2004 HES PRESIDENTIAL ADDRESS: AUTOBIOGRAPHICAL MEMORY AND THE HISTORIOGRAPHY OF ECONOMICS

ΒY

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"It's every generation throws a hero up the pop charts" (Paul Simon 1986).

In his autobiographical piece, "A Jevonian Seditionist," Sidney Weintraub ([1983]1989, p. 50) recalled that in 1957 he sent an offprint of his paper on the microfoundations of aggregate supply to D. H. Robertson.¹ He remembered that "Robertson generously wrote me that it was 'lucid and definitive,' and that thenceforth he would not return to the subject again. I confess that I have lost or misplaced his letter, along with the one by [Alan] Sproul,² in my move to Canada, though they were prized possessions." And I have my own memory of a conversation with Sidney in which he told me that Robertson had written in that letter "If this is not what Keynes meant, it is what he should have meant."

He had, however, misremembered. After his death in 1983, I deposited his papers with the Economists Papers Project at Duke University, and in doing so I found three letters that are explanatory.³ First, in a letter to Sidney dated November 1, 1957, Robert Clower (then at Northwestern) wrote:

I have just finished reading with great interest (and, therefore, care) your recent EJ [*Economic Journal*] article on Agg[regate] Demand & Supply, and it seemed appropriate to let you know I found it very good. The spate of recent articles on the topic, each of which has served to muddy more water than it has cleared, should be choked

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Department of Economics, Duke University, Durham, NC 27708-0097, USA. This Presidential lecture was presented at the annual meeting of the History of Economics Society, Victoria University, Toronto, Ontario, Canada, June 27, 2004. David Rubin, my Duke colleague, is a cognitive psychologist who has devoted his career to understanding autobiographical memory. I am pleased to have had his guidance as I sought some partial understanding of these complex matters, and as usual, my friend and colleague Neil DeMarchi provided much needed criticism of various drafts. With the usual disclaimer, I am appreciative of their help.

¹ "Dennis Holme Robertson (1890–1963), Fellow of Trinity College 1914–38, 44–63; Lecturer in economics at Cambridge University 1920–28; Girdlers' lecturer 1928–30; Reader at Cambridge University 1930–38; Professor of Economics at University of London 1939–44; Professor of Political Economy at Cambridge University 1944–57; adviser to the Treasury 1939–44" (http://cepa.newschool.edu/het/, accessed October 14, 2003). ² Sproul was then President of the New York Federal Reserve Bank.

³Sidney Weintraub Papers, Rare Book, Manuscript, and Special Collection Library, Duke University, Box: Correspondence 1939–1963, folders 1957 and 1959. I also found two letters from Sproul in that 1957 folder.

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off at this stage. Herewith my personal thanks for providing a reference to which I may refer future students of aggregate economics for a beautifully clear statement of what Keynes 'should have meant' if we could suppose that he was a rational being.

Second, in a letter to Sidney dated January 14, 1959, D. H. Robertson (Trinity College, Cambridge) wrote:

I don't think I ever thanked you for sending me, a long while ago, an offprint of your AER [*American Economic Review*] article on the Theory of Wages. I think I was too exhausted at the time by my long (tho amicable) wrangle with de Jong over the meaning of those inverse-looking D and Z curves to have much stomach for further adventure in those fields! But I have lately been reading your article with great appreciation of its clarity and thoroughness. So please accept my belated thanks.

And Sidney's reply to Robertson dated February 22, 1959 begins by saying that "it is so many years since I last heard you compliment this sometime wayward student of yours."

What had happened? It is clear that Sidney had remembered incorrectly, and had confused the Robertson letter with the Clower letter. It is not the case that there is an earlier Robertson letter since Sidney's reply denies any mail contact since 1939! Robertson would not return to the subject of aggregate supply, not because of Sidney's paper, but rather because he had lost interest in the topic in his squabble with de Jong over de Jong's paper on aggregate supply. And there is a nuanced difference between the compliment "lucid and definitive" and "clarity and thoroughness."

Misremembering is not uncommon, and for historians using individuals' reminiscences to construct historical narratives, it would appear that misremembering is minimally troubling. After all, as I did with the letters that I had found, we can in some, perhaps in many, cases find independent checks and confirmations of the remembrances; such "archival" materials often allow a rough validation of memory, a check on its reliability as historical evidence.

For example, in a famous paper published in *Cognition*, Ulric Neisser (1981) examined John Dean's Watergate testimony. Dean, recall, was special counsel to Richard Nixon in Nixon's second administration. Dean, in the Watergate hearings, appeared before Senator Sam Ervin's investigating panel and reported at length, from memory, the substance of conversations he had had with President Nixon and his senior staff members, particularly John Mitchell, Charles Colson, John Erlichman, and Robert Haldeman, concerning the mechanics of the cover-up following the investigation of the Watergate break-in. Dean's memory for the events was prodigious as he recounted, apparently verbatim, specific conversations on specific dates. This testimony thus implicated the President and his advisors in the Watergate cover-up, answering Senator Howard Baker's repeated question regarding Nixon: "what did he know and when did he know it?" What Dean of course did not know was that Nixon had an elaborate recording-bugging-technology in the Oval Office, and all of the conversations in which Dean took part had in fact been preserved. When the tapes of those conversations were made public, Neisser was able to compare Dean's recollections of the conversations with the transcripts of those conversations themselves.

Was Dean's recollection, his memory, accurate? The comparison of testimony with transcripts made clear that Dean had mixed up dates, made errors in attribution of remarks he recalled, and even combined separate conversations into a single one, and vice versa. Yet Neisser concludes his study of Dean's memory by noting that:

[There is a] paradoxical sense in which Dean was accurate throughout his testimony. Given the numerous errors in his reports of conversations, what did he tell the truth about? I think that he extracted the common themes that remained invariant across many conversations and many experiences, and then incorporated those themes in his testimony ... [In] memory experiments, subjects often recall the gist of the sentence but express it in different words. Dean's consistency was deeper; he recalled the theme of a whole series of conversations, and expressed it in different events ... [He] was wrong only in terms of isolated episodes. Episodes are not the only kind of facts. Except where the significance of his own role was at stake, Dean was right about what had really been going on in the White House (Neisser 1981, pp. 20–21).

There is, to my knowledge, only one serious discussion in the historiography of economics about the use of autobiography. In his recent "Biography and the History of Economics," Donald Moggridge (2003) devotes four pages, his last section, to "autobiography." Moggridge, of course, bases his account on the recent explosion of collections of autobiographical material. We have had the two volumes edited by Szenberg (1992, 1998), the two volume collection edited by Kregel (1989), and the two volume collection edited by Backhouse and Middleton (2000), as well as the host of autobiographically shaped interviews in such places as the *American Economist, Macroeconomic Dynamics*, and *Econometric Theory*. Moggridge's own count of these and a few other recent collections shows 198 such autobiographical essays. He suggests that:

The existence of this growing stock of autobiographical memoirs can play a useful role in the history of economics. In particular, given the absence of manuscript records in many universities in the U.K. (and probably elsewhere), such memoirs may prove prime supplements to university calendars in tracing the development of particular departments through most of the post war period. Their value will increase as the stock of memoirs moves beyond the heady days of the post war consolidation and 1960s expansion of economics to more recent, and more troubled times (p. 599).

He makes the important connection between autobiographical writing and memory itself, and refers directly to some important work being done in cognitive psychology, by pointing out that:

Autobiographical memories are constructed out of various components, and the final construction will be "guided by the person's goals at the time of retrieval, as well as by the goals at the time of encoding [the components, so that] changes in what is remembered should be expected" (Rubin 1995, p. 4) (Moggridge 2003, p. 597).

Moggridge, looking at some of the complex evidence put forward by psychologists about autobiographical memory, focuses on the incompleteness of such memory accounts, and concludes that "all of this suggests that autobiographical material should be used carefully. It is useful evidence but it may not always be sound, particularly as regards to discussions of motivation or cause. Yet most collections of autobiographical essays are unreflective on their contents" (p. 598).

Moggridge's account however is, in my view, somewhat incomplete. Though he wisely calls attention to the unreliability of memories, he also suggests that they may not be too unreliable for he suggests that they can usefully supplement other records by providing an independent check on some kinds of other materials. I'm not convinced they are so unproblematic.

One issue, of course, is separating the specifically autobiographical material from the subject's recall of past events in which the person was not so primarily engaged. That is, recalling a situation from one's own past, in which one was simply a witness to an event, appears to be systematically different, in its character, from a subject's recall of something that was autobiographically consequential. Memory has different characteristics from autobiographical memory.

If I ask you to recall a movie that you really liked, with a high degree of confidence I can predict that you will recall a movie that you have seen within the past few years. Performing this kind of experiment however also finds something else. The farther back in time you go from the present, the rate or density of those kinds of memories falls off. That's not surprising really, since we all tend to forget things. The surprise however comes when we ask for a longer list say of movies and we will find, with some confidence, that you will also produce memories of movies from the young adulthood of your life. In study after study investigators have found that the density of memories is "double humped," as pictured in Figure 1.

That is, memories from early childhood are almost nonexistent, so much so that the phrase "childhood amnesia" is used by psychologists of memory. Then the density of memories per year increases through young adulthood, and then it decreases though the middle years, increasing again to the most recent years. Specifically, suppose one plots the density of memories (e.g., memories per year normalized by the total number of memories) of say 65-75 year olds vertically, and the chronological age

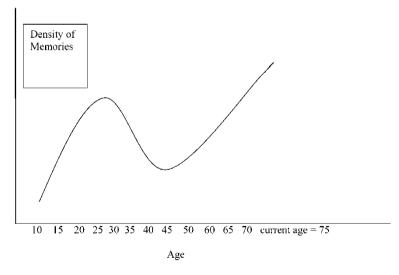


Figure 1.

of the person at the time of the event so recalled horizontally. It turns out that retrospective studies of such older subjects inevitably produce a curve which rises progressively to a peak somewhere in the mid to late twenties, then begins to decline to around age forty-five to fifty, and then rises again to the subject's present age. This "bump" in early adulthood is stable cross culturally, and seems to characterize all kinds of memories: not just memories of songs, movies, individuals on baseball teams, and novels, but even memories of styles of clothing.⁴

For an important class of personal/developmental memories however, the later years are not remembered as similarly consequential. We believe in our remembering, in reconstructing our own histories, that we are as late adults who we were by early adulthood (on average). Thus in contrast to the "double hump" curve of say "memorable reading experiences as a function of the time the book was read" (Larsen 1995), the self-forming memories—memories which truly made me what I am today—are single peaked, with the early adulthood period apparently most important in remembrance. Such a result appears in a number of studies in the cognitive psychology literature.⁵

Since I am interested in the memories of economists as "data" for historians of economics, it is important to know whether economists are similar enough to the other groups already studied by cognitive psychologists to allow their results to inform my work. Thus in an attempt to examine whether the accounts, the autobiographical memoirs of economists, were consistent with these kinds of findings, we⁶ performed a content analysis on economists' memoirs replicating the methodology in Mackavey, Malley, and Steward (1991).⁷ Specifically, we analyzed autobiographies from volumes one and two of *Recollections of Eminent Economists* (Kregel 1989).⁸ Though the autobiographies used in the sample were written under broad guidelines, and though they vary somewhat in content and format, they were all written by

⁴ The power function for retention was first identified by Crovitz and Schiffman (1974). David Rubin (Rubin, Wetzler, and Nebes 1986) found the "bump." A fairly large literature developed from that paper, a literature nicely surveyed in Rubin, Rahhal, and Poon (1998). It was Galton though who did the first age distribution with about four categories similar to the one I have used.

⁵Constructing an adequate theory of these varied components of autobiographical memory is difficult. Recent availability of functional magnetic resonance imaging technologies has opened new connections across the field however; for one set of attempts to integrate these partial theorizations, see Rubin (1998) and Greenberg and Rubin (2003).

⁶A then Duke undergraduate, Mr. Bogdan Albu, was my collaborator in spring 2003 in this content coding project.

⁷ That study, "Remembering Autobiographically Consequential Events: content analysis of psychologists' accounts of their lives" appeared in *Psychology and Aging* in 1991, and reported on recall phenomenon in autobiographical accounts written by distinguished psychologists. Those autobiographical accounts, similar to the kinds of autobiographical memoirs that we economists are accustomed to use, were scored and analyzed for content. That is, forty-nine eminent psychologists' accounts were scored for "autobiographically consequential events" (ACE) in order to examine their density across the life cycle. The finding was that "memories were concentrated during the college and early adult years" (p. 50): they found the now usual bump.

⁸ As Kregel stated in the foreword to volume one, these essays were originally printed, starting in 1979, in the *Quarterly Review* published by the Banca Nazionale del Lavoro, and in the Italian-language version of that journal, *Moneta e Credito*. These publication are described as economic journals "addressed to an international readership," and as "an international market-place for the ideas of economists throughout the world" (vol. 1, xi).

[&]quot;Frequent contributors" to the journal, as well as "other eminent economists," were asked, beginning in 1979, "to reflect on their personal activities and experiences in the process of the development of their research work in economics." Furthermore, "no particular constraint or format was placed on these contributions" (vol. 1, xi).

influential economists who were at an appropriate age to reflect on their entire life experiences. Their lives in fact spanned most of the twentieth century.

Of those autobiographical essays by twenty-four men and one woman, several were excluded because the author did not cover the entire life span, but rather focused only on the first half of the life, or on a several-year period. We excluded autobiographies by Giovanni Demaria, Hyman Minsky, and Nicholas Georgescu-Roegen for this reason.

The cognitive psychology literature identifies "Autobiographically Consequential Memories" (ACEs) as memories which describe:

an event, person, or set of circumstances in the individual's life that [are] remembered as having affected the unfolding of the life story in a personally significant way ... this consequentiality must [be] evident through the writer's own words and [can] not be assumed ... The memory must also [establish] a causal connection between the event or experience and the consequence (Mackavey *et al.* p. 53).

Thus in order to qualify as an ACE, a memory needed to have had an effect on the author's psychology and outlook, and not merely on his or her physical location or purely professional interests. Memories were identified as ACEs if they fulfilled all of the above conditions.

We also employed (but do not report here) the usual distinction between episodic and non-episodic memories. As defined in the cognitive psychology literature, episodic memories describe explicit events that occur over a short, distinct time period (usually a day or less), and are vivid in detail. In contrast, non-episodic memories describe in more general terms a longer period or life experience.

In order to identify ACEs reliably and consistently, initially the two investigators independently analyzed several of the articles. When inconsistencies appeared in the two readings, the different interpretations were discussed until the readers reached agreement. The interpretation of an ACE was refined in this way to be consistent with the earlier (Mackavey, Malley, and Steward 1991) model study before the larger set of articles were analyzed by the junior investigator.

Once identified, ACEs were coded for age at the time of the memory according to the following life periods: childhood: <12; adolescence: 13–17; college years: 18–22; early adulthood: 23–35; middle adulthood: 36–50; later adulthood: >50. In the rare case that the author did not provide enough information to accurately identify the age at the time of memory, the ACE was not coded. This occurred in only two cases. If an age spanned one or more periods, it was divided across the appropriate periods, hence the occurrence of x.5 ACEs in some life periods.

If an ACE was identified by the author as having occurred during the undergraduate years at college, the ACE was coded as "college years" even if the author's actual age at the time of the memory fell outside of the 18-22 period (i.e., if the memory was remembered as having occurred at the age of 17 or 23). This was for simplicity, as most college memories spanned several years and the exact age of the author could not be identified beyond that. This exception was not applied to any other life period. The results, summarized in the table and graph, are clear.⁹

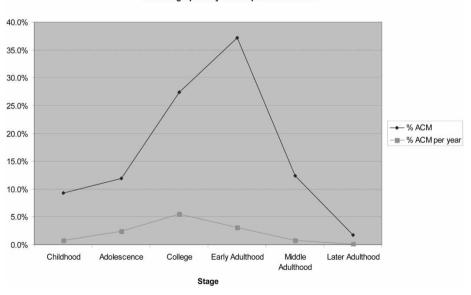
⁹I am pleased to acknowledge the assistance of Dr. Cathleen McHugh in the preparation of the table and graph.

Category	Age in years	ACM	% ACM	% ACM per year
Childhood	0-12	10.5	9.3%	0.8%
Adolescence	13-17	13.5	11.9%	2.4%
College	18-22	31	27.4%	5.5%
Early adulthood	23-34	42	37.2%	3.1%
Middle adulthood	35-50	14	12.4%	0.8%
Later adulthood	Over 50	2	1.8%	0.1%

Table 1.

There is a decided remembrance "bump" for the college/early adulthood period. Economists are sufficiently similar to other experimental subjects, autobiographically, that we may place some trust in the robust results found in the cognitive psychology literature. Put another way, we can employ arguments like those developed by cognitive psychologists in assaying the autobiographical materials on offer from economists.

I wish to suggest then that the nearly 200 autobiographical memoirs of economists that Moggridge identifies are more interesting than we are accustomed to imagine. There are more interesting questions to ask of them than "are these autobiographical accounts accurate?" and "Does the material support or disconfirm historical arguments drawn from other sources?" Specifically, these autobiographical memoirs themselves



Autobiographically Consequential Memories

Figure 2.

are documents, and are a genre of writing by economists of no less interest to an historian perhaps then economists' writings on matters of high theory.¹⁰

I realize that this is a curious claim. We are accustomed as historians to deal with the writings—written inscriptions—of economists on weighty matters of economic science itself. The material products of these scientific communities, the scientific knowledge, appears traditionally to be our subject matter and, as historians, it has been our apparent job to reconstruct that material historically if we are of such a mind, or to reconstruct it rationally if we are unmindful of history. After all, we are supposed to think that the products of economic science are theories, analysis, examples, policy documents, etc. In traditional histories of economics the autobiographical memoirs that economists write, like their letters, like their course syllabi, like their letture notes, are useful only (we usually argue) insofar as they contextualize the primary materials which hold our serious interest.¹¹

But what happens if we step back and look at this community of economists and ask other questions about this particular class of written and spoken products? Can we "analyze" them in any fashion? Is there anything systematic to be claimed or argued about this nearly 200-point sample?

A couple of points seem to me to be salient. First, these narratives, if read continuously in a moderately compressed period of time, are quite numbing. As literary materials they are, almost all of them, graceless. One wonders why. Perhaps it is the complex mix of author and audience that is at issue here. After all, the readers' expectations in reading an autobiographical memoir of an economist, when the reader is an economist, will be to find either a moral cautionary tale, or a shining path exemplar, to help reconstruct the narrative of the reader's own life. That is, these accounts variously describe an "economist's life script" by setting in motion various kinds of expectations about how a successful economist should conduct his or her own life: where to go to graduate school, the importance of mentors, the importance of being in the right place at the right time or the importance of not being in the right place at the right time, etc.¹² Systematically, this implies that their education, their professional training, and their early professional years will dominate the accounts they provide of important issues in their lives. This isn't very surprising, of course, since these economists were being asked to construct autobiographical memoirs of their lives as economists, not as parents, or children, or lovers, or for the most part, teachers. What we have are fairly systematic discussions of "what made me the great economist that I am, so great that you asked me to contribute my autobiographical memoir to your collection?"¹³

¹⁰ Of course, what is of interest to a historian is not necessarily of any interest to an economist.

¹¹ George Stigler once wrote: "[B]iography distorts rather than illuminates the understanding of scientific work" (Stigler 1970, p. 426).

¹² This matter of constructing and employing what sociologists call "life scripts" in autobiographical narratives is not simply understood. The process of autobiographical remembering itself is intertwined with those scripts (Rubin and Berntsen 2003). We have no historical studies of evolving life scripts of individuals identified as "economists" over time, or space. For instance, what were the changed expectations of a professional life for the members of the European émigré generation, and how did those brutally changed scripts affect narrative memory?

¹³ Sometimes these memoirs do touch on other kinds of events where the author is able to contextualize the economist's life with important kinds of world events that help shape the professional career. Wars, revolutions, immigrations, are all to be found and are often judged to be explanatory by the memoirs.

Second, I submit that there are real implications for the history of economics, were we to take seriously results from cognitive psychology about the bump in both recall and autobiographical recall from early adulthood. We've already suggested that there is such a bump for ACES in a sample of the economists' autobiographical memoirs. One may infer that economists' retrospective personal accounts will inevitably focus on material drawn from that early adulthood period. We consumers of these memoirs are presented with an over-sampling of "this is really important economics" from the memoirist's own early adulthood. This has some historiographically startling implications.

For instance, how can one explain "the years of high theory?" When Shackle (1967) wrote the book of that title, he was referring to the 1930s when all of the important theoretical work that shaped the twentieth century economics was created. Or rather, so he argued. Today, looking back on the 1930s, we see very little theory that has lasted. In his recent retrospective of macroeconomics in the twentieth century, the distinguished economist Olivier Blanchard argued that the period prior to 1940 was a:

period of exploration, where macroeconomics was not macroeconomics yet, but monetary theory on one side, business cycle theory on the other. A period during which all the right ingredients, and quite a few more, were developed. But also a period where confusion reigned, because of the lack of an integrated framework (Blanchard 2000 p. 1376).

Keynesian ideas of aggregate demand management policies, and the economic role of governments in promoting growth, high rates of employment, and high Gross National Product seemed to have survived, but what remains of the other high theories? Recall that for Shackle the other revolutionary and enduring breakthroughs from that period include imperfect competition, Sraffa and value theory (cost curves!), Myrdahl's monetary equilibrium, the formal dynamics of cycles and growth, and Leontief's input-output analysis. It is quite painful now to read Shackle's last triumphant chapter called "the landslide of invention." The claim that these years of high theory represented the break with tradition that would forever reshape economics seems quite dated, and mistaken.

But why was the claim made in the first place and taken so seriously at the time Shackle made it? Perhaps it is that nasty bump. Ask yourself how old was Shackle (1903–1992) in those years of high theory, 1926–1939? The answer is immediate. He was a young adult, twenty-three in 1926, and thirty-six in 1939. There is something quite systematic here. It is not without reason that Paul Simon sang the line in *Bubble Boy* about "It's every generation puts its hero up the pop charts."¹⁴ The emphasis, of course, in that sentence should be on the word "its" for each generation's hero is the hero of its late adolescence and early adulthood. It's not only that we can't stand the new music that the kids are listening to, since our music was much more interesting. Our music was the music of our bump. And so too

¹⁴ I am fully aware that my near total recall of Paul Simon lyrics is from my "bump." This is precisely the kind of evidence on generations or eras brought forward by Jerome R. Schulster (1996), who not entirely facetiously asked who was your host of the "Tonight Show," who was your James Bond, and who were your Tristan and Isolde?

with our economics. Keynes (1936, p. 384) himself wrote, in the final paragraph of *The General Theory*, that "in the field of economic and political philosophy there are not many who are influenced by new theories after they are twenty-five or thirty years of age". We products of the 1960s said it another way: "Never trust anyone over thirty." Don't trust anyone who's past our bump.

In other words, one problem in working with autobiographical memoirs is that what will necessarily emerge in later years is a systematic emphasis on the events and categories of the memoirist's young-adult period. A large number of autobiographical accounts penned by the heroic generation of economists who came of age intellectually between the late 1930s and the late 1940s focus on how economics was transformed as a professional discipline in precisely that period. They gave us, and told us about, the econometrics revolution, the Keynesian revolution, and the game theory revolution. They told us stories about a time when giants walked the earth.¹⁵

Historiographically, we have not understood these kinds of arguments to be systematic in a structural sense. That is, we do spend a great deal of time arguing about whether economics really really was transformed by the probabilistic revolution in econometrics, or whether general equilibrium theory, or that beast called formalism, really really was transformatory of economics in the early 1950s. Mark Blaug's concern with the formalist revolution of the early 1950s,¹⁶ which I (Weintraub 2002) have argued never really happened, appears to reflect exactly and precisely his own concerns with the important issues of his own early adulthood. And so, too, with much of our historical writing. I am not, of course, here attempting to dismiss Blaug's and other historians' concerns with "it's merely the bump talking." Rather I want to recommend caution in our use of autobiographical materials, especially when those materials can be construed as projecting an individual's history onto a larger historical narrative. It is not simply a matter that the materials may be unreliable in accidental or systematic ways. It is that the structure and nature of these kinds of autobiographical memoirs are not unproblematic documents. They are written to some purpose we often do not understand, for an audience of non-historians. They reflect a number of different issues from both the personal and cultural life scripts they illuminate and which in turn shape and reflectively are shaped by exactly these kinds of accounts. As a consequence, we historians of economics understand too little of the autobiographical impulse and have too impoverished a vocabulary to provide interesting, let alone compelling, appraisals of its products. Scholars in history, psychology, sociology, literature, and medicine have begun to address these issues. I submit that we historians of economics have a lot of interesting work left to do.

¹⁵ One of the consequent issues here is the notion of an "era" or a "generation." This concept seems perfectly understandable, and indeed it finds its way into everything from journalistic practices, to marketing strategies. It is, however, slippery to identify a generation "objectively." The idea seems to be attributable to Karl Mannheim (1925), and has been reconstructed and analyzed in useful ways in Schuman and Scott (1989), a paper which should be better known among historians of economics.

¹⁶ Blaug was born in 1927, and received his Ph.D. in 1955.

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