

Jerome Adolphe Blanqui Lecture

Textbooks as Data for the Study of the History of Economics:

Lowly Beast or Fruitful Vineyard?

Steven G. Medema
University of Colorado Denver

September 2011

Keywords: textbooks, Coase theorem, historiography

· Department of Economics, University of Colorado Denver. Email: steven.medema@ucdenver.edu. I thank Roger Backhouse for his insightful comments on an earlier draft of this address and Yann Giraud, Pedro Teixeira, and Jean-Baptiste Fleury for informative discussions on various aspects of this subject.

Jerome Adolphe Blanqui Lecture

Textbooks as Data for the Study of the History of Economics:

Lowly Beast or Fruitful Vineyard?

Steven G. Medema
University of Colorado Denver

I. Introduction

I am honored to be able to deliver the 2011 Jerome Adolphe Blanqui Lecture. It goes without saying that it was a great pleasure to hear that my latest book, *The Hesitant Hand*, had been selected for the ESHET Book Prize that carries with it the invitation to give the Blanqui Lecture. But it is also an honor to be able to address the assembled members of the European Society for the History of Economic Thought. I attended my first ESHET conference in Valencia in 1999, shortly after assuming the editorship of the *Journal of the History of Economic Thought*, and it was my pleasure to return nearly every year for the next decade—a period that included six years of service on the ESHET Scientific Council. ESHET has grown immensely in size and influence since I first became associated with it, and I have been particularly pleased at the efforts—instigated by Professor Kurz and extended by Professors Marcuzzo and Hagemann during their presidencies—to forge links with and help to build the communities of historians of economics in parts of the world that do not have traditions of participation in the larger history of economics community. It is also a great pleasure to stand before so many friends, and to think back on the many collegial and even very warm relationships formed over the years.

\

The great economist and historian of economics, Jacob Viner, defined economics quite simply, saying that “Economics is what economists do.” While this definition might be less than fully satisfying to someone who asks you to tell them what economics is and certainly would not pass muster with the editors of the *Oxford English Dictionary* (or any other dictionary, for that matter), it makes for an excellent definition of the subject for the historian of economics. I say this because it leads us directly to a definition of the history of economics as “a study of the history of what economists do.” I will neatly sidestep the intricacies of the question, “What is an economist?”—choosing instead to move straightaway to the implications for the study of the history of economics. Economists have done a wide range of things over the last two-plus millennia: they have received their educations in a wide variety of subjects, ranging from philosophy to the natural sciences to mathematics; they have written on aesthetics and politics, on theology and morals, on the economy and on a wide range of other social issues; they have employed intuitive arguments and mathematics; they have gathered data and examined it with more and less sophisticated empirical techniques; they have practiced medicine; they have served as legislators and in other governmental capacities, as well as policy advisors; they have banded together in intellectual communities, including communities consisting only of economists and communities that reached far beyond economics; they have worked in particular places and in particular historical contexts; they have educated students, both formally and informally. All of these things, and many others, are grist for the mill of the historian of economics.

For well over a century, the focus of historians of economics was on the economic ideas themselves, with some attention to the context within which these ideas were

developed as a means to help us understand why particular ideas developed as they did. In recent decades, however, historians of economics have begun to look more broadly, reaching beyond the study of ideas to the broader range of things that economists do. And so today, we have a much better sense for the history of “economics” than we did forty years ago, though much work remains to be done.

With this expansion of the breadth of issues considered by the historian of economics has come an increasing attention to the history of economics in the post-WWII period, a research area that is still in its infancy and which remains the subject of some controversy. Critics argue that recent economics is too close to the present to be the subject of proper history. But such objections ignore the history of our own field, a field in which histories of economics written during the classical period, during the early part of the twentieth century, and at mid-century eagerly analyzed the development of ideas nearly up to the period during which the authors were writing. Were such histories partial and incomplete? Certainly. But all histories are. Time and distance are a two-way street, adding some things and subtracting others. McCulloch knew things that we would not, and we know things that he did not. Oddly, the study of the history of economics became frozen in time roughly a half-century ago, more or less around the time of the Keynesian revolution. As the economics profession increasingly embraced the present and ignored its distant past, the history of economics did the opposite. Only recently has the historian’s conception of the appropriate time frame for the subject started to thaw—a move that I, for one, see as a good one. Today’s historians will not have the last word on the Chicago School, on the Cambridge capital controversies, on the demise of Keynesian

economics in the 1970s, or on the rise of experimental economics, but they will have the first word, and it is often a very good one.

This brings me to the topic of this evening's lecture—a rather modern one, in our discipline, if not in many others. Given that the Blanqui Lecture accompanies the receipt of a book prize, it is fitting that I take as my subject the book. But not just any book, and not even the so-called “scholarly book”—the type of book for which the Blanqui Prize was created. Instead, I will discuss the lowly textbook, a genre sufficiently lowly that it is deemed unworthy of consideration for the Blanqui Prize. My goal here, however, is not to convince the audience or the august members of the ESHET Executive Committee and Scientific Council that the book prize rules should be revised to include textbooks; indeed, they should not. Rather, I want to devote this talk to explaining why I believe that economics textbooks represent a rich and fruitful source of data for the historian of economics and, I hope, stimulate more of you to devote significant effort to their study.

I will admit that encouraging the exploration of the textbook literature may not come as a popular suggestion to members of a society whose field is under increasing pressure in many countries. At a time when professional colleagues are inclined to look at historians of economics as people who do not—and worse, cannot—do “real economics,” to announce to your colleagues that you plan to spend your time reading in old textbooks is not exactly a road to increased professional stature. Textbooks have long been considered something of an intellectual backwater. As Thomas Kuhn (1970, p. 20) has pointed out, “The scientist who writes one is more likely to find his professional reputation impaired than enhanced.” And if writing them is bad, studying them must be worse. Far better to tell your colleagues that you are looking at Walras or Frisch or

Samuelson—or, if your tastes are in the more distant past, at least at some canonical works such as those of Smith and Ricardo, which may provide you with at least a fig leaf of respectability. Textbooks, after all, are not considered to be serious scholarly literature—a tool for financial advancement, perhaps, but not much more than that.

All that said, I believe that the textbook literature constitutes a fascinating and incredibly under-utilized data source for the study of the history of economics, particularly (but by no means solely) its modern variant. Historians of economics have in recent years devoted increasing amounts of attention to the production and dissemination of economic knowledge: the creative communities within which the scholars worked, the role of extra-departmental entities such as think tanks, the financing of research, the influence of larger professional structures, the role of economists as policy advisors, and so on. The 2012 HOPE conference will focus on economists in their role as public intellectuals—economists offering advice and insight on topics both economic and non-economic in nature to the general public. When it comes to conveying detailed economic knowledge, however, there is perhaps no medium that has been more significant in its public impact than the economics textbook. Each year, countless thousands of students around the world are exposed to topics ranging from the basics of the market process to details of cutting edge game theory via economics textbooks. It is at least arguable, and perhaps even correct to say, that the textbooks are the most prominent public face of economics.

Yet, historians of economics have devoted almost no attention to this part of the economics literature—save, perhaps, for an occasional passing reference. I will allow that a great deal of attention has always been paid to books that *functioned* as texts in earlier

eras—Mill’s *Principles*, Marshall’s *Principles*, and so on—but these works were as much treatises as textbooks and, I would maintain, much more the former. As such, they were a different beast in many respects from the modern textbook genre. Some effort has been devoted to the examination of early works that were written as and functioned more overtly as textbooks—I am thinking, for example, of the work of Jane Marcet and Harriet Martineau. But when it comes to the modern economics textbook—a work written explicitly as a pedagogical device—we find almost nothing in the way of treatments by historians of economics.

The few works that have been produced to this point are illustrative of the promise of this area of inquiry. Massimo Augello and Marco Guidi (2011) have assembled a collection of new papers that examine, largely through national case studies, textbooks in Europe, North America, and beyond up to 1948 and the publication of Samuelson’s *Economics*—a collection that will be published by Routledge this summer and to which several members of this audience have contributed. Moving closer to the present, Yann Giraud and Loic Charles have explored the use of visual representation in Paul Samuelson’s *Economics* and elsewhere; Pedro Teixeira is examining the diffusion of human capital theory in both basic theory texts and specialized textbooks in labor economics. A recent paper by Jean-Baptiste Fleury looks at how textbooks evolved beyond standard theory to incorporate the analysis of social issues and, more recently, the “economics-made-fun” or “freakonomics” genre. I originally moved into this area when examining textbooks in the Chicago price theory tradition—a literature which, by the way, shows you head-on the heterogeneity within the Chicago tradition—but it was in working on my present project on the evolution and diffusion of the Coase theorem that

\

the incredible importance of the textbook literature really became apparent to me. I have spent many years compiling an extensive list of statements of the Coase theorem, and it occurred to me about eighteen months ago that it would be interesting to examine the textbooks to see if I could turn up any novel statements of the theorem in that literature. I did indeed discover a quite a number of interesting statements to add to my list, but I also found something far larger—a body of literature that often presented a treatment of the theorem that would be unrecognizable in the scholarly literature and a host of historical questions that have occupied me and my research assistant ever since.

Our brothers and sisters working in the history of science have done a bit better than we have on the textbook as data front, though not by leaps and bounds. A perusal of this literature shows that there are any number of interesting insights into the history of chemistry, physics, and biology that can be gleaned from the textbook literatures in these fields—ranging from how one can track the acceptance of various new scientific theories through the textbooks to the influence of the particular textbooks studied on the subsequent work of eminent scientists. Most importantly, the textbook data has at times painted a picture of the history of a natural science discipline that is strikingly at odds with the received history, which focuses on the history of scientific discovery.

Let me attempt, then, to make the case for my thesis before moving on to a discussion of what I consider to be a set of interesting research questions and issues. Throughout this process I shall sprinkle in examples from my own work to illustrate how the portrait of economics that emerges from the textbook literature may contrast with what one finds by focusing on the scholarly literature alone.

II. Why Textbooks?

The question of why historians of economics should be interested in the textbook literature raises the obvious parallel question of why historians of economics to this point have not seen fit to devote any significant attention to this literature. One could fall back on the efficient markets hypothesis—here, applied to the market for ideas. The fact that historians of economics have neglected the textbook literature could be taken to imply that there is nothing there that is worth examining. But this is a decidedly unsatisfactory answer, as I shall attempt to demonstrate momentarily. A more valid explanation lies in the nature of scholarship in our field, as traditionally practiced. Historians of economics have devoted virtually all of their attention to the development of new ideas and the debates among economic thinkers over these ideas. The vehicles for these debates are, and have been, the scholarly texts—treatises and, more recently, articles in scholarly journals. Both players and audience are the learned, not the learning. In fact, it is only in recent decades, largely at the instigation of the late Bob Coats, that historians of economics turned their attention to the diffusion of ideas. But even these interactions were among the learned, meaning that historical scholarship has focused on the diffusion of ideas among economists, often across geographic regions, and, at times, into the policy realm.¹

The interest in the diffusion of economic ideas came about only with the move by historians of economics to incorporate the methods and ask some of the questions posed by intellectual historians and historians and sociologists of science. These methods and questions emphasize the production and transmission of knowledge—that is, they complement the long-standing emphasis on the ideas themselves with a focus on the

¹ See, for example, Coats (1996) and Augello and Guidi (2001).

processes through which they are generated and transmitted. A consideration of the role of textbooks is an obvious outgrowth of this emphasis, as textbooks are an important mechanism by which knowledge is transmitted. In this case, of course, the transmission is to students, some of whom are future economists, but most of whom simply go on to become members of the public that is impacted by economic ideas—at least to the extent that these ideas come to influence economic policy, economic activity, and, in the case of the contemporary “freakonomics” or “economics is fun” genre, a potentially wide range of social thinking and social phenomena.

The position taken here, then, is that the lack of attention paid by historians of economics to the textbook literature is largely a consequence of our community's choice of historiographic methods² and of its decision to focus on pre-1945 (and often eighteenth- and nineteenth-century) economics. And while traditional modes of historiography virtually excluded the textbooks from the historian's database, the recent move to a more broad-based approach to the study of the history of economics would seem to open the door to the possibility of devoting attention to the diffusion of ideas in the textbook literature.

So, why might it be useful to study the textbook literature? Let me offer several reasons.

First, textbooks may be the best representation of what constitutes “normal science” in a field. Thomas Kuhn (1970) has argued that textbooks reveal “the community’s paradigms” (p. 43), and that textbooks are a vehicle through which “the paradigms of a mature scientific community can be determined with relative ease” (p.

² This is not to discount the idea, mentioned above, that the lowly scholarly status of the textbook left historians of economics with little incentive to explore this literature.

43). But the benefits here are dynamic as well as static. As Bernadette Bensaude-Vincent has noted, “An over-mechanical application of the Kuhnian concepts of 'scientific revolution' and 'normal science' can lead to the neglect of the internal dynamics of 'normal science'.” However, she goes on to note, “Scientific textbooks may provide a better understanding of the process of normalization in science” (1990, p. 435). An engagement with the textbook literature allows the historian to see accepted contours of a discipline—its range and domain, its methodology, its characterization of itself, and the evolution of these things through time. And, as Bensaude-Vincent points out, they can even “shed new light on one of the central issues of disciplinary history—namely the exact significance of scientific revolutions in discipline formation”—as well as, I would add, in disciplinary change (p. 435). In short, textbooks give a “big picture” window into these phenomena that can sometimes be obscured when focusing on primary scholarly sources.

One spin on this is that the textbooks embody what is considered to be “truth” in the profession at any particular point in time. New ideas tend not to make their way into the texts in widespread fashion until there is a reasonably broad professional consensus on the idea in question. Of course, consensus itself is not sufficient. It may take additional time before textbook authors are able to formulate extremely complex (often highly mathematical) ideas in ways that have sufficient intuitive simplicity and operationalization that they can be effectively communicated to undergraduates. The slow diffusion of rational expectations macroeconomics into undergraduate textbooks is perhaps a case in point.

\

In light of this, it may be tempting to suggest that the textbooks are liable to mislead, or that they are merely redundant—that the primary source scholarly literature is the best indicator of normal science or of the widespread acceptance of ideas and that textbooks do little more than replicate or lag the professional reality. But physicist and historian Stanley Goldberg has argued otherwise, that textbooks, not scholarly literature, are “[t]he best source for assessing the assimilation of a theory,” a statement he justifies on the grounds that “the format and content of published papers is standardized to transmit the results of research ... [thereby] discouraging excursions into the interpretation and meaning of a theory” (quoted in Gaster 1990, p. 449). By forcing the authors to communicate to a wider audience, the textbook genre tends to preclude its authors from dealing with these new ideas until there has been at least some measure of stabilization and normalization—processes that necessarily include interpretation and moves toward standardization of meaning.

Second, it is from the textbooks in a discipline that “the members of the corresponding community learn their trade” (Kuhn 1970, p. 43). The members of the next generation of academic economists have their views of economic truth formed through their coursework, and thus in part from the content of the textbooks utilized in these courses. Textbooks, then, play an important role as a mechanism for professionalizing a discipline and enforcing a measure of conformity with professional norms. Interestingly, economics differs somewhat from the natural sciences on this score, with academic articles entering one’s education in economics at a much earlier stage than in the natural sciences, where textbooks dominate well into one’s graduate study.³ As such, to the

³ See, for example, Kuhn (1970, p. 165): “Until the very last stages in the education of a scientist, textbooks are systematically substituted for the scientific literature that made them possible.”

extent that there are lags in the movement of ideas from the scholarly literature to the textbooks, the economics student may be exposed to “the state of the art” in his discipline at an earlier stage than is a student in the natural sciences.

Third, textbooks and lectures are perhaps the most significant vehicle for the transmission of economic ideas to the masses, particularly in the post-1945 period, when courses became increasingly structured around textbooks and the exploding numbers of undergraduate students dutifully amassed the set of textbooks required for their programs of study. Given that the textbook literature imposes a degree of conformity to professional norms on the textbook authors and that lectures tend to closely reflect the contents of the textbooks, the textbooks themselves serve as a useful proxy for what is being taught to the masses. While lectures are incredibly important and lecture notes—both those of the professor and those taken by students—constitute another important data source for the historian of economics, the textbook literature is both far more readily accessible and tends to represent the principle around which many, and perhaps most, economics courses are organized, particularly at the undergraduate level.

The point, then, is that whether we are talking in terms of the future economist or the educated layman, the textbooks define the discipline and so serve as a mechanism for conveying professional identity. Textbooks reflect the professional perception of what individuals trained in economics at a particular level need to know. Graduate, undergraduate field course (e.g., public finance), and intermediate theory texts to various degrees reflect the set of ideas considered to be essential knowledge for someone who is trained in economics. Principles texts may be said to include what the profession considers important for the educated layman. This means that the textbooks can play an

important role in informing our understanding of what it means, or has meant, to be an economist, to be trained in a particular area of economics, or to be conversant in the basic contours of the subject at a particular point in time.

Fourth, textbooks provide a potentially illuminating window into differences in the diffusion of economic ideas across nations and cultures. The journal literature is now very much a global enterprise, with English the dominant language of publication and authors increasingly attempting to publish their work in English-language journals. As such, national traditions and changes in them have become increasingly difficult to pinpoint. The textbook literature, however, has long had, and continues to retain, a strong national component. As such, it offers wonderful data for assessing the degree to which, the speed with which, and the form in which different ideas are spread—or not spread.

III. Research Questions

Having attempted to set out a case for the textbook as an important historical document, let me now turn to the issue of some specific research questions that emerge here.

I will begin with the idea of normal science. How does the conception of our discipline vary from era to era? How does this map against the view of economics that one gets from the scholarly literature? Are there standard sets of ideas that are consistently treated in the textbooks of particular eras? That is, does the “textbooks as normal science” idea hold up to the evidence? What are these standard topics, and at what rate does change occur? To what extent does one observe deviations from the norm? A moment’s thought reveals that the content of the general theory texts has changed significantly with time, and tracing these changes is itself an interesting exercise.

Consider, for example, the rise of a dominant neoclassical synthesis and the gradual elimination of institutional analysis as one moves through the twentieth century. This is a major story in terms of textbook content and thus what is taught and learned, but the fact that neoclassical economics is easier to homogenize may also partially explain why textbooks came to be increasingly similar as we moved through the past century.⁴

When it comes to sub-fields within economics, the differences that we observe over time may be even more pronounced. Consider, for example, the public finance textbooks. The subject matter that one finds laid out in C.F. Bastable's (1892, 1917) exposition of a century ago or in the works of Ursula Hicks (1947) and Richard Musgrave (1959) some sixty years ago are radically different—in fact, almost unrecognizably different—from public finance as conceived in the textbooks today.⁵ I expect that you would find something similar if you were to examine textbooks in labor economics or industrial organization. More generally, the emergence of sub-field textbooks provides an interesting window into the evolution of what one might call applied economics over the last century, in terms of the rate at which these subfields were considered sufficiently well-developed and entrenched to merit textbook treatments, general trends in scholarship in these areas, and the changes, often substantial, in specific sub-fields.

Textbooks also provide a useful vehicle for analyzing the introduction of new ideas into economic thinking and their incorporation into normal science. How long does it take new ideas to enter the textbook literature in a significant way? Does this vary across ideas? What accounts for these differences? I suggested earlier that the textbooks

⁴ I thank Avi Cohen and Pedro Teixeira for bringing this point to my attention.

⁵ Backhouse (1985) has remarked upon the differences between Musgrave's treatise and the graduate public finance textbook authored by Atkinson and Stiglitz (1980).

may be the best representation of what constitutes “normal science.” But this is a hypothesis, and it may be that there are lags between normal science as reflected in the scholarly literature and normal science as reflected in the textbooks. Or perhaps something cannot be considered normal science *until* it is reflected in the textbook literature at large. Then again, the evidence may well prove this hypothesis incorrect, or only selectively true. In the case of the Coase theorem, the textbook dissemination tracks the journal literature fairly closely—that is, with not a great deal of lag. There were less than twenty citations to “The Problem of Social Cost” in the economics and legal journal literatures in the 1960s; it was only in the early-to-mid 1970s that these citations really began to take off. Yet, by the mid-1970s there were already a half-dozen intermediate microeconomics textbooks discussing the theorem—sometimes by name and sometimes not.

Needless to say, the textbook literature is constantly evolving, with new books being published, existing ones going out of print, and still others being revised and updated. This presents its own interesting set of research questions. For example, is there a difference in the propensity of “new” textbooks to reflect new ideas as compared with textbooks that have been in existence for some time? We are all aware that the forces of inertia in the textbooks tend to be strong, at least on the author front, whereas the publishers are keen to have up-to-date treatments (so long as the totality of the contents does not deviate too far from the norm). If dominant texts tend to be slower to incorporate new material, this has important implications for what is taught, given their combined market share. In the case of the Coase theorem, the introductory texts written by Paul Samuelson, Richard Lipsey, and William Baumol and Alan Blinder were among

\

the slowest to incorporate a discussion of the theorem. Indeed, Baumol and Blinder still have no discussion of it in their text, which is now in its 11th edition. In contrast, new textbooks published in the late 1970s and the 1980s show a strong propensity to include a discussion of the theorem. There is also a surprising tendency for existing texts to finally incorporate a treatment of the theorem when a new co-author comes on board. This may be due to the presence of “fresh eyes” having a look at the content, or it could be due to the fact that these new co-authors (like many of the authors of new texts) are of a younger generation and so perhaps more likely to be tuned in to “new” ideas and to cover these ideas in their courses.

It would also be interesting to know whether the treatment of particular ideas is uniform over time, or evolves—either in general or across successive editions of a given textbook. To the extent that new ideas get further worked out in the scholarly literature, we might expect to see some evolution in the their textbook treatment, particularly on the part of those who were first movers in the incorporation of these ideas into the textbooks.

Yet another interesting aspect of the normal science question goes to how the treatment of new ideas by the textbook authors compares to the treatment of these ideas in the scholarly literature. For example, does the need to formulate or operationalize the idea for undergraduate students lead authors to present the idea in a somewhat different way than it is presented in the scholarly literature, and are these differences important? Once again, the Coase theorem presents us with an excellent case study. The Coase theorem says that if transaction costs are zero, the assignment of property rights does not matter; the final allocation of resources will be both efficient and invariant, with the potential for costless exchange ensuring that rights move to their highest-valued uses.

However, this is not the Coase theorem that one often encounters in the textbook literature. Rather, the textbooks consistently state the theorem result in terms of positive transaction costs, allowing for costs that are “low,” “not high,” “less than the gains from exchange,” and so on. But this is not the Coase theorem, either in statement or in result. The theorem, following Coase and as reflected in the scholarly literature, assumes costless transacting. And once one allows for positive transaction costs—even costs that are very low or less than the gains from exchange, neither the efficiency result nor the invariance result is guaranteed. Here, then, the textbook authors are presenting students with an idea that is both out of touch with the scholarly literature and, worse, simply untrue. The interesting question is, Why? My conjecture is that this has to do with the need for authors to operationalize the material—to make it applicable—for the student audience. Absent transaction costs, the theorem is little more than a theoretical curiosity, while allowing for positive but low transaction costs opens the door to actually discussing the possibility of bargaining over externalities. I am not convinced that this is the entire explanation, but the divergence between the textbook and scholarly statements of the theorem is an interesting issue, one that cries out for some sort of explanation.

Another question that arises when one considers the textbook treatment of new ideas is whether and to what extent the textbooks devote any attention to existing professional controversies over them. If the textbooks reflect normal science and tend to mask the existence of revolutions, as Kuhn suggests, then we would expect relatively little attention to theoretical controversies in the textbook literature. Of course, if the textbooks reflect normal science and normal science implies the absence of significant controversy, the question is moot. The incorporation of the Coase theorem into the

\

textbooks at a time when the controversy over it was in its heyday suggests that textbooks may include elements of non-normal science. That said, the existence of these raging debates over the theorem in the 1970s and 1980s is not acknowledged in the textbook literature. Those who bring in the theorem treat it as an accepted and settled result despite the larger professional disagreements over its validity. On the other hand, one can find instances in which controversies are treated in the textbooks. An obvious one is the discussion of macroeconomic controversies, for example, between Keynesian and monetarist or Keynesian and new classical approaches. Microeconomics, on the other hand, seems to show much less of a propensity to be framed in terms of controversies, though one example, rather historical in nature, can be found in Kamerschen and Valentine's 1977 intermediate microeconomics textbook, which devotes significant attention to the debate between George Stigler and Cambridge over the theory of monopolistic competition, even though this issue was hardly "new" at the time of their writing.

It should also be clear that textbooks and their authors do not exist in a vacuum any more than do economists when carrying out their research. As such, it makes sense to ask whether the new ideas being treated in the texts bear some sort of relationship to larger societal concerns. A nice example of exactly this is the treatment of environmental issues in the textbooks as environmental concerns began to loom large in the social conscience. One hypothesis as to the attractiveness of the Coase theorem proposition, and perhaps a rationale for its relatively quick incorporation into textbooks, is the societal preoccupation with environmental pollution that accelerated so quickly in the 1970s.⁶ It is no coincidence that the first symposium dealing with the Coase theorem occurred in the

⁶ See Medema (2011).

\

Natural Resources Journal (1973), in spite of the fact that Coase's article made only scant mention of environmental matters in its 44 pages. Given the propensity of textbook discussions to be sensitive to topical social issues—a tendency that became pronounced in the 1970s (see Fleury 2010)—it is perhaps not surprising that the textbooks were quick to incorporate discussions of the Coase theorem. This also explains the migration of the theorem over time from chapters on welfare, costs, and the like to specialized chapters on externalities and environmental issues that were increasingly incorporated into the textbooks.

One thread that bears on many, and perhaps all, of the above questions and issues is the identity of the textbook author and its relationship to the contents of the textbooks. If there is a transformation of some sort in the field (perhaps what Kuhn has called a “revolution”), do textbook authors grounded in pre-transformation ways of thinking tend to adapt their textbooks to new views at a slower rate? Do textbook authors whose research evidences a maverick or pioneering streak tend to be more likely to depart from normal science in their texts? Who are the early movers in introducing a particular idea into the textbooks? Are they “deviants” who also tend to depart from normal science at other points in their texts? Are they authors whose expertise is in the field in which this new idea arises? Does the “school” (physically or intellectually) at which the author was educated or with which the author is affiliated play a role? Are they authors who have some other sort of vested interest (for example, ideologically) in the new ideas? Do specialized textbook authors—that is, authors who tend to spend most of their time writing textbooks rather than pursuing scholarly research—tend to be the first movers, or is it those with more active research agendas? In the case of the Coase theorem,

preliminary indications are that there are not many discernible trends. One might expect, for example, that the theorem would first be mentioned by authors associated with schools such as Chicago and UCLA. But this is not the case. Textbook authors with strong links to these schools almost uniformly discuss the theorem in their textbooks and were among the early adopters, but there are many others—even in the 1970s and 1980s—with no such obvious links, whether in terms of school or research interest.

Textbooks are written for several reasons: to earn income, to create a book that is more closely matched to one's own course, to promote a particular vision of economics. Whatever the motivation, the textbook will tend to reflect some of the author's own biases in terms of approach, topics covered, and even normative pronouncements. Having taught microeconomics for more than twenty years, I can assure you that there are significant differences between certain texts when it comes to judging market outcomes and the possibilities of government intervention. On the theoretical front, a typical textbook in the Chicago price theory tradition approaches microeconomic analysis in a way quite different from what one might call a standard neoclassical text, and each of these differs from textbooks authored by those who favor game theoretic approaches or who emphasize empirical applications. The student thus comes away from a course with a rather different view of microeconomics depending on the text utilized in her course. These biases can also be revealed in the way that particular topics are treated. For example, prolific textbook author Lloyd Reynolds (1973, p. 214) bashes the Coase theorem in his introductory economics textbook. He is virtually the only author to do so, which gives credence to the idea that textbooks tend to present normal science. If authors do not fancy an idea, they tend to omit it from the text or to present it without criticism. As

Pedro Teixeira has recently shown, this treatment of the Coase theorem is not an isolated occurrence where Reynolds is concerned; he was also rather dismissive of human capital theory in his labor text in the early years and took some 20 years to fully incorporate it into his discussion (Teixeira 2011).

Another issue that cuts across these various research questions is the existence of and explanations for geographic differences in the way that particular ideas are treated and the rate at which they are incorporated into the textbook literature. Are there differences between countries, either as between their scholarly communities or in their approaches to social or political issues that could explain these differential treatments or rates of diffusion? Can the textbook literature *reveal* things about such differences that might be masked by the scholarly literature? Differently put, might a French textbook author think about these things in a way that is distinct from an American or Italian textbook author, or than a French scholar who is trying to publish an article in the *American Economic Review* or the *Journal of Political Economy*? Some countries have or have had centralized standards for textbook content. An interesting recent study of physics textbooks in Spain from the mid-nineteenth to early-twentieth century, undertaken by Jose Vaquero and Andres Santos (2001), examined the influence of these standards. They found that one result of the standards was that there were only very minor revisions made to succeeding editions of Spanish physics textbooks over many decades—at times resulting in texts that were seriously out of date, whether through failure to incorporate new advances or in the carrying along of antiquated material alongside the new. This is interesting in and of itself, but it also raises a set of further, probing questions—how were these standards set, by whom, and how did it impact

education in these countries as compared with other countries? If such standards exist or existed for economics textbooks, are there traceable influences on policy, economic activity, etc., or running backward from the political and economic situations to the textbook standards in force? The essays in the forthcoming volume by Augello and Guidi (2011) attempt to get at some of these issues for textbooks written in the pre-WWII era, but much work remains to be done here, particularly on the post-war period.

IV. The Challenges Posed by the Textbooks

Now that I have convinced you of the importance of the textbook literature for the study of the history of economics and have your minds churning on topics that you yourselves might fruitfully explore, let me offer a few words of caution, bearing on the challenges that are posed by the textbook literature. While textbook data can enrich our understanding of the history of economics, it can also, if misused, narrow it. The problem, as Kuhn has pointed out, is that the textbooks can present a distorted view of the history of a discipline and thus should not be taken as a fulsome presentation of any particular location in disciplinary history.

The first cautionary note relates to the purpose that textbooks are meant to serve. The image of science in society at large has traditionally been drawn from the textbooks, the purpose of which is “inevitably ... persuasive and pedagogic.” Given this, says Kuhn, “a concept of science drawn from them is no more likely to fit the enterprise that produced them than an image of a national culture drawn from a tourist brochure or a language text” (1970, p. 1). Economics may, as Viner put it, be “what economists do,” but they may do it differently, or represent it differently, in different fora. As such,

historians must be attuned to potential divergences between economics as practiced by economists in their research and economics as presented in the textbooks. This is itself an interesting topic for further exploration. The propensity of textbook authors to present a positive transaction costs version of the Coase theorem is just one example of what is undoubtedly a wide-spread phenomenon, with other examples including a profession preoccupied with general equilibrium models while textbooks remained in a partial equilibrium world and the contrast between macroeconomics research grounded in rational expectations models and textbook analysis grounded in a Keynesian system long since discredited by vast swaths of the profession. More to the point, how many of us have had in our offices the eager undergraduate announcing the he or she has decided to pursue graduate training in economics, only to be crestfallen when informed that doing so requires massive amounts of mathematics of a sort they had no hint of from their undergraduate work.

A second problem relates to the history of science and the mechanisms through which science develops. When it comes to understanding the history of a science, the textbooks are likely to mislead, as Kuhn noted, and to do so “in fundamental ways.” The issue is that textbooks present an “unhistorical stereotype” of the nature of scientific knowledge and discovery and so can lead us toward a Whiggish view of history (1970, p. 1). By presenting a snapshot at a particular point in time, these books often seem “to imply that the content of science is uniquely exemplified by the observations, laws, and theories described in their pages.” As such, they convey a conception of science that misleads the readers about the processes through which science develops. Let me explain.

\

In the textbook framework, science consists of bits of knowledge and the scientists are those who developed those bits that accumulate into the currently accepted state of knowledge. History then becomes the study of these incremental changes over time and the obstacles to achieving them. In such a context, two tasks remain for the historian: to “determine by what man and at what point in time each contemporary scientific fact, law, and theory was discovered or invented,” and to “describe and explain the congeries of error, myth, and superstition that have inhibited the more rapid accumulation of the constituents of the modern science text” (Kuhn 1970, p. 2) The textbook, then, does not take the science of a particular epoch on its own terms or provide the sort of nuanced treatment of “old” ideas that satisfies the burden of the historian. The discredited ideas of the past constitute little more than a litany of errors on the way to the present, the result of bad or imperfect science that must be explained away in light of modern findings. Needless to say, this approach provides a very limited and distorted view of the history of a science.

The major source of the problem here is that, in laying out their picture of normal science, the textbooks obscure the creative process and many of the mechanisms of scientific discovery. There can be no question that journal articles do the same, but I would argue that the textbooks do so to an even larger, or more macro, extent, in part because they ignore the controversies that one sees played out in the scholarly literature. While I have previously argued that the portraits of normal science contained in the textbooks are useful for historical work, they also have their limitations. In particular, the textbook , “systematically disguises—partly for important reasons—the existence and significance of scientific revolutions” (1970, p. 136). Instead, they reflect the professions

existing set of scientific paradigmatic commitments. Far from illustrating the creative processes that gave rise to revolutions, they “record the stable *outcome* of past revolutions and thus display the bases of the current normal-scientific tradition” (p. 137). It thus becomes the task of the historian to reveal those bases and to analyze how and why old bases were discarded and new ones came to be accepted in moving from one intellectual epoch to the next.

We can see this problem illustrated if we look at how the textbooks treat the history of economics. Their historical discussions, to the extent that they exist, are generally limited to bits about the giants of the past, on whose shoulders the moderns stand, scattered throughout the text. This has the effect of supplying modern analysis with links to the ideas of the past and paints the modern ideas and modern scholars as part of a larger, cumulative tradition. The problem, as Kuhn points out, is that such a tradition likely never actually existed:

For reasons that are both obvious and highly functional, science textbooks ... refer only to that part of the work of past scientists that can be easily viewed as contributions to the statement and solution of the texts' paradigms and problems. Partly by selection and partly by distortion, the scientists of earlier ages are implicitly represented as having worked upon the same set of fixed problems and in accordance with the same set of fixed canons that the most recent revolution in scientific theory and method has made seem scientific. (1970, pp. 137-38)

Each scientific revolution tends to necessitate a rewriting of the texts. But in doing so, the historical tradition, too, is rewritten, in order to accommodate the new paradigm within that tradition. Curiously, with each rewriting, the outcome is a science that has the

appearance of being cumulative. The notion that the received view, as reflected in the textbooks, is in some and perhaps many respects historically contingent is left out of the equation.

We have here something of a chicken and egg problem. Is the “persistent tendency to make the history of science look linear or cumulative” an artifact of the textbook genre or is the textbook treatment of history simply a representation of larger professional forces? Given the endogeneity here, it is not clear that this question has an unambiguous answer. At the very least, it can be argued that textbooks play a prominent role in reinforcing any biases of this nature, owing to their role as the primary source through which each new generation of practitioners comes to view its discipline. Here, too, we have an interesting research question, particularly in light of the increasingly diminished status of the history of economics in our profession. The textbooks themselves may, unwittingly or not, be playing a role in this process.

In short, textbooks tend to be a-historical but remain important historical documents. They are not the end of the story, but they are a part of the story. One cannot look at a paradigmatic change or revolution in the textbooks and simply conclude that a change has occurred in normal science. The textbooks may show *that* a change has occurred, but they ignore—perhaps consciously—the processes *by which* change occurs. The textbooks do not tell us how an idea came to be accepted, what forces were at work, and what role they played. Textbooks, instead, provide data, and from there we must utilize other resources to construct historical explanations. Here, as with the scholarly literature, textual analysis alone is not sufficient: context matters. Our understanding of the history of economics will not be enhanced by studies informing us that Samuelson

said “X” in his *Economics* in 1948 whereas Boulding was saying “Y” in his *Economic Analysis* that same year. It is in the explanations for these differences that history emerges and our understanding of it increases.

V. The Road Ahead

I have attempted to give you a sense for the usefulness of the analysis of the textbook literature for our understanding of the history of economics and along the way have made allusions to my own examination of the treatment of the Coase theorem in these works. Many of you have no doubt thought of other similar studies that could be made during the course of my remarks, but let me suggest just a handful of over-arching themes and topics that I believe are important avenues for future research.

- The impact of the evolution from the “textbook as treatise” genre to a specialized textbook literature;
- The portrayal of political economy in the “textbook” literature of the nineteenth century as compared to the more scholarly treatises of the period;
- The contrast between textbooks written by scholars of various methodological and other affinities during the pluralist inter-war period in the US or between this period and the post-WWII era;
- Cross-national studies of textbooks of various kinds, especially those that bear on phenomena where one sees contextual differences across nations;
- The diffusion of new ideas across nations and the differences with which this occurs (I think, for example, of the economic analysis of law, which made early

- inroads into some European countries and was taken up much more slowly in others, such as France);
- How the large transformations such as the Keynesian Revolution, the monopolistic competition revolution, and the Keynesian-Monetarist debate are reflected in the textbook literature;
 - The comparison of textbooks coming out of different identifiable schools and traditions;
 - The relationship of the textbook literature to economic events (I have already alluded to the impact of increasing environmental awareness on the development of the textbook literature in environmental economics);
 - The incorporation of cutting-edge concepts into the textbook literature and the challenges this may have posed in different instances, the lags—and variability therein—with which this has occurred, and why it sometimes did not happen at all—thinking, for example, of topics such as general equilibrium analysis, game theory, rational expectations macroeconomics, and the new trade theory.
 - The question of whether there have been increasing or decreasing trends toward homogenization in the textbook literature over time or at different points in time;
 - How does expansion and then consolidation of the textbooks market/industry impact what is taught? Has the trend toward “all-star” textbook authors impacted the content of the texts?
 - Closer to home, how has the treatment of the history of economic thought in history of economic thought textbooks changed over the last century? I have for some time been amassing a collection of history of economic thought textbooks

\

with a view to writing a similar sort of essay on the texts published in the last few decades, but it will be some time before I have occasion to do this, and perhaps one of you will beat me to it.

Such studies can be undertaken from a variety of directions and with different emphases, including more traditional doctrinal analyses (how does text A differ from text B, or how does text A evolve through several editions), quantitative studies (what share of the textbooks treated a particular topic across time; how many pages are devoted to that topic by particular authors across the various editions of a text), the insights that the textbooks provide regarding the sociology of the profession and the training of the economist, and so on.

Let us return for a moment to chemistry. As Bensaude-Vincent has shown, the study of textbooks can perceptibly alter our understanding of disciplinary history. While the “chemical revolution” gave rise to significant changes in chemistry doctrine, it was only after many decades and the interaction of a variety of forces—including the proliferation of textbooks—that chemical practice was standardized and the university-based discipline of chemistry emerged (1990, p. 454). And it is only through the study of these contextual forces that historians of science have come to understand the professionalization of chemistry as something apart from controversy and transition on the doctrinal front. A similar set of opportunities awaits the historian of economics.

Given that so little work has been done in this area, there is a wealth of low-hanging fruit. This is not to say that the harvesting is easy, given the voluminous nature of the textbook literature—particularly that part of it published over last fifty years. But

my sense is that the harvest will be a fruitful one and significantly advance our understanding of the history of economics.

References

Atkinson, Anthony B. and Joseph E. Stiglitz (1980) *Lectures on Public Economics*. New York: McGraw-Hill.

Augello, Massimo M. and Marco E.L. Guidi (2001) *The Spread of Political Economy and the Professionalization of Economists*. London: Routledge.

Augello, Massimo M. and Marco E.L. Guidi (2011) *The Economic Reader: Textbooks, Manuals and the Dissemination of Economic Sciences During the 19th and Early 20th Centuries*. London: Routledge.

Backhouse, Roger E. (1985) *A History of Modern Economic Analysis*. Oxford: Basil Blackwell.

Bastable, Charles F. (1892) *Public Finance*. London: Macmillan.

Bastable, Charles F. (1917) *Public Finance*, 3rd edn. London: Macmillan.

Bensaude-Vincent, Bernadette (1990) "A View of the Chemical Revolution through Contemporary Textbooks: Lavoisier, Fourcroy and Chaptal." *British Journal for the History of Science* 23 (December): 435-60.

Coase, Ronald H. (1960) "The Problem of Social Cost." *Journal of Law and Economics* 3 (October): 1-44.

Coats, A.W., ed. (1996) *The Post-1945 Internationalization of Economics*. Durham, NC: Duke University Press.

Fleury, Jean-Baptiste (2010) “The Evolving Notion of Relevance: An Historical Perspective to the ‘Economics-Made-Fun’ Movement.” Working Paper.

Gaster, Barak (1990) “Assimilation of Scientific Change: The Introduction of Molecular Genetics into Biology Textbooks.” *Social Studies of Science* 20 (August): 431-54.

Giraud, Yann B. and Loic Charles (2010) “Economics for the Masses: The Visual Display of Economic Knowledge in the United States (1921-1945). Working Paper. Available at SSRN: <http://ssrn.com/abstract=1594118>.

Hicks, Ursula (1947) *Public Finance*. London: Nisbet & Co.

Kamerschen, D. R. and L. M. Valentine (1977) *Intermediate Microeconomic Theory*. Cincinnati, South-Western Pub. Co.

Kuhn, Thomas (1970) *The Structure of Scientific Revolutions*, 2nd edn., enlarged.

Medema, Steven G. (2011) “Of Coase and Carbon: The Coase Theorem in Environmental Economics, 1960-1979.” Working Paper, University of Colorado Denver.

Musgrave, Richard A. (1959) *The Theory of Public Finance: A Study in Public Economy*. New York: McGraw-Hill.

Reynolds, L. G. (1973) *Microeconomics: Analysis and Policy*. Homewood, Ill., R. D. Irwin.

Skoog, Gerald (1979) "Topic of Evolution in Secondary School Biology Textbooks: 1900-1977." *Science Education* 63 (5): 621-40.

Teixeira, Pedro (2011) "Conquering or Mapping? Textbooks and the Dissemination of Human Capital Theory in Applied Economics." Working Paper, University of Porto.

Vaquero, Jose M. And Andres Santos (2001) "Heat and Kinetic Theory in 19th-Century Physics Textbooks: The Case of Spain." *Science and Education* 10: 307-319.