

Thema Working Paper n°2011-18 Université de Cergy Pontoise, France

The Political Economy of Textbook Writing: Paul Samuelson and the making of the first Ten Editions of *Economics* (1945-1976)

Yann Giraud

August, 2011



The Political Economy of Textbook Writing: Paul Samuelson and the making of the First Ten Editions of *Economics* (1945-1976)

Yann Giraud

(Université de Cergy-Pontoise, THEMA)¹

Draft 1.1. (August 2011)

Note: This paper has been prepared for a forthcoming HOPE Conference on "MIT and the Transformation of American Economics" to be held at Duke University in April 2013. A revised version will appear in History of Political Economy, vol. 46, no. 5. It is made available for discussion purposes only. Please do not quote or cite without the author's permission. Comments are very welcome.

Abstract: Over the past two decades, numerous contributions to the history of economics have tried to assess Paul Samuelson's political positioning by tracing it in the subsequent editions of his famous textbook Economics. This literature, however, has provided no consensus about the location of Samuelson's political ideas. While some authors believe that Samuelson has always had inclinations toward interventionism, others conclude that he more often acted as a pro-business advocate. The purpose of this paper is not to argue for one of these two interpretations but to depict the making of *Economics* itself as a political process. By 'political' it is not meant the conduct of party politics but the many political elements that a textbook author has to take into account if he wants to be published and favorably received. I argue that the "middle of the road" stance that Samuelson adopted in the book was consciously constructed by the MIT economist, with the help of his home institution and his publishing company, McGraw-Hill, to ensure both academic freedom and the success of the book. The reason for which the stance developed is related to pre-McCarthyist right-wing criticisms of the textbook and how Samuelson and the MIT department had to endure the pressures from members of the Corporation (MIT's Board of Trustees), who tried to prevent the publication of the textbook and threatened Samuelson's tenure at MIT as soon as 1947 - when early manuscripts were circulated. As a result, it was decided in accordance with both the Corporation and McGraw-Hill that the Readings volume would be published to balance conflicting ideas about state intervention. Following these early criticisms, the making of the subsequent editions relied on a network of instructors and referees all over the US in order to make it as successful and consensual as possible. This seemed to work quite well in the 1950s and for a good portion of the 1960s, until *Economics* became victim of its own success and was seen, in an ironical twist of fate, as a right wing text by younger, radical economists. From now on, Samuelson will try to have his book sent as often as possible to the radicals for referring process, with mixed results. Eventually, the book became criticized from both its left and its right.

Keywords: Paul Samuelson, Economics, Textbook, Politics, Economic Education **JEL Classification:** A14, B20, B31

¹ This research has been partly funded by the GDRE "History of Recent Economics" and the H2S Group at ENS Cachan. I benefitted from the material help of the Rare Book, Manuscript, and Special Collections Library at Duke University. I thank Béatrice Cherrier for numerous comments and for sharing an early draft of her article on MIT economics, which was responsible for drawing me to some of the ideas in this paper, and E. Roy Weintraub for his support. The usual caveat applies.

1. Introduction

Reflecting upon the significance of Paul Samuelson's renowned textbook Economics at the occasion of its fiftieth birthday, Robert Solow remembered having heard his MIT colleague stating in May 1950, during an informal meeting with other members of the economics department at the Smith House, a near-by restaurant, that: "The purpose of economic theory is to make good financial journalism possible (Samuelson & al., 1999, p. 360)." While the sentence clearly signals the importance, at a very early stage, of Samuelson's works of popularization of economic knowledge, so far historians of economics have focused mostly on his early theoretical pieces such as his Foundations of Economic Analysis (1947) or his articles on the theory of consumer's demand (Samuelson 1938, 1948b and 1950).² Besides, economists interested in a critique of modern economic theory – to which Samuelson is considered one of the chief contributors - have searched through the various editions of his textbook to find hints of its possible inconsistencies. The argument in these critical pieces is generally twofold: 1) it is argued that the multiple changes occurring in the successive editions of Samuelson's text did not reflect the diversity of economic thinking, generating a bias in favor of the neoclassical analysis as opposed to other -i.e. heterodox - approaches and/or 2) the writer tries to locate in the textbook passages where, he believes, Samuelson deviates from *purely* scientific considerations and expresses *mere* prejudices.³ The output of these contributions has been, allegedly, to locate in *Economics* evidences that Samuelson is not a pure theoretician and is politically biased. This literature, however, has provided no consensus about the nature of this bias so far. While some authors believe that Samuelson has always had inclinations toward interventionism (Skousen 1997), others conclude that he acted as a blindfold pro-market advocate (Nelson 2003).

² While numerous historical contributions have been published on the subject, the most commented so far have been Mirowski (1989), Weintraub (1991) and Hands & Mirowski (1998). All of these have emphasized the crucial role of Samuelson's early theoretical pieces in the construction of the postwar neoclassical synthesis. Samuelson, on the other hand, has been critical of these accounts (see Samuelson 1998 and Barnett 2003).

³ See for instance Linder (1977), Skousen (1997) and Nelson (2001). The latter, for instance, combines the two types of critiques. The author blames Samuelson for not introducing some new economic thinking – most notably Coases' theorem – but also tries to pinpoint the author's value statements – for instance, his male chauvinistic bias when stating that "a brilliant lawyer" with "great typing skills ... should hire a woman to be his secretary even though he types much faster than she does (Nelson 2003, p. 54)." The hagiographic piece by Gottesman, Ramrattan and Szenberg (2005), on the other hand, takes the diametrically opposite stance, claiming the logical consistency of Samuelson's textbook over the years to show it is politically unbiased.

The purpose of this paper is quite different from that of these previous accounts. It is not interested in the demarcation between science and non-science nor is it concerned by the finding of *Economics*' or its author's 'true' political nature. Instead, its aim is to depict the making of *Economics* as a political process. By 'political' it is not meant the conduct of party politics but the many political elements that a textbook author has to take into account if he wants to be published and favorably received. These elements involve not only possible political pressures and, as we will see later in the paper, it has been the case with Economics from the very beginning – but more generally the politics of textbook publishing: the taking into account of the various audiences the book is intended for, the changes in economic education and instructors' and students' expectations over the years and the increasing competition on the textbook market. The central thesis in this paper is that Samuelson has self-consciously constructed Economics as a middle-of-the-road textbook, balancing conflicting views in economic theory to gain a bigger audience and avoid political pressures. Of course, Samuelson was not acting alone in this process, he was supported not only by the team of editors, graphic designers and "travelers" at McGraw-Hill, his publishing company, but also by dozens of instructors all over the US who contributed to the textbook's many revisions. Therefore I argue that the making of *Economics* relied on a "political economy", a network of social interactions that involved not only economic transactions and a hierarchical structure but also mutual obligations, the respect of one's ideas and beliefs and an organizational culture.⁴

At this stage, it seems important to state that this thesis does not, in any way, constitute a revisionist account of the making of *Economics*. Samuelson himself has hinted at the political elements that surrounded the making of the first edition of his textbook and has acknowledged the role that was played by some particular characters

⁴ Readers of the science studies literature will certainly recognize in my using the word 'economy' the concept of a 'moral economy', as used by Kohler (1999) in the depiction of *Drosophila* genetics. My only divergence with Kohler's meaning of the term is that I do not see the "moral economy" of science as separate from the "political economy". I think that, whereas the latter involves more than money transfers, the former has to take into account economic elements. In consequence, both concepts cover identical relations, hence my using the term "political" instead of "moral".

at McGraw-Hill in the making of this book.⁵ However, to my knowledge, no historical contribution so far has fully attempted to substantiate Samuelson's claim and to provide a larger narrative of the context surrounding the making, the editing and the revising of the successive editions of *Economics*^{2,6} What has not been studied, in particular, is the extent to which the political context has had an influence on the making of *Economics* and has shaped or revealed Samuelson's ethos. It is the purpose of this paper to provide such account using recently available archival material.⁷ In the next section, I study the difficult publication of the first edition of *Economics*, focusing on the many criticisms and political pressures Samuelson and MIT had to confront at this occasion. In section 2, I examine how, with the actual publication of the first edition, Samuelson, MIT and McGraw-Hill had to respond to increasing virulent charges of socialism, leading to the editorial decision to publish a Readings volume. In section 3, I study how Samuelson and his editors, which had built a network of field reports and instructors' referees that would help balancing conflicting views and construct the most consensual text possible, encountered increasing difficulties from the mid-60s onward, when pressing social issues and economic radicalism questioned the relevance of Economics. Section 5 provides concluding observations and remarks.

1. The difficult first edition (1945-1948)

In a 1969 interview with *Business Week*, when asked on the inclusion of policy-oriented materials in the 8th edition of his textbook, especially in relation with the occurring "monetarism vs. fiscalism" debate, Samuelson said: "When the chips are down, a writer must take his stand; and no committee decision is possible".⁸ Yet,

⁵ See Samuelson (1997) and Samuelson & al. (1999). That Samuelson did not go further than these few hints is due, in our opinion, to his position toward the appropriate method in the history of economics. Samuelson defended a "Whig history of economic science", which focused on the analytical aspects of economic theory and considered the contextual elements as "gossip" (see Samuelson 1987). On the other hand, he frequently had recourse to them in his telling the history of twentieth century economics in various articles (see for instance Samuelson 1972 and 1976).

⁶ A notable exception is Elzinga (1992), which offers some insight on the context of the textbook market, providing sales figures and comparing Samuelson's text to its main competitor on the market, Campbell McConnell's *Economics*. Also of interest is Pearce and Hoover (1995), which studies the Keynesian content of *Economics* throughout various editions.

⁷ Paul A. Samuelson Papers, Rare Book, Manuscript, and Special Collections Library, Duke University, hereafter referred to as PASP.

⁸ Interview with textbook author Paul A. Samuelson, *Business Week*, offprint, undated, PASP, Box 1, Folder "Promotion 1 of 2".

Samuelson's remark must hold some irony in regards to the story behind the publishing of the first edition of 1948, when an actual Visiting Committee was set up to appraise the textbook's political content and to attempt to correct its allegedly Keynesian inclination. In this pre-McCarthyist context, in the postwar aftermath of Roosevelt's New Deal, pro-interventionist policy recommendations and their underlying national income analysis – the word "macroeconomics" did not exist then – were not to everyone's taste, especially not to some local and regional businessmen's, some of whom were members of the Corporation, the board of trustees of the Massachusetts Institute of Technology.⁹

Samuelson had been appointed Assistant Professor at MIT in October 1940 at a salary of 3,000 dollars per year. This appointment followed his not being offered a position at Harvard, where he was completing his PhD dissertation, a decision that the author later interpreted as being inspired by well-spread anti-Semistism and by the economics department chair's disdain for mathematical analysis (Samuelson 1998, Barnett 2004). Though we have little information on the kind of economics Samuelson was teaching during wartime at the introductory level, if any – it is known, however, that he introduced a graduate program in economics and supervised Lawrence Klein's PhD dissertation – we know that he soon had to leave the classroom for the war effort and joined the Radiation Laboratory in 1944, where he conducted research on fire control problems in the mathematics and statistics group. Samuelson's commitment to wartime science also included his participation in the elaboration of Vannevar Bush's influential report *Science, The Endless Frontier* (July 1945), which aim was to secure the funding of American science in the early postwar period while preventing too much state intervention in this domain.¹⁰

When Samuelson returned to the economics department in October 1945 as an Associate Professor, MIT was faced with some important demographic changes. Following the adoption of the G.I. Bill of Rights, which helped war veterans pursue

⁹ The Corporation was created in 1962 and includes businessmen, scientists, civil servants and professionals from both the Boston area and other U.S. States. Some of them hold a lifetime membership.

¹⁰ On *Science, The Endless Frontier*, see Hollinger (1990). Bush's report was specifically written against the claim, famously made by West Virginia Senator Harley Kilgore, that science should by organized by the State towards democratically determined needs. Bush's victory over Kilgore was a landmark in the emergence of "Laissez-faire communitarianism" in American science.

higher education, there was a dramatic increase of students in American universities. Many of those who chose to study engineering were likely to occupy executive positions in businesses or in the administration after graduation. At MIT, introductory economics - "Ec11" in the curriculum - became a compulsory course for all of the eight hundred engineering students. Besides, the need was felt to create a new program that would combine engineering subjects and an introduction to various fields in social science. This new course, titled "Economics and Engineering" consisted in one-term classes including psychology, industrial relations and an introduction to economic analysis, which the students could substitute from each other in the course of their four-year curriculum. The idea was not only that noneconomic majors should have a basic training in economics but also that engineers could well become better professional economists than those trained in arts colleges. Because "the competent economist of today [needed] to be grounded in exact science and its methodology", it was deemed "desirable that at least some members of the [economics] profession receive their preliminary training in the environment of an engineering school."¹¹ Though this new course failed to attract a lot of students, the attendants being mostly those who did not succeed in the other engineering subjects, it remained influential in setting the way economics should be taught at MIT. The main idea was that economics was part of a larger program designed to train the students in industrial relations. Accordingly, the economics class was expected to provide the students with, more than an introduction to economic analysis, a complete picture of the American economy and a toolbox to confront the issues of the day – in particular, unemployment. The difficulty in teaching such a course was made worse by the absence of an introductory text that would combine solid theoretical content with some statistical information presented in an appealing way for non-specialists. The leading principles textbooks of the time were austere and almost devoid of actual data on the economy, while the textbooks that were devoted to non-specialists were often poor on the analytical side.¹² This is why Ralph Freeman, chair of the

¹¹ "Proposal for a Course in Economics and Engineering", Anonymous report, November 11, 1945, PASP, Box 1, Folder "Photocopies of MIT Archives, 1 of 3".

¹² As an example of the former, see Frank Taussig's two volumes of *Principles of Economics* (1927), which was used in many North-American universities or Frederic Garver and Alvin Hansen's *Principles of Economics* (1928), which was used at Harvard. Examples of the latter include Sumner Slichter's *Modern Economic Society* (1931), used at Chicago, and Rexford Tugwell, Thomas Munro and Roy Stryker's *American Economic Life* (1930), used at Columbia.

economics department asked Samuelson to write an introductory text that would fill the void.

Samuelson accepted the workload and soon got a publishing contract with McGraw-Hill. Choosing the latter as a publisher may seem surprising for an economics textbook but it was fitting for a text devoted to engineering students. McGraw-Hill had been a leader in textbooks devoted to such audience since WWI, when the U.S. Army ordered 150,000 copies of their technical manuals to be sent on the French front. The publisher had been considered so important by the government that during WWII, its paper supply was considered a priority.¹³ Samuelson had encountered numerous McGraw-Hill publications during his service at the Radiation Laboratory. That the company published Joseph Schumpeter's Business Cycles in 1939 is what eventually convinced him to sign a contract with them. Besides, this was also a good opportunity for a publisher that had not released a successful economics textbook so far. Even before its publication, Samuelson's manuscript was printed as a mimeograph that was distributed to all MIT students. This text consisted of eighteen of the twenty-eight chapters that the final version would incorporate and that we may think as being those included in the "suggested outline for a one-semester course" in Samuelson 1948a (p. xix-xx). This printed course was apparently so successful that it had raised the attention of a few neighboring institutions who wanted to use the unpublished text in their own classes.¹⁴ The dark side of success was that it also raised the attention of some local businessmen, who did not like much its content. Samuelson's manuscript did not only differ from preexisting texts in method but also in the way it addressed political issues. Though it incorporated some up-to-date economic analysis, using some much-commented diagrams to do so^{15} , it also devoted large portions of its text space to literary comments over the respective merits of the free-market system and government interventions in order to solve the problems of unemployment and poverty. Samuelson's statements were often thought provoking and written in a frivolous way that stood out in sharp contrast with what one could

¹³ On the history of McGraw-Hill, see Burlingame (1959).

¹⁴ A 1947 letter from Pr. Chelsie C. Bowland of Brown University suggests that the text may have been available at the time for others to use, though Samuelson's answer is that he wants to keep the last available copies in preparation for the published version and correct some imperfections, for reasons we will see later. Bowland to Samuelson, November 25, 1947, *PASP*, Box 72, Folder "B - General Correspondence 1939-1951."

¹⁵ On the role of diagrams in *Economics*, see Giraud (2010).

expect from the author of *Foundations of Economic Analysis* who had stated that the "laborious literary working over essentially simple mathematical concepts such as is characteristic of much of modern economic theory is not only unrewarding from the standpoint of advancing the science, but involves as well mental gymnastics of a peculiarly depraved type" (Samuelson 1947, p. 6). Though there was nothing there that would shock the typical postwar neo-Keynesian theorist, Samuelson's insistence on the drawbacks of imperfect competition and involuntary unemployment as characteristic of the failures of the "free-enterprise system" in his original manuscript provoked the anger of some early readers. Among them was Walter J. Beadle, a business executive working for DuPont at Wilmington, Delaware and a member of the MIT Corporation.

Beadle chaired a Visiting Committee, comprised of a few businessmen and professors who were all not Corporation members and whose mission was to evaluate the economics department at MIT. Their attention focused on "Ec11" and on its accompanying manuscript, which circulated among the various members of the Committee and outside referees for appraisal. This followed Ralph Freeman's suggestion during the graduation reception in 1947 that Samuelson himself wanted someone at MIT to review his text before its publication by McGraw-Hill. The reaction of the readers, however, was less that enthusiastic. A June 1947 report by some Mr. Peterson, an Economist at the First National Bank of Boston, found Samuelson's approach to be "neither sufficiently objective nor complete". "Apparently", he wrote, "the author believes that some managed capitalism is necessary and presents theories along theses lines as established facts without presenting alternative theories or points of view."¹⁶ Peterson believed that Samuelson should begin his book by the economic analysis, before applying it to current issues. He also regretted that Keynes's theories were presented as commonly accepted, which he did not believe to be true. These comments were followed by a list of some more specific quotations. Using this report, Beadle wrote to Freeman a critical but amiable letter. He began by complimenting Samuelson "on having presented a wealth of interesting material in a lucid style" and judging his text better than the "prosaic Taussig text used when [he] was an undergraduate." However, he believed like

¹⁶ Peterson, "Economics, an Introductory Analysis", Report, June 26, 1946, *PASP*, Box 1, Folder "Criticism of the Textbook."

Peterson that many passages in the text suffered from a pro-governmental inclination that needed to be corrected. He provided two "schedules", the first one presenting the conclusions that did not "appear to be justified by the author's presentation and probably could not be justified by a consideration of all the facts" and the second one displaying "statements open to serious question." All these passages were remarks by Samuelson, regarding public finances or market failures. One example of what Beadle found seriously questionable was: "When we speak of government expenditure in the abstract we pretend that it is a subtraction from national production, although really we should know that economically it is a way of producing and using economic output." Beadle appealed to the authority of another textbook writer, Fred Fairchild, of Yale, whose own *Economics*, maybe not so coincidentally, was to be published in 1948. Finally, he concluded:

It is encouraging to know that Profesour Sauelson has asked you to edit his text and, if he approaches the matter as objectively as a professor in an engineering school approach a problem of this kind, I am hopeful that the text which is eventually to be published will attain recognition everywhere as reflecting credit on both M.I.T. and the author.¹⁷

The letter was passed on Samuelson, who replied in an equally gentle manner. Thanking Beadle for his "very constructive letter", he stated that "[his] text [had] been rewritten twice and [was] now quite different from the version in [Beadle's] hands." Though the manuscript had by now gone to the press, he assured him that it would be possible "to reword six out of ten of [his] selected quotations" while "three other had already been changed in revised versions" – this happened to be true, as none of the passages quoted by Beadle were found in the 1948 published edition of *Economics*. Urging Mr. Peterson to send his comments as soon as possible, Samuelson provided Beadle with a list of scholars who had commented on previous drafts of his textbook, without citing any name but mentioning that one of them was "Fairchild's successor in public finance instruction". Noting that his manuscript had also been "criticized by both conservatives and radicals", he concluded:

¹⁷ Beadle to Freeman, July 15, 1947, PASP, Box 1, Folder "Criticism of the Textbook."

What I do wish to avoid is a departure from a middle-of-the-road position, as compared to my present generation of economists. And I am sure that your comments have been most helpful in this respect.¹⁸

Less amiable, however, were the letters MIT President Karl T. Compton received simultaneously from Beadle and some other members of the Committee. In the first letter in a long series of impassioned, sometimes acrimonious exchanges regarding *Economics*, Beadle expressed his doubts over Samuelson, noting that in spite of his having a "brilliant record" and being "proficient to an extraordinary degree", he lacked "the knowledge and capacity to make himself effective outside the narrow area of mathematical economics." Beadle hoped that "under adequate administrative supervision the Institute may be able to bring him to maturity".¹⁹ Frank Chesterman, another Committee member, was far more straightforward in his comments to Compton. He wrote:

I am astonished to find that a teacher of economics at M.I.T. shall enunciate some of the absurd thinking which is quoted in Walter's letter to you. It is perfectly obvious that the young man is socially-minded if not strictly communistic, It would be a terrible reflection on M.I.T. if the book in its present condition were published ... I question whether Samuelson is a member of the subversive societies we hear so much about because his line of reasoning and method of expressing his thoughts are those of that group.²⁰

Obviously, there was more here than mere disagreements over Samuelson's overconfident style or comments on his lack of maturity, as a subsequent letter from Beadle to the textbook author made it clear: "The quotations in my letter to Professor Freeman", he wrote, "were illustrative of numerous statements in the text which I believe are subjects to similar criticism, and correction of the particular items which I quoted will not eliminate the difficulties which I found in the text ... In other words, if your objective is to publish a text that will attain recognition as reflecting credit on both M.I.T. and the author, then I strongly suspect that your rewriting has not gone far enough."²¹ Beadle's next letter to Compton similarly adopted a more threatening tone:

¹⁸ Samuelson to Beadle, July 31, 1947, PASP, Box 1, Folder "Criticism of the Textbook."

¹⁹ Beadle to Compton, July 15, 1947, PASP, Box 1, Folder "MIT Archives Photocopies 1 of 3."

²⁰ Chesterman to Compton, July 21, 1947, *PASP*, Box 1, Folder "MIT Archives Photocopies 1 of 3."

²¹ Beadle to Samuelson, August 6, 1947, PASP, Box 1, Folder "Criticism of the Textbook."

If [Samuelson's] view-points stem from an ingrained socialistic philosophy on the part of the author, then it would seem that more drastic correctives would be required with respect to the teaching of economics at the Institute. In any case, I believe that the Department administration is subject to severe censure for having permitted the text, in the form in which the Committee reviewed it, to be passed out to the students of Ec 11 and used as a basis for classroom instruction. It raises a question in my mind as to the competence of that administration.²²

Compton's response to these criticisms was unambiguously favorable to Samuelson and his home department: "There is no question that every member of our Economics department is a wholeheartedly advocate of the free enterprise system ... When I read the examples which you quote in Schedules I and II ... my own impression is that they are sound statements of policy provided they are carried out in a spirit of supporting the free enterprise system and not as a means of wrecking or weakening it ... Professor Samuelson has taken your criticisms and suggestions in excellent sprit and has modified a number of parts of his manuscript where this was not inconsistent with his own beliefs." He agreed, however, on the idea expressed by Beadle that economics students should "be given some contact with the various schools of thought, even those with which most of us would disagree."²³ Because Compton's letter had been sent before Beadle's latest, angrier, correspondence had been received, MIT President sent another, more explicit, statement:

If either your committee or I were to go beyond suggestion, advice and criticism in respect to the views or publications expressed by any member of the faculty the institution would be wrecked. There would be wholesale resignations irrespective of whether or not other members of the staff felt that the criticisms were justified.²⁴

Besides, Samuelson wrote to Compton, giving some more details on his methodology in writing the textbook and his political stance. "[T]he book is in no sense a 'leftwing' work; and I have never, myself, been connected with left-wing organizations of any kind, or with organizations working with such groups, or – for that matter – with any labor organizations whatsoever". Noting that his manuscript had been the object of "many requests from other institutions to use it even in its imperfect,

²² Beadle to Compton, August 6, 1947, PASP, Box 1, Folder "MIT Archives Photocopies 1 of 3."

²³ Compton to Beadle, August 6, 1947, *PASP*, Box 1, Folder "MIT Archives Photocopies 1 of 3."

²⁴ Compton to Beadle, August 8, 1947, *PASP*, Box 1, Folder "MIT Archives Photocopies 1 of 3."

mimeographed form" and "the eager vying of the best publishing houses to publish the book", he asserted that the research incorporated into it was of the sort that was published in top journals such as the American Economic Review, the Review of Economics and Statistics and the Quarterly Journal of Economics and that "the methods of analysis used are those that have been employed by 90 per cent of the active academic economists under the age of 50 over the last decade."²⁵ There is no doubt, indeed, that the Institute recognized Samuelson's scientific credentials. In fact, it happened that a few months before this whole affair, in December 1946, Samuelson had declined an offer from Tjalling Koopmans to join the University of Chicago, where the Cowles Commission was located. His decision not to leave his home institution resulted in Vice President Jim Killian's decision to raise substantially his salary up to 8,500 dollars a year by July 1, 1947, an amount which was eventually reevaluated to 9,000 a month later. This was, in Killian's own words, "immediate evidence of our wholehearted support of your own program and the general program here in economics and of our desire to do everything possible to insure that this program be as strong as we can make it."²⁶

Nevertheless, Compton and Killian's support did not slow down the criticisms against Samuelson. The discussion had now moved from substantial issues in Samuelson's political views towards the larger question of whether an intervention by the Corporation on the publications of a Faculty member should be seen as a violation of academic freedom. On the freedom of speech matter, not all of the Visiting Committee members agreed. Charles Spencer and Ellis Brewster, for instance, had expressed some skepticism over Samuelson's text, which were quite similar than those of Beadle. Yet they both believed that the Visiting Committee should not interfere with the book's content, especially as it had gone to press, and that Beadle's remark on the economics department reflected his own views rather than those of the Corporation. The latter, in their minds, should avoid dictation or control of the faculty. That Beadle was partly disavowed by his colleagues did not put the MIT Presidency at ease. Killian, in particular, feared that Beadle might want to go public about his claims, which would probably harm the Institute's reputation. Consequently, Compton and Killian found it suitable to release a statement about the

²⁵ Samuelson to Compton, August 7, 1947, PASP, Box 1, Folder "Criticism of the Textbook."

²⁶ Killian to Samuelson, March 10, 1947, PASP, Box 86, Folder "MIT."

position of MIT towards academic freedom in the economics department. It asserted that the policy regarding appointments and teaching in economics was the same than in any other field, namely that "it seeks ... to give the student a scholarly treatment of the subject which stimulates and trains him to do his own thinking ... and which encourages him to reach his own conclusions of all relevant facts and points of view".²⁷

Yet Beadle's persistence in criticizing Samuelson's *Economics* did not vanish. The recent publication of a new textbook, Lorie Tarshis' Elements of Economics, severely criticized in the conservative press for its Keynesian inclination, did nothing to dissipate the feeling among MIT benefactors that some kind of socialistic conspiracy was brewing at the Institute. For Beadle's superior Lammot DuPont, Tarshis' textbook was "an aggravated example of what [Samuelson had] done in a milder way", which was bad enough to justify that Compton be disturbed.²⁸ Similar charges were now being held against Lawrence Klein's Keynesian Revolution. A fairly technical account of Keynes' doctrine and an emanation of the PhD dissertation the author had written under Samuelson. Klein's book had not attracted much criticism outside of the economics profession when it had been published in 1946, but in light of Samuelson's recent writing, it was for some another proof that MIT economics department had gone wrong. Don Carpenter, another of Beadle's acquaintances, asserted in a letter to Killian that "Samuelson's textbook reflected the philosophy portrayed by Dr. Klein", leading him to "seriously question the advisability of teaching this kind of economics at M.I.T." and reproducing one colleague's assertion that "it is not the type of economics that [he] would like to have [his] son taught."²⁹ Killian's line of arguments in response to this letter consisted in stating that Samuelson was in now way the sole responsible for economic education at MIT and that his students' ideas did not reflect his own views. Admittedly, ad hominem attacks against Samuelson had been rendered more difficult by the fact that the American Economic Association had awarded him the very first John Bates Clark medal in December 1947. With this prize, it was hardly arguable anymore that Samuelson was only influential in "the narrow area of mathematical economics", something that

²⁷ Statement, August 28, 1947, PASP, Box 1, Folder "MIT Archives Photocopies 1 of 3."

²⁸ DuPont to Beadle, September 12, 1947. *PASP*, Box 1, Folder "MIT Archives Photocopies 1 of 3." On the controversy over Tarshis' textbook, see Colander & Landreth (1996).

²⁹ Carpenter to Killian, January 27, 1948, PASP, Box 1, Folder "MIT Archives Photocopies 1 of 3."

Compton and Killian's responses to the critics never failed to mention.³⁰ For a short period, therefore, the pressures loosened up.

2. Further criticisms and editorial changes (1948-1961)

Nonetheless, criticisms not only reappeared but also grew in virulence at the occasion of the actual publication of *Economics*.³¹ The fact that the book was successful certainly attracted the attention of a kind of readership that would not otherwise have raised an eyebrow. A letter from Samuelson to Compton, in August 1948, testified to how quick this success had been. Asserting that McGraw-Hill had already printed 45,000 copies – an exceptional run for an economics text at the time –, he wrote: "The book has been adopted for use at such institutions as Yale, Princeton, Harvard, Duke, Columbia, Purdue, etc. In terms of royalties it has been a profitable venture beyond my fondest explanations". Yet, Samuelson was conscious, from the events that had preceded, that the book would probably be received with mixed feelings.

I should add, however, that through the national income approach to elementary economics is now the rage, it may not be approved by all the authorities in the field of economics. This I suppose is inevitable in a field of the social sciences which touches upon controversy and emotions. I think, however, there is gradually coming to be greater consensus on the more neutral and objective tools as distinct from policy prescriptions.³²

In fact, the reception by professional economists turned out to be almost unanimously positive. Having received advanced copies from McGraw-Hill, Harvard University Professor Seymour Harris and Martin Bronfenbrenner from the University of Wisconsin expressed their appreciation in private letters to the editor. While the former saw in *Economics* a "landmark" that "should have considerable influence in this country"³³, the latter wrote: "Economics textbooks have maintained for entirely too long the tradition of artificial impartiality and it is a great relief to see Samuelson

³⁰ Killian almost immediately sent a letter to Beadle, attaching the notification Samuelson had received from the *American Economic Association* about the Award. Killian to Beadle, December 15, 1947, *PASP*, Box 1, Folder "MIT Archives Photocopies 1 of 3."

³¹ Interestingly, while the pressures surrounding the publishing of the first edition have been subsequently referred to in many occasions (Elzinga 1992, Samuelson 1997, Samuelson & al. 1999), there have not been many references in print to the more intense pressures surrounding the textbook between 1948 and 1951.

³² Samuelson to Compton, August 31, 1948, *PASP*, Box 1, Folder "MIT Archives Photocopies, 1 of 3."

³³ Harris to Dorman, May 25, 1948, PASP, Box 1, Folder "Criticism of the textbook."

coming out clearly with his own views, especially since I happen to agree with the great bulk of them."³⁴ In his review of the textbook for the *American Economic Review*, though, Columbia Professor Albert Gailord Hart presented another interpretation of Samuelson's political stance, which must have been truer to the author's original intent:

The supreme merit of the book, to my taste, is a systematic effort to find points of contact between different points of view which students and their neighbors in society may hold. Samuelson's own policy position is middle-of-the-road ... In consequence of this tone of reasonableness and tolerance, his book should prove congenial to teachers and students over a wide range to right and left of Samuelson's own political position.³⁵

Generally, other reviewers shared Hart's feeling over Samuelson's pedagogical skills and balanced tone. Lowell Ashby, of the University of North Carolina, wrote in the *Southern Economic Journal*: "It would be wrong ... to label the work as Keynesian in content. Not only had Samuelson written with painstaking, step-by-step plainness on the theory that 'short writing makes long reading' but he has with admirable selfrestraint leaned over backwards to avoid expounding pet policy prescriptions (Ashby 1948, p. 217)." However, there was among the praises in the academic literature, one jarring review. According to Conservative economist and syndicated columnist Lewis Haney, *Economics* had a "snappy style" and "drop[ped] to wisecracks at times", making "the inferior student (and teacher) feel good". The "economics of Keynes" it incorporated broke in the reviewer's own words "with the evolutionary development of economics as science (Haney, 1948, p. 221)."

Actually, these uncharitable comments, published in the *Annals of the American Academy of Political and Social Science*, almost look amiable in comparison to those the same Lewis Haney later published in the *L.A. Examiner*, in January 1950, calling on readers to write to the publishers and to "the trustees of various colleges in which the book is said to be used." Haney appealed to the generosity of the public towards the *Educational Reviewer*, a review published for the Committee on Education of American Small Business Organizations, "one of the most important agencies for

³⁴ Bronfenbrenner to Dorman, May 24, 1948, Box 1, Folder "Criticism of the textbook."

³⁵ Hart, 1948, p. 912.

combatting the reds and pinks who bore from within".³⁶ Haney was specifically referring here to a review written in the October 1949 issue of this publication by Dr. Charles Kraemer, a Professor of Business Administration at Wagner College. According to Kraemer, "Samuelson's evident purpose [was] to convince the reader of the need for controlling the national income through planned government intervention". Throughout his review, mathematical analysis was depicted as a self-conscious way of hiding value judgments:

Mathematical treatment of economic theory based upon data that are mere assumption, is used at length ... and it is extremely doubtful that the student without considerable mathematical training can understand this objectionable method of presenting economic theory ... The text is also the latest, and perhaps the best exposition of the theories of the larger number of "econometricians" who have taken over the economics departments of many of our universities. These believe that economic laws can be expressed in exact mathematical formulae as can be done in algebra and physical science. They try to prove their formulae in order to justify their national planning control.³⁷

Kraemer's review, as Haney suggested, resulted in a lot of letters sent to Killian, who had by now succeeded Compton as MIT President,³⁸ as well as to James McGraw Jr., Samuelson's publisher. To the latter, Beadle's colleague Lammot DuPont wrote: "The name of the publisher of this book is so close to the name of your company that I assume there must be some connection. Understanding that the book is still being published and sold, I cannot understand how you can permit it, knowing your feeling for free private enterprise."³⁹ Another of these letters to McGraw, by contrast, did not criticize the publication of *Economics* by McGraw-Hill *per se*, but the way the publisher promoted it. "[N]obody should be denied the opportunity of reading what Professor Samuelson has to say ... But I question the desirability of a company headed by James McGraw, as bodied forth in his newspaper advertisement,

³⁶ Haney Comment on 'Economics' book, *L.A. Examiner*, January 20, 1950, in *PASP*, Box 1, Folder "Criticism of the textbook."

³⁷ Charles L. Kraemer, Review of *Economics: An Introductory Analysis, The Educational Reviewer*, Vol. 1 (2), October 15, 1949, as reproduced in several places in *PASP*, Box 1, Folder "Criticism of the Textbook". It is notable that like many of these reviews, this one barely quoted Samuelson's text. The only quote featured there was: "socialist Britain (1948) has more civil liberties than did the United States in the 1920 era of rugged individualism (Samuelson 1948, p. 590)."

³⁸ Compton had resigned in October 1948 to become Chairman of The Corporation. The latter had elected Killian as its successor.

³⁹ DuPont to McGraw Jr., December 30, 1949, *PAPS*, Box 1, Folder "MIT Archives Photocopies 1 of 3."

sponsoring such a book."⁴⁰ Accordingly, the nature of the debate developed from the question of whether Samuelson's book should be published to the issue of whether *Economics* should be the sole text used in an introductory economics class and whether it should be accompanied by some other materials reflecting the various points of view existing in the discipline. This debate was referred to in McGraw's answer to DuPont:

As you know, there are wide differences in opinion between recognized authorities in the many fields of science and technology served by our Book Company jus as there are such differences among the members of university and college faculties, including that of Massachusetts Institute of Technology ... We ourselves have published a number of text in [economics] that set forth diverse and opposing views of their authors ... In matters of this sort, I think the friend to whom you refer in your letter [i.e. Beadle] did exactly right when he got the authorities at the Massachusetts Institute of Technology to prescribe required reading material that would complement the presentation in Professor Samuelson's text. That is an eminently proper way to deal with differences of opinion in such matters.⁴¹

McGraw's reference to what was happening at MIT made perfect sense, as the same issues had been raised for some time. Beadle and his friends, conscious that questioning Samuelson's ethics and scientific credentials would not lead them far, had been quick in turning their attention to the curriculum. As soon as late 1947, they had expressed concerns about the existence in the Ec. 11 class of a wide variety of readings supplementing Samuelson's text and expressing different points of view meaning others than those in favor of governmental intervention in the economy. This is how the two opposing parties framed the question of academic freedom. Whereas the economics department – as impersonated, at least, by Samuelson and Freeman – saw academic freedom as the freedom to publish and teach whatever they judged suitable in regards to accepted academic standards - hence, Samuelson's insistence on the fact that what he was teaching was the economics that journals such as the AER or the QJE published –, Beadle and the other members of the Committee approached academic freedom as the freedom, for students, to benefit from the largest range of existing opinions in order to forge their own views on economic subjects. At the time, both Compton and Killian seemed to be on the economics department side, though the

⁴⁰ Alexander Gardiner to McGraw Jr., January 16, 1950, *PASP*, Box 1, Folder "Criticism of the textbook".

⁴¹ McGraw Jr. to DuPont, January 25, 1950, *PASP*, Box 1, Folder "MIT Archives Photocopies 1 of 3."

Dean of Humanities, Robert G. Caldwell, seemed to be more inclined to respond to Beadle's demand.

The issue, however, did not seem to be settled when it resurfaced a year and a half later at the occasion of the invigorated campaign against Samuelson's Economics. Beside Kraemer and the Educational Reviewer, there were a few other conservative lobbying organizations to publish equally devastating reviews of Samuelson's text for an audience of businessmen and laymen. This consisted, most notoriously, in Rose Wilder Lane's piece in the Economic Council Book Review and Benjamin Namm's critique in Collier and Stores. Lane, a successful novelist, had moved increasingly towards the libertarian movement during wartime, when she famously decided to live on homegrown vegetables because of her disapproval of governmental planning. The National Economic Council, which published her review, was led by Merwin Hart, a conservative propagandist, notorious for his vocal anti-communism and his support for Franco's Spain as a bulwark against the latter. As for Namm, he was a New York merchant and an officer of the United States Chamber of Commerce who had decided to invest the issue of "subversive teaching" in colleges and to take to task anyone who would demise the ability of the free enterprise system to solve the economic problems of the day. Admittedly, none of these writers had any credit as economists, but they had an audience and some of their readers, astonished by what they read about a MIT Professor, wrote to Killian in good faith in order to know if there was any truth in these statements. Though the MIT president was prone to reject these allegations every time they appeared, his endorsement of Samuelson's textbook did not go as far as saying he agreed with his policy conclusions. In fact, most of the arguments in his responses to alarmed MIT supporters consisted in asserting that many MIT faculties, including himself, often disagreed with Samuelson's policy advices but that because his analysis relied on the latest developments in the field, it was the surest way to let the students exert their own freedom of thought. Therefore, it was Killian's opinion that the quantity of received letters on Samuelson should call for a more comprehensive response. To Samuelson, he wrote: "I do feel there are many businessmen with a thoroughly honest and liberal outlook who are troubled about what they feel to be the Keynesian outlook and who have gained the impression that colleges have succumbed to one-sided propaganda ... Do you agree that there is an opportunity to do something constructive about this situation rather than remain

always on the defensive?"⁴² Samuelson's answer was a clear qualification of the argument that what he taught was Keynes' doctrine:

I myself think that much of what is called Keynesianism is incorrect and in need of qualification. Much of my text is concerned with such qualifications and criticisms ... I myself rarely use the words Keynesianism and have repeatedly deplored the formation of "schools of thought" in economics. I accept and use whatever parts of the analysis of saving and investment, income-determination, and inflation that Keynes and anybody else has contributed – so long as the analysis seems to add to our knowledge of the facts of economic behavior.

Yet, Samuelson did not feel that communication should be worked out, as he also wrote: "I wonder whether we would succeed in our constructive purpose if we attempted blatantly to persuade those least likely to be persuaded – namely the sort of person bothered by the Rose Wilder lane type of attack ... [A]ttempts to change by rational argument deep-seated judgments formed at the a-rational level seem doomed to failure – and often they seem to boomerang."⁴³ This is not to say that Samuelson was totally unwilling to communicate and explain his position. A series of letters between Killian, Samuelson and J.H. Barker, Chairman of Allstate Insurance Company, shows that the textbook author could be quite open to criticism. A friend of John Burchard, the new Dean of Humanities at MIT, Barker had given Samuelson a fully annotated copy of his text to which the latter replied: "Thoughtful, detailed, point by point criticisms are extremely valuable to any author and yet they are the hardest to come by, so I am doubly appreciative of them... I am not presumptuous as to think that my knowledge of our economic system is complete and accurate, and where our differences are more than verbal, I hope to benefit from your frank and forthright criticism". Then, Samuelson returned Barker his copy with this added superscription: "Many thanks to one who helped to make this book obsolete – and better!"44 Besides, Samuelson's attachment to MIT was again testified to by his refusing a second proposal to join the economics department at Chicago, coming this time from Theodore Schultz. This was a very attractive offer with a "\$12,000 salary and literally self-determining teaching load", leading Samuelson to express his hope

⁴² Killian to Samuelson, August 29, 1950, PASP, Box 1, Folder "MIT Archives Photocopies 1 of 3."

⁴³ Samuelson to Killian, August 30, 1950, PASP, Box 86, Folder "MIT."

⁴⁴ Samuelson to Barker, July 6, 1949, *PASP*, Folder "MIT Archives Photocopies 2 of 3" and Barker to M.S. Ford, July 15, 1949, ibid.

that "the department here will continue to flourish" and that "a top-ranking MIT professor can hope over the years to far as well here as at any of the foremost American research centers."⁴⁵

Still, the matter got worse in the year 1951 and suspicious enquiries multiplied. The publication, the same year, of William Buckley's God and Man at Yale, which criticized liberal education and quoted from Samuelson's textbook, did not help much. To Ralph Freeman, Killian confessed: "Everywhere I go now practically, business people speak to me about [Samuelson's book]." John Burchard, the new Dean of Humanities and Social Science summarized the situation: "I find this whole business pretty repulsive. The President is in a terribly difficult position on this. He takes the beating. He has no desire, I am sure, to do anything but find a good affirmative position. I myself do not think the affirmative position could be made by simply getting some classical economist (if indeed one now exists)."⁴⁶ Several steps were taken. Someone was commissioned to write a memorandum on *Economics*, which would show how the various criticisms of the text arose merely from ignorance. Quotations found in these reviews were replaced in their original context while other passages in which Samuelson lauded the free enterprise system were identified. Besides, copies of favorable reviews published in Business Week and Fortune were sent to Killian, who could accordingly use them as an argument that Buckley, Namm or Lane's comments were not representative of what the business world was thinking of *Economics*. Yet, all of these were rational arguments and were concerned only with the promotion of the textbook, not with some substantial decision that could have put some of the critics at ease. Because, as Burchard had joked, it was unlikely that some classical economist would come to MIT, there had to be another way to bring those in the classroom, hence the revived idea of a readings volume that would incorporate some other texts and particularly those advocating an unconstrained free-enterprise system and accordingly critical of governmental intervention. Freeman, in a letter to Killian, referred to the existence of "a small book of readings" which MIT students were required to purchase and in which "different points of view [were] presented". As an example, he mentioned that: "most of the

⁴⁵ Samuelson to Burchard, November 1, 1949, PASP, Folder "MIT Archives Photocopies 2 of 3."

⁴⁶ Burchard to Freeman, March 1, 1951, PASP, Folder "MIT Archives Photocopies 2 of 3."

classes received and discussed the brochure entitled 'How to Read a Financial Report' issued by Merrill Lynch."⁴⁷

Beside the small mimeographed book to which Freeman referred, it was decided to publish a similar book of readings by McGraw-Hill, as a response to the pressures weighing upon Samuelson's publisher. Before then, John Taylor, the Editor in charge of College textbooks at M-H, had ordered a detailed memorandum responding to all the critiques addressed to *Economics*. The document looked much like the one Burchard had commissioned at MIT. It reported all of the quotations in Kraemer that had been taken out of context. In particular, the idea was to dissipate all the accusations of "un-American tendencies" that Samuelson was charged with. One section of this report provided a series of quotations from Samuelson "which stress[ed] the values of capitalism and free-enterprise, and show[ed] his basic opposition to socialist and welfare-state tenets". According to the author of this document, evidence of Samuelson's "true position in regard to socialist tendencies" was his leaving out the "Theory of Distribution" in his text, something no prominent economist had done "since Adam Smith's time". "No socialist could ever dream of leaving out this part which for him contains the Alpha and Omega of economics", the author commented. Another section of the report consisted in listing, state by state, the 215 institutions that had adopted *Economics* as their main introductory textbook. Two appendices mentioned the Top 100 universities of over 5,000 enrollments that used the book, as well as the oldest colleges and universities founded prior to 1850 having done so. Finally, the report reproduced portions of Hart's AER review, mentioning the passage on Samuelson's "systematic effort to find points of contact between different points of views."⁴⁸ Clearly, the overall purpose of the report was to depict Samuelson's book as endorsing a multiplicity of opinions about the economic system. Interestingly, a discussion of the materials gathered for this report occurred at the same moment Taylor and Samuelson concretized the publishing of the Readings volume, during the summer and the fall 1951. Their correspondence made it clear that Readings in Economics was not the sole idea of the Editor but a joint decision between McGraw-Hill and MIT economics department. The making of this volume,

⁴⁷ Freeman to Killian, May 9, 1951, PASP, Box 1, Folder, "MIT Archives Photocopies 1 of 3."

⁴⁸ "Discussion of the textbook entitled 'Economics: an Introductory Analysis' by Paul A. Samuelson". Report to John Taylor, PASP, Box 1, Folder "Criticism of the Textbook."

indeed, implied three other economists at MIT: Robert Bishop, John Coleman and Cary Brown – though the latter would not appear as a co-Editor of the published version. As soon as November 1951, before the volume was published or even completed, Freeman referred to it in a letter to Killian:

As I indicated to you in a recent conversation, a group of the Department staff is preparing a new book of readings to supplement the textbook which we use in Economic Principles ... As you will observe, the projected book of readings aims to present a variety of points of views ranging from radical to conservative, from Marx and Engels to Pope Leo XIII. There are also readings from classical economists such as Adam Smith, Ricardo and Bastiat. Articles criticizing recent government policies are included as well as various opinions on the economics of the defense program.⁴⁹

Killian immediately made use of this material in order to respond to critiques. To one Pittsburgh businessman, he wrote: "Included in the various readings ... are such documents as 'Meaning of Competition', published by the National Association of manufacturers, Crawford Greenewalt's 'Dupont and the Problem of Bigness in Industry', Hayek's 'The Road to Serfdom', and the Standard Oil Company of New Jersey's report, 'A Stockholders Meeting'."⁵⁰ All these texts were included in the version McGraw-Hill released in 1952, as well as a series of left-wing texts, such as an excerpt of Marx and Engels' Communist Manifesto. In addition, the Soviet Union's economy was presented in a critical way by a Russian émigré. All these texts were put together in specific sections of the book - for instance, "Government Intervention", "Protections vs. Freer Trade", "Communism, Socialism and Capitalism" - and were clearly meant as mutually counterbalancing each other by the editors, who stated in the introduction: "In the interest of lively debate, and to prepare the student for what he will meet in later civic life, we have included arguments for and *against* various policies and viewpoints ... The net result will be, we hope, an enhanced and informed appreciation of the merits of the American economy, as well as a realization of the areas where it faces friendly and unfriendly criticisms (Samuelson, Bishop and Coleman, 1952, p. vi, emphasis in the original)."

⁴⁹ Freeman to Killian, November 19, 1951, PASP, Box 1, Folder "MIT Archives Photocopies 1 of 3."

⁵⁰ Killian to D. M. Gray, November 20, 1951, *PASP*, Box 1, Folder "MIT Archives Photocopies 1 of 3."

Obviously, the elaboration of a book of readings by MIT economics department and its subsequent publication by McGraw-Hill was of a crucial importance both to Samuelson's home institution and for his publisher. This editorial decision put a final note on the questioning of Samuelson's legitimacy as a textbook author and as a teacher of introductory principles at MIT. When new critical reviews were published from time to time, such as the particularly uncharitable one written in 1954 by E. C. Harwood on the behalf of the American Institute for Economic Research, a Massachusetts think tank, they were quickly and unambiguously disparaged by Killian. Yet these criticisms were still quite frequent until the early 1960s. Every time they occurred, the counterarguments consisted in emphasizing, beside Samuelson's scientific credentials, the multiplicity of points of view that the Readings volume brought to the students. This strategy was followed by Killian's successor, Julius Stratton. By now, the idea that "the first edition of his textbook a number of years ago contained some statements ... that led to severe criticisms" but that "in most recent editions, these have been modified" was the canonical view that MIT officials were willing to communicate.⁵¹ In 1961, even Beadle asserted that "Samuelson [had] made real improvements from a business standpoint in each of the five editions that [had] now been published."⁵² Admittedly, Samuelson had learned to tone things down in the meantime. In his own response to Harwood, he wrote:

I try to benefit from all criticisms, whether complimentary or otherwise. I have one of my associates abstract what he regards as the substantive points of difference, and when the time comes for a new revision of the book, I try to decide whether various alterations in content are called for... I might add that I always welcome reprints, and that, although I, myself, am in the typical mid-stream of present day academic economists, I am not in principle of a closed mind to suggestions of newer methodologies.⁵³

This pretty much summarized the ethos presiding over the making of the subsequent editions of *Economics*.

⁵¹ Stratton to Leo N. Beckwith, April 6, 1962, *PASP*, Folder "MIT Archives Photocopies 3 of 3." The exact same wording found in another correspondence suggests that it was a standard response to criticisms.

⁵² Beadle to Willard J. Rockwell, November 14, 1961, *PASP*, Box 1, Folder "MIT Archives Photocopies 3 of 3."

⁵³ Samuelson to Harwood, November 30, 1954, *PASP*, Box 1, Folder "MIT Archives Photocopies 3 of 3." Harwood, interestingly, was a former instructor of military science at MIT who published critical reviews of Samuelson until the early 1960s.

4. The continuing quest for relevance (1961-1976)

It is safe to say that the early political pressures and criticisms affected the making of the subsequent editions of *Economics* to a large extent. That Samuelson (1997, & al., 1999) himself has referred to the story surrounding the first edition as an evidence of his continuing attempt to write a balanced textbook over the years testifies to the importance of these events in shaping the issues at stake when *Economics* had to be revised, every three years. As time went by, the matters may not have been as crudely political as it used to be in the late 1940s and for most of the 1950s, but political questions arose nonetheless, though framed in a different, subtler way. The main issue affecting economic education from the early 1960s onward was the question of its relevance. In a decade dominated by social conflicts - e.g. the civil rights movement and anti-war protests -, there was increasing concern among the American population that economic growth alone would not dissipate all the problems at stake.⁵⁴ As the leading textbook of the period and the most characteristic instance of the neo-Keynesian consensus in the discipline, Economics was under fire for providing students with abstracts principles that were too far removed from the worries of the American society. This was no longer a conservatives' critique but one that was most often voiced by left-wingers.

These criticisms had been nourished as early as the early 1960s by a wholesale reconsideration of elementary economic education in both colleges and high schools. Many economists expressed their dissatisfaction with the teaching of the introductory course, which they believed was insufficient in drawing students' interest. A 1958 conference at Grinnell College, co-sponsored by the Ford Foundation and the Joint Council on Economic Education, studied alternative approaches to economic education, other than the usual "principles-based" course. These studies, published in 1960, showed that most of the participating teachers believed in the superiority of the "problems-solving" approach.55 Unlike "principles-based" economics courses, which introduced theories to students before applying them to various problems, "problemsolving" courses worked in reverse, exposing the issues that the American society and particularly its consumers on the micro-side - had to face before exposing the

 ⁵⁴ On the changing notion of relevance in US economic education during the 1960s, see Fleury (2010).
⁵⁵ See Knopf & Stauss (1960).

economic principles one could use to solve them. Paradoxically, Samuelson's Economics, which was considered in 1948 as one of the first textbooks to confront students with the pressing issues of the day and criticized by the Conservatives as too political for a technical introduction to the discipline, was a decade later classified among the most theoretically loaded texts and accordingly challenged by more policy-oriented contenders. The main textbook adopting the "problem-solving" approach, George Leland Bach's Economics: An Introduction to Analysis and Policy, was considered among the serious alternatives to Samuelson's text, even outselling it for a short while in the mid-sixties. Besides, Bach was also much involved in the development of economic education, a field which had been vigorously supported by the American Economic Association since the beginning of the decade.⁵⁶ In 1964, together with fellow economic educationist Philips Saunders, Bach undertook a quantitative study of the impact of introductory courses on economic literacy, showing that such courses had no significant effect on success in a simple test of economic understanding submitted to a sample of high school social teachers (Bach & Saunders 1965). The outcome of their study was a subsequent refinement of the test with slightly better results (Bach and Saunders 1970), but for the most, economic education was considered a quite depressing affair in the 1960s and the classic economics textbook – as represented by *Economics* and its numerous imitators – was often held responsible for the present situation.

This is not to say that *Economics* was no longer a successful textbook. In fact, it was still considered as the main principles text, whose main advantage towards its competitors was its relative seniority and the experience of numerous revisions that has been undertaken over the past decade. Its sixth edition, published in 1964, sold more than 440,000 copies over three years, which represented an unprecedented sales figure.⁵⁷ The only other textbook to outsell Samuelson in the period was McConnell's *Economics*, which was also published by McGraw-Hill. The latter was considered a more policy-oriented introductory text, but it was principles-based nonetheless and

⁵⁶ In 1960, a Task Force on economic education had been appointed to study the economic literature used in high schools. The results were published in Olson (1963). The American Economic Association was also involved in the making of a CBS TV program, "College of the Air: American Economy", which was broadcasted in 1961. An increased collaboration between the AEA and the Joint Council on Economic Education eventually resulted in the creation of the *Journal of Economic Education* in 1969.

⁵⁷ Aggregate sales figures are taken from Elzinga (1992).

differences between the two were rather scant. One can wonder why Samuelson's publisher might want to have two twin textbooks of that sort but the most plausible answer is quite simple. Because texts were only revised every three years, there needed to be at least one backup to fill the gap when facts changed and some institutions may need to look elsewhere for up-to-date data. As a result, the two textbooks were undoubtedly leading the market in the 1960s, leaving little space for other competitors.⁵⁸ Yet a strong feeling of competition between the two books was constantly maintained at McGraw-Hill as a reminder that no revising process could be taken as granted and that continuous change was needed.

For this task, Samuelson was helped by an experienced team of editors, publicists and travelers, surveying the textbook market on a regular basis, providing newspapers, professional magazines and institutions with the latest information and blurbs on the textbook and collecting various field reports. Particularly useful were the travelers who, as sales representatives, reported on the textbook demand in their local institutions and passed on to the editors the various reports that instructors wrote in response to the latest edition. While some of these were unsolicited comments and suggestions – including some minor corrections –, there were also formal, sometimes anonymous, referee reports, which were used by McGraw-Hill in preparing the revision. These documents contained general comments as well as chapter-by-chapter detailed analysis. The comments concerned the technical aspects of the book as well as its tone and the various political recommendations it contained. Less frequently, they were accompanied by quite unflattering students' comments that ranged from "like dry toast" to "a little senile but interesting" or complained about the presence of "a lot of propaganda talk."⁵⁹ More substantially, what stood out from these various comments was that the book was too long and too detailed for a one or two-semester course. Whereas, in the preceding decade, Samuelson was criticized for not taking into account the variety of economic thinking, the general opinion was that it failed to cut through the various existing theories. Apparently, this was especially the case with the microeconomic section – which was reduced to a minimum in the first edition –,

⁵⁸ A 1969 study shows that roughly 3 US institutions of 4 were using either Samuelson or McConnell as their main introductory textbooks. Other adopted texts included Lipsey and Steiner's *Economics* and Heilbroner's *The Economic Problem* as well as Bach's text, but their diffusion in US colleges and universities is not comparable to that of the McGraw-Hill books.

⁵⁹ Gerald C. Spencer to Samuelson, August 6, 1969, PASP, Box 1, Folder "Economics 8th edition."

leading one commenter to write: "The book makes too much of an effort to mention all, or at least the great majority, of the various economic theories which bear on various points."60 Though it can be said that one of Samuelson's main efforts in his textbook was to encompass the largest set of economic theories possible - at least what was translatable into something that undergraduate students could learn another important concern was to make *Economics* appear as relevant on the policyside. In fact, these policy-oriented aspects were the main points that the editors put forth when promoting the book. In this setting, the teaching of economic principles did not appear as an end in itself but as a means to understand the news and to provide sound policy advices. The press release accompanying the publishing of the 7th edition in 1967 was almost exclusively focused on these elements, confronting some passages of the textbook with recent newspapers headlines (see fig. 1 below). This was also reflected in the revised introduction, in which appeared for the first time a diagram showing different projections of US and USSR growth rates between 1960 and 2000, illustrating the necessity of combining "scientific analysis" and "the art of judgment" to break free from "wishful or paranoid thinking" (Samuelson, 1967, p. 3). This was consistent with the new image of Samuelson as a columnist – he had begun writing for Newsweek in 1966 - and it was this latter persona that McGraw-Hill wished to promote rather than the theoretician – admittedly, it was before Samuelson was granted the Nobel Prize in 1970.

⁶⁰ "Report from the University of Michigan", enclosed to Spencer to Samuelson, October 10, 1968, *PASP*, Box 1, Folder "Reviews of Text."

Samuelson's Seventh Edition Stays Ahead of the Headlines KSUAI, AF NID II, IN The Reserve Board Hikes Jobless Rate Fell Again in August Its Rate From 41/2 to 5% India Begins World's Biggest **Program of Birth Control** State of Union Speech **Two Gold Prices Proposes Aid to Cities** Fed Chairman Sees and Tax Surcharge Possibility of Hike Immediate Tax Boost Needed Planned 6

Fig. 1. Source: PASP, Box 1, Folder "Promotion 2 of 2"

It is doubtable, however, that Samuelson's version of political debates was what mainly interested young readers in the mid to late 1960s. Whereas most of the policy content in *Economics* focused on comparative systems and macroeconomic issues, such as the inflation/employment debates between neo-Keynesians and Monetarists, the problems of the American society seemed more oriented toward microeconomic concerns. With the rise of civil rights and feminist movements, identity politics was all the rage. Though racial issues were rarely evoked in the reviews of *Economics*, criticisms of Samuelson's alleged male-chauvinist prejudices at various points in the textbook were often encountered. Samuelson's assertion that "the girls at Sweet Briar" would not be able to treat some of the most difficult chapter-ending questions, while "honor students at Princeton" would, quoted in a New York Times' feature at the occasion of the release of the 8th edition, did not escape the attention of a few female Professors (Shenker 1970, p.41). None of their letters of protest to the textbook author failed to mention that they had used several of the first seven editions as former students or current instructors. These criticisms inspired a few cosmetic changes, such as the gender crossing of some of the economic agents that were referred to throughout the book. More substantially, the 8th edition offered a few forays into racial and urban issues.

Admittedly, the latest edition represented some kind of a disappointment for the author and its editors, as it was the first one to sell fewer copies during its first year than its predecessors in spite of a tremendous promotion campaign. Besides, some field reports by McGraw-Hill travelers suggested that certain institutions were unsatisfied with the textbook and had planned to have it replaced in the near future by a thinner, less sophisticated and less expansive text.⁶¹ In addition, the content itself of *Economics* was increasingly challenged by those among the youngest generation of economists who labeled themselves as "radical" and saw Samuelson's textbook as the most typical instance of an excessive domination of postwar neoclassicism. Against the latter, this new stream of radicalism, which had appeared on American campuses from 1967 onward in the wake of students' protests, argued that economics was first and mostly a political science that had porous boundaries with the other areas of social studies. Though radical economics has often been equated with the rebirth of Marxist thought in the field, it was in the beginning a larger emanation of several dissenting movements that encompassed racial, gender and environmental issues, without a clear identity.⁶² What was clearer, however, was its demarcation from mainstream economics, to which it reproached its reductionist approach, its positive methodology and its ignorance of the questions of social classes and income distributions. In addition, on the pedagogical side, some of the concerns of radical economists echoed those that had been addressed by educationists since the beginning of the decade, namely that economic education was not oriented enough toward "real" issues. Radical economics classes had appeared in 1969 in the curriculum of Harvard University and they were particularly popular among students, including those of neighboring MIT.

Yet it seems that the importance of these dissenting voices had been overlooked in the making of the 8th edition and that the petty arrangements that had been brought here

⁶¹ One can understand *Economics*' relative decline in the early 1970s as a consequence of its standing in-between different kinds of textbooks. While it was too principle-oriented and too technical for the students looking for a simple introduction to economic issues, it was also surpassed by the arrival of more technical textbooks such as Lipsey and Steiner (1972) – an American version of Lipsey (1963), which had largely outsold *Economics* in the UK. Many readers (students and instructors alike) felt that there was a need for a shorter version of *Economics*, devoted to some particular branch of the audience, and the idea of splitting the text into a two-volume – micro and macro – book was often discussed at the time. Yet the death of the general economics textbook, which many predicted at the time, did not occur.

⁶² On the construction of the identity of radical economists and their subsequent migration to specific economic departments, see Mata (2009).

and there were unlikely to convince the radicals. Therefore, the communication with the latter is something that Samuelson and his editor Michael Elia had decided to work out in the preparation of the next series of revisions. It resulted in the insistence of the textbook author to have the latest edition specifically reviewed by radical economists, though this segment represented only 5 percent of the profession according to a *Wall Street Journal* study.⁶³ This was an easy thing to do, because in the early 1970s, radicals had migrated to specific economics departments in various universities and colleges all over the US, where local McGraw-Hill travelers could contact them and make them write a report on the textbook. Samuelson's request was quite surprising a move, given that on the theoretical side, he had voiced his dissatisfaction with the radical economists' critique, most notably at the occasion of his prefacing Assar Lindbeck's The Political Economy of the New Left in 1971. This probably explains why some of the approached radical instructors simply refused to review Economics. For instance, James Weaver, a Professor at the American University in Washington DC, responded that reviewing the book was an impossible task because "[w]ithin the paradigm in which Professor Samuelson [was] working", it was excellent. But, to this instructor, Economics was "essentially engineering" and "as an attempt to explain human behavior, it [was] a complete failure". Then, he added: "If one wishes to restructure society in order to achieve other values than maximizing output of material goods and services, Samuelson's book is no help at all".⁶⁴ However, other radical economists chose to review the text and their reports were dense enough to be filtered and compiled by Samuelson's team at McGraw-Hill. These were unsurprisingly critical comments. There was the idea that the book was too long, too theoretical and not oriented enough toward empirical research. Some of the sections, like Chapter 7, which dealt with labor economics, were clearly stranger to radicals because, in their minds, the situation depended on social and institutional factors, to which mainstream economic theory had nothing relevant to bring. The micro section, however, did not get as many critical comments because "much of neoclassical theory" was "unobjectionable to radicals."⁶⁵ Though coming from different referees, these reports most often coincided and reinforced each other, which

⁶³ Elia to Samuelson, July 15, 1971, Box 1, Folder "Economics, sale reports".

⁶⁴ Weaver to Elia, September 10, 1971, *PASP*, Box 2, Folder "Elia Review of Economics." On this, Samuelson's editor, who was never sparing with disparaging comments on "radecons", commented that: "If economics is the dismal science, then from this speech, it appears to me that radical economics is a depressing art (Elia to Samuelson, September 14, 1971, ibid.)."

⁶⁵ Elia to Samuelson, January 6, 1972, PASP, Box 2, Folder "Elia review of economics."

testified to the existence of a somewhat unified radical framework that Samuelson could eventually take into account in the revising process. This resulted in the addition of a new chapter, a quite analytically detailed and simultaneously critical assessment of Marxist thought. But, as one might expect, the most important revision concerned the Readings volume, now in its seventh edition, which incorporated some texts illustrating the debate over the obsolescence of economic growth, a section on "alienation" and a reproduction of the debate on the New Left that had taken place in the November 1972 issue of the *Quarterly Journal of Economics*. Once again, the texts were presenting conflicting views, both apologetic and critical assessments of radical economics. In the new Left debate, however, it was a home match and the neoclassical point of view remained dominant, with radicals Stephen Hymer and Frank Roosevelt being on the defense side.

Actually, there was little here to dissipate the radicals' criticisms over *Economics*. In this respect, radical economist Howard J. Sherman's review of the 9th edition in the September 1973 issue of *Challenge* deserves to be quoted at length. First, the author mocked what he saw as a deceitful display of open-mindedness on Samuelson's part, calling the book "RRRRRadical" as it contained "every radical issue that [was] now fashionable at cocktail parties". According to the author, the emphasis on new issues such as ecology and racial discrimination were mainly cosmetic and "in reality, however, Samuelson remain[ed] an apologist for the status quo, taking a cautiously liberal position on every issue - in favor of reforms but no drastic changes." Samuelson's style was questioned throughout the review. In the author's mind, it testified to his talking down to students and his overlooking Marxist analysis, which was treated more technically than most of the other sections in the text. On this, Sherman stated: "The curious question is why Samuelson has to bury his main exposition of Marx in an avalanche of mathematics. After all, this is a book for elementary students, and all of Marx's Capital was written in a straightforward literary manner with very few mathematical equations." Also, the irony of treating the radicals' view through Lindbeck's attack was not lost on the reviewer. More importantly, Sherman's main point was that Samuelson systematically grounded his policy recommendations in the assumption that the government was acting toward the best interest of the population. At no point, however, Samuelson provided a relevant theory of the state that would confront "the question of the degree to which capitalist

economic power controls the U.S. government (Peterson, Sherman and McCloskey, 1973, pp. 63-5)." In some way, Sherman seemed to prefer Alchian and Allen's version of economics – as presented in their textbook *Exchange and Production* –, which at least provided a straightforward reactionary position. His review constituted not only a critique of the textbook but a charge against Samuelson's explicit middle-of-the-road stance. It was Sherman's idea that the existing conflicting views were underwritten by incommensurable societal conceptions that left no place for a balanced, "cautiously liberal" point of view. It is safe to say that this opinion was representative of the Radical economists' critique, which was directed at liberals rather than conservatives. In sum, the spirit of democratic debate and balance of ideas that was at the core of *Economics* and the *Readings* volume was unlikely to change the radicals' minds. Therefore, disagreements would long persist.

For its tenth edition, *Economics* seemed to require a no less significant revision. There was the continuing competition with McConnell's text, which had been substantially revised in its sixth edition of 1975, with four new chapters and the inclusion of the *Readings* in the main text. The new material was unsurprisingly policy-oriented, with a whole chapter devoted to the Phillips' curve. These changes were made for the most part in response to the latest revisions in Milton Spencer's Contemporary Economics and Roger Leroy Miller's Economics Today, which both offered similar features. Samuelson, however, chose not to carry out this task alone and backed off a bit, in spite of the insistence of his former editor, Mary Griffin. In a letter of March 1975 to McGraw-Hill's Publisher Howard Aksen, he almost called it quits, writing: "Now that I am about to turn sixty, my physician and I have taken a close and realistic look at my schedule. For years, I have been trying to crowd into it more than one person's quota of activities, and we are both agreed that the arrival of one's seventh decade of life is an appropriate time to remedy this situation".⁶⁶ A meeting was arranged with Aksen ten days later, where it was decided that Samuelson would barely revise the text but would be helped by his colleague at MIT, Peter Temin, who would undertake a statistical revision of the ninth edition, check proofs and incorporate the few changes that were specific to the new edition. Samuelson, on the other hand, would only serve as a consultant for the latter. Though the resulting

⁶⁶ Samuelson to Howard Aksen, March 14, 1975, *PASP*, Box 2, Folder "10th edition: draft, corrections".

text would be undoubtedly his – its content being mostly an emanation of the previous editions –, it was made clear that Samuelson would be little involved in this new volume. Aksen even mentioned the idea that McGraw-Hill could buy him the rights out of his text.⁶⁷ We can infer that the subsequent editions, especially those following the eleventh that were co-authored with William Nordhaus, gradually involved less commitment by their original author.⁶⁸ By 1976, then, as *Economics* had fully developed into a commercial franchise rather than a mere author's textbook, Samuelson could move on from what had represented to him more than three decades of work.

5. Conclusion

There are several conclusions to draw from the preceding account of the political elements surrounding the making of Samuelson's *Economics*.

• First, though there is no evidence here that the textbook was intentionally politically biased – in the sense of supporting explicitly left-wing or right-wing economic policies –, it is obvious that Samuelson had to take political elements into account in his textbook from the very beginning and until the last edition which he fully supervised. He was forced to do so in the beginning because of the various political pressures and criticisms he encountered during the making of the first two editions. Of course, Samuelson was partly protected by his credentials as an economic theorist, yet this alone did not suffice to clear-up potential controversies. Therefore, the innumerable efforts made to balance conflicting views were seen as the best way to ensure the textbook's legitimacy and continuity. Paradoxically, this self-perceived middle-of-the-road position involved a whole lot of politics.

• Second, while there is little doubt that everything that was published in *Economics* from 1948 to 1976 was under the author's control, it can also be said that Samuelson impersonated many different voices in his textbook, reflecting the wide variety of opinions that were expressed in field reports and

 ⁶⁷ Aksen to Samuelson, March 25, 1975, *PASP*, Box 2, Folder "10th edition: draft, corrections."
⁶⁸ The fact that the materials related to the subsequent editions are not found anywhere in the

Samuelson papers seems to validate this assumption.

instructors' referees. The role of the demand, there, was as crucial as that of the supply and many changes in the various editions were made to accommodate the various audiences that the textbook addressed. We can, for instance, understand the growing place of policy-oriented issues in the latest editions, in particular the much-commented discussion on growth in the USSR and alternative economic systems as reflecting the concerns of the American public rather than the sole intention of the textbook author.

• The third point, which is related to the previous one, is that economics textbooks, especially those that are used at the introductory level, embody more than some economic knowledge. They reflect, more or less explicitly, societal issues and simultaneously contribute to shaping social representations. They can accordingly be treated as objects bearing a larger cultural significance. Gender or race issues, for instance, are often encountered in the textbook literature, and historians of economics have seldom paid attention to these matters so far. From the perspective of the history of economics, the study of economics textbook can be useful not only to trace some particular developments in the field but also the evolution of the audience it is intended for – in this case, the society at large.

• There remains at least one unanswered question. Béatrice Cherrier (2011) has shown that *Economics* played an important role in the education of young economists at MIT. Instructors there were told to follow scrupulously Samuelson's textbook in their classes. In our story, indeed, MIT was central in the writing of the textbook at the very beginning because the latter was directed at the specific audience constituted by MIT engineering students, and because MIT officials – especially Compton, Killian and Freeman – were influential in responding to criticisms of the first two editions and pushing for the publishing of the *Readings* volume. Yet, as we move further into subsequent editions and as the relation with McGraw-Hill editors and commenters outside of Samuelson's home institution appear as the main actors behind the revisions and changes made in the textbook, the role of MIT seems to fall into the background. Yet, it would be interesting to know to what extent the middle-of-the-road stance that *Economics* self-consciously adopted is also foundational of MIT economics or, to put it differently, whether the

textbooks' core values reflected or influenced those of the department from which it originated. If pursued, these lines of inquiry could contribute to affect substantially the prevailing image of a mainly theory-driven MIT.

In his influential account of the neoclassicization of postwar economics *Machine Dreams*, Philip Mirowski provided us with what he saw as a definitive wrap-up of Paul Samuelson's academic life:

Perhaps the best way to understand Samuelson's place in the postwar neoclassical orthodoxy is as someone who has been most strident in his insistence upon the 'scientific' character of neoclassicism, but simultaneously someone who has been obsessed with the idea that there might be a 'third way' ... somehow located between the aggressive 'Marshallianism' of the Chicago school and the full-blown Bourbakist general equilibrium formalisms of the Cowles Commission. This putative third way was always a very delicate entity, composed of a host of seemingly self-contradictory propositions ... Yet, through a series of fortuitous events (such as his 1948 textbook), it was Samuelson's version of neoclassicism that first captured the attention of the immediate postwar economics profession, and it was he who came to exemplify the brash self-confident face of the 'new' mathematical economics'' (Mirowski 2002: 226).

Though there is no need here to comment on what is mostly Mirowski's personal judgment on one's career, it is arguable that the narrative above offers an example of how the "third way" Mirowski is referring to has developed in the domain of economic education. There is no doubt, indeed, that Samuelson's will to stand in the middle position has been one of his main concerns in the making of *Economics*. Yet, what Mirowski assesses as a set of "self-contradictory propositions" appears in the light of this paper as an emanation of Samuelson's pragmatist position, i.e. his taking into account the politics of scientific – or textbook for that matter – writing. His success was therefore anything but "fortuitous".

References

Ashby, Lowell D. (1948). Rev. of *Economics : An Introductory Analysis. Southern Economic Journal* 15 (2): 216-7.

Bach, G.L. & Saunders, Phillip (1965). Economic Education: Aspirations and Achievements. *American Economic Review*, 55 (3): 329-56.

Barnett, William A. (2004). An Interview with Paul A. Samuelson. *Macroeconomic Dynamics*, 8: 5, 19-42

Brown, E. Cary and Solow, Robert, M. (eds) (1983). *Paul Samuelson and Modern Economic Theory*. New York, NY: McGraw Hill.

Burlingame, Roger (1959). *Endless Frontiers: The Story of McGraw-Hill*. New York, NY: McGraw-Hill.

Cherrier, Béatrice (2011). A Preliminary History of Economics at MIT, 1940-1972. Manuscript.

Colander, David C. and Landreth, Harry, eds. (1996). *The Coming of Keynesianism to America: conversations with the founders of Keynesian economics*. Cheltenham, UK: Edward Elgar.

Elzinga, Kenneth G. (1992). The Eleven Principles of Economics. *Southern Economic Journal*, 58 (4): 861-79.

Fairchild, Fred R., Furniss, Edgar S. & Buck, Norman S. (1940). *Economics*. New York, NY: The Macmillan Company.

Fleury, Jean-Baptiste (2010). The Evolving Notion of Relevance: An Historical Perspective to the 'Economics Made Fun' Movement. Manuscript.

Garver, Frederic and Hansen, Alvin (1928). *Principles of Economics* Boston, MA: Ginn and Company, 1928.

Giraud, Yann G. (2010). The Changing Place of Visual Representation in Economics: Paul Samuelson Between Principle and Strategy, 1941-1955. *Journal of the History of Economic Thought*, 32 (2): 175-97.

Gottesman, Aron A, Ramrattan, Lall & Szenberg, Michael (2005). Samuelson's *Economics*: The Continuing Legacy. *Quarterly Journal of Austrian Economics*, 8 (2): 95-104.

Hands D. Wade & Mirowski, Philip (1998). A Paradox of Budgets : The Postwar Stabilization of American Neoclassical Demand Theory. In Morgan, Mary S. and Rutherford, Malcolm, eds. *From Interwar Pluralism to Postwar Neoclassicism*. Annual Supplement to Volume 30 of *History of Political Economy*. Durham, NC: Duke University Press: 260-92.

Haney, Lewis H. (1948). Rev. of *Economics : An Introductory Analysis. Annals of the American Academy of Political and Social Science*, 260: 221-222.

Hart, Albert G. (1948). Rev. of *Economics: An Introductory Analysis. American Economic Review*, 38 (5): 910-8.

Hollinger, David A. (1990). Free Enterprise and Free Inquiry: The Emergence of Laissez-Faire Communitarianism in the Ideology of Science in the United States. New Literary History, 21 (4): 897-919.

Knopf, Keyon A & Stauss, James H., eds. (1960). *The Teaching of Elementary Economics*. New York: Holt, Rinehart and Winston.

Kohler, Robert E. (1999). Moral Economy, Material Culture and Community in *Drosophila* Genetics. In Biagioli, Mario, *The Science Studies Reader*, New York, NY: Routledge: 243-57.

Lindbeck, Assar (1971). *The Political Economy of the New Left: An Outsider's View*. New York: Harper and Row.

Linder, Marc (1977). *The Anti-Samuelson* (two volumes), with the help of Julius Sensat Jr. New York: Urizen Books.

Lipsey, Richard G. (1963). *An Introduction to Positive Economics*. London, UK : Weidenfield & Nicolson.

Lipsey, Richard G. & Steiner, Peter O. (1972). *Economics*. New York, NY: Harper & Row.

Mata, Tiago (2009). Migrations and Boundary Work: Harvard, Radical Economists, and the Committee on Political Discrimination. *Science in Context*, 22 (1): 115-43.

Mirowski, Philip (1989). *More Heat than Light: Economics as Social Physics, Physics as Nature's Economics*. Cambridge, UK: Cambridge University Press.

_____ (2002). *Machine Dreams: Economics Becomes a Cyborg Science*. Cambridge, UK: Cambridge University Press.

Nelson, Robert H. (2001). *Economics as Religion: from Samuelson to Chicago and Beyond*. University Park, PA : The Pennsylvania State University Press.

Olson, Paul R. & al. (1963). Economics in the Schools. *American Economic Review*, 53 (1), Part 2: *i-xii*, 1-27.

Pearce, Kerry A. and Hoover, Kevin D. (1995). After the Revolution: Paul Samuelson and the Textbook Keynesian Model. In Cottrell, Allin F. *New Perspectives on Keynes*. Annual Supplement to Volume 27 of *History of Political Economy*. Durham, NC: Duke University Press: 183-216.

Peterson, Wallace C., Sherman, Howard J. & McCloskey, Donald (1973). A Trio of Opinions on the Ninth Edition of Paul Samuelson's *Economics*. *Challenge*, 16 (4): 61-6.

Samuelson, Paul A. (1938). A note on the Pure Theory of Consumer's Behaviour. *Economica*, 5 (17): 61-71.

____ (1947). *Foundations of Economic Analysis*. Cambridge, MA: Harvard University Press.

(1948a). Economics: an introductory analysis. New York, NY: McGraw-Hill.

(1948b). Consumption Theory in Terms of Revealed Preference. *Economica*, 15 (60): 243-53.

(1950). The Problem of Integrability in Utility Theory, *Economica*, 17 (68): 355-85.

(1951). *Economics*, 2nd ed. New York: McGraw-Hill.

(1955). *Economics*, 3r ed. New York: McGraw-Hill.

(1968). *Economics*, 4th ed. New York: McGraw-Hill.

(1961). *Economics*, 5th ed. New York: McGraw-Hill.

_____(1964). *Economics*, 6th ed. New York: McGraw-Hill.

(1967). *Economics*, 7th ed. New York: McGraw-Hill.

_____(1970). Economics, 8th ed. New York: McGraw-Hill.

_____(1973a). *Economics*, 9th ed. New York: McGraw-Hill.

(1973b). *Readings in Economics*, 7th ed. New York: McGraw-Hill.

(1987). Out of the Closet : a Program for the Whig History of Economic Science. *History of Economics Society Bulletin*, 9 (1) : 51-60.

____ (1997). Credo of a Lucky Textbook Author. *Journal of Economic Perspectives*, 11: 153-60.

(1998). How *Foundations* Came to Be. *Journal of Economic Literature*, 36 (3): 1375-86.

Samuelson, Paul A., Bishop, Robert L. & Coleman, John R. (1952). Readings in Economics. New York: McGraw-Hill.

Samuelson, Paul A. & Temin, Peter (1976). *Economics*, 10th ed. New York: McGraw-Hill.

Samuelson, Paul A. & al. (1999). Samuelson's *Economics* at Fifty: Remarks on the Occasion of the Anniversary of Publication. *Journal of Economic Education*, 30 (4): 352-63.

Saunders, Phillip & Bach, George Leland (1970). The Lasting Effects if an Introductory Economics Course: An Exploratory Study. *The Journal of Economic Education*, 1 (2): 143-9.

Shenker, Israel (1970). "Economics, 8th edition". New York Times, February 5, 1970, p. 41.

Skousen, Mark (1997). The Perseverance of Paul Samuelson's *Economics*. *Journal* of *Economic Perspectives*, 11 (2): 137-52.

Slichter, Sumner H. (1931). *Modern Economic Society*. New York, NY: Henry Holt and Company.

Tarshis, Lorie (1947). Elements of Economics. Boston, MA : Houghton Mifflin.

Taussig, Frank W. (1927) *Principles of Economics*. New York, NY: The Macmillan Company.

Tugwell, Rexford Guy, Munro, Thomas & Stryker, Roy Emerson (1930). *American Economic Life: And the Means of Its* Improvement, 3rd ed. New York, NY: Harcourt, Brace & Co.

Weintraub, E. Roy (1991). *Stabilizing Dynamics: Constructing Scientific Knowledge*. Cambridge, UK : Cambridge University Press.