time of Ricardo the classical economists have taught that supply creates its own demand; – which is taken to mean that the rewards of the factors of production, must, directly or indirectly, create in the aggregate an effective demand exactly equal to the costs of the current supply, i.e. that *aggregate* effective demand is constant; though a want of balance due to temporary miscalculation as to the strength of *relative* demands may bring losses in certain directions balanced by equal gains in other directions, which losses and gains will tend in the long run to guide the distribution of productive resources in such a way that the profitability of different kinds of production tends to be equalised. (Keynes 1979, p. 80)

Keynes believed that if Say's Law was true there were certain implications for the interest rate and investment (Keynes 1973, p. 112). This he considered a corollary of Say's Law. With respect to investment, he said, 'any individual act of abstaining from consumption necessarily leads to, and amounts to the same thing as, causing the labour and commodities thus released from supplying consumption to be invested in the production of capital wealth' (Keynes 1973, p. 19). Or alternatively, 'there is some force in operation which, when employment increases, always causes D_2 to increase sufficiently to fill the widening gap between Z and D_1 ', where D_2 is the 'amount which (the community) is expected to devote to new investment', Z 'the aggregate supply price' and D_1 'the amount which the community is expected to spend on consumption' (Keynes 1973, pp. 29-30).

This reference to a special force was made more explicit in a later statement concerning implicitly what Keynes believed underlay Say's Law: '(t)hus, the weight of my criticism is directed against the inadequacy of the *theoretical* foundations of the *laissez-faire* doctrine upon which I was brought up and which for many years I taught; – against the notion that the rate of interest and the volume of investment are self-adjusting at the optimum level' (Keynes 1973, p. 339).

Keynes said that classical theory's 'axiom of parallels' for Say's Law is 'the assumption of equality between the demand price of output as a whole and its supply price' (Keynes 1973, p. 21). And this was true 'for all levels of output and employment' (Keynes 1973, p. 22). He expressed this basic concept in different ways, with different notation, as he developed the *General Theory* (Keynes 1987a, pp. 422, 427; Rymes 1989, pp. 134, 163), and in the *General Theory* itself (Keynes 1973, p. 26).

3 Implications of Say's Law

The fundamental implication of Say's Law, according to Keynes, was the belief that the economy was self-adjusting, to equilibrium, at full employment. This, in turn, has numerous and varied further implications, which may seem fairly obvious now, but were not when Keynes developed the *General Theory*.

In the section where he first introduced Say's Law in the *General Theory*, Keynes summarised what he believed were its implications for classical

economists: 'the social advantages of private and national thrift, the traditional attitude towards the rate of interest, the classical theory of unemployment, the quantity theory of money, the unqualified advantages of *laissez-faire* in respect of foreign trade and much else' (Keynes 1973, p. 21).

The social advantage of thrift is that 'any individual act of abstaining from consumption necessarily leads to...(investment) in the production of capital wealth....enrich(ing) the community as a whole' (Keynes 1973, pp. 19, 21; also p. 178). As for the traditional attitude towards the rate of interest, Keynes said that classical economists '[assume] that the rate of interest adjusts itself more or less automatically, so as to encourage just the right amount of production of capital goods to keep our incomes at the maximum level which our energies and our organisation and our knowledge of how to produce efficiently are capable of providing' (Keynes 1987a, p. 490). '(T)he classical theory of the rate of interest...was based on the idea that the rate of interest was the prime factor which brought the supply and demand for savings into equilibrium' (Keynes 1987a, p. 447), thus ensuring equality between saving, the supply of credit, and investment, the demand for credit (Keynes 1987b, pp. 206, 211).

But Keynes believed classical economists had a mistaken theory of the rate of interest, one in which the marginal efficiency of capital sets the pace. The classical economists' system was one of calculable risk, without uncertainty; they believed that there was a state of definite and constant expectation. Therefore inactive balances were inelastic in response to changes in the rate of interest (Keynes 1979, p. 258; Keynes 1987b, pp. 106-7, 112-3, 122).

According to Keynes the classical theory of employment was that 'men will be employed...such that...the marginal output of wage goods has a utility equal to the marginal disutility of labour' (Keynes 1987a, p. 513). Employment is in equilibrium at this intersection of the demand and supply of labour (Keynes 1987a, p. 427; Rymes 1989, p. 131). Therefore classical economists believed that 'we are *always* in a condition where a reduction in the real rewards of the factors of production will lead to a curtailment in their supply' (Keynes 1973, p. 304). There 'is no obstacle to zero involuntary unemployment' (Rymes 1989, p. 163; Keynes 1987b, p. 26). 'The classical postulates do not admit of the possibility of ..."involuntary" unemployment' (Keynes 1973, p. 6). We are always at full employment (Keynes 1987b, pp. 58, 107; Keynes 1973, p. 191); and there is no such thing as cyclical fluctuation (Keynes 1987b, p. 56). Keynes argued that in the classical world output as a whole has a zero elasticity, and 'aggregate employment is inelastic in response to an increase in the effective demand for its output' (Keynes 1973, p. 26; Keynes 1987b, pp. 58, 71). Therefore, 'an increase in investment will involve a *decrease* in consumption' (Keynes 1987b, p. 26).

Also, '(t)he classical theory assumes that the real wages of labour depend on the money bargains between employee and employer. If it doesn't there is no means by which the second postulate can be assured' (Rymes 1989, p. 161), 'and, that by agreeing on different money wages, labour can change its real wages' (Rymes 1989, p. 132). The second postulate, of course, was that, '(t)he utility of the wage when a given volume of labour is employed is equal to the marginal disutility of that amount of employment' (Keynes 1973, p. 5).

Keynes argued that, if the economy were at full employment, in other words, in the classical world, the quantity theory of money held (Keynes 1987a, p. 543; Keynes 1987b, pp. 105-6; Rymes 1989, p. 158). Also, with the rate of interest and the volume of investment self-adjusting so that the economy is at the

optimum level, 'preoccupation with the balance of trade is a waste of time' (Keynes 1973, p. 339). Even worse:

Under the influence of this faulty theory the City of London gradually devised the most dangerous technique for the maintenance of equilibrium which can possibly be imagined, namely, the technique of bank rate coupled with a rigid parity of foreign exchanges. For this meant that the objective of maintaining a domestic rate of interest consistent with full employment was wholly ruled out. Since, in practice, it is impossible to neglect the balance of payments, a means of controlling it was evolved which, instead of protecting the domestic rate of interest, sacrificed it to the operation of blind forces. (Keynes 1973, p. 339)

The ultimate consequence for Keynes was that classical economics was 'wholly inapplicable to such problems as those of unemployment and the trade cycle, or, indeed, to any of the day-to-day problems of ordinary life' (Keynes 1987b, p. 106). But, of course, it was applied to the problems of ordinary life, with the result that 'its signal failure has discredited its practitioners and is responsible for much [distress] and even for the reputation of economics' (Rymes 1989, p. 135; Keynes 1987a, p. 406). Keynes went so far as to claim that 'Marxism is a highly plausible inference from the Ricardian economics, that capitalistic individualism cannot possibly work in practice' (Keynes 1987a, p. 488; see also Rymes 1989, p. 135).

4 Say's Law in the Transition from the *Treatise* to the *General Theory*

As mentioned above, Keynes may have been the first to use the phrase 'supply creates its own demand' for Say's Law. Given the importance of Say's Law in Keynes's escape from classical thought as he developed the *General Theory*, and given the controversy surrounding Keynes's representation of Say's Law as 'supply creates its own demand', it is of interest to analyse the evolution of Keynes's use of this aphorism.

Relatively early during the transition from the *Treatise* to the *General Theory* Keynes mentioned the various implications of Say's Law that he identified, and that were discussed in the previous section.⁶ Even before the *Treatise on Money* was published, Keynes wrote that in 'pre-War days everybody thought that we were in a state of fluidity, and the whole assumption of orthodox economics and orthodox financial practice is that you have a state of equilibrium' (Keynes 1981c, p. 87).⁷ 'Economists spend most of their time describing and discussing what happens in a position of equilibrium, and they usually affirm that a position of disequilibrium is merely transitory' (Keynes 1981c, p. 72).

In an historical retrospective 'probably written in 1932', Keynes mentioned the social advantages of thrift: '...orthodox theory in modern times has always concentrated on the importance of saving as a means of making a community wealthy, though it is evident that this cannot be so unless an increase of saving leads to an increase of investment' (Keynes 1987a, p. 406).

In a radio broadcast on 14 March 1932 Keynes discussed the traditional attitude toward the rate of interest: 'It used to be believed that the level of interest and the rate of investment were self-regulatory, and needed no management and no planning; and that all would be for the best if natural forces were left to discover and establish the inner harmonies' (Keynes 1982a, p. 91).

During his first lecture of Michaelmas Term 1933, on 16 October, Keynes discussed the two fundamental postulates of the classical theory of employment (Rymes 1989, pp. 85-90). Earlier, a number of times during the election campaign in spring 1929, Keynes said that classical economics assumes everyone to be employed. For example:

This theory assumes that all the productive resources – savings, labour, and the gifts of nature – which are at any time in existence are normally employed because, so the argument assumes, whenever they are unemployed they are ready to accept a lower rate of remuneration, and employment will always be forthcoming at a sufficiently low rate of wages. That is to say, the theory starts off by assuming the non-existence of the very phenomenon which is under investigation (Keynes 1981b, p. 811; see also *ibid.*, pp. 807, 823).

As for cyclical fluctuations, in a late 1932 contribution to a *Festschrift*, Keynes wrote: ‘the real-exchange economics, on which most of us have been brought up and with the conclusions of which our minds are deeply impregnated...is a singularly blunt weapon for dealing with the problem of booms and depressions. For it has assumed away the very matter under investigation’ (Keynes 1987a, p. 411). Thus, Keynes argued, we are accustomed to believe that the elasticity of output as a whole is equal to zero. Again, even before the publication of the *Treatise on Money*, he wrote:

The increase in demand for output which will result in investment, as an expedient for increasing output and employment is obviously one which only works so long as there exists surplus capacity of equipment and labour of a suitable kind. When there is no longer any suitable surplus capacity, a change on the side of demand can only bring about the substitution of one kind of output for another. But it is important to emphasise this, because what we have been accustomed to believe has often been based on the assumption either that there is no surplus capacity or that, if there is any, it will be brought into use within so short a period by the operation of normal forces. (Keynes 1981c, p. 438)

In his first lecture of Michaelmas Term 1933, Keynes also discussed classical theory’s assumption about wage bargains: ‘(m)uch of the application of classical theory is based on the supposition that a reduction in real wages is the same thing as a reduction in money wages. Pigou maintains that a reduction of money wages will have the same effect as a reduction in real wages’ (Rymes 1989, p. 87).

In one of the roundtable discussions during his visit to the University of Chicago in June 1931, Keynes commented that the ‘quantity theory, I think, is essentially an equilibrium theory’ (Norman Wait Harris Memorial Foundation 1931, p. 73). Finally, during his testimony before the Macmillan Committee on 28 February 1930 Keynes said: ‘free trade assumes that unemployment is an abnormal break in prosperity of which one should not take account’ (Keynes 1981c, p. 117).

So it can be seen that Keynes distinguished very early during the transition from the *Treatise* to the *General Theory* many of the various implications of Say’s Law that he identified. In comparison, it appears Keynes’s first mention of what he came to identify as the basic postulate of classical economics, Say’s Law, that can be definitively dated, came later.

In Keynes's lecture on 23 October 1933, he distinguished between a Co-operative Economy, a Neutral Economy, and an Entrepreneur or Money-wage Economy. In a Co-operative Economy, 'factors are rewarded in terms of a predetermined share of the total product of industry, and not as sums of money' (Rymes 1989, p. 91). In a Neutral Economy, 'factors are....paid in money and they do spend all their money income purchasing current output' (*ibid.*, p. 91). 'In the Entrepreneur or Money-wage Economy, factors please themselves as to how much they will spend from current income' (*ibid.*, p. 92). Keynes equated classical economics with a Co-operative Economy.

Lorie Tarshis's notes for this lecture, which serve as the central core for Rymes, after a paragraph identifying fluctuations in the relationship between incomes earned in current production and incomes spent on current consumption as fluctuations in effective demand, read: 'Ricardo says – Supply creates its own demand – this is why the classical theory can't explain the cycle. Hence the optimism and predisposition toward laissez-faire of classical theory' (*Keynes's Lectures, 1932-35: Notes of Students*, p. J8). The phrase 'supply creates its own demand' that Keynes equates with Say's Law is used, but none of the six student note-takers who were present for this lecture that Rymes has obtained notes from refer to this as Say's Law.

In volume XXIX of Keynes's *Collected Writings* there is a draft chapter that is identified as being from the last 1933 draft table of contents, entitled 'The Distinction between a Co-operative Economy and an Entrepreneur Economy'. It is well known that Keynes lectured from the drafts of his books.⁸ It appears that Keynes, in his lecture of 23 October 1933, may have been lecturing, at least in part, from this draft chapter. There are many similarities between this draft chapter and the lecture notes of the students for this lecture. In the draft chapter Keynes uses the phrase 'supply creates its own demand' three times, but also does not specifically refer to it as Say's Law.⁹ This draft chapter may be the first written record of Keynes's use of this phrase (Keynes 1979, pp. 80-1).

In the comparable lecture in the following autumn, on 29 October, 1934, all five note-takers that Rymes has obtained notes from identify the aphorism 'supply creates its own demand' as Say's Law. All five note-takers use the phrase 'Say's Law', and on average twice each. Bryce uses it three times, Champernowne once, and the other three twice each in their notes for this lecture (*Keynes Lectures, 1932-35: Notes of Students*). So it appears that Keynes may have identified the phrase 'supply creates its own demand' as a basic postulate of classical economics in October 1933, but not as Say's Law until later.

In a letter to Lerner in June 1936 Keynes equated his 'breaking away from the assumption in some shape or form of Say's Law' with 'the re-discovery of there being a problem of the equilibrium of the supply and demand of output as a whole, in short, of effective demand' (Keynes 1979, p. 215). Two months later, in his famous letter to Harrod, Keynes identified four 'moments of transitions which were for me personally moments of illumination' (Keynes 1987b, p. 85):

You don't mention *effective demand* or, more precisely, the demand schedule for output as a whole, except in so far as it is implicit in the multiplier. To me, regarded historically, the most extraordinary thing is the complete disappearance of the theory of the demand and supply for output as a whole, i.e. the theory of employment, *after* it had been for a quarter of a century the most discussed thing in economics. One of the most important transitions for me, after my *Treatise on Money* had been

published, was suddenly realising this. It only came after I had enunciated to myself the psychological law that, when income increases, the gap between income and consumption will increase,- a conclusion of vast importance to my own thinking but not apparently, expressed just like that, to anyone else's. Then, appreciably later, came the notion of interest as being the measure of liquidity preference, which became quite clear in my mind the moment I thought of it. And last of all, after an immense lot of muddling and many drafts, the proper definition of the marginal efficiency of capital linked up one thing with another. (Keynes, 1987b, p. 85)

The order of the four moments of transition that Keynes mentions is believed to be: 1) the marginal propensity to consume is less than one, 2) effective demand, 3) liquidity preference and 4) the marginal efficiency of capital (Clarke 1988, p. 229; Moggridge 1995, p. 558). Keynes's letter to Harrod may perhaps be interpreted as being ambiguous as to whether the discovery of effective demand was before or after the realisation that the rate of interest is the measure of liquidity preference. Keynes's claim that it is the level of incomes which ensures equality between saving and investment, and the theory of the rate of interest in his June 1937 *Economic Journal* article, seem to imply that the accepted interpretation is correct (Keynes 1987b, pp. 212-3). Effective demand does appear to have been second.

If Keynes's moment of transition with respect to effective demand was before that of liquidity preference, that narrows down quite a bit the time when it must have occurred for Keynes. In some rough notes for his 1937 lectures Keynes wrote:

I reached the conception of effective demand comparatively late on. Those who are old enough and attended in 1931-1932 may remember a contraption of formulas of process of all sorts of lengths depending on technical factors with income emerging at a given date corresponding to input at an earlier date. My distinction then was between input and output. I would lecture on this at considerable length and at one time it occupied several chapters in my book. But I discarded it partly because it was frightfully complicated and really no sense in it, but mainly because there was no determinate time unit. I found I could get all that was required by the conceptions of effective demand. (Keynes 1987b, p. 180)

The reference to 1931-2 has been interpreted as being to Keynes's lectures during Easter Term 1932, that is, April-June 1932 (Clarke 1988, p. 262).

By the time of Keynes's lecture on 31 October 1932 he had identified that 'the rate of interest is an *expression of liquidity preference*' (Rymes 1989, p. 69). Thus it appears that Keynes's moment of illumination concerning effective demand occurred in either late spring, summer, or early autumn 1932.¹⁰

So, as we see, even though Keynes equated his 'breaking away from the assumption in some shape or form of Say's Law (with) the re-discovery of there being a problem of the equilibrium of the supply and demand of output as a whole, in short, of effective demand' (Keynes 1979, p. 215), it seems that his moment of illumination with respect to effective demand and his identification of the basic postulate of classical economics as being Say's Law occurred quite far apart in time.

5 Supply Creates its Own Demand

As mentioned above, Keynes may have been the first to use the phrase 'supply creates its own demand' to represent Say's Law. Certainly it seems impossible to prove this at present. But the phrase 'supply creates its own demand' clearly was not widely used to symbolise Say's Law before Keynes. A search using JSTOR¹¹ of thirty-one leading economics journals for the phrase 'supply creates its own demand', and obvious variations, found the first use of the phrase to be in a book review of John Strachey's *The Nature of Capitalist Crisis* by Joan Robinson in the June 1936 *Economic Journal*: '(t)he whole structure of traditional teaching is founded upon Say's Law – supply creates its own demand' (Robinson 1936, p. 298). Kahn, in an article in the August 1936 *Review of Economic Statistics*, is the second to use the phrase (Kahn 1936, p. 145). The third use of the phrase was by Keynes himself in the February 1937 *Quarterly Journal of Economics* (Keynes 1987b, p. 123). So it certainly appears that the phrase was not widely used before Keynes used it, and it is entirely possible that Keynes may have been the first to use it to represent Say's Law.

Is it possible to identify the likely source of this phrase for Keynes? There were two books that Keynes was reading around the time when he first used the phrase 'supply creates its own demand' that are possible sources for this phrase: *Malthus and his Work*, second edition, by James Bonar, and *Value Theory and Business Cycles*, by Harlan Linneus McCracken.

James Bonar's Malthus and His Work, second edition

As was seen in section 4 above, Keynes equated Say's Law with the concept of effective demand. Keynes's expansion and rewrite of his essay on Malthus during October and November 1932 appears to be a crucial period with respect to his formulation of his concept of effective demand. Keynes added all the economic material in this essay as he rewrote it for publication (Kates 1998, p. 142).¹² One of the sources that Keynes used in revising his Malthus essay was the second edition of Bonar's book *Malthus and His Work*. In the first footnote in his Malthus essay Keynes refers to this edition of Bonar's book and says that it is 'to [this] edition my subsequent references relate' (Keynes 1972b, p. 72).

Bonar discusses Say's Law on p. 292, although he does not specifically refer to it as Say's Law, and does not use a phrase similar to 'supply creates its own demand' at this point. About 50-60 pages earlier, though, Bonar, discussing rent, does use a number of versions of the phrase 'supply creates its own demand'. He uses the following phrases: 1) 'supply creates its demand' (p. 232), 2) 'supply to create its own demand' (p. 233), 3) 'supply that creates its own demand' (p. 233), and 4) 'supply to create its own demand' (p. 244).¹³

We know Keynes read part of Bonar's book. Keynes refers to Bonar's book a number of times in his essay on Malthus. The earliest explicit page reference by Keynes is to p. 291 of Bonar's book, though.¹⁴ Is it plausible that Keynes read pp. 232-44? Above it was mentioned that Keynes introduced all the economic material to the Malthus essay as he rewrote it for *Essays in Biography*. The quotes from the Bonar book given above are from book II, which is entitled 'Economics'. Given that Keynes was adding material on economics to his Malthus essay, it is most likely that he read this entire chapter of Bonar's book on Malthus's economics, therefore including pp. 232-44.

Harlan Linneus McCracken's Value Theory and Business Cycles

In a footnote in the draft chapter that is identified as being from the last 1933 draft table of contents, entitled 'The Distinction between a Co-operative Economy and an Entrepreneur Economy', that was mentioned above, Keynes refers to McCracken's *Value Theory and Business Cycles* (Keynes 1979, pp. 81-2). In this footnote Keynes discusses the beliefs of Marx, Hobson, Foster and Catchings, Major Douglas, classical economists, and himself as to whether M is less than, equal, or greater than M' in the formula M-C-M', where M is money and C is commodity (or effort).

In his book, McCracken discusses embodied value theory and commanded value theory in their relation to business cycles. Ricardo epitomises one who believes in embodied value theory, which emphasises supply and the long run in the determination of value. On the other hand, Malthus epitomises one who believes in commanded value theory, which emphasises demand and the short run in the determination of value.

In a chapter on Foster and Catchings, McCracken says:

The Automatic Production-Consumption Economists who insisted that *supply created its own demand*, that goods exchanged against goods and that a money economy was only refined and convenient indirect barter missed the significance of money economy entirely. Neither was their position materially strengthened by adding that 'in the long run' the two balance (McCracken 1933, p. 159; italics added).

So in McCracken we see a variation of the phrase 'supply creates its own demand', although in this paragraph McCracken does not explicitly refer to this phrase as Say's Law of Markets. In the next paragraph McCracken does use the term 'law of markets', but does not place emphasis on it: '(a)ccording to these writers, the classic law of markets, invented for a barter economy, has been carried over into a money and credit economy where it does not fit' (McCracken 1933, p. 159).

In the previous chapter, though, in which he specifically mentions some Automatic Production-Consumption Economists by name, McCracken does emphasise the 'Law of Markets' and Say's role in its development:

The 'Law of Markets' was first clearly formulated by J.B. Say, was ably defended by Ricardo and James Mill, and remains as one of the basic doctrines of Classical Political Economy. In its briefest terms it may be stated as follows:

1. Goods exchange against goods.
2. The *power* to demand increases as *supply* increases, *pari passu* and in the same proportion.
3. The *will* to demand (buy) is always present when the *power* is present because of the insatiability of human wants.
4. Therefore, total supply can never exceed total demand and general over-production is impossible. (McCracken 1933, p. 144)¹⁵

In the footnote in his draft chapter Keynes refers only to p. 46 of *Value Theory and Business Cycles*. Is there reason to believe that he would have read p. 159 of McCracken, and therefore have seen the phrase 'supply created its own demand'? Yes: in the footnote on p. 82 of his draft chapter, Keynes refers to Foster and Catchings. Since p. 159 of McCracken is part of a chapter about Foster and Catchings, it seems highly likely that Keynes would have read this chapter and seen the phrase.

6 Summary and Conclusions

It seems difficult to exaggerate the importance of Say's Law to Keynes as he wrote the *General Theory*. Much of the *General Theory* is written as a criticism of classical economics, specifically classical economists' beliefs about Say's Law and its implications.¹⁶ The composition of the *General Theory* for Keynes was a 'long struggle of escape': an escape from Say's Law, which for Keynes characterised classical economics.

In this paper the role of Say's Law in Keynes's development of the *General Theory* is analysed. The various ways in which Keynes expressed Say's Law are discussed. The many important and varied implications of Say's Law for Keynes are mentioned. The evolution of Keynes's thought about Say's Law and its implications are discussed. Finally, two possible sources for Keynes of the phrase 'supply creates its own demand' that he used to characterise Say's Law are suggested: James Bonar's *Malthus and His Work*, second edition, and H.L. McCracken's *Value Theory and Business Cycles*.

Of the two we believe McCracken to be the more likely source. If Bonar were the source of this phrase for Keynes, it is surprising that he apparently did not use the phrase until autumn 1933. Keynes revised his Malthus essay at the end of 1932 and the beginning of 1933. If Bonar's *Malthus and His Work* was the source of the phrase it seems likely that Keynes would have used it before autumn 1933. McCracken's book, in comparison, was published in late spring 1933.¹⁷ This is more consistent with Keynes's apparent first use of the phrase being in the draft chapter 'The Distinction between a Co-operative Economy and an Entrepreneur Economy' and in his autumn 1933 lectures.

Second, the context of Keynes's initial use of the phrase, especially in the draft chapter, is much more similar to the context of McCracken's use of his similar phrase than the context in Bonar. Bonar uses his versions of the phrase 'supply creates its own demand' in the midst of a discussion of rent.

There are a number of factors relating Keynes's first use of the phrase in the draft chapter and McCracken's use of his similar phrase. Most obviously on p. 81 of the draft chapter, in a footnote, Keynes refers to McCracken's book, specifically concerning Marx and his formula M-C-M' and the classical formula C-M-C'.¹⁸ In that same footnote Keynes refers to Foster and Catchings. As was previously mentioned, McCracken's use of the phrase is in a chapter about Foster and Catchings and their beliefs.

The paragraph in McCracken immediately before the one in which he uses the phrase 'supply created its own demand' reads, in part:

A great deal has been written regarding the superiority of money over barter in the convenience of exchange. But that is of very minor significance. 'The one meaningful characteristic of trade by barter is that demand for goods always equals the supply of goods....Where goods are exchanged only for goods, there can be no addition to the effective demand without an exactly equivalent addition to the supply.' Under barter economy there is perfect balance, but in a money economy there is an unbalancing of supply and demand because money introduces three options which do not enter into barter. Money is suspended purchasing power. The man with money is free to choose the *time*, and the *place* where he will spend his money and the *goods* he

will accept for his money. Such liberty does not attend barter. (McCracken 1933, pp. 158-9)

Compare this with the paragraph in Keynes's draft chapter immediately before the one in which he first uses the phrase 'supply creates its own demand':

Effective Demand may be defined by reference to the expected excess of sale proceeds over variable cost (what is included in variable cost depending on the length of the period in view). Effective demand fluctuates if this excess fluctuates, being deficient if it falls short of some normal figure (not yet defined) and excessive if it exceeds it. In a co-operative or in a neutral economy, in which sale proceeds exceed variable cost by a determinate amount, effective demand cannot fluctuate.... But in an entrepreneur economy the fluctuations of effective demand.... (Keynes 1979, p. 80)

Both discuss possible fluctuations of effective demand. In a barter economy (McCracken), or in a co-operative or a neutral economy (Keynes), effective demand cannot fluctuate. But in a money economy (McCracken), or an entrepreneur economy (Keynes), effective demand can fluctuate.

How the phrase is introduced is similar in both: in Keynes, '(f)rom the time of Ricardo the classical economists have taught that supply creates its own demand' (1979, p. 80); in McCracken, '(t)he Automatic Production-Consumption Economists who insisted that supply created its own demand' (1933, p. 159). For McCracken, Ricardo is the pre-eminent Automatic Production-Consumption Economist:

In Book I, we analyzed the Ricardian system of economic thought, based upon the theory of embodied value.... [McCracken 1933, p. 210]
Wherever there is supply, there is power to demand. The insatiability of human wants serves as a sufficient inducement for the exercise of that power. (McCracken 1933, p. 214)

So, as can be seen, the context in which Keynes initially uses the phrase 'supply creates its own demand' is much more similar to the context in which McCracken uses his similar phrase than that in which Bonar uses it.

A possible question is, if McCracken is the source of the phrase for Keynes, why did not Keynes refer to Say and/or the Law of Markets when he first used it? After all, McCracken mentions both in the chapter immediately before the one in which he uses the phrase 'supply created its own demand'. One possible reason is perhaps Keynes did not relate this phrase to Say's Law of Markets at that time. Another possible reason is that perhaps he did not read McCracken's chapter in which Say's Law of Markets is mentioned. This chapter is entitled 'Aftalion and Voluntary Failure of Demand'. After all, Keynes, in a broadcast entitled 'On Reading Books', said that '(n)ewspapers are good practice in learning how to skip; and, if he is not to lose his time, every serious reader must have this art' (Keynes 1982b, p. 329).

Whatever the reason may be, it appears that Keynes, in 1933, may have been one of the first, if not the first, to use the phrase 'supply creates its own demand', but he did not identify this aphorism as Say's Law until substantially later, in 1934.

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Notes

1 In his essay on Malthus, lamenting that Ricardo, not Malthus, was the parent stem from which nineteenth-century economics proceeded, Keynes wrote: '(w)e have laboriously to re-discover and force through the obscuring envelopes of our misguided education what should have never ceased to be obvious' (Keynes 1972b, p. 101.)

2 Repeatedly Keynes grumbled about the confusion that was caused by classical assumptions being tacit (for example, Keynes 1987a, p. 410), and was very conscious of this as an editor himself. He wrote to Kalecki: 'Meanwhile I return the article in the hope that you will preface it with a catalogue of your assumptions. For it is not fair to the reader that he should be forced to disentangle them for himself and then wonder whether or not you really are making them' (Keynes 1983, p. 798). Similarly, in a letter to Harrod, Keynes wrote: '(i)n general, you must *prove* your point from *stated* assumptions, and not merely assert it as an intuition from unstated ones – especially when the assumptions are (avowedly) unrealistic and therefore not easily supplied by the reader' (Keynes 1987b, p. 335).

3 Kates (1998) argues that Keynes misinterpreted Say's Law and the result, similarly to the case of Ricardo winning out over Malthus almost two hundred years ago, is that economics was put on the wrong track for a substantial period of time (and Kates believes still is). This thesis will not be discussed in this paper.

4 As early as December 1930 Keynes basically stated and denied the validity of his interpretation of Say's Law, without calling it that (Keynes 1972a, pp. 129-30).

5 For a slightly different version, see Rymes's students' notes (Rymes 1989, p. 133).

6 For each implication many other references could be given. Emphasis here is placed on one of the first obvious references to each implication of Say's Law that Keynes identified.

7 Keynes made a similar, but perhaps not quite as strong, statement over four years previously (Keynes 1981a, p. 440).

8 For example, in the letter to the printers when Keynes sent the first three chapters of the *General Theory* to have the first page proofs set up, he wrote: 'I should be much obliged if these particular chapters could be returned to me within about a fortnight, since I shall be needing them for lectures and have no other corrected copy' (*Keynes Papers* 1993, reel 34, p. GTE/3/10; see also Dimand 1988, p. 146).

9 There is a page of Keynes's original manuscript missing at this point, though (Keynes 1979, p. 81). Assuming that Keynes was lecturing from the draft chapter on 23 October, the notes of the students are fairly consistent about what was apparently on the missing page. Bryce's notes, for example, read:

K[eynes] says – expenditure creates its own income – this does not assume that expenditure is equal to fixed reward of entrepreneurs.

Celebrated optimism of classical theory is traceable to this – also its devotion to *laissez faire* (cf, Marx).¹

In cooperative economy we would get a tendency toward an 'optimum reward' – and deviations are said to be fault of gov[ernment] or labour intervention.

This might be justified in a neut[ral] or coop[erative] economy. Hence Keynes thinks the atmosphere of classical theory has been over optimistic.

This change [?] of K[eynes] probably due in part to remark of Marx. $C \rightarrow M \rightarrow C'$ (M is money and C is commodity).

¹ Phrase in parenthesis inserted later by Bryce (*Keynes's Lectures, 1932-1935: Notes of Students*, pp. B12-3).

The discussion about 'expenditure creates its own income' and Marx's remark concerning C-M-C' are in Keynes's draft chapter (Keynes 1979, p. 81). The section between appears to be what was on the missing page of the original manuscript.

10 There is no consensus in the literature as to when Keynes's moment of illumination concerning effective demand occurred. The criterion used as evidence that a moment of illumination has occurred differs. For Clarke it is 'to look for indications of developments in his thinking which represented his initial insights, even if they were disjointed flashes of illumination' (Clarke 1988, p. 258). This will give an earlier date than 'Patinkin's approach...the exposition of the doctrine in a form intended for a professional readership' (Moggridge 1995, p. 559). Clarke does give an earlier date, summer 1932, for when he believes Keynes grasped the principle of effective demand (Clarke 1988, p. 263). Others propose a later date: Moggridge, 'by early 1933 *at the latest*' (1995, p. 564); Patinkin, '...during 1933, and in all probability during the first half of that year' (Patinkin 1976, p. 79).

11 JSTOR is a database which contains the complete contents of core scholarly journals, starting with the very first issues.

12 An editorial note at the beginning of Keynes's biography of Malthus details sections of the essay that were added, and when they were added, in 1932-3 as Keynes rewrote the essay for *Essays in Biography* (Keynes 1972b, p. 71).

13 The second edition of Bonar's book is essentially a reprint of the first edition (Bonar 1885), with the biography (Book V) expanded, some notes added, and some obvious mistakes corrected (Bonar 1924, p. vi). The four quotes in this paragraph are word for word the same, on the exact same pages, in the first edition except on p. 244 of the first edition it reads 'supply to create its own demands'.

14 The Malthus essay in *Essays in Biography* is a revision and rewrite of a short paper giving a personal sketch of Malthus that Keynes read at a special meeting of the Malthusian Society in 1922. The article had never been published previously (*Keynes Papers* 1993, reel 32, pp. B/1/19, 21). Although the editorial note in *Essays in Biography* says that '(i)t is not possible to date all the changes with certainty' (Keynes 1972b, p. 71), it seems fairly certain, from an analysis of Keynes's draft of the essay, that the specific page references to Bonar's book were added as the article was rewritten for *Essays in Biography*.

15 In a footnote five pages later McCracken writes: 'Say's *Law of Markets*, according to which production financed consumption and supply generated adequate demand is in serious need of modification. In other words a law formulated in harmony with Ricardo's embodied valued theory' (McCracken 1933, p. 149).

16 In a letter to Hawtrey in March 1936 Keynes wrote: '(m)y book is couched in the form of being in the main a criticism of the classical theory' (Keynes 1987b, pp. 14-15), although he came to believe that doing so was a mistake:

What some of you think my excessively controversial method is really due to the extent that I am bound in thought to my own past opinions and to those of my teachers and earlier pupils; which makes me want to emphasise and bring to a head all the differences of opinion. But I evidently made a mistake in this, not having realised either that the old ones would be merely irritated, or that to the young ones, who have been, apparently, so badly brought up as to believe nothing in particular, the controversy with older views would mean practically nothing. (Keynes 1987b, p. 87)

And he wanted to correct this sometime in the future: 'I should like some day to endeavour to restate the whole matter, not controversially or critically or in relation to the views of others, but simply as a positive doctrine' (Keynes 1979, p. 247).

17 McCracken's *Value Theory and Business Cycles* is listed in 'The Weekly Record', which describes and indexes the new books of all publishers, in the 10 June 1933 issue of *The Publishers' Weekly* (p. 1900) The November 1933 issue of *Economica* lists it

among books received (p. 511). This edition of the book does not appear to have been listed in the 'New Books' section of the *Economic Journal*. In the December 1936 *Economic Journal* the British version of the book is listed under 'New Books' (p. 792), and this version was reviewed by Meade (1937).

18 The phrase 'supply creates its own demand' is on pp. 80-1 of Keynes's draft chapter.

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