

The Evolution of U.S. Economics Textbooks

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THE EVOLUTION OF U.S. ECONOMICS TEXTBOOKS¹

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Paul Samuelson's comment, "I don't care who writes a nation's laws -- or crafts its advanced treatises -- if I can write its economics textbooks" (Nassar, 1995) captures the importance of textbooks. It suggests that there is much to be learned about society and the economics profession by a consideration of its textbooks, and their evolution. In this paper I briefly consider the evolution of US economics texts from 1830 to the present. I concentrate on how their goals have changed over the years, and discuss how those goals reflected their view of what economists knew.

The argument of the paper is the following. From 1830 until 1930, economic texts were attempting to teach precepts—educating common sense about economic policy as they saw it. That goal also reflected what they saw themselves doing as economists.

Then, in the 1930s there was a change in what the profession saw as its role. It started to see itself more as a pure science, and also started to believe that one could draw lessons about policy from that pure science. That brought about with it a change in the texts, and starting in the 1950s, economic textbooks took on a quite different structure. That structure was first seen in Samuelson (1948) but his book became the template for almost all key books after that up until 2010.

This template remained the textbook template even though, by the 1970s, the approach it reflected, (which some would call the neoclassical) had been abandoned by the cutting edge of the profession, with more and more movement away from it occurring over the next forty years as avenues of thought were explored, and new technologies were developed. During this time economics moved away from the strict reliance on the supply/demand model, introduced much more empirical work into its analysis, and switched its core modelling techniques to game theory. By the 2000s these changes had led to the development of an active behavioural economics and the introduction of lab experiments as a standard tool of economics.

The economic texts, however, did not change with the profession, and as of 2010 most texts had not incorporated that new approach in their core structure. This has created a gap between what economists do and what they teach. (Colander, 2005). As more and more of the stock of teaching economists become trained in these new approaches and methods, we can expect to see a major change in the texts.

1830s-1930s: Economists as Preachers.

¹ This paper is a modification of Colander, 2006.

My consideration of this period will be on three top-selling texts: Francis Wayland's *The Elements of Political Economy*, first published in 1837 and in print in various editions until 1875 (and adapted versions well into the 1880s), Francis Walker's *Political Economy*, which was a top selling U.S. text from 1883 to 1908, and Edwin Seligman's *Principles of Economics*, which went through twelve editions from 1905 to 1929. I will also briefly discuss the text, *Pure Economics* by Maffeo Pantaleoni, which was translated from Italian into English in 1898. This book, while not a top-selling U.S. text, is important because it represents the beginning of the divergence between what U.S. economists teach and what U.S. economists do, and is a precursor to the later texts, although, unlike Pantaleoni, the later texts tried to draw policy conclusions from the models presented in principles, whereas Pantaleoni explicitly did not do so.

Three observations

Let me begin my discussion of this period with three observations. The first is that, in the time period I am considering, the U.S. was not the center of the economics profession as it is today; then the center was Europe. U.S. texts reflected the debates that were going on in Europe, but U.S. economists were not central players in the debates.² Thus, in a way the U.S./European roles were reversed from what they became in later periods. By that I mean that much of what U.S. economists did during this period followed from what European economists did, and that European texts, not American texts, set the template for what economists did, and for what they taught. U.S. texts were, in many ways, modification of European texts, adapted for the U.S. situation.³ In the English language, Smith, Ricardo, Mill, and Marshall were seen as providing the canon, and the U.S. textbooks attempted to convey that canon, modified for the U.S. students, to U.S. students.

In the later part of this period the *Methodenstreit* led to deep divisions in European economics, and to alternative ways of doing and thinking about economics. That *Methodenstreit* was less apparent in the U.S. at the turn of the century because the U.S. economics profession was dominated by economists strongly influenced by the German historical school. This changed over time, but until the 1940s, institutionalists and progressives dominated the American Economic Association. They saw economics as primarily a discursive field, where theory offered little help, and ideas mattered most.⁴ This domination is important because the approach followed by the German historical school allowed a closer connection between what economists did and what they taught than the alternative formal approach would have.

The second observation is that over the time period from 1830 to 1930 the U.S. economics profession was evolving. In the early part of the period, U.S. economists, and

² Not being part of the central debate has advantages; it allows one to focus on policy issues more relevant to one's country's particular issues, rather than trying to maintain a more universal perspective.

³ For example, because of the abundance of land in the U.S. texts gave much less focus to rent and diminishing returns.

⁴ For example, in 1941, Paul Samuelson and Wolfgang Stolper's paper on the theory of international trade was rejected at the *American Economic Review* as being a narrow study in formal theory that added little to the literature.

educators generally, were primarily ministers, and economics was seen as part of a broader moral philosophy, not as a separable subject.⁵ It was taught as single course, usually to upper-level students; thus, for most students principles of economics was not the beginning of a course of study as it is today; it was the entire study.⁶ The point is that economics was seen as simply an aspect of philosophy, and was often defined as the science of wealth. For example, in his definition of political economy, Francis Walker writes «Political economy, or economics, is the name of that body of knowledge which relates to wealth. Political Economy has to do with no other subject, whatsoever, than wealth» (Walker 1987). The almost theological nature of economics instruction slowly waned over the period, as economics became a more established, and separable, subject, but for the primary texts in the U.S. that I consider, the economics presented in the texts remained much more related to moral philosophy than to what we would today consider a scientific approach. While there was much discussion about how economics was scientific in the texts, little of what we would today see as science shows up in the texts. The texts during this period did not try to teach pure economic science.

A third observation is that while the name given to the study of economics changed over this time period, with the books calling the field of study ‘political economy’ initially, and ‘economics’ at the end of the period, the subject matter of the texts remained much more in what would now be considered political economy, not economic science. Maffeo Pantaleoni’s book (1889; English translation 1898) which would be considered more scientific, was called pure economics, to distinguish it from the type of economics presented in the other texts.

1830-1870: Francis Wayland’s Political Economy

The first book I consider in this period was entitled Political Economy. It was written by Francis Wayland in 1837, and was highly successful; it was the largest selling book in the U.S. during much of this period, with estimates of cumulative sales of 40,000 books in 1867, and it continued to be sold in revised form through the 1880s.⁷ Wayland, like many of the economists and authors of economics textbooks at the time, was an ordained minister and administrator. (Wayland became president of Brown University, after which he went back to the ministry.) This is important to the question I am addressing because Wayland was representative of what economists did during this early time period. What they did was to philosophize; economics was one area in which they philosophized, and they were careful to make that clear to the students. Economics was part of a broader moral philosophy. What they did was not exclusively, or even primarily, economics. Economics was a side interest of theirs that happened to generate significant interest from students, for the same reason that economics generates interest in students now – because it seems more relevant to business, and to students’ every day concerns, than does much of what they study.

⁵ One book on this period (O’CONNOR 1944) calls the period from 1830-1870 the «clerical» school of economics.

⁶ Marshall first got a separate tripos in economics at Cambridge in the late 1800s, and it was only at the turn of the century that graduate studies in economics became possible.

⁷ My references are to the 1886 edition, which was modified by A.L. Chapin (WAYLAND, CHAPIN 1886).

Wayland's book can best be described as a set of precepts, with little formal technical analysis in it. There were no graphs and no tables. It was pedantic in tone; it went through much of what might be found in Ricardo, in simple form, but maintained strong moral overtones, this is what's good and this is what's bad.⁸ Wayland, and later Wayland and Chapin, had four divisions: production, exchange, distribution, and consumption. They gave the largest emphasis to exchange; emphasizing what O'Connor (1944) called a «theological harmony» of the way the economy works. While the content and chapters of the divisions changed, that division remained through all editions.

They divided labor into productive and unproductive labor, although there was a strong positive connection presented between the financial sector and real economy, characterizing the connection between the Church and financiers at the time. A sense of the moralistic approach can be gained by considering some selections from the book. First, in the definition they state that political economy is the branch of social science that treats production and wealth, and that it is a «true science». They continue:

By science, as the word is here used, we mean a Systematic arrangement of the laws which God has established, so far as they have been discovered, of any department of human knowledge. It is obvious, upon the slightest reflection, that the Creator has subjected the accumulation of blessings of this life to some determinant laws. Every one, for instance, knows that no man can grow riche, without industry and frugality. (Wayland, Chapin 1886, p. 4)

They continue their moralistic approach to economics in their discussion of overproduction. They state:

As surely as the unnatural excitement of the drunkard's debauch is followed by headache and languor, so surely must the unnatural excitement of the period of speculation be followed by stringency and failure and depression through the whole system of the world's industry. The hard times are due to this reaction, and the real causes of the disturbed balance between supply and demand are to be found in the abnormal conditions of the period of illusive prosperity. (Ivi, p. 139)

One final example can be found in their discussion of exchange and free trade; they discuss the lack of protection among U.S. states as compared to protection among nations. They conclude: «It confirms every phase of the theory and shows that what is philosophically sound and true is also practically safe and wise» (ivi, p. 384).

1870-1910 Francis Walker's Political Economy

Through the 1800s the U.S. economics profession evolved, reflecting, in part, the evolving nature of European economics. During this time period Marxian economics developed, the German historical school expanded, and neoclassical economics developed. Institutionally, economics was coming into its own; graduate study in economics was beginning, and there was more specialization possible. Data analysis was

⁸ O'Connor describes Wayland's book as the «most dogmatic, most conservative, most pious of the clerical books» (O'CONNOR 1944, p. 282).

expanding, with the expansion of the national censuses, and economics was becoming more technical, and mathematical economics was beginning to gather a foothold. But, in the United States, the more technically inclined economists were in the minority; the majority of U.S. economists were still largely nontechnical and concerned with policy issues, not economic theory. Francis Walker, the author of the book that replaced Wayland, is representative of this period. His book is also entitled *Political Economy* (Walker 1883). It went through three editions and was the top selling text until replaced by Seligman in 1905.

Walker was part of the U.S. economics establishment; he was a well-known economist and professor at Yale, the son of Amasa Walker, a well-known economist in his own right, who also had written an economics textbook. In 1886 Francis Walker became the first president of the American Economic Association. Despite being more involved in economics than Wayland, Walker's interests extended significantly beyond economics. He was the director of the 1870 and 1880 U.S. Censuses and Commissioner of Indian Affairs, as well as being President of MIT from 1881 to 1897. Thus, like the majority of economists at the time, Walker was more than an economist, and did not define himself in terms of his economic research. During this period there seems to be little deviation between what economists did and what they taught.

That said, it should also be said that his text did not reflect the intellectual turmoil that was ongoing in economics at the time. For example, there is no index entry for Marx, Edgeworth or Walras, and there are no graphs, tables or charts. The book has a similar structure to Wayland's, with five parts on Method, Production, Exchange, Distribution, Consumption, and a final part on applications, which applied the economic principles in the book to policy issues.

It had a similar moralistic nature to Wayland's book. To give you an idea of the tone of the book, consider his concluding consideration of socialism and communism. Walker writes:

Communism is, if not moribund, at the best everywhere at a stand-still, generally on the wane; nor does it show any sign of returning vitality. On the other hand, socialism was never more full of lusty vigor, more rich in the promise of things to come, than now.

It seems only needful to add, that, while doctrines of anarchism, socialism, and communism are respectively held by not a few sincere and disinterested men, of a high order of intelligence, large numbers of those who embrace one or the other of these systems do so with no appreciation of the differences between them, being influenced wholly by a general discontent with the results of the existing social and industrial order, either as affecting themselves or as controlling the fortunes of their class. In addition to these, every public demonstration of socialistic or communistic organizations almost inevitably draws out a swarm of «lewd fellows of the baser sort» who for the time attach themselves to that party, out of a general hatred of law and order, or in hope of plunder, or form a delight in riot and mischief (Walker 1883, p. 524)

During this period, economists made a major differentiation between political economy, or applied policy, which was concerned with policy precepts that combined economic and broader moral reasoning, and pure economics that was the science of economics and was concerned with theorems. In the U.S., political economy dominated, and few economists were concerned with pure economics. As suggested by the quoted passage, the U.S. books concentrated on political economy, which meant that during this time period, there was not much difference between what economists did and what they taught. Economists focused on policy, not theory, and the books taught precepts reflecting economist's best summary of what the appropriate view on policy was.

Maffeo Pantaleoni's Pure Economics

The beginnings of a rather different, more mathematical, approach to economics, was, however, beginning over in Europe. Walras, Edgeworth, and Pareto were focusing more on what came to be called pure economics, which emphasized theory and theorems. That different approach made its appearance in the U.S. in 1898 with the translation of Maffeo Pantaleoni's text, *Pure Economics*, into English, eleven years after it was published in Italian.

Maffeo Pantaleoni's text is fundamentally different from Walker's. It is consciously about economics rather than one in political economy. He states this explicitly in the preface, writing: «This manual is intended as a succinct statement of the fundamental definitions, theorems and classifications that constitute economics science, properly so called, or Pure Economics. Thus all questions pertaining to economic art, or Political Economy, are beyond its scope» (ivi, p. vii). He continues: «This is a departure from the lines on which textbooks of economic science are usually prepared, their authors' objects being to equip the reader forthwith for the discussion of the most important economic problem is presented by everyday life» (ivi, p. vii).

The entire format of Pantaleoni's book is different from the other texts that I am considering. Pantaleoni's book has much more of the structure of current texts, beginning with part I, «The Theory of Utility», part II, «The Theory of Value», which includes a specific chapter on the law of supply and demand, including reciprocal demands and stable and unstable equilibria, and part III on applications of the general analysis to categories of commodities. It has numerous graphs, many of which are forerunners of the graphs seen in modern texts.

Consistent with the different emphasis, he provides a different definition of economics. He writes: «Economic science consists of the laws of wealth systematically deduced from the hypothesis that men are actuated exclusively by the desire to realize the fullest possible satisfaction of their wants, with the least possible individual sacrifice» (ivi, p. 3). He justifies his approach writing: «the discussion of problems of economics art is altogether superficial and inconclusive, if not based ultimately on theorems of Pure Economics» (ibidem).

I suspect that most, but not all, U.S. economists were in disagreement with Pantaleoni. One who was not was Irving Fisher, who wrote a highly positive review of

the book stating «We do not know where else in English can be found so compact and excellent an epitome of modern economic theory».⁹ These were the first inklings of mathematical economics making its way into the U.S. textbook market, and while it did not become widely used in the U.S., it was a precursor of the theoretical approach that would come to dominate economics. But the issue was not about whether to differentiate what was taught and what economists did; the issue was about what economists should properly do. Pantaleoni was arguing that what economists should do is to concentrate more on pure theory, and that that is also what they should teach. He writes that studying pure economics requires «no greater intellectual effort for its comprehension than many other branches of study that form art of a university curriculum»¹⁰ (ivi, p. vii).

1905-1930: Edwin Seligman's Economics

Pantaleoni's approach did not catch on among American economists, nor in the textbooks in the period that I am considering. Instead, the textbooks remained in the political economy tradition, as demonstrated by the next book I will consider by Edwin Seligman. He titled his book *Principles of Economics*, not *Political Economy*, reflecting a change in the way in which economics was referred to during this period, but not a change in focus of the texts; they remained in the political economy tradition. The book was first published in 1905 and it went through 12 editions, and was last published in 1929.

Seligman's training reflects the professionalization that was occurring in economics during this time period. He is the first of the U.S. textbook authors I am considering who was a formally trained economist, having studied economics at Columbia, where he received a Masters Degree, and in both Germany and France. He began to teach at Columbia in 1888, becoming the *McVickar Professor of Political Economy* there in 1904, one of the first specific professorships devoted to economics in the U.S.. His specialty was taxation.

Consistent with that professionalization and increasing specialization, Seligman's work was more within economics than was the work of the previous authors. He wrote widely about economic issues, including *Railway Tariffs* (1887), *The Shifting and Incidence of Taxation* (1892; 3rd ed., 1910), *Progressive Taxation in Theory and Practice* (1894; 2nd ed. 1908), *Economic Interpretation of History* (1902; 2nd ed. 1907), along with many articles in the «*American Economic Review*», the journal of the American Economic Association. But he was still a generalist and he was also a lawyer who was admitted to the New York State bar in 1884. Besides his work in economics, he edited the *Encyclopaedia of the Social Sciences* and the *Columbia University Studies in History, Economics, and Public Law*. So his interests and work extended far beyond economics.

⁹ In England, not surprisingly Edgeworth called it a «gem».

¹⁰ Pantaleoni, however, did not remain concentrated on pure theory. About the time the book was translated, Pantaleoni turned away from pure economics to applied economics, focusing his research attention to the relations between economics and statistics, history, and institutions. He also became finance minister in 1919 and was one of the first senators named by Benito Mussolini.

Despite his being less of a generalist than Weyland or Walker, his text reflected the same focus on precepts and general policy ideas as did previous texts, although the actual positions differed from theirs. The reason was a change in the policy views of the majority of U.S. economists during this time period, the institutionalist movement that dominated U.S. economics. Seligman's policy views reflected what is sometimes referred to as the «progressive approach» in U.S. economics, an approach that reflected the German historicist perspective. These progressives, like the clerical laissez faire economists of the earlier era, combined their politics with their economics while at the same time maintaining what they called a scientific approach. But by 'scientific' they meant empirical – not apolitical.

We can see Seligman's views on policy in his writings about socialism in an article he wrote about the economics profession. He writes:

The socialists, such as Weitling, Marlo and Proudhon, uttered energetic and effective protests against the prevailing systems; and in England able men like Thompson and Jones, wrote large works to countervail the exaggerations of the orthodox school. But the new ideas first obtained a truly scientific basis about the middle of the century, when three young German economists – Roscher, Knies and Hildebrand – proclaimed the necessity of treating economics from the historical standpoint. They initiated a new movement whose leading principles may be thus formulated:

1. It discards the exclusive use of the deductive method, and stresses the necessity of historical and statistical treatment.
2. It denies the existence of immutable nature of laws in economics...
3. It disclaims belief in the beneficence of the absolute laissez-faire system; it maintains the close interrelations of law, ethics, and economics...(Seligman 1925)

While there are no graphs in his text, there are charts and tables. For example, he includes a bar chart with the production of corn (ivi, p. 107) and a table of the movement of nominal and real wages (ivi, p. 177) and a line graph of wholesale prices (ivi, p. 469). There is a long introductory section with a discussion of the economic literature, beginning with a list of books, and journals that students can use for reference.

The book is organized slightly differently than the previous books. After the discussion of the literature, and a discussion of method, it has a part entitled «Elements of Economic Life» which includes more historical discussion than the previous books, and parts entitled «The Structure and Process of Economic Life» which includes the foundation of value theory, «Value and Exchange», which touches on macro and international trade issues, and a final part entitled «Government and Wealth». He concludes the book stating that economics «is the prop of ethical upbringing, it is the basis of social progress» (ivi, p. 693).

Economists' changing views about policy show up in Seligman's summary of his views on free trade, which differed substantially from those of Walker. Seligman saw

benefits of trade, but also of protectionism, and he concludes «it is not competent to argue from internal free trade to international free trade» and that «in the main, then, the conclusion would seem to be that under certain conditions a protective policy is relatively defensible» (ivi, p. 570).

Surprisingly, there is no discussion of taxation, which was his specialty. He justifies not including it by arguing that to do it right it would take much more time than the course would allow. For him, taxation, along with finance and statistics are separable courses of study.

1930-1950: The Ending of an Era

In the 1930s the world economy fell into a depression, and only came out of the depression with the spending involved in World War II. Despite these events, the texts of the time did not change significantly. Laurie Tarshis (Colander and Landreth, 1996) describes the way in which the depression was handled by many teachers when he tells how his professor responded to the events of Black Friday. At the beginning of class his professor announced to the class that the events of that day were probably the most significant events of the century, and then said “let’s get on with the lecture.”

The next set of books, such as Garver and Hansen (1928), and Fairchild, Furniss and Buck (1930), followed the general approach of the earlier books, although these books were becoming less descriptive of what economists did and how they thought of themselves. The reason was that what economists did was changing, and that change began to show up in writings about economic teaching in the 1930s. For example, in a review of textbooks Ise (1932) writes «In economic journals and monographic studies of special fields the development of statistical data has been truly impressive; yet textbooks have been but moderately enriched by the growing accumulation of statistical knowledge» (ivi, p. 390). Ise blames this on the lack of student’s ability to understand economics and the fact that much of the statistical matter is nonreliable for statistical generalization. His concluding suggestion about economics was however far off the mark; he suggests that the fight between the progressives who «deny the validity of economic theories» and the business schools who «are demanding something more practical» (ivi, p. 397) may well lead to an end of economics in the university curriculum. He writes «between the Scylla of the Institutionalists and progressives and the Carybdis of the barbarian hosts of business school promoters, economics is already grinding on the reefs» (ibidem).

Robert Solow (1995) nicely describes the books of the period when he describes the three books used in the 1940s economics course at Harvard. The books were Garver and Hansen (1937), Sumner Slichter (1931) and Luthringer, Chandler and Cline (1938). Like the previous texts the books were largely prose with almost no diagrams and no equations. Thus, they parallel the earlier books I described. They were long on classifications and descriptions; they were discursive. Solow writes “Most provide more institutional descriptions, very sensible discussions of economic policy, and serious looks at recent history as it would be seen by an economist. ...The authors ruminate more than they analyze.” (88) Solow continues “the student is not encouraged to make literal use of

the apparatus of supply and demand curves. Both books spend time discussing monopolistic elements in real-world markets, but most of the discussion is institutional. Their reflections on the workings of economy are worth reading. They inspire bursts of nostalgia; words like “civilized” came to mind.” (89)

All these descriptions could have well have been applied to the earlier books and show the continuity of these books with those of the earlier period. Perusing these books suggests that these later books were slightly better at separating the normative from the positive elements of the analysis, but opinion blended with theory is hard to discern ways. Solow’s (19xx) discussion of these books seems appropriate. They do not present models. Instead, they ruminate and attempt to explain the reasoning that leads them to their policy conclusions. In this attempt, their goal was the same as the goal of the earlier economists—to explain economist’s thinking about policy issues in its full context. Thus, they followed in the footsteps of the earlier books I described, rather than Pantaleoni. That would all change in the 1950s.

A major reason for the change was the Depression and World War II, which combined changed society’s ideological view of economics and of government. While the earlier texts were on the progressive side of the political spectrum, that progressive side was from a generally accepted ideology that accepted the market and little government control as a backdrop for thinking about the economy. The Depression and World War II changed that ideology. Whereas earlier, the majority of the population in the US strongly favored markets and opposed government intervention, after the Depression, that support was weaker and more in debate. The market had failed society in the 1930s and the government has saved democracy by successfully leading the war effort. These changing views began showing up in textbooks, and as it did, economics common sense and ruminations about what policies to follow became more consistent with an increased role of government in markets and policy. The Keynesian revolution reflected those same forces. For example, whereas before the common sense was that deficits were a bad policy to follow, the Keynesian textbooks started to see deficits as serving a useful purpose at times. The ideological backdrop that served as the foundation for what was considered educated common sense was shifting and economics texts reflected that change.

This change in underlying ideological backdrop did not occur without fights. During this period there were enormous battles with the US economics profession about policy that lost any sense of civility. For example, supporters of fiscal policy were called communist, and pressure was put on universities and colleges to fire any professor who advocated such policies.. One need only look at William Buckley’s *God and Man at Yale* () which when through the economic texts being taught during that time and pointing out communistic nature to get an idea of the strong feelings of the time.

Keynesian economics had not significantly entered the texts of the 1940s that Solow described, and it was only with Laurie Tarshis’s text (Tarshis, 1947) that Keynesian economic, and macroeconomics more generally, entered the textbooks. Tarshis was a student of Keynes, and was one of the group of Harvard students who spearheaded the Keynesian revolution in the US. His book initially sold like hotcakes,

with one school after another adopting it. (Colander and Landreth, 1996) But those adoptions created a backlash were professors who used the book were subject to a letter writing attack by groups such as the Veritas Society, which called for their dismissal, or failing that, a call to stop all gift-giving to colleges that allowed the book to be used. University presidents were called upon to fire these communist professors.

While most university presidents stood firm for academic freedom, the backlash against books that advocated active government policy in the economy had an effect. For one, it killed Tarshis's textbook, and its sales slumped to almost zero. The lessons of Tarshis's book were not lost on publishers. If books were going to advocate activist fiscal policy, and present other arguments for an activist government, they would have to do so with more care than previous textbook authors did. This made it far more difficult to provide broad contextual arguments about policy as they had before, since those could be questioned. When economist's common sense is not broadly shared by everyone, the old style texts which talked discursively about policy had serious problems. This opened the way for a major change in the nature of principles of economics textbooks and in how economics was practiced. The economics profession became much more mathematical, and ostensibly more scientific, with the scientific and mathematics serving as a shield for complaints that the views being advocated were normative in nature. It was simply a mathematical argument leading to a conclusion.

1950-2010: The Samuelsonian Era

It was not only economic texts that changed in the 1930s to 1950s; it was also economics. It was becoming much more mathematical and formal Paul Samuelson's *Foundations of Economic Analysis* () and John Hick's *Value and Capital* () were integrating many of the partial equilibrium insights into a general equilibrium framework, and the methodological approach used by economists was shifting from a Marshallian one-thing at a-time approach to a Walrasian "everything at once" mathematical approach. Econometrics was developing, and was seen as the way to test models. To have models to test, one needed carefully specified models, and what was meant by applied economics was changing—from a discursive economics in which economic models were kept in the back of one's head in arriving at a reasoned policy conclusion, to one in which models moved to the forefront, and institutional features and assumptions were kept in the back of one's head as was empirically tested formally specified models.

The nature of applied economics changed. Whereas previously applied economics involves broad general discussions of policy that took various factors into account, now applied economics came to mean the application of econometrics to the analysis. An applied economist was an economist who did econometric work. With this development of econometrics, applied economics could be seen as another aspect of scientific economics. It validated theory, and allowed a direct movement from theory to policy. As that happened the educated common sense approach that saw models and statistics as tools to aid judgment that previous books conveyed, ended. Econometrics offered a way around judgment. With econometrics, economics could be a positive science. Any other approach was seen as simply a way of slipping implicit values into the analysis.

How and why this change occurred, and whether it was good or not, is not the subject of this paper. It is something that happened; Solow (1995) captures it nicely in his discussion of texts of that period. He writes “Judicious discussion is no longer the way serious economics is carried out.” (89) “In the 1940s, whole semesters could go by without anyone talking about building or testing a model. Today, if you ask a mainstream economist a question about almost any aspect of economic life, the response will be: suppose we model that situation and see what happens.” (90)

This change in style of doing economics occurred at the cutting edge of economics starting in the 1930s, 40s and 50s, led to a dissatisfaction with the texts as suggested by Solow. To remedy the problem Paul Samuelson was given a semester off to work on a new text, which was first published in 1948. It placed economics in a scientific framework with the microeconomic presentation organized around supply and demand graphs and a general Walrasian conception of the economy. Its macroeconomics was organized around a Keynesian aggregate expenditures/aggregate production model, in which fiscal policy was needed to keep the economy at full employment. Samuelson’s text became the major text in the 1960s, selling millions of copies over the various editions and becoming the template for all future texts. Sales of the 1948 edition exceeded 120,000, and by 1964, sixth edition sales had increased to almost 450,000. Thereafter, and other books adopted its template, sales decreased, but they remained at almost 200,000 in the 1980 11th edition, the last edition that Samuelson did alone. (Elzinga, 1992) Thereafter William Nordhaus was a co-author but US sales continued to decrease substantially, although foreign sales remained high for a number of years thereafter. By the 1990s, the Samuelson book was no longer seen as a major player in the US market. But even those sales underestimate the book’s importance, since the other competing books in the principles followed the Samuelson template with some being seen as essentially simpler clones of the book. This is certainly the perception of the McConnell text that replaced Samuelson as the leading text in the late 1960s. It’s first edition sold over 70,000 and by the 6th edition sales per edition were in the 500,000 range, where they stayed through the next five or six editions.

The Samuelson template was much more in line with Pantaleoni’s approach, with one major difference. Instead of eschewing all talk of policy as not being in the domain of textbooks, Samuelson used the simple models he developed to arrive at policy conclusions. This change reflected the change that was happening in policy economics at the time Samuelson wrote the book. Whereas before economists had carefully separated out economic theory from economic policy, starting in the 1930s that strict separation was broken as welfare economic theory became a central component of economist’s policy approach. Welfare economics approached policy with the belief that economics could be seen as an applied science in which one developed models and applied those models through the use of statistical analysis. While statistical analysis was seen as important within this approach, that statistical analysis did not make it into the principles texts, which involved primarily deductive supply and demand reasoning in the micro portion of the book, and deductive aggregate production/aggregate expenditures reasoning in the macro portion of the book.

U.S. Textbooks

In the 1990s a number of other books entered the market, and companies stopped making sales figures available. Those that were made available were notoriously unreliable and vary by year since publication. Second hand sales of the textbooks cut into total edition sales, and led to quicker editions, and higher prices, which led in turn to a larger second hand market.. Second year sales often fall off 50-60% and the third year they fall off another 50%. One estimate of 1995 sales is presented below. (Nasar, 1995)

1995 Sales Estimates

McConnell and Brue,	150, 000
Baumol and Blinder	75,000
Miller	75,000
Byrnes and Stone	75,000
Parkin	75,000
Lipsey et al	50,000
Samuelson and Nordhaus	50,000

Since 1995 many new principles textbooks have arrived, on the market. These include Mankiw, Krugman, and Hubbard, as well as my own book. These sales figures, even if correct, can be misleading, since some books now often have four or five versions of the same book, and almost all come in splits as well as combined. Prices in the US have risen substantially so most combined books now sell for about \$150.00 and some publishers are beginning to lease books. Most books come with large ancillary packages that include computer gradable exams and problem sets. Moreover, publishers offer custom editions, and rights to individual chapters, which can account for a significant portion of a book's revenue. More and more books are ebooks and often, individual chapters for books are sold and put together in a custom package. So a book can no longer be seen as a single text, but rather as a franchise of a collection of texts and products

The future of economics textbooks is unclear, and there have been predictions of major shifts in the market for years, with no such shift happening. Perhaps the largest expectations were for Mankiw text, but when it came out most observers saw it as following the Samuelson template with only minor modifications such as putting growth first in the macro portion of the book and downplaying Keynesian economics. Instead of targeting Samuelson and providing a new intellectual framework, it was seen as a lower level book targeting McConnell. In 2010, the two market leaders are generally thought to be Mankiw and McConnell, which are both remain spinoffs of the Samuelson template, even though economics has changed considerable in the interim.

The Future of Economic Texts

U.S. Textbooks

The way economics is done has changed considerably since the 1950s when the Samuelson template became the template for principles texts. In Colander (2005), I argued that currently, what economists do is quite different from what they teach, that the two diverged beginning in the 1970s and 80s, and that over the past few decades the gulf between the two has widened. Today, game theory is the core theoretical tool, and the supply and demand framework is seldom used in formal models. Behavioral economics has changed the nature of assumptions used in economic reasoning, and statistical tools have expanded enormously. So too has the domain of economics, which now looks at all types of problems, not simply economic problems. In short, modern economics is quite different from textbook economics.

These changes will, in my view, eventually lead to a fundamental change in texts, a change that will most likely be ushered in with a change in not only template of texts, but the medium in which they are conveyed. On-line presentation is in the process of replacing printed page presentations, and on-line presentations offer major new ways to convey information, including simulations, videos, dynamic models and many more. Thus, in the future a text as concept will be a vestige of the past, and will be replaced by multimedia presentations. Content will be combined in many different ways, and textbook success will be judged by the percentage of the presentations that are used by various professors. The future will be quite different than the past in far more ways than content.

References

Baldassarri M. (ed.), Maffeo Pantaleoni: At the Origin of the Italian School of Economics and Finance, New York-London, St. Martin's Press-Macmillan, 1997 (in association with «Rivista di Politica Economica», Sipi, Roma).

Buckley, W. God and Man at Yale, Washington, D.C., Regnery Publishing, 1951.

Colander D., What Economists Teach and What Economists Do, «Journal of Economic Education», 36, 3, Summer, 2005, pp. 249-260.

Colander, D. "What We Taught and what we Did: The Evolution of US Economic Textbooks (1830-1930)" *Il Pensiero Economico Italiano* XIV 2006

Colander, D, Landreth, H. "Political Influence on the Textbook Keynesian Revolution: God, Man and Laurie Tarshis at Yale" in Omar Hamuda (ed.) *Keynesianism and the Keynesian Revolution in America*, Edward Elgar, 1998.

Colander, D. Landreth, H. *The Coming of Keynesianism to America*, Cheltenham, Edward Elgar. 1996.

Edgeworth F., *Mathematical Psychics*, London, Kegan Paul, 1881.

Fairchild F. R., Furniss E. S., Buck N. S., *Elementary Economics*, New York, Macmillan, 1930.

Garver F. B., Hansen A. H., *Principles of Economics*, Boston, Ginn and Company, 1928, revised ed. 1937.

Hicks, J. *Value and Capital* Oxford, Oxford. 1939.

Ise J., Recent Textbooks on Economics and Their Trend, «*The Quarterly Journal of Economics*», 46, 2, 1932, pp. 385-397

Luthringer, G.F. Chandler, L.V. Cline, D.C. *Money, Credit and Finance*, Boston, Little, Brown and Company, 1938.

Nasar, S. "A Hard Act to Follow? Here Goes. *New York Times*, March 14, 1995

O'Connor M. J. L., *Origins of Academic Economics in the United States*, New York, Columbia University Press, 1944.

Pantaleoni M., *Pure Economics*, translated by T. Boston Bruce, New York, Kelly and Millman, 1898.

Samuelson P. A., *Economics, an Introductory Analysis*, New York, McGraw-Hill, 1948, 8th ed. 1970.

U.S. Textbooks

Samuelson, P. Foundations of Economic Analysis Harvard University Press. 1947.

Seligman E., Continuity in Economics, in Essays in Economics, New York, The Macmillan Company, 1925.

Seligman E., [On the Shifting and Incidence of Taxation](#), «Publications of the American Economic Association», 7, 2/3, 1892; 3rd ed., New York, Columbia University Press, 1910.

Seligman E., Principles of Political Economy, New York, Longmans, Green and Co., 1905, 12th ed. 1929.

Seligman E., Progressive Taxation in Theory and Practice, Baltimore, American Economic Association, 1894 2nd ed. 1908.

Seligman E., Railway Tariffs and the Interstate Commerce Law, «[Political Science Quarterly](#)», 2, 2, 1887, pp. 223-264; 2, 3, 1887, pp. 369-413.

Seligman E., The Economic Interpretation of History, «Publications of the American Economic Association», 3rd Series, 3, 1, 1902, pp. 369-386, reprint 1907.

Skousen, M. “The Perseverance of Paul Samuelson’s Economics” Journal of Economic Perspectives, Spring 1997. pp. 137-152

Slichter, S. Modern Economic Society. Holt and Company, New York, (1928) 1931

Solow, R. “How did economics get that way and what way is it?” Deadalus, Fall, 1995. pp 87-100

Tarshis, L. The Elements of Economics Boston, Houghton Mifflin. 1947.

Walker F. A., Political Economy, New York, Henry Holt and Company,. 1883 2nd ed. 1887.

Wayland F., Chapin A.L., The Elements of Political Economy, New York, Sheldon and Company, 1886.

Wayland F., The Elements of Political Economy, New York, Leavitt, Lord & Company, 1837, revised ed. New York, Sheldon and company, 1875.