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Samuelson, Keynes and the search for a general theory

Version 2

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1. Introduction

The idea of a general theory of global applicability has a powerful appeal to economists. Keynes sought to justify his theory as the *general* theory of employment, interest and money, whilst in the postwar period the prestige of general equilibrium theory rests to a considerable extent on its claim to generality. Postwar debates over Keynes and "the classics" were, to a

considerable extent, attempts to show that one theory was general and the other a special case, applicable only if local circumstances were right. Keynesian economics thus provides an interesting test case to discuss the theme of this conference: the interaction between global and local approaches to economic analysis.

The main subject of my talk is, however, not Keynes, but Paul Samuelson. My reason for bringing Samuelson into the story of Keynesian economics is the biographer's obsession with his or her subject, but it has, I contend, a clear rationale. Samuelson's work is dominated by what might be called three textbooks. *Foundations of Economic Analysis* (Samuelson 1947), the book that, as far as many economists were concerned, set out how economic theory was to be undertaken and formed a staple of graduate training for many years. *Economics: An Introductory Analysis* (Samuelson 1948), the textbook that virtually swept the board in elementary economics teaching when its first edition was published. And *Linear Programming and Economic Analysis* (Dorfman et al 1958), co-authored with Robert Dorfman and Robert Solow, which expounded the linear methods that were central to so much of postwar economics. Though they were all published under Samuelson's name (subject to the necessary qualifications in respect to the last book), and though I have no wish to argue that there are inconsistencies, these represent different conceptions of what it means to construct a general theory of economics.

2. Keynes's general theory of employment

The most influential book on economics in the twentieth century bore the title, *A General Theory of Employment, Interest and Money* (Keynes 1972 [1936]). In that book, John Maynard Keynes argued that the theory he was proposing was more general than the classical theory that he was criticising. The analogy was explicitly with Einstein's general theory of

relativity, of which Newtonian mechanics was a special case. Whereas the Newtonian theory is the special case that is relevant to most of the physical problems encountered by human beings, the classical theory was, Keynes argued, simply not relevant to a world in which we know very little about the future.

In the vast literature on the *General Theory*, a question that has, to my knowledge, rarely been asked is *why* Keynes believed it was desirable to have a general theory. Given his view of economics as a moral science, merely copying the natural sciences would not have been sufficient reason. It is only slightly less plausible to claim that his preference for a general theory reflected his training in mathematics, where a more general theory, dependent on less restrictive assumptions and applicable to a larger range of case, is desirable. However, that is still a weak explanation given that Keynes was, at that point in his career far from living in an ivory tower, thoroughly immersed in the practical worlds of journalism, finance and government policy making. The reason has to be sought in his economics.

At one level the reason is obvious. The objective of the *General Theory* was to demonstrate that the cause of unemployment was not to be found in wage inflexibility. The dislocation of the economy that the world experienced in the early 1930s was not the result of workers holding out for wages that were too high. The policy message was that cutting wages, a difficult and unjust process, would not solve the problem of unemployment: on the contrary, it would make the situation worse for a large number of reasons (outlined in chapter 19). To show this he needed to construct a new theory, which had to be defended. However, though this is clearly part of the reason, it is not clear why a general theory would perform this task better than a new and more appropriate local theory.

It would appear that the answer has to be sought in the "classical" theory that Keynes had learned in the Cambridge environment in which he had been brought up. His teachers

were not "general equilibrium" theorists in the strict Walrasian sense, but the theory of competitive equilibrium, albeit with many distinctive Marshallian qualifications and modifications, provided a general framework within which to analyse economic problems. Marshall's long run might be difficult to pin down at all precisely, and the theory might need modifying to take into account local conditions, such as the nature of the product, production conditions, and whether the market was competitive, but supply and demand, with the theories of consumer and producer behaviour on which they were based added up to a general theory.

It was, moreover, a theory with clear welfare implications. Marshall's doctrine of maximum satisfaction sought to demonstrate that, except where some industries were subject to increasing returns to scale, the price and quantity generated by competitive behaviour would maximise the sum of consumer's surplus. Though the analytical apparatus was new, this resulted in a conclusion of which John Stuart Mill had provided the canonical statement, when he had written that "*Laissez-faire*, in short, should be the general practice: every departure from it, unless required by some great good, is a certain evil" (Mill 2006, p. 945). Keynes presumably had Mill's book in mind when he wrote in his last chapter about the social philosophy towards which his theory might lead. In arguing that his was the more general theory, he was implicitly questioning Mill's judgement that the general case was competitive markets which produced the best outcome for society. The methodological counterpart in the Millian notion that the laws of economics were inexact, and that the modifications necessary to take account of local circumstances were "disturbing" causes, a methodology echoed in Marshall's notion of "normal" value.

Why did Keynes choose to argue that he was offering a general theory when his theory was in significant respects a special theory, abstracting from many of the problems addressed

by earlier generations of economists? Did offering a general theory had more than the rhetorical value of making it easier for his fellow economists, to whom the book was addressed, to accept his argument as an extension of already-accepted ideas? Anna Carabelli (Carabelli 1991), in a rare discussion of this problem, argues that had he offered a special theory, Keynes would have had in producing persuasive empirical evidence for it, a task that would have been particularly difficult given that the classical theory had such a long history and was so well established. However, I suggest that there was a more fundamental reason. Even had he been able to adduce persuasive empirical evidence that his theory offered an accurate diagnosis of what was happening, had he produced a special theory his critics would have been able to argue that the world should be changed so that his theory was no longer applicable. It would have been what Peter Clarke has called an "imperfectionist" theory, the response to which could be that the imperfection should be removed. For example, when faced with an uncompetitive exchange rate, policy makers had refused to accept his argument that labour market institutions meant that the difficulty in lowering wages provided a constraint on monetary policy, instead arguing that measures should to be taken to reduce wages. If his theory were more general, this way of defending orthodoxy would not work: it would be necessary to challenge his arguments directly. He thus sought to argue that his theory was a more general theory, displacing the theory of competitive supply and demand.

3. The search for a general macroeconomic theory

Keynes claim to be proposing a general theory of employment laid the foundations for the debate over what John Hicks called "Mr. Keynes and the classics". The Keynesian argument over generality meshed perfectly with the Walrasian approach preferred by many members of

the rising generation of mathematical economists inspired by Hicks, for the simultaneous equations of Walrasian theory, unlike the Marshallian methods in which Keynes had been trained, were seen as providing a general theory of economics. However, the use of formal models of general equilibrium inspired by Walras, of which the IS-LM model was the most popular variant, led inexorably to the conclusion that Keynesian unemployment rested on the assumption that wages did not adjusting flexibly to clear the market for labour. Economists might resist that conclusion, positing reasons why the interest rate might fail to equilibrate saving and investment, but the Walrasian logic left no route by which unemployment could be explained unless there were some reason why wage rates did not adjust.

Such arguments led to the conclusion that, the "classical" theory was the general case and Keynesian theory the "special" case. The definitive summary of this view was provided by Don Patinkin in *Money, Interest and Prices* (Patinkin 1956; Patinkin 1965). Keynesian economics was the economics of disequilibrium, a sort of special case resulting from slow adjustment of prices and wages, because it would not last indefinitely, and classical economics—which defined the equilibrium to which the economy would eventually move—was the general case.

However, now that the theory was formulated in this way, it could be turned on its head. It was possible to argue that what happened out of equilibrium was the general case, and it was equilibrium that was the special case. This was the brilliant twist to Patinkin's argument made my Axel Leijonhufvud in *On Keynesian Economics and the Economics of Keynes* (Leijonhufvud 1968). There was a Walrasian dimension to his argument in that he associated being in equilibrium with the existence of an auctioneer. Given that such an entity is fictitious, except for highly organised markets, disequilibrium was the general case. What made this significant was that it was not the disequilibrium of Walrasian theory. Drawing on

an argument by Robert Clower (Clower 1965), which turned out to have a parallel, un-noticed at first, in *Money, Interest and Prices*, Leijonhufvud argued that if there were no auctioneer, demand and supply functions would not have the form posited by Walrasian theory. Demands and supplies would depend not just on endowments and prices but also on the trades that took place out of equilibrium—on disequilibrium transactions.

Although there was a Walrasian dimension to Leijonhufvud's thesis, his vision of how markets operated were very un-Walrasian. Though he and Clower later turned to Marshall, in his book he suggested a parallel with Friedrich Hayek's conception of markets—always out of equilibrium. The difference was that, where Hayek drew on his vision to explain how only a decentralised market could possibly coordinate economic activities of millions of agents in a world where tastes and technology, the givens of Walrasian theory, were changing all the time, Leijonhufvud concluded that the inevitable information problems meant that markets could not possibly operate smoothly.

By the 1970s, though it was still central to many textbooks, the question of whether Keynes or the classics offered the more general theory had lost its rhetorical force, though there was a fascinating throwback in a debate over Milton Friedman's monetary framework (1974) in which all sides laid claim to the general case in which IS and LM curves were neither horizontal nor vertical. Instead, attention became focused on the putative trade-off between inflation and unemployment and a different conception of generality. Though they may not have used this terminology, for Robert Lucas and the "new classical" macroeconomists, a general theory was one derived explicitly from individual optimisation. What he called "free parameters", not grounded in individuals' optimising behaviour, might represent local conditions well—he conceded that such models might fit the data better than models without free parameters—but they were of limited use. The Lucas critique, which

contended that models not grounded in the fundamentals of tastes and technology would not survive changes to the policy regime, meant that free-parameter models based on empirically observed regularities could be of no more than local validity. (Much of this is discussed in my book with Mauro Boianovsky 2013.)

4. Samuelson - the mathematical economist

Samuelson, in *Foundations of Economic Analysis* (???) also sought a general theory but the basis for it being a general theory was very different. He sought to establish a common mathematical structure underlying different branches of economic theory. The way he claims to have come to this was very pedestrian: working in different branches of economics he had found himself proving the same theorems time and time again. More efficient to understand this common mathematical structure and then to apply it to different problems. The common mathematical structure that lay beneath much economics was constrained optimisation. Using this and linear algebra, needed to derive results from systems of simultaneous equations, he could cut through the puzzles that had confronted previous generations of economics and derive comparative statics results relating to the firms and consumers.

The key figure in leading Samuelson to this conception of the unification of economic theory was his mathematical economics teacher, Edwin Bidwell Wilson. Wilson was a polymath, trained as a mathematician and, as Samuelson never tired of pointing out, a protégé of the great American physicist, Willard Gibbs, he had solved problems in aeronautics, writing a prominent textbook on the subject, before becoming Professor of Vital Statistics in Harvard's Institute of Public Health. In alternative years he taught graduate courses in mathematical statistics and mathematical economics in the Economics Department, both of which Samuelson took.

Wilson did not just teach these topics, but would stay on for an hour after lectures, talking about anything and everything. One of the subjects he covered was thermodynamics, this no doubt inspiring Samuelson to take a course in the subject, presumably from Percy Bridgman, who taught Harvard's course in the subject. He also introduced Samuelson to the Le Chatelier Principle, governing the way in which chemical equilibrium changes when a system is subject to external changes. One of the lessons he taught Samuelson was that different systems might share a common mathematical structure. It was possible to work out certain results concerning chemical interactions without knowing anything about the substances concerned simply by knowing that the system was in equilibrium. The Le Chatelier principle, though derived in chemistry, could be generalised to apply to any equilibrium system, whether chemical, thermodynamic or economic. Generality lay in the underlying mathematical structure.

However, and here comes the difference from the "Keynesian" search for generality, it did not involve the construction of a general theory of economics. Leaving aside the extent to which applying the methods of optimisation to the consumer and the firm meant that those theories were encompassed within a single general theory, there was a profound gap between his static analysis of the individual agents and his analysis of dynamics. In both cases results were derived from the assumption that a system was in equilibrium but the nature of that equilibrium was very different: in the case of individual agents, the equilibrium was defined by optimum conditions; in the broader case, it was stability conditions. The latter was the realm where the "correspondence principle", a term that he introduced between writing the thesis in 1941 and publication of the book in 1947, came in. Comparative static analysis of how an equilibrium changed when parameters changes was of little value if the equilibrium

was not stable, which meant that it was legitimate to make the assumption of stability, for operationalising economic theory.

Had Samuelson believed that all economic models could be derived from optimisation, the correspondence principle might have been unnecessary, because second order conditions for an optimum would have been sufficient to ensure stability. However, he did not believe this. He drew a distinction between "(1) theorems proceeding from the assumption of maximizing behavior on the part of individuals, and (2) stability conditions relating to the interaction between economic units" (Samuelson 1947, p. 258). When dealing with examples from "economic theory"—supply and demand in one or more markets—he did not even address the possibility that the second order conditions might render the correspondence principle redundant, because he did not wish to model the economy using a single representative agent. As a student of Haberler and Leontief, he should have been familiar with with index number and aggregation problems and at the National Resources Planning Board his major research topic had been how the distribution of income across households affected consumption: he knew that heterogeneity mattered. When he turned from "economic theory" to business cycles, he started with the Keynesian system as defined by James Meade, John Hicks and Oskar Lange, taken to be a three-equation system involving a consumption function, the marginal efficiency of investment and liquidity preference, all of which were assumed to depend on both the rate of interest and the level of income.This was presented as if it were a distinct system from the ones that he had previously analysed. As Samuelson made clear in the book's conclusion, "only a part of economic theory is concerned with the maximising action within an economic unit" (Samuelson 1947, p. 351).

Thus although it was, in a sense, a short step from the maximisation of the early chapters of *Foundations* to rational choice theory in which it is taken as axiomatic that human

agents conform to certain norms of rationality, Samuelson chose not to make that step. *Foundations* did not offer anything more than a methodological unification of economic theory, for there was no presumption that the whole of economics could be derived from a common theory. Generality involved finding a common mathematical structure, enabling results from one problem be be applied to other problems. Though this would be an exaggeration, one might argue that the application of the Le Chatelier principle to economics unified it no more than it unified economics and physics.

5. Samuelson - the institutional economist

The previous sections already establish two, or perhaps three notions of what it means to have a general theory of economics.However, I want to argue that Samuelson's "neoclassical synthesis" represents yet another. This term was introduced in the third edition of *Economics* (Samuelson 1955). In this textbook, Samuelson made no claim to be providing a general theory of economics. He did begin by talking about "universal economic conditions but this involved little more than the claim that all societies faced certain very general problems. Societies might face limits on what they could produce, and the dynamics of population might be similar in all societies, but he did not suggest was sufficient to construct a general theory.

The "the neoclassical synthesis" that he presented in this book was very different from the general theory to which he alluded in *Foundations*. He defined the "neoclassical synthesis" in the following two paragraphs, both of which were set in italics for emphasis.

> Neoclassical synthesis: by means of appropriately reinforcing monetary and fiscal policies, our mixed-enterprise system can avoid the excesses of boom and slump and can look forward to healthy, progressive growth.
>
> This fundamental being understood, the paradoxes that robbed the older classical principles dealing with small-scale "microeconomics" of much of their relevance and validity—these paradoxes will now lose their sting. In short, mastery of the modern analysis of income determination genuinely validates the basic classical pricing principles; and—perhaps for the first time—the economist is justified in saying that the broad cleavage between microeconomics and macroeconomics has been closed. (Samuelson 1955, p. 360).

More succinctly, he argued that "if modern economics [shorthand for the theory of income determination] does its task so well that unemployment and inflation are substantially banished from democratic societies, then its importance will wither away and the traditional economics (whose concern is with the *wise* allocation of fully employed resources) will really come into its own—almost for the first time" (ibid., p. 11). Even more succinctly, he argued that "successful income stabilization validates the classical principles of economics" (ibid., p. 666, n. 2).

This definition posits a clear distinction between "modern economics"—identified with the modern theory of income determination—and "classical" theory, which deals with the efficient allocation of fully-employed resources. The synthesis was described as "neoclassical" on the basis of its being a combination of modern and ancient (classical) ideas, but there was no implication that these two sets of ideas were derived from a common theoretical framework. Samuelson's argument was that there was a need for one theory to

tackle problems of unemployment and another theory to tackle problems of full employment. This view that different types of theory were needed for different situations was echoed in the literature on what were then called "underdeveloped countries"—different types of economics were needed for countries at different stages of development (see Backhouse 1985, chapter 27). It took wise policy, guided by one type of economics, to render another type of economics relevant.

Samuelson claimed that this neoclassical synthesis represented a consensus viewpoint, accepted by most American economists.

> In recent years 90 per cent of American economists have stopped being "Keynesian economists" or "anti-Keynesian economists." Instead they have worked toward a synthesis of whatever is valuable in older economics and in modern theories of income determination. The result might be called neoclassical economics and is accepted in its broad outlines by all but 5 per cent of extreme left-wing and right-wing writers. (Ibid., 212)

There are three points I wish to make about this synthesis. The first is that, it reflects a dimension of Samuelson's work that is not usually recognised: its deep roots in American institutionalism. Though this is a story I will be telling elsewhere, for it is too long to cover today, when writing the book he repeatedly described it, apologetically, to his friends, as "very institutional". Obviously, this meant that the book was elementary, not focusing on abstract theory, but it is impossible to believe that an American economist, well read in the interwar literature, used the word without realising its connotations. Being "institutional" meant that it was a book that, unlike *Foundations*, focused on the local. His accounts of households, firms, government, labor markets and so on were rooted on the contemporary

United States. Offering a thoroughly local, context-specific body of ideas was entirely consistent with the institutionalists' highly empiricist conception of science. Such a perspective is not surprising for someone who was introduced to economics through the textbooks of Richard Ely and Sumner Slichter, and who admitted to being profoundly influenced by reading John Maurice Clark.

However, the strongest link with institutionalism came through his second mentor, Alvin Hansen. The met after Hansen came to Harvard in the fall of 1937 and became very close. Samuelson's most well known articles on multiplier-accelerator interaction (Samuelson 1939a; Samuelson 1939b) arose from translating Hansen's numerical examples into algebra. In his thinking about macroeconomics and policy, Samuelson was Hansen's disciple. During the war years, when Samuelson worked part time at the National Resources Planning Board, they remained close, debating fiscal policy, and in 1947 they produced a joint report. In his macroeconomics, Samuelson, still a young economist (aged 25 in 1940), was very much a disciple of Hansen.

But, you may object, surely Hansen was by then a Keynesian, having famously converted to Keynes in between the two reviews he wrote of the *General Theory* in 1936. Here, I disagree, siding with Perry Merhling (Mehrling 1997), who has offered a rather different account. Hansen was one of the leading exponents of institutionalist business cycle theory in the United States, developing a dynamic theory of investment and the cycle centred on the acceleration principle. Investment was driven by technology, population dynamics and structural factors rather than by the short term expectational factors stressed by Keynes. It can be argued that Hansen came to accept Keynes, perhaps after reading his article in the *Eugenics Review* (Keynes 1937) because he realised that key Keynesian ideas could be incorporated into his own theory. Thus the multiplier-accelerator model should be seen not an

as application of Keynesian theory so much as representing the incorporation of the multiplier into a pre-existing institutionalist theory of the cycle. For most of the war years, Hansen and Samuelson both distanced themselves from Keynes, offering very un-Keynesian explanations of investment and the cycle, though taking on board the multiplier.

The second point I wish to make concerns the political context in which the "neoclassical synthesis", a term that had no fewer than twelve index entries, scattered throughout the book, was developed. Not only was it the product of an intellectual position that attached great importance to the local, but it was a response to very "local" circumstances. In the earlier displayed quotation, Samuelson sought to distance the theory of income determination from Keynesianism, implicitly recognising that the terms "Keynesian" and "anti-Keynesian" were politically charged through arguing that the neoclassical synthesis was thus a political consensus. If traditional "classical" theory were seen as conservative, then so too was the neoclassical synthesis. Samuelson presented it not as a justification of Keynesian economics but as a vindication of "real classical truths" (ibid., p. 569). Those "truths" were not just theoretical propositions but involved statements about the real world that were relevant for policy—"classic truths and principles of social life" (ibid., p. 733). Thus the neoclassical synthesis—the use of proper monetary and fiscal policy—could render valid John Stuart Mill's claim that imports, not exports, add to a nation's well being (ibid., p. 623). The neoclassical synthesis validated the case for free trade, undermining the argument that tariff protection was needed to cure unemployment for it was more efficient to use monetary and fiscal policy for this purpose (ibid., p. 659). It made it possible to solve the challenging problems of international economics (ibid., p. 676). When Samuelson turned to the problem of economic growth, after claiming that twenty years earlier it might have been difficult to answer "the neo-Marxian theory of imperialism", he wrote,

> Perhaps we should be thankful that the Russian economists have not mastered modern elementary economics; that they do not yet understand the "neoclassical' synthesis which, combining modern income determination with the older economic theories of resource allocation, clearly demonstrates the ability of resolute free societies to dissipate the ancient fear of mass unemployment. (Ibid., p. 709)

The political dimension of the neoclassical synthesis, as a body of ideas that could help the United States fight the Cold War against communism, could hardly have been any clearer.

Finally, a note on the economic context of the neoclassical synthesis. Samuelson's fullest definition of the term came in a short Epilogue to a chapter, "Fiscal policy and full employment without inflation", in which he explained how the cycle could be controlled. In the first two editions, the emphasis had been on the *difficulty* of creating a healthy economy. The recently passed Employment Act of 1946 affirmed the responsibility of the government to fight mass unemployment and inflation, but the measures it proposed might not be sufficient, for it was also necessary to attend to "the proper relations of prices and different branches of production" (1948, p. 436; 1951, p. 419). He did no more than hint at the possibility that the problem of effective demand might be cured, ending his discussion of the Employment Act with the sentence, "If ever the curse of general inflation or deflation has been banished, there will rise to the top of our national policy agenda—and properly so—the true and abiding universal economic problems which every economic society has had to face since the Garden of Eden" (ibid.).

In the third edition the tone was completely different. When the first edition had been published, unemployment was around 3½ per cent and rising.[1] Wartime controls had only just

[1] Statistics in this paragraph are taken from Samuelson 1955, p. 208. They agree with those in earlier editions.

been removed and the outlook was far from clear. The Employment Act was recent legislation and no one knew how it would work out in practice. When the second edition appeared, unemployment had been at or over 5 per cent for two years and though it fell in 1951, even if Samuelson had anticipated this by the time the book went to press, it could be attributed to the Korean War, which was also contributing to high inflation. There were no grounds for confidence about the normal level of peacetime activity. In contrast, by the time of the third edition, there had been two years of low unemployment (2.7 and 2.4 percent) and, though Samuelson thought it would be much higher in 1954, there was evidence that even Republicans were committed to the goal of full employment, the chapter having opened with a quotation from Dwight Eisenhower: "I give you this assurance: every legitimate means available to the Federal Government that can be used to sustain prosperity will be used" (Samuelson 1955, p. 336). Samuelson replaced the sentence referring to the Garden of Eden with the much more positive, "This chapter's Eisenhower quotation affirms that full-employment policy is bipartisan in American politics" (ibid., p. 360).

The neoclassical synthesis can thus be seen as both a defensive move against conservative attacks on policies Samuelson believed to be important, and a response to a changed economic situation in which, for the first time since the war, it seemed possible that mass unemployment might be eliminated. The United States could turn its attention from demand management to microeconomic issues. The neoclassical synthesis explained that there was no inconsistency in this shift of emphasis.

6. Conclusions

One way to interpret the distinction between the global and the local, albeit not the only one, is to see it as referring to the distinction between general theories, applicable to a variety of

contexts, and special theories built on assumptions that reflect specific local situations. The examples I have discussed here show that this can be interpreted in very different ways. The standard view of Keynesian economics from the *General Theory* to its demise in the 1970s is based on a single notion of generality: that the more general theory encompasses specific, local theories. This is the notion of generality found in the "Keynes and the classics" debates and which, with certain modifications, lies beneath the claims of the new classical macroeconomics to offer a more general theory. The examples I have discussed here show that such a claim is mistaken, for there are at least three, and possibly four, if Lucas's notion of the difference between new classical and Keynesian economics is seen as different from the general/special case relationship.

1. *One theory encompasses another as a special case*, as non-Euclidian geometry encompassed Euclidian, or arguably as Einstein's theory encompassed Newton's. This was the sense in which Keynes used the term. It was taken up in the Keynes and the classics debates, and as Keynes was interpreted and reinterpreted, conclusions changed over whether Keynesian or what is better known as neoclassical economics formed the special case.
2. *Generalization implies a common method as much as a theory from which special theories can be deduced as special cases*. This is the sense in which Samuelson constructed a general theory in *Foundations*.
3. *A pragmatic synthesis of different theories* where the claims to theoretical integration are weak, as in Samuelson's version of the neoclassical synthesis.

Given that Samuelson is conventionally viewed as a neoclassical economist and that his methods are close to those of Patinkin and many architects of the neoclassical synthesis, and that his term "neoclassical synthesis" came to be applied to Patinkin's model, there has been a

failure to recognise that his two notions of a general theoretical framework are different from the one propagated by Keynes and which dominated postwar macroeconomics. Where Patinkin and others were trying to develop general theories of macroeconomics, Samuelson, at least in his early work (I say this simply because I have not yet studied his later work) embodied much of the institutionalist concern with local circumstances. Paradoxically, his neoclassical synthesis was a response to very specific local political and economic circumstances, marking his macroeconomics out as very different from Patinkin's, a subject on which there is much more to say than I can fit into a 45 minute talk.

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