ROUTLEDGE

/ what do economists know?

New economics of knowledge

Edited by
Robert F. Garnett, Jr

What Do Economists Know?

This volume provocatively rethinks the question of what, how, and for whom economics is produced. Academic economists in the twentieth century have presumed to monopolize economic knowledge, seeing themselves as the only legitimate producers and consumers of this highly specialized commodity. This has encouraged a narrow view of economic discourse – the producer/consumer "economy" of economic knowledge – as little more than a private dialog among professionally licensed knowers.

This book recasts this narrow view. Its fifteen essays highlight the range of voices (academic and non-academic) in the economic conversation, affirming "what economists know" while challenging their assumed monopoly in the marketplace of ideas.

What Do Economists Know? collects the reflections of leading economic theorists including Jack Amariglio, John B. Davis, Arjo Klamer, Judith Mehta, Deirdre McCloskey, David F. Ruccio and Grahame F. Thompson.

Robert F. Garnett, Jr teaches Economics at Texas Christian University and is Book Review Editor for *Rethinking Marxism*.

Economics as Social Theory
Series edited by Tony Lawson
University of Cambridge

Social theory is experiencing something of a revival within economics. Critical analyses of the particular nature of the subject matter of social studies and of the types of method, categories and modes of explanation that can legitimately be endorsed for the scientific study of social objects, are reemerging. Economists are again addressing such issues as the relationship between agency and structure, between the economy and the rest of society, and between enquirer and the object of enquiry. There is renewed interest in elaborating basic categories such as causation, competition, culture, discrimination, evolution, money, need, order, organization, power, probability, process, rationality, technology, time, truth, uncertainty, value, etc.

The objective for this series is to facilitate this revival further. In contemporary economics the label "theory" has been appropriated by a group that confines itself to largely asocial, ahistorical, mathematical "modeling". *Economics as Social Theory* thus reclaims the "theory" label, offering a platform for alternative, rigorous, but broader and more critical conceptions of theorizing.

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Preface

This project began as a set of papers presented at “Knowledges: Production, Distribution, Revision,” an interdisciplinary conference at the University of Minnesota in 1994. The organizers (Ellen Messer-Davidow, David Shumway, and David Sylvan) made a special effort to include economic knowledges in the conference’s discussion of historical forms and institutions of knowledge production. The strength and complementarity of these papers (by Jack Amariglio, Radhika Balakrishnan, Michael A. Bernstein, Stephen Cullenberg, Satyananda Gabriel, Caren Grown, Arjo Klamer, David F. Ruccio, Diana Strassmann, and Grahame F. Thompson) sparked the idea of a volume to explore where, how, and with what consequences economic knowledges are produced. Thanks to Alan Jarvis and Alison Kirk at Routledge, this initial idea had a chance to grow and improve in the intervening years. Ten essays have been added, and each of the five original essays included here has been substantially revised. The result is a volume that is richer and more diverse yet close, philosophically, to the original idea: a set of reflections on the presuppositions, consequences, and possible reconfigurations of received models of economic knowledge production.

Acknowledgements

My involvement in this project began five years ago when my son's arrival preempted my arrival at the "Knowledges" conference at which this volume was born. I would like to thank Jack Amariglio, Steve Cullenberg, Arjo Klamer, Ellen Messer-Davidow, David Ruccio, and Diana Strassmann for their truly blind faith in my ability to take this on and for all of their guidance and encouragement at that early stage.

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I would also like to thank the American Economics Association for permission to reprint the essay by Robert J. Blendon *et al.* from the *Journal of Economic Perspectives* (Summer 1997); Art Resource for use of Manet's "Argenteuil" (1874) in Judith Mehta's essay; Susan Friedman Photo Research for acquisition and use of a Groucho Marx image from *Horsefeathers* in Ulla Grapard's essay; Universal Studios for permission to use the Groucho Marx image in this essay; Addison Wesley Longman for permission to use figures and captions in the Grapard essay from Ritter and Silber's second edition (1977) of *Principles of Money, Banking, and Financial Markets* and from Ritter, Silber, and Udell's eighth edition (1993); and the Cartoon Bank for use of four cartoons from *The New Yorker* in the Grapard essay.

I will always owe a special debt to the contributors for their unfailing goodwill despite excessive editorial suggestions and unforeseen delays.

And my deepest thanks go to Enid and Ben, without whom I might never have started this book, let alone finished it.

1 Economics of knowledge

Old and new

Robert F. Garnett, Jr

This volume is in many ways a sequel to Deirdre McCloskey's reflexive critique of economists' philosophical absolutism (McCloskey 1985, 1990, 1994). McCloskey challenges her fellow economists to repair the poor fit between their liberal economics (pluralism, openness, free markets) and their generally illiberal meta-economics (Science, Truth, Method). No one Scientific Method ever guides economic research anyway, McCloskey argues. And none is needed.

> There is no need for philosophical lawmaking or methodological regulation to keep the economy of intellect running just fine.
>
> (1985: 28)

> [My] attitude towards Methodology is similar to Adam Smith's attitude toward Mercantilism. Both Methodology and Mercantilism are attempts to blockade entry and acquire rents for the few already in possession. They sloganize about the public good, but violate it cynically, the better to stay in charge.
>
> (1994: 187)

In a similar spirit, the following essays urge economists to extend their pluralist ethos one important step further, to challenge the *de facto* Mercantilism of our own professional culture in which we are expected to act as the exclusively licensed producers and judges of "economic knowledge." Among the starting points for this work is an acceptance of McCloskey's basic premises: (1) objective, capital-T Truth ["God's Truth"] is unavailable to human beings; and (2) the knowledges we can achieve [small-t, intersubjective truths] are "achieved only through intellectual trade," i.e., "open, reasonable, fair, patient, *sprachethiklich* conversation" (1994: 74 and 304). But who is to say where the boundaries of this conversation are to be drawn? Or, more pointedly: how can a serious rethinking of modernism in economics (such as McCloskey, Klamer, Amariglio, Ruccio, Mehta, and others have initiated over the past 15–20 years) fail to include a reflexive interrogation of academic economists themselves as a would-be epistemic monopoly?

McCloskey's notion of an "economy of intellect" suggests that something valuable (viz., potential knowledge) may be lost by confining this free trade zone to universities and other epistemically privileged sites; and that something may be gained by extending it to include non-academic producers and genres of knowledge. Yet such extensions of economic discourse are generally discouraged by members of our profession. Why? What is at stake in the preservation (or transgression) of these intellectual boundaries? How is the prestige and identity of our discipline "rhetorically constituted" (Shumway and Messer-Davidow 1991: 222)? What kinds of "boundary-work" do we enact "for the purpose of constructing a social boundary that distinguishes [our 'scientific' activities and knowledges from] 'non-scientific' intellectual or professional activities" (Gieryn 1983: 791)?

To ask these questions is to join a broad and fast-growing conversation in knowledge and science studies about the very idea of expert knowledge and its production/dissemination by academic disciplines. What is an expert? How do experts and expert knowledges gain social authority? What responsibilities do experts have to their fellow citizens in a democratic society? The social epistemologist Steve Fuller speaks for many in this discussion when he says:

> Without succumbing to anti-intellectualism, a democratic society must always be suspicious of knowledge in which the most valued forms of knowledge are the least accessible, or more sociologically, the most esteemed knowledge producers are the ones whose goods are accessible only to an elite set of consumers (e.g., other professional knowledge producers and, indirectly, their patrons).
>
> (Fuller 1992: 397)

In the natural sciences and other disciplines, discussion of these social dimensions of knowledge and expertise has been underway for some time.[1] But in economics, with few exceptions, it has scarcely begun.[2]

Perhaps our (economists') disregard for these issues is due in part to our unspoken "economics of knowledge," our tacit allegiance to a neoclassically inspired vision of academic scholarship in which each field of knowledge (discipline or subdiscipline) is conceived as a kind of market economy where the production and competitive evaluation of ideas serves to ensure – as if by an invisible hand – that the best ideas prevail.[3] For many economists and other academics, some half-conscious formulation of this idea seems to serve as their surrogate epistemology. Colander has noted this on numerous occasions, that most academic economists "seem implicitly to believe that there exists an invisible hand which guides science to truth" (Colander 1989: 31).[4] But Mirowski says it best:

> The image is one of numerous individuals concocting bits of intellectual property, sending them out into the intellectual marketplace, and having them all find their true value, culminating in all and sundry at a Pareto optimum of knowledge. ... It is this root

> metaphor ... that leads the average economist to believe that the econometric journal literature is full of consensus estimates of important economic constants, even though the "facts" in their own narrow area of specialty may be subject to a myriad of technical objections. What is known is not perfect, but free discourse among equals guarantees that what is known is the best available information.
>
> (Mirowski 1997: 273–74)

These ideas exemplify what we might call the "old economics of knowledge," an informal and widely-held view of knowledge that is characterized by two premises: (1) the best knowledges are (or should be) academic knowledges; and (2) the optimality of academic knowledges is (or should be) ensured by competitive, market-like processes of academic research and publishing.[5] The first is so widely presumed that it is rarely stated. One exception is Cicarelli and Spizman's paper (1984) in which they specify a "production function for economic knowledge" (p. 41) on the assumption that "the departments of economics at major universities are the 'firms' responsible for producing the output in the economics knowledge 'industry'." While acknowledging that "[t]his assumption is not without its limitations ... [since] there are other sources of production such as public agencies and private consultants," they resolve this ambiguity by invoking a version of premise (1): that "none [of these non-academic sources] is as devoted to doing basic research as university economics departments" (Cicarelli and Spizman 1984: 42).

The second premise is also widely held, albeit in different forms. One view of the academic "economy of intellect" (its nature and proper functioning) is offered by McCloskey and other antifoundationalists;[6] the conventional literature on economic methodology offers another (Dow 1997; Caldwell 1994). These approaches differ in numerous ways, most of all in their notions of knowledge itself: one seeing knowledge as nothing more (or less) than intersubjective agreement; the other seeing knowledge as an objective apprehension of Reality. Yet their mutual acceptance of premise (2) points to a fundamental point on which they agree: the notion of a singular subject – namely, an academic subject – of economic knowledge. They may disagree on what counts as knowledge; on the process by which knowledges should be produced and evaluated; on the range of voices that deserve to be heard in the academic marketplace; and much else. Yet both ultimately envision a closed "economy of intellect" in which all knowledge is (and should be) created by a collective *academic* subject of knowledge. So regarding premise (2), these rival conceptions of the knowing subject – whether a "scientific community," a "human conversation," or some mixture – are nominally different yet effectively the same.

It is a short step from these two premises, (1) and (2), to the conclusion that an epistemic monopoly by the academic economics profession is a good thing – indeed a necessary precondition – for the veracity and progress of economic knowledge.

The "new" economics of knowledge represented in this volume arises from a desire to rethink both of these old premises. The rethinking of (1), as already suggested, employs antifoundational epistemologies to renegotiate the boundary between academic and non-academic forms of economic discourse. The possibility of extending the domain of economics in this way is suggested in a recent paper by Amariglio and Ruccio:

> The basic discursivity of knowledge – knowledge is not a mirror of nature but is constituted in and by discourse – precludes the idea that there exists a relation of adequacy or correspondence between one's knowledge and the "real" outside of it. The "relativism" that this concept of knowledge implies is not, to our mind, a statement of the impossibility of knowledge. To the contrary, it indicates the plurality of and (often incommensurable) differences between knowledges.
>
> (Amariglio and Ruccio 1994: 30)

The rethinking of (2) is inspired by several recent criticisms of the neoclassically conceived "free marketplace of ideas": the feminist epistemologies of Seiz (1992) and Strassmann (1993);[7] the institutionalist strain in the sociology and history of economics represented by Coats (1993); Colander (1989, 1991); Coats and Colander (1989); Klamer and Colander (1990); and Maloney (1991);[8] and the social/institutional economics of science outlined by Sent (1997), Mirowski (1995), Wible (1998), Hands (1994, 1997), and Davis (1997).[9] In addition, the essays in this volume are informed by knowledge studies literatures outside of economics including the social epistemologies of Fuller (1988), Pickering (1992), Longino (1990), and Rosenberg (1979); Gieryn's sociology of science (1983); Messer-Davidow, Shumway, and Sylvan's disciplinarity studies (1993); and deconstructive perspectives from philosophy and literary studies (e.g., Weber 1987) on the institutional forms and effects of academic knowledge production.

What is new in all of this is an attempt to move beyond the old model of knowledge – with its view of the knowledge economy as a closed conversation among professionally licensed knowers – toward new models in which the boundaries of the intellectual economy are redrawn to include a wider range of knowledge producers, consumers, and possibly other interested parties (stakeholders). In other words, it is an attempt to take anti- or postmodern epistemologies a step beyond where McCloskey and others have yet wanted to go – to philosophically resituate our academic endeavors within a wider "regime of truth" (Foucault 1980: 130–33). This gives rise to several new questions and sensibilities about economic knowledge.

First, it piques our desire to understand the boundary-work through which our profession continually reasserts the scientific quality and superiority of its knowledges *vis-à-vis* other, "unscientific" genres of economic discourse. What motivates these exclusionary rhetorics? What are their effects, positive and negative, on academic economists and on various others? In what ways do they secure benefits for members of our profession (employment, prestige, financial support, intellectual independence)? In what ways do they fuel our elitism by encouraging conspicuous demarcation of our knowledges and knowledge-producing activities from those of the layperson?

Second, this new economics of knowledge obliges us to ask: for whom are academic knowledges produced? "*Who uses which* knowledge to *what* end" (Fuller 1992: 397). And how well do our knowledges serve these ends? The old economics of knowledge assumes that "society" is the ultimate beneficiary of academic research, and that whichever knowledges best suit the needs and preferences of the expert community will do likewise for society. Some economists have questioned this assumption (Machlup 1962). Yet economic methodologists and epistemologists – whom we expect to think most broadly about our academic enterprise – are generally not among them. Most of their debates concern the scientific rules under which the disciplinary economy might speed up the growth rate of economic knowledge. The precise character of this knowledge or its private vs. public purposes are rarely discussed by these "old" economic philosophers.

Finally, this new approach invites a renewed appreciation of the two-way connections between knowledge and society – the social consequences of different knowledges as well as the social influences shaping the nature and authority of knowledges at different times and places. The old approach tends to minimize this latter connection by insisting that any knowledge's truth value can be determined in a "context of justification" that is independent of its "context of discovery" (Caldwell 1994). The former connection is also frequently denied via the received view of academic disciplines as private enterprises – professional bodies whose knowledge-generating activities are its own internal business and hence properly exempt from social analysis and criticism. In Gieryn's view this presumptive "exempting [of] members from responsibility for consequences of their work" is one further consequence of disciplinary boundary-work (1983: 792).

These three sets of issues are the principal foci of the chapters that follow. Drawing from a range of critical perspectives (rhetorical, postmodern, feminist, critical realist, and others), these fourteen essays point up a series of absolutist presuppositions in our received view of what, how, by whom, and for whom economic knowledges are produced. They also examine the impact of this received view on our relationships with various others: university students, experimental subjects, high school teachers and students, philanthropic foundations, non-academic economic discourses, academic colleagues in other disciplines, trade unions and other civic audiences, and still others. And, not least, they suggest avenues for the reconstruction of this received view. While they offer no unified or comprehensive treatment of these subjects, these essays provide a fruitful set of starting points for future studies of the interactions among producers and consumers of economic knowledge, academic and non-academic, and the contradictory effects – on ourselves and others – of our "old economics of knowledge."

The chapters to follow

Academic versus ersatz economics

The first five essays consider the discursive gap between academic economics and the "ersatz economics" of the layperson. In the opening essay (Chapter 2), Jack Amariglio and David Ruccio consider the transgressive effects of this ersatz economics on academic economists' professional authority. Their discussion is prompted by the surprising appearance of this academic/ersatz dualism in the introduction to McCloskey's price theory textbook, where she announces her desire to "attack ersatz economics again and again, with ever-increasing violence" (McCloskey 1985: 3). Amariglio and Ruccio see this scientistic moment in McCloskey as representative of a larger tendency in modern economics to treat ersatz discourse in an intensely ambivalent way: denigrating it as a non-discourse (miscellaneous nonsense, lacking structure and consistency) while also privileging it as a brand of nonsense so dangerous that it must be confronted and destroyed at all costs. They also analyze the structure of ersatz economics (in a US context) as a discourse, contrasting some of its concepts and modes of reasoning to those of academic economics.

Judith Mehta's essay (Chapter 3) follows several adjacent paths, viewing the academic/ersatz relationship as a vital nexus for modern (and also postmodern) economists. She argues that this dualism in its modern form exerts oppressive effects on the subjects of economic theory, those wo/men-in-the-street whom modern economic theory presumes to liberate. It oppresses them by domesticating their "commonsense world," "constraining observations of behavior within ordered and predetermined boundaries" such that "the Subject loses all his/her specificity, all his/her difference, in measures of the extent to which behavior conforms to a 'type': homo economicus." Drawing from her work in experimental economics, Mehta envisions a possible renegotiation of the academic/ersatz relationship, a mode of interaction between economic scientists and their subjects that would be "less totalitarian." Ultimately she would like to "take the 'ersatz' out of ersatz knowledges, to downplay the voice of academic rhetoric in economics by refusing its absolute authority in the construction of narrative." But "downplay" does not mean "remove." So we are led, with Mehta, to ask: what role and authority would academic economists have in this postmodern knowledge regime? In her words:

> How much of ourselves must we inscribe in the text in order to authorize it yet not be author? in order to give back to wo/man-in-the-street the authority which is theirs in the interpretation of experience? and yet to share in the critical possibilities of the knowledge production process?

Deirdre McCloskey (Chapter 4) responds directly to the Amariglio/Ruccio and Mehta essays, first by agreeing with several of their criticisms. She writes:

> I understand what all three are saying through an image popular in sociology, and brought into economics by Arjo Klamer and Stephen Gudeman. Sociologists speak of the street floor (called in phenomenology the "life world") and the eighth floor (the view of the positivist scientist). ... What irritates Jack and David and Judith is the positivist scientist sitting in his or her office drinking tea and calculating significance tests, occasionally glancing down at the street, and claiming loudly that the *only* way to do *real* Science is to get an office on the eighth floor.
>
> (McCloskey, this volume: 60)

In one respect McCloskey confesses to have changed her view. When writing her 1985 textbook she "had more faith than I do now in the *wertfrei* possibilities of social engineering." So she could not tolerate the "ersatz" view of the economy as a "field of ethics." Her view today is that economists should be more accommodating of these ethically charged ersatz perspectives. She concurs with Mehta's proposal to "[bring] the voice of the wo/man-in-the-street into economic discourse as one of many voices." Yet McCloskey still wants to educate the wo/man-in-the-street – to counter her tendency to "[think] that her self-interest is the same thing as the social good" by teaching a social point of view on economic affairs. McCloskey also challenges her critics not to project their preferred narratives onto the academic/ersatz couple (e.g., reading the former as "socially contrived" and the latter as "authentic," or the former as "Right-leaning/pro-capitalist" and the latter as "Left-leaning/anti-capitalist").

Arjo Klamer and Jennifer Meehan (Chapter 5) extend this discussion by analyzing the role of academic economists – and the academic/ersatz split – in the national debate and Congressional vote on the North American Free Trade Agreement (NAFTA) in November 1993. The NAFTA case is interesting, given the economic nature of the debate and its pro-NAFTA outcome in the Congress. We would expect it to be a heyday for academic economists. But Klamer and Meehan show that economists' expert knowledge was not central at all in the decisive stages of the Congressional debate. Arguments that few academic economists would endorse ultimately carried the day. Klamer and Meehan make sense of this surprising outcome through a careful analysis of the "rhetorical gap" between academic and everyday economic discourses, showing how academic arguments initially found favor on Capitol Hill yet in the end were "crowded out" by more politically charged genres of economic reasoning.

Robert J. Blendon *et al.* (Chapter 6, reprinted from the *Journal of Economic Perspectives,* 1997) offer an empirical investigation of the academic/ersatz gap in the current US context. Blendon and his co-authors report the results of two parallel 1996 surveys, one of economists and one of the public. They find a significant "perception gap" between the public and professional economists concerning the health of the US economy. The public generally has a bleaker picture of what has happened economically to the average family and is more pessimistic than most economists about the intermediate future. So individual perceptions of economic conditions tend to be at variance with those described in official statistics. In contrast to the views of Amariglio, Ruccio, Mehta, Klamer, and Meehan, Blendon *et al.* do not see this gap as a byproduct of rhetorical or discursive differences between professional economists and the public. They see it as primarily a result of economists' inadequate communication of their knowledge to the public. They suggest that academic economists spend more time educating the public about economic conditions and the implications of economic research.

It's not all academic

While the first five essays focus on the distance and difference between academic and non-academic knowledges, the chapters by Michael A. Bernstein, Radhika Balakrishnan and Caren Grown, and Suzanne Bergeron and Bruce Pietrykowski highlight points of contact between academic and non-academic loci of economic knowledge production. Bernstein (Chapter 7) presents a well-documented social history of US economic thought during and after World War II. Against the current backdrop of renewed demands for US economic expertise (in Eastern Europe, China, the former USSR, Central and South America, and elsewhere), Bernstein shows the far-reaching effects of World War II and the coming Cold War on the US economics profession and, in turn, the active role of US economists in the construction of the postwar *Pax Americana*. Then and now, he asks, what are the geopolitical, economic, and other processes whereby US economic knowledges become vested with professional-cum-imperial authority abroad? Bernstein carefully avoids the reductive logic of internalist or externalist histories by which the truth value of ideas is reduced to purely intellectual or extra-intellectual factors. As such it offers a valuable contribution to the history of postwar US economic thought as well as a suggestive sketch of how an evolutionary "social epistemology" of economics might proceed.

Balakrishnan and Grown (Chapter 8) look at the relationship between academic economics and philanthropic foundations in the United States, seeking grounds for greater cooperation in their efforts to produce, disseminate, and utilize economic knowledge. Reflecting on their work over the past decade as professional economists and as Program Officers at the Ford and MacArthur Foundations, the authors take fresh stock of the tensions and opportunities in this relationship. The relationship has been made difficult by academic economists' disinterest in forming research partnerships with foundations, and by foundations' lack of enthusiasm for much of the economic knowledge emerging from the academy. Yet Balakrishnan and Grown believe that many of these old tensions have begun to subside, on both sides, thanks to theoretical and empirical innovations in academic economics and private foundations' growing demands for economic knowledge. Recent foundation grants show new academic/foundation partnerships forming for precisely these reasons. The authors applaud these developments while emphasizing that such initiatives are unlikely to continue unless foundations and the economics profession continue to foster the conditions that have made these newly renegotiated partnerships possible.

Bergeron and Pietrykowski (Chapter 9) deliver an imaginative response to McCloskey's call to "extend the boundaries of the discursive terrain in economics," taking us outside the bounds of conventional academic economic discourse to the novel economics of Norman Rush's *Mating,* winner of the 1991 National Book Award for fiction. Their economic reading of *Mating* explores connections between Rush's narrative (and the economic theories which inform it) and recent economic development literature. In this way they place the novel – and their readers – in an informative two-way dialogue with the professional literature in this area: showing how this literature can inform the novel *and vice versa*; indeed, how this novel and the novel genre itself may have comparative advantages over conventional economic discourses in their capacity to represent complex causation and subjectivity. Their reading offers compelling support for the claim that novels such as *Mating* deserve to be included in an extended definition of economic discourse as the universe of texts and talk – academic and otherwise – through which economic knowledges are produced and disseminated.

Reconstructing the academic conversation

The third section revisits the philosophical ground of academic economic discourse itself, to see how intradisciplinary conversations might be improved through the development of more cogently pluralist philosophies of economic theory. John B. Davis (Chapter 10) considers the grounds on which our discipline might become self-consciously postmodern in the sense that no single Method or paradigm would be understood, even in principle, to govern our knowledge production-and-exchange activities. Davis worries that such a vision cannot be formulated or defended based on the "nihilistic relativism" which currently prevails among some postmodern economists. He proposes a "principled relativist" approach which eschews notions of transdiscursive Truth while insisting that the identity of each theory (paradigm) is not as fragmented or laden with indeterminacy as the nihilists believe them to be. Different theories can be identified as distinct, centered programs of thought and action, Davis argues. He regards this approach as vital to the postmodern reconstruction of economics as a discipline committed to discursive openness and pluralism since it provides (as "nihilistic relativism" does not) a framework in which to demonstrate and defend the diversity of economic discourse.

James R. Wible and Norman H. Sedgely, III (Chapter 11) answer the pessimistic appraisals of econometrics by several leading econometricians by suggesting that much of the problem may lie in unrealistic expectations of the role of econo-metrics in the neoclassical research program. Toward revising these expectations, they propose to rethink the philosophical framework in which empirical inference takes place. They outline an alternative vision of the empirical world (ontology) and of economic knowledge construction (methodology and epistemology) within which a more empirically informative econometrics might take hold. Writing in the tradition of critical realism, their view of econometrically generated knowledge is tempered by an emphasis on the complexity of the economic world, the difficulty of knowing it in any meaningful way, and the fragility of any knowledge of it we may obtain. Their approach is also pluralist in a Lakatosian sense, seeing economic knowledge as the joint product of a plurality of *theories* (namely, explanatory theories, observational theories, and theories of data construction) rather than as a relation of correspondence between theory and reality. Besides making econometric methods more intelligible and useful to practitioners, Wible and Sedgley see their framework as contributing to the improvement of the overall marketplace of ideas by providing a more coherent "empirical basis with which to rationally compare [rival theories]."

Teaching matters

The final section links several of the previous topics to concrete matters of teaching and learning. Ulla Grapard (Chapter 12) analyzes the narrative strategies found in an undergraduate "money and banking" textbook as an example of the subtly gendered aspects of teaching and learning and their impact on students' identification or disidentification with economics as a field of study. She focuses not on the written text but on eight illustrations (diagrams, cartoons, and motion picture stills) from the 1977 and 1993 editions of the textbook. Adapting Barthes's semiotic theory of the "rhetoric of the image," Grapard performs a rhetorical analysis of the text using these marginal features as points of entry. With a sharp eye for the gendered messages they convey to students, she concludes that these illustrations do not enhance learning as much as they serve to create a "club of insiders" by genderizing and sexualizing the learning process. By constructing the community of intended readers, the text simultaneously constructs images of the outsiders, the ones who do not belong to the economists' club.

Claire Sproul (Chapter 13) reflects on the role of the Advanced Placement (AP) exam in secondary economics education. Sproul has taught micro- and macroeconomic AP courses in independent high schools for nearly a decade. Numerous studies have appeared during this time citing a deplorable lack of basic economic knowledge among US citizens. Many US high schools (public and independent) have responded by adding economics to their core of required courses; and many of these courses now follow the AP curriculum. Sproul's essay describes the curious dual effect of the AP exam. On one hand, it enhances the prestige of economics courses within the secondary school community and draws more of the "best and brightest" students into these courses. On the other hand, the AP curriculum imposes such severe curricular constraints that teachers are left with little choice but to reproduce the mainstream–neoclassical knowledges deemed valuable by the AP curriculum and (not coincidentally) by the economics curriculum in most US colleges and universities. This undercuts many of the pedagogical advantages these teachers would normally enjoy. Sproul believes that high schools could play a leading role in the creation and dissemination of alternative economic knowledges. But the AP exam, as currently structured, stands in the way of such innovation.

Grahame F. Thompson (Chapter 14) complements Sproul's vision of potential reforms at the secondary level with an informative report on how "basic economic knowledge" is being reconceived at the university level in the UK. Thompson and his colleagues at Britain's Open University recently completed an ambitious rewriting of their introductory economics curriculum, culminating in the publication of a new textbook, *Economics and Changing Economies* (1996). Thompson's chapter highlights the goals and achievements of this book in the light of the continuing controversy among non-neoclassical teachers of economics over how best to confront the neoclassical orthodoxy. Thompson *et al.* add a new perspective to this old debate. They confront the micro/macro canon not by opposing it as a paradigm but by deconstructing it, a strategy Thompson calls "bypassing and outmaneuvering." Their premise is that neoclassical economics is not a unified whole and should not be treated as such. He rejects the notion that one should "condemn all of neoclassical economics out of hand" since in Thompson's view "[t]here is no 'all' of neoclassical economics. ... The way [it] operates is contingent – dependent upon what it is aligned with and under what circumstances, and with what pertinence it is 'read.'" A better way to convey the limits and blindspots of orthodox micro/macro is to teach it while also "challenging it from within," "taking the canon to its limits so as to demonstrate its implications in the changed context of the mid-1990s."

Richard McIntyre (Chapter 15) returns to the issues from which the volume began by sharing his "working knowledge" of rhetorical effectiveness as a PhD talking economics to a trade union audience. This is no simple task. But as McIntyre points out, facing these audiences is "not all that different from facing an introductory principles class." For either audience, McIntyre is a wise and worldly guide to the task. He offers four basic principles which he illustrates with examples from two of his own recent talks: (1) speaking to public school teachers' unions about "school privatization"; and (2) speaking to teachers and other unions about NAFTA, free trade, and comparative advantage. McIntyre draws from years of experience – over 100 speeches to union audiences since 1989. And he talks to us in precisely the ways he suggests talking to them: using humor and a keen awareness of his role as "economic expert" to deflate while also asserting the scientific pretensions of academic economics; toggling effectively back and forth between academic and everyday (ersatz) genres of economic talk.

Final thoughts

What do academic economists know? I believe we know a great deal, thanks in large part to our enduring intellectual diversity. The aim of this collection is not to cast aspersions on "what economists [don't] know." Its message differs in this regard from those of Blaug and others who feel that "economists don't know much of anything anymore" (Blaug 1998: 11) due to their excessive mathematical formalism and related problems. Rather, these essays highlight some underappreciated costs and contradictions of our "old economics of knowledge," a piece of professional/philosophical common sense that continues to shape what academic economists do (and how we think about what we do) in a number of important ways. These essays also contribute to the rethinking of this common sense, offering a wider view of what counts as economic knowledge and how our academic knowledges are situated within this wider discursive field. This suggests new ways of understanding and enacting our roles in this expanded economic conversation, a few of which are explored in these chapters.

Lastly, I am sure I speak for all contributors in saying that none of these arguments are meant as cheap jabs at McCloskey, whose work directly informs or inspires many of our essays. If anything they aim to extend McCloskey by using her own work against itself, pushing it in new directions. We hope to persuade her (and some of the rest of our colleagues) to stop envisioning the "conversation of humankind" as a strictly academic dialogue and to extend her "economy of intellect" to a more rhetorically open and heterogeneous space. Many of us take offense at Paul Krugman and others in our profession who shout and sneer at the wo/man-in-the-street from their eighth-floor offices. We would like Aunt Deirdre to join our protest, just as she would if these shouts were directed at Judith Mehta's work, or Jack Amariglio's, or Milton Friedman's, or even her own – to say something like (paraphrasing):

> [C'mon Paul] ... The cry "that's not economics" just means "I don't know what in the hell you are talking about and am not going to find out." ... It's a disgrace. [You modernist] economists play hardball without remorse [and] ... think ... it's made morally right by [your] model of the market.
>
> [But] specialization without trade is a few bricks short of a load. ... Just as differences of tastes or endowments are grounds for trade, disagreements about the causes of crime or the nature of capitalism are grounds for serious conversation, even with economists.
>
> We can be wise if we trade intellectually. But we cannot be social engineers hovering over society like a new priesthood, for if we were so smart we would be rich.
>
> (McCloskey 1994: 360, 76, and 83–84)

Notes

1. Kohler, for example, begins his *From Medical Chemistry to Biochemistry* with a discussion of the ways in which academic disciplines "demarcate areas of academic territory, allocate

the privileges and responsibilities of expertise, and structure claims on resources" (Kohler 1982: 1).

2. This is not to ignore the recent push among mainstream economists for a "new economics of science" to study, among other things, the "institutional infrastructures shaping the world of 'academic' science" through an "explicit exploration of 'the connecting links between institutional structures ... and incentives to acquire pure knowledge'" (David 1998: 15; see also Stephan 1996). But as yet this research shows no recognition of the philosophical and sociological issues raised by Fuller and others in the broader knowledge studies literature.
3. Sent makes a similar point, that "immersion in the science studies literature ought to lead economists into engaging in the self-referential enterprise of rethinking their own presuppositions" (Sent 1997: 5).
4. "So long as there is perfect or effective competition ... true or sound ideas will tend to prevail over ignorance, error, and vested interest" (Colander 1989: 31).
5. Until recently one might have dismissed this old economics of knowledge by saying "This stuff has no truck with *philosophers* of science. It's just the ersatz epistemology of a bunch of economists." But thanks to the work of Philip Kitcher (1993), the neoclassically inspired invisible hand of truth is alive and intellectually respected today among certain philosophers of science. Kitcher develops formal neoclassical-like models of knowledge production and regards them as highly rigorous formulations of a social epistemology. A sophisticated critique of Kitcher's approach, pointing out the many asocial features of his "social" epistemology, is offered by Mirowski (1995).
6. The term "antifoundationalist" refers to persons who embrace an antifoundational (or antiessentialist) epistemology, who view the theory/reality relationship as a mutually constitutive one in which theories play an active role in the definition and ascription of meaning of what is known to be "real." In economics this group would include, among others, Amariglio (1987), McCloskey (1985), Samuels (1990), Strassmann (1993), and Wolff and Resnick (1988).
7. The marketplace of academia lacks ... both free entry and perfect knowledge. ... [And] as any economist would agree, barriers to entry create price distortions. Exclusionary practices lead to a divergence between the social and private value of ideas. The private value is determined by the reward structure within the discipline and the complex processes by which economists have been selected and socialized, and the process by which other potential economists have been excluded.

   (Strassmann 1993: 57)
8. "[S]omething is terribly wrong in the economics profession. ... [T]he invisible hand of truth has lost its guiding influence," a loss he attributes to "the internal dynamics of the profession: who is allowed to become a member, who gets promoted, who gets paid what, who gets the laurels" (Colander 1989: 31–32).
9. [T]he supposed pluralism of the free market of ideas serves to mask a rigid hierarchical control of access to journals and grants in the American context, in conjunction with the most eggregiously lax attitudes towards the quality of reporting of empirical endeavor found in any science ... [a] most curious of conjunctures: ruthless policing of mathematical conformity in conjunction with anarchy in the empirical regime, all framed within an ideology of absolute freedom of inquiry.

   (Mirowski 1997: 274)

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Part I

Academic versus ersatz economics

2 The transgressive knowledge of “ersatz” economics

Jack Amariglio and David F. Ruccio

McCloskey and “ersatz” economics

The rhetorician of economics, Deirdre McCloskey, has become best known for her strident and persuasive attack on the “modernism” that has characterized economic discourse during much of this century, especially post-World War II neoclassical and Keynesian thought. In her call for economists to pay attention to the metaphors and narrative structures that comprise economic argument no less than they do the intellectual output of the humanities, McCloskey (1985a, 1990, 1994) has clearly identified and criticized the tendency in modernist economics to fetishize so-called scientific ways of constructing discourse. Her criticism focuses primarily on the related points that scientific discourse, in any field, and without question in economics, relies on standard, recognizable literary and discursive forms of persuasion and that the preference for what passes for science should not be grounded in the presumption that economists do something called theory which somehow is not a function of the forms of rhetoric and literary construction.

McCloskey’s appeal to economists to give up their modernist bias against exploring the implications of a rhetoric of economics leads her to the mostly pluralist view that, since the issue of distinguishing economics as a science from its non-scientific formulations cannot be a question of avoiding discursive forms or modes of persuasion, various economic schools of thought, perhaps especially those that constitute the mainstream, should give up the “sneering” that characterizes their attempts to lay claim to the necessary superiority of their efforts. In other words, McCloskey has established herself as perhaps one of the most eloquent – and, certainly within mainstream economics, one of the most important – defenders of those schools of economic thought (such as feminist economics and/or Austrian economics) whose ideas are often dismissed by those in the “core” of the profession as lacking scientific merit. It is not that McCloskey herself prefers such economic discourses. To the contrary, she remains a committed devotee of the Chicago School. It is instead that she regards the distinction between these other schools of thought and the mainstream to be more a matter of which forms of persuasion have had a better track record of working rather than one of category distinctions, in which the marginal economic discourses are said to be bad economics (or even not economics) in opposition to the mainstream which claims for itself the title of true science.

Now, all of this might lead a reader to the conclusion that McCloskey would be willing to extend her pluralist antimodernism to include less formal economic discourses as well. After all, if there is a discernible rhetorical structure to most present forms of professional economic thought, then there is no reason a priori to suspect that such a rhetorical structure is not present in those forms of economic thinking (and writing and conversing) that are practiced outside the academic economics profession. Indeed, one would expect that a trained and astute rhetorician of economics like McCloskey would enjoy sinking her teeth into the project of bringing to light the metaphors and narrative structures that constitute the formulations of economic reasoning that can be found in the popular press, centers for policy making, labor and business organizations, and in the last instance, in the expostulations of the "man in the street."

So, it is shocking, at least to us, to find that in the various versions of her textbook on price theory designed for use in the undergraduate economics curriculum (McCloskey 1985b), revised even after she established her reputation as the preeminent rhetorician of economics (1983a, 1983b, 1984, 1985a), McCloskey would adamantly and aggressively identify something that she calls "ersatz" economics which, she claims, should both be distinguished from legitimate economic theorizing and be unmasked, thoroughly criticized for its mostly nonsensical, even irrational, formulations and effects. In McCloskey's view, ersatz economics, the economics of the "man in the street," has no redeeming features and must be avoided like the plague by fledgling undergraduate economists. In some startling turns of phrase, McCloskey likens ersatz economics to astrology and dismisses it as both wrongheaded and ultimately destructive in its effects on economic knowledge:

> The economist should persuade the open-minded noneconomist that these economic propositions are true by the same method that an astronomer would use to persuade them that astronomical propositions are true: refined common sense, consistent reasoning, and ascertainable fact. ... The economist faces the special obstacle that the people being persuaded are themselves economic bodies and have elaborate opinions of their own. The Earth's own opinion about the movement of the heavenly bodies would probably be that they all move around the Earth itself in circles. Untutored economic experience is a bad teacher of economics, just as the unaided eye is a bad teacher of astronomy. ... Practically everything that you thought you knew about economics before studying it is wrong. ... The vocabulary of such ersatz economics, the economics of the man in the street, contributes to the confusion. ... This book will attack ersatz economics again and again, with ever-increasing violence.
>
> (McCloskey 1985b: 3)

While McCloskey does not go so far as to claim that ersatz economics is inferior because it is vulgar, the discourse of the masses, there is no question that its informality and lack of rigor make it unsuitable for anyone serious enough about conducting economic analysis and making sound judgments about economic issues. Not only then is ersatz economics dismissed by McCloskey as not contributing to economic knowledge; it is also seen to be one of the prime causes of the gross misconceptions that non-economists, untrained in the presumed rigors of mainstream theory, harbor in their approaches to everyday questions of economic activity and policy

Nor is McCloskey alone in her contempt for what she terms ersatz economics. In fact, much of the jockeying for position of different economic schools in the history of economic thought has relied on various maneuvers to discredit other schools as lying closer to popular opinion, ideology, values, and the like than to rigorous science. As we argue below, many economists during the modernist age, and clearly into the present, have built cases against their professional opponents on the grounds that there is no substitute for formal methods of reasoning in constituting the scientific core of the economics discipline. But, while it is true that the science/non-science distinction has enabled those in the profession to subject one another (not to mention their colleagues in other disciplines) to scornful criticism or invective, often at will, it is also true that even harsher judgments than McCloskey's have been proffered to distance economic scientists from the popular charlatans who are often thought to occupy positions of power in policy institutions and the media in their effects on the public's understanding of economic theory and issues. That is, professional, academic economists often speak with utter disdain about "ersatz" – or "pop" or "airport" – economics, and spend not a little bit of time either in feigning disinterest or in viciously attacking the "mistakes" that policy makers and politicians, journalists, advocacy groups, lobbyists, and just plain folks are prone to make in their ignorance of proper economic method.[1]

What we notice in these attacks, which can be seen in such events as the effete distaste with which so many notable economists in the United States originally greeted (and continue to treat) the diverse forces arrayed against the North American Free Trade Agreement (NAFTA) to the disgust that academic economists express when mulling over popular opinion polls of their students and the general public concerning the usefulness of price and wage controls, the reasons for the decline in manufacturing jobs, and other economic questions, is that academic economists treat most expressions of ersatz economics to be unworthy of serious scientific study. The reasons for this are not hard to fathom: they represent and enact precisely the conception of disciplinarity with which many (if not most) academic economists conduct their research and teaching and engage divergent schools of economic thought, simply ignore or visit abuse on the work of academic colleagues in disciplines other than economics, and, especially it seems, denigrate the economic ideas which are produced and circulate outside the academy.

Perhaps the most striking among these is the tendency to portray ersatz economics as a non-discourse, that is, as a mostly random set of irrational elocutions lacking both structure and consistency. Such a characterization is based on and enacts a particular treatment not only of ersatz economics but also of the discipline of economics itself. Ersatz economics, for example, is dismissed as non-knowledge precisely because – presumably – it does not follow the prescriptions for constituting scientific economic discourse. As an example of the mostly untrained mind, the statements that are said to characterize ersatz economics may sometimes mimic valid economic knowledge but this is mostly accidental or clumsy parody. Ersatz economics' parodic nature is incomplete – or perhaps, instead, it is pastiche – insofar as it resembles the real thing only occasionally and, even then, without any regard to the consistent modalities of argument of the original. The dismissal of ersatz economics as a non-discourse also presumes and performs a particular narrative of the disciplinary self: the conclusions and policy proposals associated with academic economics are understood to be the products solely of formal, logical procedures, untainted by the mundane values and norms, subjective biases, political orientations, passions, or interests of its practitioners. It is therefore possible for academic economists to admit (as McCloskey and others have convincingly demonstrated) that the *modes of communication* within their discipline share the metaphors and strategies of persuasion present in the everyday world. However, whereas they consider ersatz economics to be thoroughly imbued with such tropes and linguistic devices, they still treat the methods and utterances of academic economic *science* – the procedures and positive statements associated with actually doing, instead of talking about or presenting the results of, academic economic research – as if they were immune from the contaminating effects of rhetoric.

One would think, then, that academic economists would prefer simply to ignore ersatz economics since, as is most often the case, it takes only one or two sentences spoken from the vantage point of scientific authority to demonstrate its fundamental absurdity and inconsistency. But, we note, the attacks on ersatz economics are quite vitriolic, leading us to suspect that something of consequence is at stake here in the academic economists' imagination, not to mention their (our) practices. There is something clearly transgressive about ersatz economics, enough to make someone as careful and respectful as McCloskey nearly foam at the mouth in expressing her reactions ("attack ersatz economics again and again, with ever-increasing violence"!). So, not only are the attacks on ersatz economics generally devoid of any serious attempt to make explicit the "rules of formation" of its discursivity (since it is denied, at one level, the status of discourse). They are also characterized by clear warnings against the dangers of even thinking in these ways since thoughts are sometimes put into practice, as academic economists contended in their onslaught against arguments even remotely critical of NAFTA. Ersatz economics, then, is a transgression of the norms of the economics discipline (at least according to some of its practitioners), and, as such, must be defended against just as astronomy and the other natural sciences must be insulated and protected from the popularity of similar modes of expression such as astrology and magic.[2] The fact that ersatz economics may in fact hold pride of place in the minds of the public means that nothing short of a frontal attack – usually conducted with enormous pomp, if not ceremony – must be waged by academic economists to rid public discourse of the erratic shamanism implicit in ersatz economics. At least this is what appears to be the case if McCloskey's textbook (along with the pronouncements of Krugman and others) is viewed as our guide to the problem.[3]

In the remainder of this chapter, we discuss these two issues, that is, the discursive structure of ersatz economics and its transgressive nature – to the mainstream academicians. Given the novelty of the change in perspective proposed here, we are interested primarily in exploring the problems that one might encounter in establishing the discursive regularity of ersatz economics as well as in distinguishing the forms and/or moments of transgression of popular economic discussion. To state up front our views on these issues, we do indeed think that the distinction between ersatz economics and its purported opposite (academic, scientific economic discourse) cannot be one of a melange of unconnected and unfounded, biased, and value-laden opinions in contrast to the unified structure of a formal, rigorous, positive scientific discourse. Instead, we believe that the distinction lies elsewhere, mostly in the *effects* of these two (or at least two) forms of economic argumentation, in that they lead to quite different and incommensurable (although not isolated or completely autonomous) processes and bodies of economic knowledge. Additionally, we suspect that much of the anger and fear that professional, academic economists have felt and expressed toward ersatz economics has to do both with the latter's popularity and its occurrence in and among "the masses" as well as its sometimes antiauthoritarian, vaguely "left" or populist orientation (insofar as popular opinion on economic matters often calls attention to the permanence and growth of inequalities in income, status, and power).[4] That is, we think it is possible to find some of the transgressiveness of ersatz economics in the fact that it is not containable in either form or content within the bounds of mainstream economic discourse. And this overflowing or challenging of the boundaries is, indeed, threatening to many economists as it puts into question both the disciplinary conceptions and the hegemonic positions – theoretical as well as occupational – that (we) academicians wish to hold in and out of the academy.

The discursive structure of "ersatz" economics

The ongoing, insistent, and even violent efforts on the part of McCloskey and of other academic economists to eliminate what they consider to be ersatz economics and to replace it with economic science has not been matched by any comparable attempt either to theorize forms of economic knowledge other than their own or to investigate empirically the actual contents and procedures of the economic knowledges held by their students or by other non-economists. How many economics instructors are even interested in asking their students what theories they invoke to understand or explain the economic dimensions of the society in which they live? And if they do pose such questions – "How would you define economics?" "What do you think is the appropriate policy to lower unemployment?" – isn't their (our) usual response to immediately challenge the students' "wrong" answers (sometimes accompanied by a look of bemusement, all too often with a chuckle or some other sign of ridicule or derision) and then to begin teaching them the "correct" answer and, perhaps even more important, mode of reasoning?

As the moniker suggests, *ersatz* economics – the economic knowledge that students enunciate in the classroom, that non-academics bring to discussions of economic policy – does not need to be taken seriously, to be investigated for the knowledges which it may offer. Instead, it can be largely ignored, except as it serves as an obstacle to the reception of the proper "economic method." It is not surprising, therefore, that our survey of the last ten years of the *Journal of Economic Education* turned up not a single article which took as its object the discursive structure of ersatz economics, no article in which the author sought to investigate how high school or college students (let alone non-students) actually think about economics apart from academic economics. Of course, we did find a large number of studies in which the authors presented the results of "testing" the economic knowledge of students, many comparisons of the scores from "pretesting" and "posttesting" what students learn in high school and college economics courses. But the nature of the testing is always the same: students are asked a series of multiple-choice questions (e.g., from the TUCE, the *Test of Understanding in College Economics,* or the TEU, the *Test of Economic Understanding,* and the TEL, the *Test of Economic Literacy,* often given to secondary school students) before and after taking an economics course in order to determine how much they have "learned."

The issue that is never addressed is whether or not a process of "unlearning" is also taking place in the classroom, a process whereby prior knowledges are being set aside, deconstructed, and/or destroyed as a new knowledge is being put forward to take their place. Instead, economics education is portrayed, implicitly or explicitly, as a way of replacing non-knowledges – beliefs, opinions, half-baked ideas, myths, and so on – with knowledge – a combination of economic reasoning and positive conceptions of economic relationships and institutions. Thus, the idea of ersatz economics appears to eliminate any need for academic economists to examine the kinds of economic knowledges that their students, not to mention other people outside the academy, use to make sense of the economic dimensions of their lives.[5]

There is, however, ample evidence that students and others do have at least some form of knowledge of economic issues that does not derive from a formal course in economics. Not surprisingly, this evidence does not come from the kinds of tests economic educators are fond of – in which those who are tested are found to have more or less of a particular kind of knowledge, that which is set forth by "blue ribbon" panels of economists and enshrined in economics textbooks – but, rather, from opinion polls and surveys.[6] The *Gallup Report,* for example, regularly publishes the results of polls it conducts with representative samples of the US population on a wide variety of economic questions, including whether poverty is increasing or decreasing and where the blame for poverty should be placed (March 1985), the degree of confidence in US economic institutions such as banks, big business, and labor (July 1985 and annually in different months), how NAFTA will affect jobs and wages (August 1993), and whether or not minimum wages should be increased (May 1987 and February 1995). In each case, the vast majority of those polled are able to answer the question (based on the polls we have examined, from 1985 onward, those with "no opinion" generally run between 2 and 12 percent), thus indicating a general awareness of and knowledge about economics.

We recognize, however, that, from the perspective of ersatz economics put forward by McCloskey and others, the results of such polls can be interpreted in exactly the same terms that they apply to the ideas of their students: "prescientific" opinions and beliefs but not "real" economic knowledge. In fact, that is precisely the attitude adopted in the most comprehensive survey we have been able to find, the *National Survey on the American Economic System* conducted for the Advertising Council in 1974–75. Throughout the report, the authors lament the "fragmentary economic understanding" of the majority of respondents. And what is the criterion for such an overall assessment? In each case where those surveyed respond using terms that are not in the lexicon of academic economics, or arrive at judgments that appear to run counter to those of the majority of academic economists, the observation is that those surveyed have deficient economic knowledge.

As is often the case with surveys, the *National Survey on the American Economic System* may say as much about the attitudes of those who conducted the survey as it does about the ideas of those who were being surveyed.[7] Certainly in this case, the authors' own perception of their results seems to coincide with McCloskey's conception of ersatz economics, Krugman's scornful appraisal of "airport economics" and "pop internationalism," and with the authors of the pretesting/posttesting approaches published in the *Journal of Economic Education* whose overall orientation is that the majority of US citizens have little knowledge of economics and what they know is generally misguided or just plain wrong. This is also the view of Lee Hansen who, in reference to the "public's understanding of economics," can baldly state that "everyone judges it to be low" (1986: 152). What is needed, in their crusade to stamp out knowledges other than their own, is more economic education – not only at the college level but also in high schools and even in elementary schools. Thus, beginning some ten years before the Advertising Council survey was conducted, a Development Economic Education Program for teachers and students was launched by the Joint Council on Economic Education in three school districts. By 1989 there were 1,836 districts enrolled in the program, covering 39 percent of the precollege student population. A major effort is thus underway whose goal is to disseminate "official" academic economics and to eliminate and replace what is considered to be ersatz economics.[8]

But perhaps there is a different approach, a way of understanding that other economics which does not relegate it to the status of ersatz non-knowledge. A first step in this direction is provided by Arjo Klamer and Thomas Leonard (1992) who discuss what they call "everyday economics" as a particular form of conversation and story-telling, one which is different from – indeed, incommensurate with – that of academic economics. Whereas in their view academic economists tell stories that are mechanical and highly stylized, everyday economics is replete with accounts that are historical and anthropomorphic, moral tales that have heroes and villains. Thus, both academic and everyday economics are taken to be forms of conversation and story-telling; where they differ is on the specific metaphors that are used to produce their respective knowledges.[9]

The consequence of adopting the "rhetorical" approach put forward by Klamer and Leonard is to call into question the hierarchical arrangement in which the "science" of academic economics is privileged (at least by academic economists and by politicians and policy makers who attempt to play the trump card of academic economics in policy discussions) over the "non-science" of everyday economics. The resulting horizontal arrangement between academic and everyday economics is also shared by Stephen Gudeman (1986) whose work on alternative "models of livelihood" challenges the privileged status of the models used by anthropologists to analyze the economies of their subjects. In Gudeman's view, modes of livelihood are "local" cultural constructions and anthropologists would do well to interpret the models that social agents have already built rather than impose their own "universal" models of economic behavior and institutions, models that are often borrowed from the world of academic (especially mainstream neoclassical and Keynesian) economics.

What both the rhetorical and local anthropological approaches point to is that what McCloskey and others consider to be ersatz economics has its own discursive structures; it is not merely a less organized, inchoate version of the knowledge produced by academic economists. As we see it, one of the distinguishing characteristics of everyday economics is that it is often more *declarative* than the economics that is practiced in the academy: whereas academic economists tend to privilege the form of reasoning associated with economic science – the "economic way of thinking" they seek to impart to their students and lend to colleagues in other disciplines – and the formal methods that serve to guarantee scientific rigor, the practitioners of everyday economics tend to take firm positions on specific economic issues and problems. In this sense, McCloskey's "man in the street" emphasizes conclusions – specific observations about economic life, concrete explanations of economic events, advocacy of specific economic policies – instead of a general, scientific way of carrying out economic analysis.[10]

The focus on conclusions involves a particular way of producing and narrating economic stories: concrete actors and agents are seen to make the decisions that lead to specific economic events. Academic economists tend to refer to the interaction of elements in an abstract system to explain economic events, such as the interplay of supply and demand which results in a market-clearing price. Everyday economists, on the contrary, look for and focus on the decisions and actions of "real" people and institutions: car manufacturers raise prices, the Fed lowers interest rates, IBM decides to lay off workers, Japan protects its markets, the US Postal Service is inefficient, and so on. The emphasis is less on the elegance or parsimony of the form of argument than on the ways in which winners and losers can be identified and the responsibility for particular economic outcomes can be attributed to the activities of an actual agent (or set of agents) in the economy

Another characteristic of everyday economics concerns the *interests* that are associated with, and perhaps even served by, economic knowledge. Academic economists tend to link economic analysis and policy prescriptions either with no interests or with a presumed general interest; that is, economic science is in some sense "above" what are considered to be any particularistic – for example, national, sectional, or class – interests.[11] It seems that the only time academic economists invoke interests is when they wish to denigrate ersatz economics (or, for that matter, another school of economic thought) as the product of a fundamentally "limited" view, one that is confined to and biased by an idiosyncratic, "personal" standpoint. In everyday economics, however, interests are paramount. The presumption of economics produced outside the academy is that all economic knowledge – its own as well as that of the academics "who teach because they do not know how to do" – is, in a fundamental sense, interested. Even more, for non-academics economic knowledge only has validity, that is, it only makes sense and is worth listening to or reading, if it announces (or at least can be linked to) a specific set of interests rather than hiding behind by a presumed disinterestedness (or general, universal interest – which, in the end, can be identified as someone's interest) on the part of the speaker or writer.[12]

The idea that everyday economics can be distinguished by its focus on conclusions and interests begins to overcome what is perhaps the major obstacle in attempting to make sense of forms of economic knowledge other than academic economics: that of recognition. It is possible, we think, to recognize the utterances that comprise everyday economics as the products of specific economic discourses, produced according to their own rules of discursivity, displaying forms of discursive regularity that are no less (or, for that matter, more) coherent than those of academic economics. It is precisely these everyday economic discourses that give content and meaning to the way people think and talk about the economic decisions that they make (from financing a college education to purchasing a car) and the economic relationships and institutions with which their lives are intertwined (including the causes of a Teamsters strike, the effects of NAFTA, and the strategies to lower federal budget deficits).

Once this recognition is granted, it then becomes possible to look for and examine the *artifacts* of everyday economics, the texts and speech acts in which the discursive structures of economic meaning are embodied. These include the books and magazine articles written by non-academic economists, editorial columns and newspaper accounts of economic events, discussions on talk shows, the lyrics of popular music, literary texts and visual arts (including poetry, novels, movies, and videos), and conversations and discussions in a wide variety of social settings, from the dinner table to the shopfloor. In this sense, there is not a univocal everyday economics but a panoply of non-academic discourses concerning economic issues.[13] The range of everyday economic discourses which can be evidenced in the modern-day equivalent of Bakhtin's "carnival" is not limited to the discursive formations of academe – indeed, it may include quite stylized parodies of, and even concerted attacks on, the official academic language – but, instead, covers the most diverse genres, speaking positions, and social identities. While chided and dismissed by academic economists, these heterogeneous economic knowledges serve to create a lively debate about economic issues in the wider society.

We should not have been surprised, therefore, to find a meaningful (and often contentious) discussion about matters pertaining to the economy in our visit to a local high school classroom. There we encountered students with opinions and ideas about a wide variety of economic topics, many of which did not coincide with the views expressed by academic economists. For example, one student saw markets as mostly chaotic and disorderly, because every time she went to buy something the price had changed – as compared to the fundamentally orderly, tendency-to-equilibrium conception of markets proffered by many schools of academic economic thought. Another student saw "individual greed" as the main cause of all the major economic problems in the United States – to which still another student responded that "self-interest" was a good thing, something that he had in fact "learned" in the first nine weeks of the course in economics in which our discussion with the students took place. (Perhaps we should have asked the teacher to leave the classroom during the course of the discussion?)

The Advertising Council survey to which we referred earlier turns out to be an excellent source for understanding the discursive structure of everyday economics. The main reason is that, in contrast to the usual "tests" of economic knowledge that we found in the *Journal of Economic Education,* the survey was based on a series of open-ended questions in which respondents could choose their own terms. Thus, for example, the first question in the survey asked respondents to give a word or phrase to describe the US economic system. While 41 percent used terms that were considered by the authors of the report to be "descriptive of a system" (free enterprise, capitalism, etc.), and thus indicative of more or less correct economic understanding, another 48 percent used phrases that the authors considered to be "personal," to reflect an "attitude" (inflation, depression, bad, not working, etc.), and thus to represent an absence of economic literacy.[14] A wide variety of responses was also offered to all other questions in the survey – from the definition of profits to the merits of other economic systems compared to that of the United States – many of which the authors of the report correctly understood to fall outside the "language of economics" (see Table 2.1). From our perspective, it is precisely the fact that the respondents often used terms and phrases that are not those of academic economists (and, in the case of private enterprise, a term from academic economics, the fact that almost one-quarter of respondents could not define what it was) which gives evidence that a different set of discursive structures, those of everyday economics, serves to construct the economic knowledge of people outside the academy.[15]

This examination of the content and nature of everyday economic discourses challenges not only McCloskey's and others' views of those discourses – by opening up the possibility that what is considered to be ersatz economics is constituted by quite different rules of formation – but also their conception of the economics discipline itself. If everyday economic knowledges are elaborated with an explicit view toward announcing and engaging the social context and identities of the speaking parties – thereby unmasking all pretenses to a purely objective, universal viewpoint on economic issues – this also serves to question the idea that the formation of academic economics is a purely logical, scientific procedure. Choices are made at every turn in the argument: choices to exclude (or not) issues of power, decisions to downplay (or highlight) instances where equilibrium cannot be reached, the presumption of certain knowledge (rather than uncertainty or simply no knowledge whatsoever), and so on. In each such case, a theoretical move is made which represents and enacts a particular set of interests and subject positions, concerned with matters of individual prestige, social influence, and political orientation no less than the rules of mathematics and adherence to conceptual rigor – in short, the disciplinary identity of academic economists. It is from this position that academic economists zealously guard their domain and rule everyday economics to be simply a form of non-knowledge. in content between academic

The transgressive nature of "ersatz" economics

However, the question still remains: why is everyday economics considered to be so dangerous, so transgressive, that it provokes such ire on the part of McCloskey and other academic economists?

Table 2.1 Examples of economic language

	Academic economics	*Everyday economics*
System	Free enterprise Capitalism	Inflation Can't afford necessities Bad, not working, unstable
Good about system	Free enterprise Capitalism	Economic mobility Personal freedom
Role of advertising	Informs consumers	Creates false wants Causes high prices
How profits are used	Reinvested For research	To buy goods/services To buy luxuries To live on
Definition of "private enterprise"	Private/not public ownership	Don't know

Source: *National Survey on the American Economic System* (1975)

Part of the answer may lie, as we have suggested earlier, in the differences and everyday economics. For example, whereas academic economists tend to emphasize the gains from free trade (and, as President Clinton correctly understood during his first term, six Nobel Economics laureates were quite willing to support him by testifying to the merits of NAFTA), the majority of Americans were consistently opposed to the passage of the agreement with Mexico (see Table 2.2).

Another example concerns minimum wages. Students are often taught, especially by neoclassical economists, that minimum wages are an important cause of unemployment. However, in April 1987 a majority of Americans, 77 to 20 percent (the remaining 3 percent had no opinion), favored increasing the minimum wage. Almost two years later, in February 1995, the percentages were virtually the same: 77 in favor, 21 opposed, 2 with no opinion. So much for what is often alleged to be the fickleness of public opinion!

There are many other examples we could cite in which everyday economics arrives at conclusions that are different from, and in many cases diametrically opposed to, the ideas put forward by the majority of academic economists. The fact is, however, there are also many instances in which the two discourses tend to coincide – a lesson which many liberal and left (e.g., Keynesian, feminist, radical, Marxist, and other heterodox) economists have learned the hard way in the classroom and in attempting to get their views aired and favorably discussed in the media. The issue of decreasing the US federal budget deficit (both the need for it and the particular means of achieving it) represents one recent example: according to the February 1994 *Gallup Poll Monthly,* 74 percent of Americans – despite repeated remonstrations from the White House, and not a few academic (especially Keynesian) economists – supported a constitutional amendment to require a balanced federal budget. Other examples of overlap between everyday economics and the views of perhaps the majority of academic economists include the role of accurate economic forecasting as an appropriate test of economic theory, the nature and role of welfare reform, the preferable amount of government regulation of the economy, the effects of equal pay/equal worth provisions, and the informational role of advertising. In these cases, popular opinion often appears to be closer to that of mainstream economists than to their academic colleagues on the Left. In this sense, neither wing of the profession (nor even those of the ever-shifting middle) can sit comfortably in the presumption

Table 2.2 Free trade with Mexico

Favor	*Oppose*	*No opinion*	
August 1993	26%	64%	10%
July 1993	28%	65%	7%
March 1993	31%	63%	6%
September 1992	33%	57%	10%

Source: *The Gallup Poll Monthly* (August 1993) that their ideas are "naturally" in tune with or the correct palliative for the concerns expressed by the "man in the street." There would appear to be no simple, one-to-one mapping of ideas between academic economics and everyday economics.

What this hybridity suggests is that there must be another source of transgression, an additional cause of the degree to which mainstream academic economists feel the need to stamp out what they consider to be ersatz economics. The difference in language between everyday and academic economics suggests not only that non-academic economists sometimes reach conclusions different from their academic counterparts but that, even when they reach similar conclusions, when they appear to be in complete agreement, the knowledges of everyday economics represent a potential challenge to academic economics. Everyday economics, precisely because it is produced in and through a different set of discourses, always threatens to escape from the confines, to overflow the boundaries, of academic economics – and to turn against it. Since the knowledges of everyday economics are produced outside the academy, according to different concepts and procedures, they are not subject to the same mechanisms of control that academic economists impose on their own activity (and appear to want to extend elsewhere).

The case of NAFTA is once again instructive. According to the limits imposed by their own conception of appropriate scientific procedures (not to mention the views shared by the "community" of academic economists and the organizers of the conferences to which they were invited to present their work), academic economists tended to use the latest modeling technique of computable general equilibrium models to demonstrate the potential gains for both countries from a free trade agreement between the United States and Mexico.[16] The general population arrived at a quite different conception of the effects of NAFTA: 49 percent thought that US wages would decline (another 28 said that there would be no effect on US wages) while 68 percent believed that there would be fewer jobs in the United States as a result of the agreement. And this was on an issue in which there was a considerable campaign orchestrated from the White House (under two presidents representing different political parties), not to mention economics classrooms across the nation, to convince the public of the merits of a free trade agreement!

But returning one final time to the Advertising Council survey, there is an additional element that we think might be fruitfully explored in attempting to explain the danger that academic economists perceive in everyday economics: the fear of the masses. Throughout the report, the authors emphasize the fact that, in comparison to their definition of economic knowledge, "most of the population discuss economic concepts in general, even vague, terms." Moreover, they go out of their way to note that specific demographic groups – "low income earners, those in lower level occupations, the old and retired, homemakers, those with low educational attainment, blacks, and those who are inactive in community affairs" – tend to use terms outside the "language of economics," to exhibit what they consider to be a "fragmentary and incomplete" knowledge, more than did other parts of the population – "those who have already attained some measure of success in American society" such as college-educated, upper-income people in high-level occupations. A good example is the definition of private enterprise: the first set of groups exhibited a much higher tendency not to be able to define that term – between 26 and 51 percent – than did the second – 8 to 23 percent (see Table 2.3).

What this seems to suggest is that the discursive divide between academic and everyday economics not only limits the extent to which academic economists can influence and shape the knowledge of others but also that the other, everyday economics to which it stands opposed represents more than just another knowledge or discourse: it is directly associated with people – a "general population" and, especially, parts of that population – who, since the beginning of the modern age, from the moment when academic economics first emerged, have been constituted as the rebellious masses, the "masterless men" (Bauman 1987). It is these people who, from their positions outside the academy, with their "ersatz" economics, represent a challenge not only to the modes of analysis and policies favored by academic economists but also to the very positions from which academic economists speak.

To be clear, our point is not to celebrate the enunciations of and positions taken by everyday economics. We find ourselves disagreeing with the content of everyday economic knowledges probably just as often as McCloskey and other – both mainstream and heterodox – economists. Our project, rather, is to challenge the terms in and through which academic economists have sought to subvert the discursive standing of everyday economics, to expose what such virulent and often violent responses disclose about the disciplinary identity of academic economics, and to open up a space in which the utterances of everyday economics can be read and heard – and thus engaged – differently.

Table 2.3 Definition of "private enterprise" (by selected demographic groups)

	Private/not public ownership	*Don't know*
Total	50	24
Black	45	32
Skilled, operatives	48	26
Income under $7000	41	36
8th grade or less	30	51
Full-time homemaker	47	32
White	51	23
Professional, managerial	57	13
Income over $20,000	55	17
Complete college	61	8
Work	54	19

Source: *National Survey on the American Economic System* (1975)

In our view, the presence of economic "clowns," "charlatans," and "street performers" who deign to speak in languages other than the officially designated one – and, in this way, to mock and challenge the authority that academic economists attempt to bestow upon themselves – serves to remind us that economic discourses (no less than other discourses of the social and natural world) are inextricably bound up with the construction and contestation of social identities. The disciplinary identity which has been laboriously produced by academic economists represents an attempt to centralize the language of economic discourse and, thereby, to place themselves in the privileged position of speaking for, to, and about what they consider to be the ill-informed, ignorant masses. Those who operate outside academe have failed, however, to exhibit the appropriate esteem and dared to oppose the self-proclaimed authenticity and incontestability of academic economics. They listen and appropriate the official teachings – and then proceed to make innumerable and far-reaching transformations to adapt them to their own interests and according to their own rules (de Certeau 1984). They succeed in producing their own economic discourses and social identities which, in the end, escape the vainglorious attempts at mastery and containment on the part of academic economists. They do not simply accept and obey – and in this they transgress.

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Notes

1. Paul Krugman, for example, wrote the original edition of *The Age of Diminished Expectations* (1990) in order to criticize what he calls airport economics (which he distinguishes both from the "Greek-letter" economics of academic economists and the "up-and-down" economics of business journalism). From the preface: "Along the way this book tries to convey a number of things that professional economists know but that the broader public generally does not" (1990: xii). Elsewhere, he baldly asserts that "economists are basically right and the general public basically wrong about international trade" (1993b: 362). On the same theme, he argues that

   > Most of what a student is likely to read or hear about international economics is nonsense. ... [T]he most important thing to teach our undergrads about trade is how to detect that nonsense. That is, our primary mission should be to *vaccinate* the minds of our undergraduates against the misconceptions that are so predominant in what passes for educated discussion about international trade.
   >
   > (1993b: 23; emphasis added)

2. Mark Blaug also raises the specter of astrology (to which he adds other "non-sciences" such as witchcraft and faith healing) displacing "science" in his discussion of the methodology of

economics: "Must we really conclude after centuries of systematic philosophizing about science that science equals myth and that anything goes in science as it does in dreams? If so, astrology is no worse or better than nuclear physics" (1980: 44).

3. In a private communication (April 1995), McCloskey did admit that she might have gone "over the top" in her textbook. Our criticisms of her view, and our joining her together with other economists' dismissive conceptions of ersatz economics, are not intended as a personal attack (for, as we write above, such a stance seems to be inconsistent with other dimensions of her work, for which we have great respect) but, rather, as a way of questioning and posing an alternative to the conception of ersatz economics that her "lapse" symbolizes. If there are differences between us that remain, they stem (at least partly) from the fact that, whereas McCloskey is inclined to borrow from the writings of such thinkers as Richard Rorty and Wayne Booth, our own work is more influenced by that of Michel Foucault and Louis Althusser. The result is that we probably hold divergent views concerning not only how discursive formations work (e.g., how statements are produced, which statements are included or excluded, etc.) but also how power is exercised in and through discourse.
4. For example, according to the March 1985 *Gallup Report,* fully 70 percent of the respondents said that the percentage of Americans living below the poverty line was growing and 60 percent believed that the distribution of money and wealth in the United States "should be more fairly distributed among a larger percentage of the people." Of course, as the history of right-wing populism in the United States and elsewhere demonstrates, expressing concern about the existence of and increase over time in economic and social disparities does not necessarily lead to leftist politics. However, whether basically left wing or right wing (or, for that matter, a complex combination of the two), both tendencies often involve a critique of the status quo and the forms of authority – including academic economic discourse – with which it is associated.
5. While recent studies of "genre" knowledges have focused attention on the rhetoric of disciplinary communication (see, e.g., Berkentotter and Huckin 1995), the tendency is still to emphasize the ways in which such genre conventions are learned and practiced – and not to consider the possibility that other forms of communication are perhaps disabled and displaced by socialization into disciplinary communities.
6. Another source is child psychology. Berti and Bombi (1988), for example, have studied children's conceptions of such issues as work, buying and selling, wages and profits, and other aspects of economic life. As an illustration, Fabrizio (age 10) says that "things which people work on more cost more and things cost less which people get less tired making" (p. 112). However, the fascinating research conducted by these child psychologists is ultimately compromised, we think, by a developmentalist approach that focuses on the "transition from a primitive to a more sophisticated and correct understanding" (p. xi) which, in their view, is the set of ideas held by adults.
7. A similar point is made by Edward Said (1978) concerning the conception of Orientalism produced within and by the West and about anthropology in considering ethnographies of the "other" (see, e.g., Clifford 1988).
8. The theoretical underpinnings and the actual methods of this effort are discussed in Peterson (1982), Walstad and Soper (1991), and Walstad (1992). Julie Nelson and Steven M. Sheffrin (1991) have criticized the "ideological biases" in current versions of the TEL.
9. While we agree with Klamer and Leonard in terms of their overall approach, they probably overstate their case when they refer only to the formal, mechanistic side of academic economics. Such an approach may be the *aspiration* of academic economists but, in our view, there is an abundance of heroes and villains, moral tales and historical epics to be found in existing statements concerning profit-maximizing firms, rent-seeking agents,

welfare theorems, the role of Robinson Crusoe, and so on. For example, Susan Feiner has shown that, beneath the veneer of mathematical formalism, the neoclassical conception of the market actually "mirrors the fantasy mother of the unconscious" (1995: 156).

10. George Bernard Shaw's version was that "If all the economists were laid end to end, they would not reach a conclusion."
11. Leonard Silk invokes a similar argument as one of the possible explanations for why academic economists have had little success in educating the public on economic issues:

> Economists are as politically biased as most other people, but they hide their biases behind a scientific curtain. This is not necessarily done from a deliberate and conscious desire to deceive. ... But the public does recognize the biases of different economists and discounts their "scientific" or "positive" analyses for bias.
>
> (1986: 142)

12. This echoes Mikhail Bakhtin's approach to the language of everyday speech in which such factors as "*who* precisely is speaking, and under *what* concrete circumstances" (1981: 340) are of decisive significance.
13. Similarly, academic economics is not limited to a single theory or method but, instead, includes a wide range of different – we would argue, incommensurable – discourses. See, e.g., the discussion by Amariglio, Resnick, and Wolff (1990).
14. The other 11 percent used "mixed" phrases, referring both to a system and an attitude.
15. A similar issue arises in the case of literary and cultural studies where economic concepts and theories are often invoked and deployed – ranging, for example, from "symbolic economies" and "economies of desire" to the economics of "postindustrial society" – but not in a language that is recognized, much less understood or used, by academic economists. See Amariglio and Ruccio (1998) for a discussion of the existence and effects of these different economic languages.
16. See Cypher (1993) for a discussion of the role of academic economists in the "selling of NAFTA."

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look at me look at you look at me look at you look at me look at
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Look at me look at you

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boundary

Dear Judith,

I am writing to invite you to contribute an essay to a Routledge volume. ... This volume will explore connections between economics as discourse and economics as discipline; between discourse broadly defined (academic and non-academic) and the disciplinary aims and practices of modern economic science. Your work on experimental economics and game theory strikes me, as it did Jack, as a terrific fit for this collection. It would particularly enrich the opening chapters in which Amariglio/Ruccio, Klamer/Meehan, and McCloskey will examine some of the subtle and not-so-subtle boundary-work through which academic economists distinguish and elevate their Knowledge vis-à-vis the ersatz economics of the “man in the street.” I’ll ask you to send a five-page prospectus by September 30.

prospectus *n.* a printed document advertising or describing a school, commercial enterprise, forthcoming book, etc. [L, = prospect f. *prospicere* (as PRO-, *specere* look)]. *The Concise Oxford Dictionary* (1990: 959)

Future anterior

So, what is in prospect? What will have been done? Let's begin with a concrete idea, rather than an abstraction: that what is being done exists in the event of its own production, an event in which we all participate. This is to say that here you participate with me in the search for a mode of seeing which will enable the unseen to become visible and a mode of re/presentation which will enable the unrepresentable to represent itself. It's a reflexive act, continually referring us back to the Subject. But who, or what, is the Subject? S/he is me, and s/he is you; s/he is wo/man-in-the-street, that shadowy object who is supposed to be the subject of economics and yet whose visibility under the auspices of science and objectivity is regarded as unnecessary. Since her/his behavior never quite comes up to the mark of homo economicus (being always something more, or something less, than a well-behaved set of preferences), s/he is an ersatz being, relegated to the interstices of the discipline. And so iconolatry displaces her/him: in a development on the agenda of the Enlightenment philosophes, neoclassical economists regard the advent of homo economicus as the point at which modern knowledge begins, thereby signaling its conclusion (it's ironic, don't you think, that lifting the veil wraps up the Subject?). But according to recent philosophical events, the Subject – in its struggle for re/presentation – is where more commonsense knowledges begin to be restored to us.

> Luce Irigaray was asked:
> How can one be a woman, and an analyst, and a professor, for example? How can one engage in "speaking (as) woman" when some people do the talking and others listen? Here, for example, there is one person speaking and some others listening ...

> This is Luce Irigaray's response:
> If I am speaking to you today, it is because I have already heard the questions you have asked me. But in fact, if only from the scenographic point of view, the mechanism operating here bothers me a lot. And it is perfectly clear that when I speak like this – in a seminar, a lecture, a colloquium ... – I am obliged, compelled, to go back to the most commonly spoken form of discourse. I am trying to circumvent this discourse, trying to show that it may have an irreducible exterior. But in order to do so, it is true that I have to begin by using standard language, the dominant language ...

The first task is to broach the boundaries imposed on knowledge through the modern discursive regime; we must find other ways of looking, other ways of interpellating ourselves and our Others if, indeed, we are to reappropriate the s/Subject. So I'll take a break from the finish of a linear text and insinuate myself and my Others in its ruptures. I take my cue from Roland Barthes, who regards discourse as "any significant unit or synthesis, whether verbal or visual: a photograph will be a kind of speech for us in the same way as a newspaper article; even objects will become speech, if they mean something"

(Barthes 1973: 110). In other words, I shall look beyond the written text in order to engage in dialogue with you. So, there will be some visual imagery, but the typographical arrangements of the piece also have their say. It may be that through the use of a much broader discursive strategy than is common under the discipline, you and I will see things differently, and will acquire a different understanding of the knowledge construction process. It's something I desire for this discipline which, in my view, has imposed certain arbitrary and unnecessary constraints on knowledge through an exclusive focus on modern theoretical protocols. Here, I pose for you, of course, and not without risk. But there's also a pleasure to be derived from the process: from not knowing quite what the prospect is, from ex-posing the uncertainties associated with the task of authorship, and from deconstructing the presumed linearity and progressivity of the text. So, as you look at me look at my subject/s; try thinking of this essay as an experiment in looking. My anticipation of your act of consumption implicates you in the production: I'm looking at you looking at me.

> It can happen that I am observed without knowing it, and again I cannot speak of this experience, since I have determined to be guided by the consciousness of my feelings. But very often (too often, to my taste) I have been photographed and knew it. Now, once I feel myself observed by the lens, everything changes: I constitute myself in the process of "posing," I instantaneously make another body for myself, I transform myself in advance into an image. This transformation is an active one: I feel that the Photograph creates my body or mortifies it, according to its caprice.
>
> (Roland Barthes 1993: 10)

For several years now, I've been working in experimental economics. In my Department, there are several of us who are transfixed by rational choice theory; we can't help looking at

That having been said, the form of your question is quite interesting in itself. It means something like this: how can one be a "woman" and be "in the street"? That is, be out in public, be public – and still more tellingly, do so in the mode of speech. We come back to the question of the family: why isn't the woman, who belongs to the private sphere, always locked up in the house? As soon as the woman leaves the house, someone starts to wonder, someone asks her: how can you be a woman and be out there at the same time? And if, as a woman who is also in public, you have the audacity to say something about your desire, the result is scandal and repression. You are disturbing the peace, disrupting the order of discourse. And at that point there are no two ways about it, you're shut out of the university, in fact you're excluded from all institutions.

(Luce Irigaray 1985: 144–45)

it. As a consequence, we spend a great deal of time running experiments designed to refine, refute, or displace it. Of course, not all economists are convinced that the experimental methodology is appropriate to economics; Friedman (1953) and Samuelson (1976) are early examples of opposition to the idea. The debate is a long-running one, and I could write an essay on this subject alone. Two key issues are the extent to which the experimental environment can be controlled, and whether this environment is as rich as the one described by the theory under evaluation (see, for example, Davis and Holt 1993). I would simply argue that the extent to which experimental economics has become a legitimate tool in the service of the discipline (exemplified by the significant number of sessions devoted to the report of experimental results at meetings of the American Economic Association) demonstrates changing perceptions of what is meant by scientific objectivity. But writing now, my concerns are elsewhere – and, I would say, more fundamental. I want to discuss this thing called "observation," what is at stake in the act, and why we do it.

So, no, Luce Irigaray, this institution hasn't excluded me – yet; I'm under a more subtle form of discipline, the short-term contract.

Camera obscura/camera lucida

In interrogating the place of photography in social anthropology, Elizabeth Edwards (1992) refers to "the modern recording and interpretative problem." At issue for Edwards is the location, establishment, and integration of recorded material among traditional texts when new and very different cultural and epistemological contexts make it impossible to view the material with the same conviction with which it was once viewed. She notes that when photography first emerged as a medium for transcribing and transmitting anthropological information (in the late nineteenth and early twentieth centuries), a historical (let alone, any other) perspective was rarely seen as integral to the process; the photograph was a "truth-revealing mechanism," and photography a mere ancillary tool in the fieldworker's arsenal. In other words, the photograph simply mirrored reality. But many contemporary writers, from across the arts, humanities, and social sciences, now call into question the Western construction of the Other which is realized in the artifacts, both literary and photographic, inherited from their predecessors. (Edward Said's work on the construction of cultural Otherness in *Orientalism* (1978) and *Culture and Imperialism* (1993) exemplifies this movement in literature.) Such imagery is now seen to say more about the intentions and ideology of the observer than it does about the subject it has purportedly captured; as such, anthropological photography, both then and now, continues to be a valuable resource, but situated within radically different agendas. At the same time, contemporary writers struggle to locate new theoretical spaces in their analyses for the representation of Otherness, spaces in which Otherness is recognized without being colonized, domesticated, or essentialized, and yet which add to our understanding of human phenomena.

In my view, the treatment in modern economic discourse of the observations acquired from laboratory experiments is problematic in ways which are analogous to those identified by Edwards in discussing the anthropological photograph. Most obviously, both the photograph and the experimental observation constitute recorded material. In addition, both are used either to exemplify "the real," or to make general statements about it; both are part of the modern quest for realism, truth, and certainty; and both embody, as Edwards argues for anthropological photography, the ultimate failure in positivist terms of these endeavors. That is, it may be that the photograph and the experimental observation do, indeed, contain within them strands of meaning, elements of representation, some evidence of some thing. But, as Edwards argues, "meaning shifts in a delicate and possibly indeterminable balance between creator, consumer, and occasionally subject." This being the case, modern preoccupations with fixity and stability, approached in the case of economics through the logocentric lens of methodological individualism, necessarily foreclose on understanding. To develop this view, I focus on three characteristics of the modern discursive regime which I see as implicated in its failure.

First, both photograph and observation constitute a snapshot, an image of some thing or event captured in a moment in time, be it "Potlach, Alert Bay, British Columbia" or "the choice of lottery A rather than lottery B" in a laboratory experiment. In both cases, the act of capture immediately displaces and relocates the thing in a space which is out-of-its-time, but not timeless. Knowledge is something that is known (and not that was known) and so primacy is given to the image in its present moment; thus, the thing that was undergoes a transformation into something that is. Symptomatic of a problem here is the common practice amongst authors as they write about their image (since it has become "theirs", they have appropriated some part of the thing for themselves) of slipping between grammatical tenses:

"Without ceremony, the women fanned out and started to pick. Grabbing my camera, stopwatch, and notebook, I hastened to follow them. ... I sampled how rapidly the women were able to pick."

Caption to photograph appearing on the same page: "Tin!kay packing mongongo nuts at !Gausha."

"The tools and techniques of gathering are relatively simple. The knowledge of plant identification, growth, ripeness and location, however, is extremely complex, and the !Kung women are highly skilled at distinguishing useful from nonuseful or dangerous plants and at finding and bringing home sufficient quantities of the best food species available."

Richard B. Lee (1984)

"We divided the subjects at random into two groups, Group C (for "coordinating") and Group P (for "picking"); there were 90 subjects in Group C and 88 in Group P."

"The results of the experiment are summarized in Table 4.2."

"Two summary statistics are reported for each question and each group: c, the coordination index, as defined in Equation (1), and r, the range of responses."

"Our results confirm that players of pure coordination games are more successful at coordination than they would have been, had they ignored all labeling and thus chosen strategies at random."

Mehta, J., Starmer, C., and Sugden, R. (1994)

it's as if they're grappling with a tensility which refuses to be annulled. In describing how the image was taken, the author says "This is what I did;" and then in describing what has been made of it, the author says "This is what it means."

This temporal (and also, the spatial) displacement of the object is at once motivated by, and an expression of, the modern insistence on controlling and ordering knowledge according to the scientist's own frame of reference, an act which can only take place under the assumption of the superiority of that frame of reference. Thus, in anthropological photography, Edwards points to how an unequal relationship was sustained through a controlling knowledge which appropriated the "reality" of the observed subject and organized it according to its own protocols and preoccupations:

> Photography was in many ways symbolic of this relationship. It represented technological superiority harnessed to the delineation and control of the physical world, whether it be boundary surveys, engineering schemes to exploit natural resources, or the description and classification of the population. ... The emergence of scientific anthropology was a

> coincidental and not unrelated part of these processes, for it was through anthropology that the power of knowing was transformed into a rationalized observed "truth."
>
> (Edwards 1992: 6)

Up until the demise of empire, the narrative of the Other was required to be transformed under the discipline of Western anthropology's ordered structures in order to preserve and reinforce the convenient fictions underwriting imperialism. As Edward Said points out, the main battle in imperialism is over land; but "The power to narrate, or to block other narratives from forming and emerging, is very important to culture and imperialism, and constitutes one of the main connections between them" (1993: xiii). Indeed, in a development of arguments advanced by Michel Foucault (1980) and Jean-François Lyotard (1986, 1988), I suggest the control over narrative epitomized in the anthropological photograph articulates the broader quest for control over the knowledge production process. And so in modern economics, as in early anthropology, we find the noisy and disordered behavior of wo/man-in-the-street rendered benign and impotent under the discipline of rational choice theory's discursive regime. Here, we find the unequal relationship between academic and non-academic discourse manifest in the functional forms in which meaning is expressed: the rhetoric of number provides the technology for the displacement of the human subject and the appropriation of knowledge, while brackets perform the task of constraining observations of behavior within ordered and predetermined boundaries, a task which in anthropological photography is performed by the span of the lens. For example, none but the trained economist is likely to recognize the expression "$S_i p_i U(x_i)$" as a meaningful rendition of the rational actor's preferences over some set of objects, let alone to challenge the idea that it represents every facet of the situation in which one is required to choose between alternative possibilities. And when behavior spills out beyond such tightly ordered boundaries, most economists will appeal to the inexperience of the actor and, hence, their *ad hoc* system of beliefs and expectations (Smith 1989), or an ephemeral concern for "fairness" (Binmore, Shaked, and Sutton 1985), to explain the spillage rather than entertain the possibility that the economist's axiomatization of choice has failed to capture behavior.

A second characteristic of the modern discursive regime is the elliptical treatment of the ideology and preoccupations of the author in the text. These aspects of the knowledge production process determine the s/Subject under observation and how it is represented, and yet are regarded as irrelevant under the presupposition that the transcendental observer is objective (and, therefore, truthful) and parsimonious in depicting the phenomenon under study. Provided the observer can demonstrate rigor in the practice of scientific protocols, the image is regarded as

> … what I see is that I have become Total-Image, which is to say, Death in person; others – the Other – do not dispossess me of myself, they turn me, ferociously, into an object, they put me at their mercy, at their disposal, classified in a file, ready for the subtlest deceptions. … Death is the eidos of that Photograph.
>
> (Barthes 1993: 14–15)

unmediated; it is authentic. It can then be assumed, for example, that !Kung women pick mongongo nuts at the same rate regardless of the presence or absence of the anthropologist Richard B. Lee; by extension, it can be assumed that Lee's transformation of the event into meaning is authoritative. Hence, a formal third-person account of research protocols (e.g., a description of the mechanics of the laboratory experiment) takes primacy over statements of authorial intent. Indeed, it is rare to find an anthropological photograph which includes an image of the anthropologist (at least, outside of personal diaries), or an experiment in economics reported in the first person.

In order to observe, there has to be one who observes; yet it becomes essential to preserve the myth of absence in order to sustain the conviction that there is no relationship between observer and observed, that there are no interventions, no interpenetrations of one by the other, that the image is "clean." This being the case, the consumer of images can look at what has been produced, knowing it's not "the real thing" and yet knowing it to embody some original property of the thing itself. The consumption of knowledge is thus an act akin to voyeurism in that the reader can look at the act, event, or object, but without actually engaging in it or feeling implicated in its production. The producer is simply an agent, or tool, of the representing culture, whose responsibility for the commodity terminates with the lifting of the veil and the exposure of the s/Subject. And the Subject is the performer in a peep-show; s/he's implicated in the production of a commodity, but it's a commodity which cannot be bought back at any cost. S/he has no control over the uses to which the performance is put or who looks, over where the performance begins and where it ends – s/he's locked into endless action replays of a role in which s/he has no voice and a game played according to someone else's rules. It's the death of the Subject – an embalmment.

A third characteristic of the modern discursive regime has been waiting in the wings. The producer of the text, in displacing the object of study and then fixing it according to the protocols and preoccupations of the representing culture, acts as the agent of classification. In anthropological photography, Edwards points out that "the inevitable detail created by the photographer becomes a symbol for the whole and tempts the viewer to allow the specific to stand for generalities, becoming a symbol for wider truths, at the risk of stereotyping and misrepresentation" (Edwards 1992: 7). In experimental economics (indeed, throughout scientific economics), the eye of the observer is fixed, fetish-like, on the detail of behavioral outcomes to the exclusion of the processes underwriting those outcomes; that is, "outcome" comes to symbolize the whole and the general, and to displace the array of alternative modes of expression of the event in favor of the taxonomies of rational choice theory. These taxonomies satisfy the desire for fixity; they put off a confrontation with mess and

> **Fetishism** takes us into the realm where fantasy intervenes in representation; to the level where what is shown or seen, in representation, can only be understood in relation to what cannot be seen, what cannot be shown. Fetishism involves the substitution of an "object" for some dangerous and powerful but forbidden force.
>
> Stuart Hall (1997: 266)

disorder (castration anxiety?); they have exclusive charge over the signifiers of meaning, and yet they are external to the domain of wo/man-in-the-street. It's an act of iconolatry: the Subject loses all her/his specificity, all her/his difference, in measures of the extent to which behavior conforms to "type": homo economicus.

I-con, therefore, I can

It is on these grounds that I want to claim that the modern discursive regime constitutes a form of iconolatry which has subjugated, or rendered ersatz, the other knowledge of wo/man-in-the-street. The observation is an operator in the narrative of science; it acts as a dis/connecting device (or "on–off" switch) to mark definitive boundaries between truth and fiction, nature and culture, producer and consumer. The observation is therefore an indispensable device in the modern narrative of the real. As such, excision of this node (and the myths associated with it) is necessarily productive of alternative accounts of phenomena with greater meaning and relevance to their human s/Subjects.

Ironically, science has also presented us with technologies for an escape from iconophiliac modes of representation. But before discussing these, it becomes necessary to ask: what is "the real thing" which modern academics believe it is possible to observe through the sense organs, and subsequently to record and classify, and thereby to transform into knowledge? Baudrillard (1988) puts forward a definition of "the real" which, under science, we could easily be seduced by; the real is "that for which it is possible to provide an equivalent representation." Yet this definition invokes the deeper question: what is the imperative to represent? Here, I treat "representation" as "the production of meaning through language, discourse and image" (Hall 1997).

Martin Heidegger characterizes the modern period as "the age of the world picture." This is an epoch in which "Only that which becomes object [in this way] is – is considered to be in being" (Heidegger 1977: 127); that is, phenomena come into being in and through representedness, implying that that which cannot be pictured, or objectified, cannot be. Heidegger asserts that in the modern age, nature and history become the objects of a representation that explains. And there's the imperative, the compulsion to iconolatry: the desire, not just to look, or to gaze, in a passive way, but to understand and explain and thereby to become master of phenomena, including (and, especially) the human subject. So, "getting the picture" means more than getting a mere image of the thing: it means "getting the self," for it is only through representation that the human subject acquires presence.

In this sense, the modern voyeuristic gaze produces gratification – but in limited quantities. Like other, more physical forms of gratification, discipline and parsimony are integral to the economy of knowledge (it's tautological – an economy can't be an economy without scarcity). This economy is constituted by fear of excess: excess dulls desire, diminishes exchange value; excess causes prices and profits to fall. The fear is that the Subject would dissipate and dissolve into an unholy chaos without scientists as priests. And so a privileged few are charged with the organization of spectacle, with doling out gratification in strictly measured quantities, all the while preserving their investments. The consumer can look, but not touch; the Subject can act, but not speak. It's another irony, that science necessarily divides as it seeks to unify: some of us are necessarily priests, and others must be their subjects.

And so it would appear that a great deal is at stake in the power to represent. But like Baudrillard and many others, I'm not convinced that "the real" exists beyond a volatile fantasy; I believe there is, indeed, a "crisis of representation" – of faith – under modern iconolatry. In making this claim, I'm not seeking to extinguish all the work that has been conducted under modern theoretical protocols (indeed, in citing above an excerpt from one of my own collaborations in the positivist project, I demonstrate a preparedness to embrace its tools – but only in complementary relation to other modes of inquiry, which I report below); the term "crisis" may have negative and destructive connotations, but these can be refused in favor of its productivity. What I want to do is to explore the aporia in the relationship between observation and representation and its potential to be transformative of the knowledge production process. And one way to motivate the analysis is through a rather different form of imagery. So I shall tell a tale about a painting.

Source: Giraudon/Art Resource, NY (S0032363, PE7690, B&W Print). Manet, Edouard (1832–1883). Argenteuil, 1874, Musee des Beaux-Arts, Tournai, Belgium.

The indigo effect

The image in question is entitled “Argenteuil, Les Canotiers”; it’s an oil on canvas, and it was produced by Edouard Manet in 1874. In the foreground, a man and a woman are sitting in a boat; trees and meadowland occupy the middle distance; and in the background is a village, or a small town, with a smoking factory just visible.

Now here’s one possible reading of the image. The spatial relation between Factory and Nature seem to suggest that neither is implicated in the other. Here we have an innocent rural idyll: a landscape in its originary state, untouched by human intervention. As the art historian T. J. Clark (1985) suggests, we might imagine that this was not a terrain where industry was master at the time of painting. Arguably, the only link between human industry and Nature is provided by the actors; we can imagine that perhaps these are two factory workers spending their day off at the river.

The river of Manet’s painting is represented by deep shades of indigo, colors which emit the richness and vibrancy we have come to associate with Impressionism. However, we “know” the Seine at Argenteuil isn’t really indigo because we’ve seen many rivers, even if we haven’t seen this one, and they are usually much duller in color. But our reading of the painting is modulated by science, which takes charge of the lack of correspondence between the image of the river and our everyday perception of rivers. So we also “know,” because chromatology tells us, that indigo is one of the components of the color of river water. There is, then, no contradiction between our experience of rivers and Manet’s representation of this one. We can imagine, by adding a little bit of science, that Manet is seeking to represent the underlying structure of the color of river water, one of the elements of which is indigo.

Here’s another “fact.” Industry was developing rapidly along the borders of the Seine in the 1870s. Indeed, several large chemical-dye factories were located just a few miles upstream of Argenteuil, including an indigo factory which used the latest technology to produce artists’ oilpaint. This factory deposited its effluent in the Seine, which changed the color of the water to the particular shade of indigo which Manet used to represent the color of river water. Thus it would seem there is a deep complicity between the object (river water) and that which has been used to represent it (oilpaint of a certain shade of indigo). So here’s another reading of the painting. It’s an ironic commentary on the way in which modern technology circumscribes and constrains the possibilities for representation – as well as the object of representation itself.

There’s one further knot in the tale. Real indigo oilpaint was very expensive – too expensive for some of the Impressionists whose budget constraints dictated that they resort to artifice and use a mixture of cobalt and black. So the “real” color of river water was represented as if “real” indigo oilpaint had been used.

Do you “get the picture?”

> One should use common sense in evaluating the tradeoff between providing enough of an economic context to explain the incentive structure and not providing suggestive terminology. … For example, one of the authors once had a subject tell him that the word "oligopoly" on a receipt form "gave away" the purpose of the experiment, since the subject remembered from his introductory economics class that oligopolists are supposed to collude. This subject was unusually successful at colluding. As a result, all previously collected data were discarded, and the receipt form was changed.
>
> (Davis and Holt 1993: 28)

Now, modern economic knowledge derives its authority from rigorous adherence to scientific protocols. In the case of experimental economics, careful control of the laboratory environment is regarded as the means to ensuring neutrality in the relationship between observer and observed and, hence, to ensuring that observations of behavior embody authenticity; one must avoid "contamination," or "contagion," effects at all costs. Yet the proposition invoked by this tale of a painting is that the object of representation is inseparable from the tools used to represent it; while the tools of representation are, in turn, inseparable from the object. This is what I call "the indigo effect." In the context of experimental economics, it implies that the conceptual apparatus of rational choice theory and observations of "real" choice behavior are in interpenetrative relation; that is, "The conditions of the possibility of experience in general are likewise conditions of the possibility of the objects of experience" (Kant 1968: 194). In other words, the indigo effect points to the redundancy of the modern distinction between epistemology and ontology. Here, I use the term "epistemology" to mean the system of beliefs by which things can be known and validated (e.g., models of the human condition which emphasize how the facts of behavior can be collected and validated), and the term "ontology" to mean the underlying theory of what exists framed in terms of the concepts and taxonomies of the dominant discourse (such as its notions of rationality/irrationality). Where the two are in interpenetrative relation, the effect is to disturb claims to knowledge that are grounded in the belief that there is a fixed and intransigent exteriority to reality; yet the effect is also productive.

In almost all disciplines, we see examples of practitioners working to release the productive potential of the indigo effect by refusing the constraints imposed on knowledge by the dominant discursive regime with its preoccupation for fixity and iconophiliac representation. Under this less totalitarian approach, meaning is treated as something that is socially constructed and negotiable, rather than found, fixed, and intransigent. Discourse is therefore seen as dialogical, and knowledge as the product of an ongoing system of exchanges between a variety of subject-positions. This implies that an "end-product" can never be produced: "Meaning is a dialogue – always only partially understood, always an unequal exchange" (Hall 1997: 4). On this view, recuperation of hitherto marginalized discursive regimes is seen to yield a richer and more multifaceted understanding of phenomena than is attainable under the auspices of the modern theoretical paradigm. In biology, for example, A. G. Gross (1990) argues that no aspect of science is without its rhetorical counterpart; taxonomic groups don't possess an existence independent of their description: they are constructed, not discovered, and yet modern scientists use them as vehicles for the generation and representation of the evolutionary theory which has become axiomatic within evolutionary biology. And so the authority of the assumed taxonomy acts to circumscribe and constrain biological knowledge, denying the possibility of other knowledges grounded in other taxonomies, or what Elizabeth Edwards refers to as different cultural and epistemological contexts. This isn't to deny the knowledge which is acquired from a given epistemic system, but simply to refuse to privilege it over and above the voices of other knowledges.

Bruno Latour's (1996) approach to the sociology of science and technology ventures to refuse the iconophiliac mode of representation by permitting a multiplicity of localized knowledges to give voice. His (arguably, Foucauldian) agenda is to unravel the histories of the doomed Aramis transportation project in Paris through a series of conversations with and between the personnel involved, including the head of the project, project engineers, a private consultant, the directors of various related organizations, and various technical and economic advisors. The injunction is to restore the "noise" of these other voices, which the modern paradigm would eradicate in producing the "perfect" image, and to expose the (sometimes harmonious, sometimes dissonant) layers of mediation in the construction of narrative. Thus, as consumers of the text, we are confronted with the participants as they argue, bicker, moan, groan, agree, enthuse, and express regret in the process of describing and explaining the demise of the Aramis project in their own terms. There is, then, no suppression of the lack of coherence between narratives through the imposition of a totalizing frame of reference; Latour's primary role in the production, in as much as he is visible, is as the agent, or tool, of these other discursive regimes.

Yet Latour does preserve a degree of invisibility throughout the text which renders his interventions unaccountable; beyond the Preface his authorial hand is only elliptically inscribed, as if the phenomenon of Aramis comes into being only through the mediations of the participants. I questioned Latour on the absence of an "inner" ethnography when

> In this book, a young engineer is describing his research project and his sociotechnological initiation. His professor offers a running commentary. The (invisible) author adds verbatim accounts of real-life interviews along with genuine documents, gathered in a field study carried out from December 1987 to January 1989. Mysterious voices also chime in and, drawing from time to time on the privileges of prosopopoeia, allow Aramis to speak. These discursive modes have to be kept separate if the scientification is to be maintained; they are distinguished by typography. The text composed in this way offers as a whole. I hope, both a little more and a little less than a story.
>
> (Latour 1996: excerpt from the Preface)

he appeared as keynote speaker at a workshop on "Iconoclasm in Science, Religion and Art" at the Institute of Contemporary Arts in London in July 1996. I suggested that the task of revealing the social, technological, economic, and political conditions underwriting the history of the Aramis project couldn't be accomplished without his interventions; yet there is no account of the conditions (e.g., social and economic) under which Latour's own project took place. But the appeal for greater reflexivity was refused on the grounds that it is the multiplicity of subject-positions and their narratives – none of which, apparently, implicate Latour – which supply the "invisibilities" which would be denounced by the modern text. I'm reminded of the title of another of Latour's (1993) text, *We Have Never Been Modern*; it seems to me that Latour is being thoroughly modern in seeking to preserve his absence from the text.

My own approach to the escape from iconophiliac representation takes its cue from the work of Jean-François Lyotard in philosophy, Stephen Tyler in anthropology, and Joanne Martin in cultural studies. This is Lyotard's description of the task to be accomplished:

> The postmodern would be that which, in the modern, puts forward the unpresentable in presentation itself; that which denies itself the solace of good forms, the consensus of a taste which would make it possible to share collectively the nostalgia for the unattainable; that which searches for new presentations, not in order to enjoy them but in order to impart a stronger sense of the unpresentable. A postmodern artist or writer is in the position of a philosopher: the text he writes, the work he produces are not in principle governed by preestablished rules, and they cannot be judged according to the text or to the work. Those rules and categories are what the work of art itself is looking for. The artist and writer, then, are working without rules in order to formulate the rules of what *will have been done*. Hence the fact that work and text have the characters of an *event*; hence also, they always come too late for their author, or, what amounts to the same thing, their being put into work, their realization (mise en oevre) always begin too soon. *Postmodern* would have to be understood according to the paradox of the future (*post*) anterior (*modo*).
>
> (Lyotard 1986: 81)

Here, and in Tyler's discussion of the task of postmodern ethnography, we see an expression of both the technological and philosophical contingencies at work in permitting the unspeakable to speak. This is Tyler's opening paragraph:

> These essays ... do not pretend to novelty or invention for they are but reminders, in their own paradoxical way, of the commonsense world modernism thought it had surpassed or suppressed in its domestication of all the world that was exotic. They speak the language of resistance to all totalizing ideologies that justify the repression of the commonsense world in the name of utopia, or that seek to legitimize practice and judgement as the expression of theory. ... Postmodernism is the culmination of modernism's assault on the idea of representation, but unlike modernism, it also

> undermines the idea of form, closing off any easy escape into that cosmetic cosmos of ordered abstraction. The deconstruction of writing – for some the whole significance of the postmodern moment – was the consequence of the crisis of representation in science and the arts, and is ultimately only a preliminary move in the restoration and recuperation of the commonsense world incarnated for us not in language or representation but in speech and communication in the carnival of the mundane and quotidian talk of life.
>
> (Tyler 1987: xi–xii)

Notice Tyler's appeal for a restoration of "the commonsense world," of that which Lyotard refers to as "the unpresentable," and which Jack Amariglio, David Ruccio, and Deirdre McCloskey refer to elsewhere in this volume as "ersatz knowledge." For Tyler, this means the ideology of the god-like transcendental observer must be overturned in favor of a polyphonic text in which observer and observed cooperate in the construction of ethnographic narrative. These injunctions appeal to those of us seeking to take the "ersatz" out of ersatz knowledges, to downplay the voice of academic rhetoric in economics by refusing its monopoly on authority in the construction of narrative. But how much of ourselves must we inscribe in the text in order to author-ize it yet not be author? in order to give back to wo/men-in-the-street the authority which is theirs in the interpretation of experience? and yet to share in the critical possibilities of the knowledge production process?

> Because postmodern ethnography privileges "discourse" over "text," it foregrounds dialogue as opposed to monologue, and emphasizes the cooperative and collaborative nature of the ethnographic situation in contrast to the ideology of the transcendental observer. In fact, it rejects the ideology of "observer-observed," there being nothing observed and no one who is observer. There is instead the mutual, dialogical production of a discourse, of a story of sorts. We better understand the ethnographic context as one of cooperative story making which, in one of its ideal forms, would result in a polyphonic text, none of whose participants would have the final word in the form of a framing story or encompassing synthesis – a discourse on the discourse.
>
> (Tyler 1987: 203)

Lyotard's appeal to work without rules in order to formulate the rules of what will have been done appears as the ultimate aporetic event of the interaction between academic and non-academic discourse. It's an aporia voiced by Joanne Martin (1992) in her study of the cultures within corporate organizations. One of Martin's objectives is to develop ways of writing about these cultures which acknowledge the complexities and uncertainties inherent in any such study. The approach, which she exemplifies through a focus on relationships in a multinational electronics corporation, is not to try to dissolve or deny the importance of the incommensurabilities between different perspectives, but to acknowledge each of those perspectives, and to treat the insights each one yields as legitimate. In the conclusion to the study, she explicitly raises her own biases and preoccupations (or, presumably, those that are known to her) so that the interpenetrations of text and authorial intent are open to interrogation from all who participate in the event; yet she asks if all we achieve by their exposure is a greater enhancement of our authority as authors than if we were to consistently attempt to reduce our visibility and appear neutral.

I share in common with Martin and Latour a conviction that other knowledges call for other technologies of representation, technologies which lie in cooperative relation to the modes of speaking of wo/men-in-the-street and which don't seek to dissolve the differences, incommensurabilities and contradictions between and within narratives. The word processor is an example of a concrete technology (complete, of course, with its own set of constraints on the knowledge production process) which, hitherto, was only available to typesetters and graphic designers but which has opened up an interface between academic and everyday discourse. This interface can be used to develop alternative discursive practices, or spaces of representation. On this view, knowledge would appear, not as an end-product, but, through the use of a variety of typographical arrangements, as a collage of events in dialogical relation. The text below is an example; it's a clip from a much longer essay. Here, parallel columns are used to represent a multiplicity of accounts of bargaining behavior.

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5. The narrative of standard game theory

All six games share a common mathematical structure. There is a family of pure-strategy Nash equilibria: for any value of x in the range 0 = x = £16, any pair of strategies such that one team demands x and the other team demands £16 - x constitutes a Nash equilibrium. Each team of the pair can be expected to differ only in terms of their preferences over the different outcomes. (Different teams, or individuals within teams, may of course have different utility-of-wealth functions, and so in this sense there will be a difference between games. But since the cards are dealt at random, there can be no systematic difference between the utility

5. The narratives of the players

B11: [Mulling over the fact that the teams failed to reach an agreement.] We're not poor enough. We should play this game at the end of term.

B12: I still haven't paid my tuition fees; I've still got loads of money in my account.

S3: Right; so 2 aces each, and if 4 are worth 16, then these are worth £8.

S4: So we ask for £8, and then everyone gets the same amount.

S3: Yes. £8 each. Seems fair enough to me.

B7: So the more aces you get, the better it is really.

functions of players according to the number of aces they hold.) The distribution of cards, and the destinations of teams as either Buyers or Sellers, are therefore presentational devices. .

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However, Binmore, Shaked and Sutton (1985) remain unconvinced that "fair play" is of any consequence in bargaining behaviour. They claim that subjects' convictions about fairness or distributive justice are ephemeral; they are merely features of inexperienced play which are easily displaced by calculations of strategic advantage once players are fully cognizant of the structure of the game.

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B8: I don't know really. It's always the same because you need to get all of them. It doesn't matter how many you start off with – of you start off with zero, if you start off with 3: it doesn't do you any favours.

Organizer: [After the experiment.] Did you think the distribution of the aces was significant?

S7: Yes, I think so.

S8: Yes.

Organizer: So if you'd had 1 ace, what would you have done?

S7: Put the price up probably

S8: Yes, probably, because, I mean, in a way, we've got the scarce commodity so I suppose it's worth more.

Organizer: So with 3 aces, you'd have asked for less?

S8: Probably about half, in fact.

S7: Yes.

(Mehta 1999)

The narratives of the bargainers were given to me at the time of running an experiment with a one-shot simultaneous-move bargaining game and are quoted verbatim from transcripts of the event. I regret now that I didn't ask permission for the personal identities of the subjects (e.g., their names and their gender) to appear in the text. I feel sure that permission would have been given; moreover, I believe that the act of promising to preserve the anonymity of subjects was an act of exclusion on my part – I thereby annulled their presence in what became My project. The narrative of standard game theory is, of course, my own characterization of the subject-positions embraced by a variety of orthodox game theorists and necessarily essentializes those positions using the conceptual tools and discursive protocols of rational choice theory. However, the full version permits dissonances to emerge between alternative constructions of behavior appearing in the mainstream (i.e., neoclassical) literature. The essay includes an "introduction" establishing my meta-theoretical agenda, and accounts of the experimental methodology and my role as the editor of events. But there is no "discourse on the discourse," no attempt to bring the knowledge event to a "conclusion"; any conclusion about bargaining behavior must be authorized by the narratives themselves and in their own terms, and so necessarily occupies the interstices of the text.

I still feel uneasy about my representations of bargaining behavior. This is because "written" text abstracts from the provisionality at stake in the production of knowledge; it ineluctably "fixes" the s/Subject. Symptomatic of my resistance to this fixity is a constant desire to rewrite and rewrite; I feel this about every text I've ever participated in, including the one you're reading now. In presenting my work with bargainers at a conference, I wanted both to implicate the audience in the performance of the event, and to give concrete form to the voices of the subjects in order to make visible the negotiable elements of the bargaining process. My strategy was to treat the text as a dramatic script, the bargainers and rational choice theorists as *dramatis personae,* and members of the audience as players. To avoid privileging one set of narratives over the other, the two columns of text were spoken simultaneously. Of course, a cacophony resulted – which I regard as symptomatic of the difficulties at stake in the act of representation; the performance sounded like an orchestra tuning up, that moment when each of the players has their autonomy and before the conductor has brought about a coherent tune.

An alternative strategy for subjugating the voice of academic rhetoric, and one which is more in the spirit of Tyler, is for "observed" and "observer" to cooperate in the writing of an

> However, much though one is needed, this chapter cannot be a full account of staging an exhibition. ... The omissions I have in mind are, rather, those dictated first by the limited space available in this chapter and second by publishing schedules. ... While reconstructed environments and mannequins remain popular with many, to others they have come to seem doubly inauthentic. Not only are they not "the real thing," but in so dramatically supplying artefacts with their "original" context they tend to exclude the other contexts in which the artefacts have figured, including their present one as museum objects. This limitation brings to mind Baxandall's (1991: 41) comment that "exhibitors cannot represent cultures": all they can do, he suggests, is to set up a non-misleading and stimulating arena in which the maker of artefacts, the exhibitor's intentions and the visitor all come together.
>
> (Michael O'Hanlon 1993, describing the organization of a museum exhibition depicting aspects of contemporary life in the New Guinea Highlands.)

inner ethnography, or "ethnography of the ethnography" (e.g., O'Hanlon 1993). Here, no claim is made to disavow the preoccupations of either observer or observed, and the possibility is acknowledged of there being other equally valid selections of objects, or events. As a result, interpretative preoccupations are never permitted to insist on closure of the analysis. Indeed, it is the coming together of all the participants – hitherto, separately as producer, subject, and consumer – which becomes the event of the production of discourse.

This brings me to a (but not, the) concluding moment in the text. Just as in anthropology the photographer is unable to represent physical movement, the experimentalist in economics is unable through the iconophiliac mode to represent the performance of discursive negotiation, the never-ending shifts in, and tensions between, meanings; these aspects of the behavior of wo/man-in-the-street are refused in the doomed endeavor to capture and fix “the real.” Moreover, as Lyotard (ibid.) points out:

> work and text have the characters of an *event*; hence also, they always come too late for their author, or, what amounts to the same things, their being put into work, their realization (mise en oevre) always begin too soon. *Postmodern* would have to be understood according to the paradox of the future (*post*) anterior (*modo*).

This text, then, is my attempt to resituate the endeavor in another landscape, one which is far from fixed and originary but rich in possibilities. Now, over to you.

> I lost the author-ity game twice: once when I started to write and again when you started to read. Congruence between my intended meaning and your interpretation is as elusive as the chimera of a single organizational culture, viewed the same way by all its members.
>
> (Joanne Martin 1992: 202)

I’m a Lecturer in Economics at the University of East Anglia in England (although by the time you read this, I will have relocated to a research post at Erasmus University in Rotterdam). I participate in first year introductory economics courses, and in the more “specialized” economics courses, “Industrial Organization Theory,” “Strategy and Risk” and “Political Economy.” My research is in the to areas of bargaining behavior, and inter-firm contractual relations. My approach both teaching and research is overlaid with a concern for the implications of recent French philosophy for the conduct and authority of economic analyses. I am a single parent with three children. I enjoy telling stories, photography, science fiction/fantasy, and writing poetry.

boundary

Dear Rob –

Here are the first 14 pages of the essay I’m writing in response to your invitation. ... I enclose three photocopies which I see as integral to the text. A reproduction of the Manet painting is essential (black and white will do; it’s a technological constraint to work with – besides, I like the irony that color lies at the center of the story, and yet is missing from the re/production), as is the “eyes” photograph. The third photograph is more questionable.

It's me under a veil, and it's a visual mode of speech for the idea that modern theory, like the voyeur, is after removing the veil in order to acquire enlightenment – but without engagement with the Subject in the act.

Dear Rob,
... Yes, I think I've been too opaque in places. This is because I see the task of writing as one of hinting, suggesting, or glancing at provisional arrangements of things. I think I'm as provisional as the things I look at: I arrange, and am arranged by, a/the text; I don't want to domesticate, appropriate, enslave or be enslaved by it; I don't want to be entirely at its disposal as either producer or consumer; it's my way of defying re/presentation. One of my colleagues commented once (when I refused to write a Conclusion to an essay) that I abdicate too much authority/responsibility, to which I respond that the task I'm trying to take on is to displace and unsettle that authority in the performance of authorship in order to show what is at stake in the modern discursive regime. But confusion and responsibility are altogether different matters, and so I'll try to be clearer, at least about this part of my agenda. ... On copyright matters, here's a poem: ...

Dear Judith,
Here at last are my comments on your essay. ... Where to take it from here? Previously you had suggested a couple of possibilities: (1) to "pull the essay back to game theory by saying more about my own work with bargainers" and (2) to say more about "voyeurism, veils and the fetishistic gaze of modern economic theory." ... My own preference would be for you to pursue (2). ... Your brief references to these ideas in the current draft suggest that they might provide an illuminating way to depict interrelations among consumers, producers, and subjects of economic knowledge, modern and postmodern. I found these references exciting but still opaque and confusing in certain ways. ... Yours, Rob.

There is no
proper copy
in my mind
that tells me
how to re-present
these things.
But I have a mind
to tell you
that we are all
in-deed
entitled
to more than one
copy-right.

Oh, and do you think the references should go at the end?

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4 Jack, David, and Judith looking at me looking at them

Deirdre McCloskey

Jack and David and Judith. I cannot pretend I do not love these people. We do not agree on every political or scientific or philosophical point, but they are my friends. So you will forgive me if I drop the false Objectivity conventional in scientific discourse.

I understand what all three are saying through an image popular in sociology, and brought into economics by Arjo Klamer and Stephen Gudeman. Sociologists speak of the street floor (called in phenomenology the "life-world") and the eighth floor (the view of the positivist scientist). Some understandings, to speak of practical rhetoric, are best made scientifically persuasive at the level of the street, some others from the eighth floor. If you want to understand what it is like to be a member of a crowd you had better be down in the crowd. But if you want to make generalizations about the behavior of the crowd as a whole you had better be looking from the eighth floor. What irritates Jack and David and Judith is the positivist scientist sitting in his or her office drinking tea and calculating significance tests, occasionally glancing down at the street, and claiming loudly that the *only* way to do *real* Science is to get an office on the eighth floor.

It irritates me, too. Jack and David complain that I scorn ersatz economics, which scorn would make it hard to get out of the cozy office on the eighth floor.

Before I agree with them, one point of misunderstanding, a frequent one that arises because the Good Old Chicago School (Knight, Friedman, Director, Schultz, Coase, Alchian; I am a junior member, which gives you an idea of how antique the school is) is often mixed up with Samuelsonian economics or the Nouvelle Chicago of Lucas and Becker. It was *not* "informality and lack of rigor," contrary to what Jack and David aver, that made me unhappy with ersatz economics. My textbook *The Applied Theory of Price* (1985) was one, long argument that "rigor" of the Samuelsonian, Hal Varian sort is mostly a waste of mental storage space. (My argument failed to convince adopters of intermediate microeconomic textbooks; Hal got the market and the kids lost their common sense.) I do not believe, and did not believe in 1985, that "there is no substitute for formal methods of reasoning in constituting the scientific core of the economics discipline." For example, formal methods of reasoning have little to do with the belief widespread among economists that people engaged in mutually advantageous exchange should be left alone. Yes, you can draw a diagram about it; and if you don't like that you can employ a fixed point theorem about it. But the conviction is mainly political and ethical, and it would be strange to argue that economists are formally rigorous about politics and ethics. (They think they are, but their "rigor" makes a serious political philosopher or ethical theorist laugh out loud.)

The man in the street thinks that *his* industry should be protected from competition from a mutually advantageous exchange taking place between Ms. A and Mr. B. He says in effect, "A and B are better off, but what about *me*?" The economist's job is to remind people of the social point of view, the eighth-floor view as against the life-world experienced down in the crowd on the street. The central argument of the economist against the man in the street is usually in fact a matter of accounting, often very simple accounting. My textbook made the point repeatedly (e.g., p. 7 on fungibility, p. 10 on budget lines, p. 15 on cash vs. commodity subsidies, p. 16 on inferior goods, and at about this frequency throughout the book). And Adam Smith's book from which we all originate begins with the accounting truth most often misunderstood by the man in the street: "The annual labour of every nation [the National Income] is the fund ... it annually consumes [the National Expenditure], and ... consists ... in the immediate produce of that labour [the National Product]" (Smith 1776: 10).

The man in the street commits errors in economic thinking because he's ignorant or self-interested or just innocently confused into thinking that his self-interest is the same thing as the social good, *not* because he is "untrained in the rigors of mainstream theory," if "rigors" means what it usually means in economics, namely, the pointless formality (verbal or mathematical) I have recently stigmatized as the "A-prime, C-prime theorem." (Namely, that you can prove anything if you are free to vary the assumptions; so "proofs" of the desirability or undesirability of NAFTA are silly wastes of chalk unless attached to observed magnitudes in the world (McCloskey 1994: 138; 1997: 85).) I was unenthusiastic in 1985 for what Jack and David have me commending, "the prescriptions for constituting scientific economic discourse" or "formal, logical procedures untainted by ... mundane values and norms." I am even less enthusiastic now.

On the other hand, I agree with Jack and David that the vitriol against ersatz economics suggests that something more is going on in the rhetoric than mere error. "There is clearly something transgressive about ersatz economics": yes. They believe it is the challenge to professional standing. I mean, if these people are correct, I'm out of a job. Yes, that's part of it, I suppose. Economists are surprisingly willing to describe their scientific behavior in such grossly self-interested terms. But I would push it a little further. As Jack and David say, ersatz economics sees the economy as a field of ethics. Professional economists of the mainstream do not. (Jack and David tend to read non-mainstream always as "left"; I remind them, not for the first time, that Austrian economics is of the Right, is deeply committed to ethical thinking, and is as unpopular with the mainstream as is Marxism or institutionalism.) The transgression is against the modernist claim of ethical neutrality. In this I have changed my view. When I wrote the textbook I had more faith than I do now in the *wertfrei* possibilities of social engineering. (On the other hand, I still hold my conclusion about national income and consumers' surplus and cost–benefit analysis:

> The weather is not the only cause of a good or bad day, yet we all want to know the weather report. Average income is not the only cause of a good or bad society, yet we all want to know the nation's income.
>
> (McCloskey 1997: 194; cf. 221)

And Jack and David are certainly correct to imply that "economic literacy" is often a cover for "capitalist ideology." The force behind state laws mandating high school courses in economics (but not adequate training for teachers to give the courses) is Babbitt and his chums.

But Jack and David identify ersatz economics with a hermeneutics of suspicion, "announcing and engaging the social contexts and identities of the speaking parties." In other words, that people speak from motives is supposed to be decisively important for evaluating what they say. Sometimes it is. It often is in ersatz economics, as Jack and David agree (and celebrate). And scientific economics does arise in part from interests, such as careerism and ideology. But that X is one motive in Argument Z does not imply that it is the only one. This is Jeremy Bentham's error: that self-interest can be seen as part of the motivation for some acts of love and courage is supposed to mean that love and courage don't exist – in other words that *all* the motive for loving or courageous acts is selfish. It doesn't follow, though all manner of economist from Marx to Becker has assumed it does.

The literary critic Wayne Booth has tagged this move "motivism":

> About the agency of mental change, the modernist dogma is simple: ... [T]here are no good reasons. ... What we call reasons can always be seen through as rationalizations. ... "Look for secret motives" has ... been a slogan in many disciplines, and the unexamined assumption has been that if you can find it – that is, if you can find a class interest or a sexual drive or a kinship interest or a childhood trauma – you have explained away whatever "surface reasons" anyone offers for his beliefs or actions.
>
> (Booth 1974: 24–25)

"Aha! Caught again defending capitalism, Professor!" It's not a very good analysis, and I find it unmarked in Jack and David, and in Judith, too.

In short, I agree with the program to integrate an eighth-floor with a streetfloor view. I agree that I was too harsh on ersatz economics, and that economists of the mainstream are altogether too comfortable in their scorn for the life-world. If a publisher ever offers me another chance to drive Hal Varian out of the market (he is a good economist and a sweet man but has had a terrible effect on economic education), I'll be more streetwise. To Jack and David I say: yes, yes.

The eighth-floor view is supposed to be Objective. Judith observes that The Experiment is taken by some economists enthralled with a nineteenth-century view of Science to have the status once accorded The Photograph in anthropology. The anthropologists call the appeal to objectivity "coconut counting," and have realized its childishness. Anyone acquainted with the history of photography could have leapt to the same maturity. When Matthew Brady took "objective" photographs of purported "Union dead," he had to use Confederate corpses, since by the time he got there, in case of a Union victory, the actual Union dead were already buried. He can be detected in photographing the same corpses from different angles, sometimes repositioned, for "different parts" of the alleged field of battle.

The rhetoric of Objectivity was hard won. Kepler's accounts of his observations and his reflections on them were autobiographical, and Galileo, of course, dramatized his in dialogues. Only with Newton does physics achieve finally the status of news from nowhere (Bazerman 1988: 82ff.). The same thing happens in mathematics. The unmotivated, impersonal conventions of mathematical prose were perfected by Gauss, who was called The Fox because he covered his tracks in the snow with a bushy tail. But of course the objectivity is phony. It is just a way of avoiding controversy (as is plain in the personal histories of Newton and Gauss). Taking such a position does not mean there is no world out there, or that the Pythagorean Theorem is false. It means that all knowledge is rhetorical, an agreement among Us. Philosophical realism has nothing to do with it; practical questions of rhetoric have everything to do with it. As the mathematician Armand Borel put it, "something becomes objective ... as soon as we are convinced that it exists in the minds of others in the same form as it does in ours, and that we can think about it and discuss it together" (1983: 13).

Physical experiments and mathematical proofs are news from somewhere, not nowhere, somewhere in an imagined history of the discipline, for example, or from a particular school, or a national tradition, or from a position on the salience of computers or statistical significance. "In order to observe," notes Judith, "there has to be one who observes; yet it become essential to preserve the myth of absence." I had an absurd correspondence a few years ago with Vernon Smith, one of the pioneers of experimental economics, about his belief that statistical significance tells How Much Is a Lot in an experiment. It does not, but Smith could not grasp the point, so entranced was he with the vision of Objectivity, the scientist modestly absent while a table of Student's-*t* decided whether he had done his work well or poorly. He became abusive, as positivists do when someone blasphemes against their god.

Judith and I join in overturning the idols and disfiguring the icons. But sometimes in her text, as in Jack and David's, the wo/man-in-the-street is seen as genuine. I think this is romantic and inconsistent with the main point she is making. There is nothing more genuine about the !Kung women's understanding of their gathering than the anthropologist's. There is nothing more genuine about a welfare mother misunderstanding the effects of the minimum wage than a professor of economics misunderstanding the effectualness of statistical significance. Both of them claim that I Know, that My viewpoint is objective. I admit that I get more irritated at the anthropologist or the experimental economist, because professors are paid large sums to know that they do not know. Like Judith, and Jack and David, I want to comfort the afflicted and afflict the comfortable. But looked at from an ... umm, ahh ... objective point of view, I cannot see any difference.

Judith later develops the idea of bringing the voice of the wo/man-in-the-street into economic discourse as one of many voices. Yes. A complete social science should include the street level and the eighth floor. It's what she and Arjo Klamer and others are trying to do. And, yes, its author should not disappear behind the stage scenery. But what limits the voices? (Not that limiting the voices is such an urgent priority in modern economics: Judith and Jack and David and I agree emphatically that the need now is for radically more voices, not fewer. But I raise the point as one of ultimate theoretical interest because I have an answer:) Rhetorical use. A pragmatic theory of knowledge. The answer to the best question one can ask of any assertion, So what?

The rhetorical answer does not end with the notion of "there being other equally valid selections of objects, or events," as Judith puts it. Sometimes that's fine. But sometimes it is not fine. We have to decide whether to continue the war in Vietnam, say, or whether to put more money into economic experiments with communication. (I do not want to become invisible or to appear neutral: briefly, No; and Yes.) When there is an outcome there is something that the "dramatic script" is *about,* and it will not do, as Judith believes, to say that "a 'conclusion' ... must be authorized by the narratives themselves and in their own terms." This seems to me to be "letting the facts [voices] speak for themselves," which as Judith herself would agree is often a rhetorical cover for imposing the author's voice.

So I don't agree with Judith's substantive "solution." But her main point is that there is no substantive solution, and with this I agree. She offers, and exemplifies, a new *procedure*: openness to multiple voices, an end to what the Sons of Thomas Kuhn have called "the empiricist monologue." Yes, yes, yes.

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5 The crowding out of academic economics

The case of NAFTA

Arjo Klamer and Jennifer Meehan

When both the United States House of Representatives and the Senate approved the North American Free Trade Agreement (NAFTA) in November 1993, it seemed a victory for economic principles. With the decision to endorse a free trade zone in the North American hemisphere, the Congress endorsed the principle of free trade over protectionism, the value of efficiency over that of equity, and general interest over special interests. In reality, though, political arguments crowded out serious economic arguments – that is, the arguments of academic economists. Where they had played nicely along in the prelude to the debate, academic economists had no role to play when it came to the final act. As we shall show in the following analysis, political and moral arguments prevailed.[1]

At issue

The issue here is the influence of the science of economics on public policy. It should be a serious issue for economists. After all, policy relevance is the chief rationale for what they do. Textbooks, scientific papers, and especially grant proposals justify their theoretical and empirical content by mentioning the implications for policy. "With the set of assumptions and after incredibly complicated technical maneuvers we [the economists] conclude that tariffs will produce a significant welfare loss for consumers in country A."

In view of the alleged importance of policy relevance, the lack of research on the actual impact of economists and their science on politicians and their policies is astonishing. While the bulk of economists is busy figuring out how the world works, only a few have bothered asking themselves how the body of theoretical and empirical work has affected that very same world. The rational expectations hypothesis defined the problem away by stating that agents know what economists know.[2] But do they? What do policy makers do with the wisdom of economists?

Anecdotal reports tell about a critical role for academic economists as in the designing of Kennedy's economic policies and during the deregulation of airlines and trucking in the late 1970s. Milton Friedman recollects how he, together with two other economists (Alan Greenspan and W. Allen Allis), was able to sway a President's Committee on an All Volunteer

Armed Force in favor of the abolition of the draft and the establishment of a voluntary army (Friedman 1986: 8). But exactly what do these anecdotes prove?

For Milton Friedman his anecdote does not prove a great deal as his theory informs him that policy makers will be inclined to make use only of the knowledge that fits their interests. After all, Friedman does not imagine that officials act in their public interest and shares with fellow travelers such as James Buchanan and Gordon Tullock the point of view that a public official is as much guided by self-interests as any other economic agent. Accordingly, officials can be expected to heed the scientific advice of economists only if it accords with their interests. The impact of the science of economics, therefore, cannot be systematic and predictable. In the opinion of Friedman, and that of his successors at Chicago, this finding should keep economists modest in their policy aspirations. He sees only a modest public role for academic economists.

Other economists with a Keynesian inclination such as Paul Krugman (1994) and Isabel Sawhill (1995) continue to insist that economists be involved in policy. Yet these economists lack a coherent theoretical legitimation for such advice. They have no worked-out theory to explain how the work of economic scientists plays in the policy arena. So they cannot account for the fact that those academic economists who act upon their advice tend to leave the policy arena in utter frustration and full of tales about ineffective interventions and irrational policy makers.[3] They may hold out hope that the impact of their ideas will take time, just like new developments in the arts need time before they are generally appreciated. Those who do invariably cite John Maynard's flippant remark that "[m]admen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back" (Keynes 1936: 383).

In the meantime they indulge in a litany. In his recent book, Krugman articulates the overriding sentiment:

> [t]he role of the economist who cares about policy can be dispiriting: one may spend years devising sophisticated theories or carefully testing ideas against the evidence, then find that politicians turn again and again to ideas that you thought had been discredited decades or even centuries ago, or make statements that are flatly contradicted by the facts.
>
> (Krugman 1994: 292)

Echoing these remarks, Alan Auerbach – another academic economist who spent time in politics as an economist for the Joint Committee on Taxation – offered this three-point explanation (Auerbach 1992: 239):

1. the "shorter time horizon" in Washington compared to academia, "with ideas being raised and discarded with more frequency than the occasional visits to Washington during my existence";
2. the important role of lawyers; and

3. the disproportionate time spent on issues that affect only specific taxpayers versus the broader issues that concern an academic economist.

These support the contention of Stuart Eizenstat, former advisor to President Carter, who retrospectively notes that “[e]conomists and politicians too frequently are like ships passing in the night, neither understanding the needs of the other” (Eizenstat 1992: 71).

Even if these observations are only partially true, they make for a puzzling phenomenon. Economics is a discipline that boasts of its lofty reign as the Queen of Social Sciences, draws annually a million undergraduates to its introductory courses at US colleges, of which 30,000 choose it as their major, and counts 130,000 practitioners in the United States alone. Among those are 17,500 PhDs with many serving as presidents (Mexico), cabinet ministers, business leaders, and IMF and World Bank bureaucrats. Each year, a member of this community is awarded a Nobel Prize which serves to legitimize the scientificity of the discipline. Yet, its role in political debates and policy decision making seems to be minimal.

In this chapter we approach the puzzle head-on. Our intention is to untangle and determine what happens to the “product” of scientific research in the process that leads to a policy decision. Our case is the NAFTA debate.

Preamble

Krugman’s *Peddling Prosperity* (1994) shows how not to execute the intended investigation. Being an interested party, that is, an academic economist, he sets out to show that in politics bad economic ideas drive out good ones. The argument seems simple enough. Various presumptions about the nature of economic knowledge and the process by which this knowledge transfers underlie such a line of argument, and all are dubious. First there exists a presumption that academic knowledge is available to anybody who takes the time to learn. But that is to simplify the issue to a fault. Anybody who has engaged in academic economics is aware that knowing what we know is problematic and controversial. Academicians write surveys to sort out the “knowledge” that research of a specific topic generates, only to find out invariably that the results are at best ambiguous and often even contradictory. A related problem is that economists proceed without clear standards for appraising competing theories, extensive methodological research notwithstanding. Accordingly, the knowledge that academicians produce comes in the form of a discourse that requires engagement and interpretation.

Another presumption is that politicians could take academic economists seriously if they only set their mind to it. Apparently they will be able to decipher the scientific language, understand the argumentation, accept the policy conclusions, and will act accordingly. How unrealistic that representation seems. How could we ask politicians to understand the muddled picture that scientific knowledge offers, when we, the creators of this picture, are unable to devise a solution? Whenever politicians hear academic economists, they hear them speak in multiple voices. Keynesians disagree with new classicals, all of them disagree with supply-siders and they all come with so-called scientific studies to back up their contradictory statements. Economics as a science rarely speaks in one voice and that leaves politicians with the problem of choice. Krugman ignores this problem.

He prefers to dismiss economic arguments generated by the so-called policy entrepreneurs as "bad." He is entitled to believe so, and as an interested party has every reason to state the claim. He seems to presume that the policy entrepreneurs, who peddle their (bad) ideas do so to gain attention. This should not be surprising in the light of the neoclassical assumption that agents act in their own interest. He overstates the argument, however, when he claims these policy entrepreneurs to be ignorant. As a consequence, his story casts the good guys against the bad ones; his own sort, academic economists, are the good guys of course, and the policy entrepreneurs, the bad. The important question to ask, however, is why the ideas that he considers bad tend to prevail in the policy arena. Why are they more persuasive than the "good" ideas of academic economists? Krugman offers no clues.

He appears to apply what we refer to as the stupidity hypothesis (Klamer and Leonard 1992). According to this thesis, you and like-minded "know" while the others operate in a state of ignorance or stupidity. It is a hypothesis that people commonly use when they have to cope with people who are different from themselves. Academicians in particular have a tendency to deprecate the cognitive capabilities of non-academicians, including students, business people, and politicians whereas students, business leaders, and politicians return the favor considering academicians too far removed from the world of reality. An example of the academic put-down can be found in the article by Blendon *et al.* (1997 and this volume, Chapter 6) describing how the public's knowledge of economics falls far short of the knowledge of economists. So they call upon economists to do a better job educating and communicating their research findings. Apparently, the problem is ignorance.

Klamer and Leonard (1992) suggest that the stupidity problem is rather a rhetorical problem. It is what happens when people across cultures judge each other. Being most familiar with the Dutch–American stand-off, we cannot help noticing that many Dutch find the Americans somewhat callous in their treatment of the poor whereas most American visitors to the Netherlands will complain about waiters who do not want to wait. This is not a matter of stupidities on each side but of different cultures, each of which has its own particular discourse. The Dutch and Americans not only speak a different language, they also tend to use different metaphors and narratives to talk about their respective worlds. The Dutch tend to think of their society in terms of one big family, whereas in the American conception society is foremost a community of autonomous individuals who are expected to fend for themselves. The two metaphors generate different perspectives on issues such as welfare. Judging what the others do as stupid is tempting when seen in the light of one's own metaphor. In American eyes the Dutch seem overly generous towards individuals who should be held accountable for their actions, whereas to the Dutch the Americans seem uncivilized in their stoicism and apathy toward their family members.

In this study, we follow the approach of Klamer and Leonard (1992) and Cordes, Klamer, and Leonard (1993). The presumption is that knowledge is a process or, better, a variety of processes. Each process is generated within a circle of practitioners; each process has its own rhetoric. The rhetoric consists in rhetorical devices, foremost among which are metaphors (speaking about something in terms of something else), narratives (the employment of events and the characterization of individuals and groups), and the selection of authority. Speaking of circles is speaking metaphorically. We distinguish the "circle" of academic economists in order to delineate the collection of economists that considers those outside their "circle" non-serious, non-scientific, or otherwise not deserving to be counted among academicians. Krugman implicitly identifies such a circle by casting the group of policy entrepreneurs outside. These entrepreneurs include in his books academicians who venture too much outside academia to be still considered academic (or serious), such as Harvard professor John Kenneth Galbraith (who also happens to be the only economist of contemporary fame), and MIT professor Lester Thurow.

For the sake of the following discussion we distinguish the circles shown in Figure 5.1.

Everyday economists are all those coping with economic issues on a daily basis. Someone deciding to buy now instead of later in anticipation of rising prices practices everyday economics, and so does a company in the process of planning an expansion, and so does a politician weighing the pros and cons of NAFTA. Everyday economists are most likely to personalize the economy; they think in terms of people doing things, of right and wrong, of victories and defeats, of special interests, and of identities. Do not expect from these economists neatly systematized knowledge and empirical evidence. These people, and we are all among them, think in dramatic terms, of winners, losers, and of power. We assume that economic journalists come closest in expressing this type of economic "knowledge" because they have

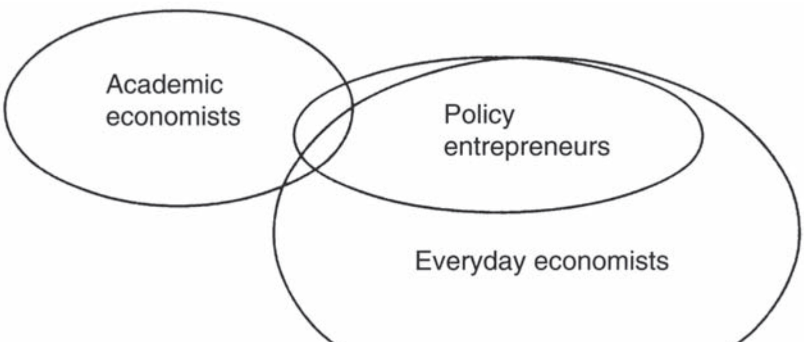

Figure 5.1 Three genres of economic knowledge

to cater to an audience in need of such knowledge. The policy entrepreneurs are placed to mediate between the academic and everyday spheres.

The study of the capital gains debate shows that the main rhetorical difference between academic and everyday economics concerns the choice of metaphors and narratives. Whereas academicians choose to think about the economy as a (general equilibrium) system of markets, everyday economists prefer to think in anthropomorphic or biological terms. That is to say, the economy is populated by people who are emotionally driven, and functions like an organism as a whole with functionally interdependent parts. The academic narrative is minimal whereas everyday economists prefer to dramatize the economy endowing it with villains (big corporations, unions, foreigners, or presidents of the other party) and heroes (entrepreneurs, small businesses, unions, presidents of one's own party).

This dichotomy was explicit in the NAFTA debate and is one which must be further considered. Let us do that now.

A sequence of events leading up to the NAFTA vote

The quest to create, develop, and implement NAFTA began officially on June 10, 1990, at which time then US President George Bush and Mexican President Carlos Salinas issued a joint statement supporting the general principles of a trade agreement between the United States and Mexico. Not to be left out, Canada conveyed its express interest in joining the negotiations shortly thereafter. Not until June 12 of the next year, as a result of many diplomatic and legal technicalities, were the negotiations commenced in earnest, marked by the first in a series of trilateral meetings of trade ministers. In the following fifteen months, the ministers met an additional six times in a variety of major North American cities. Within the United States proper, separate public hearings were held by the Trade Policy Committee staff, affording hundreds of Americans the opportunity to testify on the subject of NAFTA.

As the formal negotiations continued, in the Unites States, the focus of 1992 turned to the presidential election. With the possibility of a relatively unknown and inexperienced Arkansas governor, whose position on NAFTA was hitherto ambiguous and uncertain, winning the election, the Bush administration and Bush himself began to play a more active role in the negotiation process. A US delegation of private sector officials and eleven members of Congress, led by then US Trade Representative Carla A. Hills, that journeyed to Mexico to meet with President Salinas, Secretary of Commerce Jaime Serra, and other key Mexican government and private sector officials is exemplary of the change in approach. Following other similar efforts, President Bush announced the conclusion of NAFTA negotiations on August 12, 1992 and apprised Congress and the US public of his intent to enter into the agreement. His endorsement was echoed by then presidential candidate Bill Clinton, although conditionally, as the candidate expressed concern over the need to develop supplemental agreements to address non-economic concerns.

After his electoral win in November and his inauguration on January 20, 1993, President Clinton redirected the focus of NAFTA from the purely economic issues focused upon by the trade minister, to the side agreements. Recognizing that the development of such agreements considered satisfactory by the United States represented the agreement's future, both Canada and Mexico entered into further negotiations in attempts to settle labor, environmental, safety, and immigration concerns. These side agreements were completed and signed on September 14, 1993, paving the way for Congress to vote on NAFTA in its entirety.

Although the process is seemingly simplistic in this summary form, the politics and debates that surrounded NAFTA left the country guessing whether or not it would be supported. As the negotiations shifted from economics, exemplified by the trade ministers' meetings, to politics, the development of the supplemental agreements, and the ensuing special interests, the face of NAFTA changed. What from the outset seemed as if it would be merely a trade treaty, an issue which rarely riles the public interest, became one of the United States' great debates of the year. Special interests came to dominate the debate, effectively crowding out the arguments of academic economists, and leaving NAFTA's fate in the hands of whichever side could better sell the agreement to the US public.

The role of academic economics

The NAFTA agreement seemed an opportunity to afford academic economists their desired day in the public court. This was to be their game. After all, when it comes to the issue of free trade, the bickering for which economists are so well known effectively ceases. Free trade had been the rallying cry of Adam Smith and David Ricardo, the pioneers of modern economics, and it continues to be for a majority of modern economists. In surveys, professional economists overwhelmingly support liberalization of trade and agree that tariffs and other protective measures are welfare reducing. So one would expect academic economists to grab NAFTA as an opportunity to rehash their case for free trade.

In many ways academic economists did so. They conducted empirical studies of the economic effects of NAFTA for the three participating nations, wrote reports for government agencies, organized and participated in numerous conferences and even more seminars, and talked with reporters. The activity deployed was unusual for academicians. Yet its effectiveness was dubious. Moreover, the connection between what academicians say in public and what they say within the academic community is problematic. Even when academicians appear to influence the public debate, that influence may not be because of their academic "knowledge" *per se,* but because of other factors, such as reputation, communicative skills, or simply the willingness or eagerness of the audience to hear their message. To paraphrase the late Chicago economist George Stigler, the public is willing to hear those economists who supply what they demand, ignoring the others.

In the case of NAFTA, various economists supplied the arguments that the government needed. In August 1991, the US government requested that the International Trade Committee investigate the findings of economic research that had been done into the economy-wide implications of NAFTA. "The Commission's investigation should be confined to studies recently completed or currently being developed that meet recognized academic standards for state of the art economy-wide policy modeling" (USITC 1992: A2). The ITC solicited twelve "academic" papers and reviewed them in a report which was sent on to the Trade Representative in May 1992.

All but one of the twelve papers present so-called computable general equilibrium (CGE) models. According to the executive summary, "CGE models are firmly grounded in economic theory, and embody microeconomic principles regarding firm and consumer behavior, national budget constraints, and the measurement of economic welfare" (USITC 1992: v). Some focus on the economy-wide impact, others on specific sectors. They all find positive gains of NAFTA for each of the three countries, with the strongest gains for Mexico. As far as the United States is concerned they find positive changes in GDP, employment, and real wage as the consequence of NAFTA. Evidence on the wages of low-skilled labor, however, appears to be mixed "with some studies showing decreases and others showing increases, although the real wage changes are all less than two percent" (USITC 1992: vi).

While the overview offers the studies as "a body of knowledge" to be accepted at their face value, the subsequent discussion brings out their provisory nature. For example:

> In most of the static models, it is assumed that labor is homogeneous, perfectly mobile between sectors within a country, and immobile internationally. While these assumptions are standard in trade theory, it would clearly be desirable to relax them to study a NAFTA.
>
> (USITC 1992: 3)

The static character of most models gets mentioned, and so is the modeling of capital – always a tricky factor because of the time element that it embodies, and the assumptions of perfect competition and constant returns to scale that some models make.

Indulgence into these issues is what characterizes the conversation among academicians. Whereas everyday economists seek solutions, academicians are trained to see problems. They are also trained to construct answers to those problems with the methods that their discipline prescribes, but the academic convention tells them to problematize and question the way by which the answer is given. This ritual is difficult to appreciate by non-academicians, but without it the academic conversation would dry up and die out quickly. Because of it, successful academic conferences produce a sense of awe for the problems of representing things as they are and a recognition of how little "we" know. This is not a result that sells well outside the academic circle. The USITC report, therefore, stresses the unanimity of the reports on the positive gains of NAFTA for the three countries.

The International Trade Commission did a follow-up study in 1992 at the request of Congressional committees (USITC 1993). For this study the commission heard testimony or received submission from almost 150 organizations (mostly agricultural), used a model developed by its own staff to estimate the effects on specific sectors, but also recalled the results of its previous study. Like the earlier report, this looks like a serious report. For one, it is in small print. And it presents the usual caveats. The report points out, for example, that the studies that the first report discusses do not take into account new provisions in the NAFTA agreement. In a footnote the reader is reminded that the model used by the Commission itself is "only one of several means the Commission staff uses in providing assessments of the Agreement's impact for the Commission's consideration in adopting its final report" (USITC 1993: 1–4).

It is difficult to ascertain how influential these two reports have been. Doubts as to their influence arise as the economists who conducted the studies for the ITC are rarely quoted or cited in the media.[4]

Among the many other reports that NAFTA generated is a study by the Congressional Budget Office. Although the CBO is staffed with many economic PhDs, it would be far-fetched to call the study academic. The print is pretty large and, more importantly, the reader is spared the technical problems that the staff must have experienced in reaching its findings. The conclusions are far from dramatic: the CBO finds "fairly small" gains for the United States and "contrary to some commonly expressed concerns ... relatively little impact on jobs and the location of manufacturing" (1993).

Surely, the Brookings Institution, always in the game to uphold an academic reputation while playing politics, also organized a NAFTA conference to contribute to the great debate with a volume of its own. The volume heavily favors NAFTA, although a few dissenting economists are included. Among the dissenters is Jeff Faux, president of the Economic Policy Institute, who disparages the academic studies that support NAFTA and argues that NAFTA has bad distributive outcomes with especially bad outcomes for low-wage earners.

The print in this Brookings volume is as large as the one of the CBO study. Neither Faux nor the others in the Brookings volume adopt the academic mode. They are more interested in advancing their opinions than sharing the problems in deriving and supporting them as is the convention within the academic circle. The implied audience appear to be policy makers and other interested parties, not fellow academicians. Here are Krugman's policy entrepreneurs at work.

This is even more obvious for the so-called academic study that has been cited most widely in the NAFTA debate[5] and has had arguably the most impact on the proceedings, that is, a report by the Institute for International Economics authored by Hufbauer, Schott, and Martin (1993). It is presented in the form of a briefing book in large print. The academic impression is evoked in the form of tables and many numbers. The calculations in the report do not withstand academic scrutiny, as many academic critics have pointed out. All that does not matter. The reputation of the institute and its authors were sufficiently persuasive to get one of its main "findings" locked in the collective mindset of everybody involved in the

NAFTA debate, and that was the claim that NAFTA would generate 171,000 jobs for the United States. (Clinton would adopt the rounded figure of 200,000 jobs in his presentations.)

The reports of the Brookings Institution and the Institute of International Economics suggest that academicians were prepared to violate their academic standards in order to get attention.

Another influential statement from the academic circle was a letter signed by 300 economists including all American Nobel laureates. The press, the President, and political supporters of NAFTA would regularly cite the support of the Nobel Prize winners. As a matter of fact, they were the only academicians that maintained some degree of visibility in the final stage of the debate, although it was only in the form of lip service; none were cited by their individual names, but in a conglomerate under the heading of laureates.

Accordingly, in the earlier stages of the NAFTA debate, with the political world barely paying attention and the staff of government agencies in the position to reflect, academic studies stacked the deck in favor of the NAFTA agreement. Yet they also showed that the impact on the US economy was minimal. Paul Krugman, the academic whom we have encountered earlier, declared NAFTA "economically trivial." His verdict of the debate: "The anti-NAFTA people are telling malicious whoppers. The pro-NAFTA side is telling little white lies."[6] Academic honesty compels academicians to acknowledge that their research has shown the difficulty of knowing anything with a reasonable degree of certainty. If they know anything, it is that NAFTA does not make a big economic difference one way or the other.

So we see: the conversation within the academic circle does not produce great drama, and tends to have a dispiriting effect on those who are resolved to act. It should therefore not come as a surprise that academicians were avoided in the later stage of the NAFTA debate.

Special interests and the prelude to Congress

Once the academic economists, their knowledge, and theories were effectively eliminated from the negotiation process and public debate, the special interests crept in and reared their heads. Coming from a variety of races, ethnic groups, classes, and regions of the United States, perplexing and somewhat shocking unions were being created, with a clear line drawn in the sand differentiating between the pro- and anti-NAFTA forces. The pro-NAFTA forces consisted of big business, industry, manufacturing, economists (including all eight living Nobel-Prize-winning American economists), all living former presidents, and former and present administration officials. The actors constituting the anti-NAFTA effort represented a more sorted lot. The more well known of the group, generally speaking, included certain environmentalists, labor unions, and specifically, two former presidential candidates, Ross Perot and Patrick Buchanan. Setting these diametrically opposed, both ideologically and personally, actors onto a stage to act out the unfolding drama of NAFTA was a fascinating process to watch.

Ultimately, the special interests and not the administration, nor the economists, nor Congress determined the terms and the direction of the NAFTA debate. Prior to the involvement of the special interests, the issues of labor, the environment, immigration, and enforcement were rarely, if ever, considered. Furthermore, NAFTA represents the first time that such provisions have ever been included in a trade treaty, and this comes as a result of the special interest groups. Thus, the role that they play in our story of academic economists being crowded out of the debate is crucial. Most importantly, it is they who introduce and perpetuate the belittling of academic economists before the US public, effectively gutting this purely economic issue, free trade, and gambling its future on fear and on issues of seemingly little relevance to the free trade versus protectionism debate.

The anti-NAFTA forces perfected this process, basing their arguments upon discrediting and disproving economists and the economic arguments presented during the negotiation process. One of the leading members of this push is a policy entrepreneur himself, highly educated in the field of economics, who is currently the president of the Economic Policy Institute (EPI). In the EPI's briefing paper, "The Failed Case for NAFTA," Jeff Faux recognizes that "[n]o one, of course, can predict the future," yet

> we should always be suspicious of economists – who cannot tell us what interest rates will be next week – confidently predicting what the results will be years from now of a complex international deal for which there is no historic precedent.
>
> (Faux 1993: 1)

Faux continues this degradation of academic economists and economics throughout the entirety of the paper questioning the "unchallenged" basis upon which the majority of economists support NAFTA; he continues in this manner, citing specific economists such as Gary Hufbauer of the Institute for International Economics, in an attempt to discredit the work that they have done in support of the agreement.

Politicians did not refrain from outright attacks on homo economicus either. On the floor of the House of Representatives Congresswoman DeLauro questioned why a number of economists have come out in favor of the treaty. She wondered at how "[t]hose who push the treaty do not seem to understand ... but then again, they don't stand to lose their jobs. They are our academicians, corporate executives, economists, and editorialists" (DeLauro 1993: H9807). She pressed the point further by referring to acclaimed editorialist Abe Rosenthal who states that "they [economists] have shown so little care, compassion, or understanding about the fears of working people who might lose their jobs – how they would howl if their own jobs were in danger" (DeLauro 1993: H9807). Such comments expose the hostility directed toward economists when the debate made its way to the spotlight. Not only were economists precluded from entering the debate in any form other than covertly, their professional image was being tainted further by an audience that was already doubtful of their effectiveness. In a sense, the NAFTA opposition was able to use the debate as a "whipping post" for the academic economists, providing repeated lashes throughout.

The sequence of three different Gallup polls, in 1991, September 1992, and March 1993, suggests the effectiveness of the opposition to NAFTA. The poll in 1991, conducted immediately following the commencement of negotiations, found that 83 percent of Americans favored a NAFTA which was similar to the already existing US–Canada agreement. In September 1992, the heyday of the anti-NAFTA special interests, this figure of support dropped dramatically. In one short year, the public opposed NAFTA 57 percent, while only 33 percent supported the agreement. And if the pro-NAFTA forces thought it could only get worse, it did. By March of 1993, 63 percent of Americans were opposed to NAFTA, while 31 percent were in favor (Judis 1993: 32). These results, even allowing for a percentage error, were horrifying for the discombobulated, unorganized, and obviously ineffective pro-NAFTA forces; it would seem that their message was being lost on the US public, who was lending its support to calls of fear of the "giant-sucking sound" from the south and *Save Your Job, Save Our Country: Why NAFTA Must Be Stopped – Now!* dictated by Perot and his followers (Choate and Perot 1993).

The anti-NAFTA folks appear to have mastered the art of persuasion. As all good debaters are taught, when trying to develop a point, it is necessary to clearly outline and develop three main "selling points"; once completed, these points should remain the same for the entirety of the debate. The anti-NAFTA forces had perfected and perpetuated this approach up until October of 1993. Although constituted of a colorful variety of groups and individuals, the opposition narrowed its focus to four main points:

1. labor issues
2. environmental issues
3. immigrations issues
4. questions of enforcement

On the other hand, the pro-NAFTA forces did not share such an effective strategy. In fact, the future of NAFTA was characterized as volatile and tenuous until November 17, the day that the House of Representatives voted on the agreement. Although supporters of the agreement were able to clarify and relay to the public their approach beginning in September, the question remained: was it too little, too late?

All the signals pointed at a victory for the opposition to NAFTA. By September of 1993, a *Wall Street Journal* and NBC news poll found that 36 percent of those surveyed opposed the agreement, while only 25 percent favored it; that left the number of Americans who were uncertain at 34 percent (Broder and Gerstenzang 1993). Reported in an article titled "Campaign to Sell Free Trade Pact Gets Off to Limp Start," these results were not a sign of hope for the pro-NAFTA group. In fact, fewer people did not have an opinion, illustrating a US public uninterested and unmotivated to learn about NAFTA. Two weeks later, a slightly different poll released by Times Mirror intimated slightly better results for supporters of the agreement. Of those Americans paying fairly close or very close attention to the agreement, 42 percent said they favored it, 31 percent said they opposed it, and 21 percent were undecided (Gerstenzang 1993). These results did not bode well for the passage of NAFTA, especially since the individuals polled were relatively knowledgeable about the agreement.

This sense of uncertainty was captured in numerous articles and essays which recognized the Congress's majority support for NAFTA in principle, but not yet in vote. As Representative Jim Kolbe expressed: "If people were voting their conscience, this thing would pass handily. ... Privately, most members recognize NAFTA's virtues" (Cohn and Fineman 1993: 27). Furthermore, the *National Journal,* a weekly newsmagazine on politics and government, expressed a similar viewpoint in its cover story on NAFTA when it quoted a White House official as saying "[m]ost Members are on our side intellectually ... but they need political cover" (Stokes 1993: 2472). Clearly, the image that is coming into focus is one of a Congress which believes in NAFTA, but is in search of a publicly acceptable vehicle to channel its support.

In an attempt to take the offensive and answer the call of challenger Ross Perot, the White House agreed to engage itself in a debate on the politically popular CNN show, *Larry King Live*. After a day of negotiating the rules and regulations of the debate, the White House and Perot finalized the deal. Al Gore, the Vice-President, would square off against Perot.

The Gore/Perot debate and afterward

In the critical stage of a decision process emotions and passions tend to overwhelm logic and rationality. It is then that special interests begin to weigh in heavily. Until November 9, the pro-NAFTA side had been preoccupied with the logic and rationality of their point of view whereas the anti-NAFTA forces had appealed to the emotions and passions of Americans. The arguments of the latter had also been far more focused on special interests of labor and the environmental movement. The debate between Vice-President Al Gore and the most outspoken frontman for the opposition forces, Ross Perot, on November 9 were to change this rhetorical situation in more ways than one.

The debate introduced a new element to the NAFTA debate, that of character. It was as much about the characters of the two sides as about NAFTA itself. In front of a national television audience Al Gore and Ross Perot personified the two sides; they became the issue themselves. The debate became a contest in character. Al Gore, generally considered a very stiff, stoic individual shed these clothes for ones of wit and enthusiasm. He challenged Perot by pointing out contradictions in earlier made statements and interests of the Perot family in the continuation of trade barriers between Mexico and the United States. While Perot tried to make an emotional plea against the NAFTA treaty, alluding to job losses in the United States and likely exploitation of unprotected Mexicans by US corporations, Gore tried to deflate the emotional plea by calling the character of the spokesman himself into doubt.

The debate did not uncover any new or otherwise unknown secrets about NAFTA that would commit an uncertain US public and uncertain Congress to one side or the other. Rather it was the manner in which the arguments were presented, and the men themselves which made the point. Gore's style was confident, aggressive, and passionate, yet steady. By contrast, Perot's was defensive, and emotional. This dramatic difference separated the two men so that the subjects they were on hand to discuss became secondary. Personal slights against one another dominated certain conversations between the two men, and their bickering over whose turn it was to speak made one think back to days on the school bus instead of national television.

Besides doing a little of character assassination Al Gore tried to breathe life into the pro-NAFTA position and place it in a narrative context that the viewers might recognize and identify with. He told a story of a family in Tennessee that, after actually sitting down and reading the agreement, realized that it would benefit rather than hurt its small business. Similar stories followed later in the debate. The next aim was to move beyond personal interest to national interest arguing that the opportunity to become party to such an agreement comes before the country only once every fifty years. He warned that if the Americans did not grab this chance, the Japanese were eagerly waiting to grab it. He concluded by characterizing NAFTA as a choice between the "politics of fear and hope, past and future, pessimism and optimism, and the status quo and movement forward with confidence."

The public response to the debate suggested that Gore had been successful in making the opposition position suspect, by making the individual who personified that position, Perot, suspect. The overwhelming impact such a shift in strength would have on the final outcome would be determined by another debate, spanning nearly three weeks, in both the House and Senate chambers. The battle was a grueling one, and up until the final vote, nobody was certain about the outcome.

The Congressional debate

Congress enjoyed its first formal taste of NAFTA five days before the Gore–Perot debate occurred when statements prepared by President Clinton were presented concurrently in the House of Representatives and the Senate. Clinton's statement spoke matter-of-factly about the benefits of NAFTA. Congressional leaders provided additional statements in support. These statements were again very short – Senate Majority Leader George Mitchell's comments did not exceed one column in the *Congressional Record* – very dry, and did nothing to evoke the high stakes of the debate.

This unelated approach was altered significantly, though, immediately after the Gore–Perot debate. In the final stage the White House "poured about 95 percent of its time and energy into the fight" (Roberts 1993: 24–28). Most visible was a large press conference on November 10, where the President declared that "I honestly believe we're going to win it now ... and that's not just political puff" (Roberts 1993: 24–28). Under the heat of a strong antimovement and with the encouragement of the outcome of the debate, the pro-NAFTA side got focused and in the process got passionate as well. It showed in White House statements, and also in the debate on the Hill.

The same politicians who had spoken out a week earlier in support of NAFTA came back again in seemingly new clothes. Their rhetoric had become more powerful and more emphatic, as if now they dared to believe in their cause. They pushed aside the mainly economic arguments; they also left further *ad hominem* arguments out and began addressing the character of the nation instead. "Who are we?" became the question. "What kind of nation are we to vote against a free trade agreement?" General interest took over from special interests. The discussion advanced the vote on NAFTA as a test of national character. NAFTA came to represent the greater economic role the United States would take in this new world order and, more importantly, the symbol of free trade for which the United States was supposed to stand.

Upon NAFTA's introduction in Congress, Clinton set the stage for the pro-NAFTA sources. He opened by offering NAFTA as an "agreement vital to the national interest and to our ability to compete in the global economy" (Clinton 1993: H8872). He continued in a similar vein throughout the message, referring to NAFTA as the first opportunity for the United States to enter such a treaty, a responsibility Americans could not back down from. Clinton concluded by stating "America is a Nation built on hope and renewal. If the Congress honors this tradition and approves this agreement, it will help lead our country into the new era of prosperity and leadership that awaits us" (Clinton 1993: H8873). Thus Clinton attempted to characterize the debate in terms of the narrative of national interest and pride. But he also addressed the concerns of the anti-NAFTA forces depicting the agreement as a "pro-growth, pro-jobs, pro-exports agreement" (Clinton 1993: H8872) which will help to increase environmental standards in Mexico, will reduce tariffs, and reduce drug trafficking. Finally he projected NAFTA as a means to outdo the Japanese.

Subsequent floor statements submitted by Representatives and Senators make clear that Clinton had set the tone for the debate. Like the President, Senate Majority Leader George Mitchell emphasized in a statement on November 4 the historic opportunity that NAFTA provided the American people. He did not eschew economic figures, however, discussing the numerical implications of free trade with Mexico for the US economy. He also evoked the Japanese factor. In later statements Mitchell would leave out the economic figures and instead relate NAFTA to the identity of US society, just as Gore had done in the debate with Perot and Clinton did in his statement to the Congress. He emphasized the opportunity of NAFTA and appealed to the sense of pride and responsibility as world leaders. He contended that

> [t]his agreement will define the American role in the global economy and in world affairs well in to the 21 st century. ... We must have the courage and the confidence to lead this country into the next century. The Senate now will decide whether America will actively engage the challenges of this post-cold war period, or whether this Nation will reject new opportunities for the future.
>
> (Mitchell 1993c: S16702)

Senate Minority Leader Bob Dole mimicked the narratives of Clinton and Mitchell. Like Mitchell, he devoted portions of his earlier statements to economic arguments concerning US productive capacity and NAFTA's importance for the future of US trade. Then Dole shifted gears. He wrote that he wanted to "talk straight" with the American people and continued stating that

> [w]hen you sort out all the charts and charge, and now the countercharges, and all the predictions that the sky is falling, you cut right to the heart of the issue, NAFTA comes down to one word, and that is leadership. America has a choice. We can choose to be a leader in today's global economy ... or we can pass the baton of leadership to Japan and Europe.
>
> (Dole 1993c: S16703)

It was for all to see: NAFTA was about the character of the United States.

Other members of Congress would try out different characterizations later in the debate but in the end the insistence on US leadership and responsibilities for free trade in the world carried the day. Finally, the pro-NAFTA forces seemed to be speaking the same language and using the same rhetoric. Among them Senator Paul Simon reproached his opponents for being ignorant: "[t]he opponents are really saying: Stop the world. I want to get off. But we cannot do that. All we can do is impoverish ourselves in the attempt" (Simon 1993: S15797). Economists made a brief appearance, too. Senator Carol Mosley-Braun and Senator Pete Domenici introduced a letter signed by hundreds of academic economists. But the significance of such a gesture is hard to determine. Scrutiny of the actual debate indicates that the rhetoric of pride, leadership, and responsibility prevailed.

In contrast, the rhetoric of the anti-NAFTA forces did not change in this final stage. That may not have added to its effectiveness, certainly not given the new rhetorical vigor of the other side. In the House of Representatives Gephardt and Bonior led the opposition. In his statements Gephardt evoked the rights of Mexican workers, decried the problems of enforcement, and, following a strategy that the NAFTA opponents developed late in the game, stated that he wanted a different NAFTA. He expressed that "[t]his is a new world in which we live. We do not have to take second and third-best agreement. We can get good trade agreements" (Gephardt 1993: H9809). The problem with this line of argument, and one which was seen during a CNN debate, is that, when asked for specifics, Gephardt could not deliver.

Bonior emphasized enforcement problems and job loss and thus remained most in line with the tried arguments. He questioned the sincerity of Mexico in entering the supplemental agreements by noting that

> Jaime Serra, the Commerce Secretary in Mexico ... told Mexican political, social and economic leaders in Mexico in selling this treaty to them that they have nothing to fear basically in terms of the sanctions and the enforcement mechanisms in this treaty, because they are too cumbersome, they are too long, they are too difficult, and we are beyond that, we are safe, we do not have to worry about that.
>
> (Bonior 1993b: H9822)

Bonior predicted that taxes will be raised to pay for all the jobs lost to Mexico. Although the appeal to fear had played well with the public in the early days of the debate, in the final stage it seemed to have lost its effectiveness.

In the Senate, Senators Larry Craig and David Riegle led the opposition. Craig wrote a letter with Senator Kempthorne to President Clinton, to express concerns about the environmental consequences, the enforcement issue, and the conformity of standards between the United States and Mexico. In the debate he reiterated these concerns. Riegle's approach was less structured. In his statement to the Senate Riegle focused on the labor issue and domestic repercussions and concluded by stating that "[t]he NAFTA vote ought not to be for sale. We ought to turn out NAFTA and start over with a fresh negotiation that can look after the jobs and interests of working people and all people of this country" (Riegle 1993: S15532).

Accordingly, economic arguments played well on the anti-NAFTA front even though they were not the arguments of academic economists. These arguments focused on the loss of jobs and competition with a low-wage country. The pro-NAFTA forces tried to appeal to interests that transcend strictly economic interests, such as pride and leadership. In his address to the Senate on the day before the vote Bob Dole stated that

> it just seems to me we do not want to announce our retreat tomorrow, or whenever the vote is in the Senate, that we are going to retreat in the global marketplace. We do not want to huddle on the sidelines while the rest of the world decides where economic opportunities may be. We do not want to give up the fruits of 40 years of leadership in the world as champions of free trade, open markets, and rising standards of living.
>
> (Dole 1993b: S15699)

Senator Mitchell challenged the House to have "the courage and the confidence to lead this country into the next century. We cannot relieve or remake the past" (Mitchell 1993b: S15698). Like Dole, he implied that a "nay" vote would be a "nay" against the country.

Nevertheless, even one day before the House vote, the administration was not certain of the outcome. Only six days before, *The Wall Street Journal* reported that "The White House and USA-NAFTA, a pro-NAFTA business coalition, say they have 205 votes of the 218 needed to win. But pro-NAFTA lawmakers in the House put support for the trade pact at about 190 votes" (Calmes and Frisby 1993: A16) The discussions on the floor of the House and Senate became more heated and immense pressure was put on those voting. The public, although remaining relatively neutral overall on the issue, was at least finally paying attention. The atmosphere in Washington was tense.[7]

In the end both the House and the Senate voted for NAFTA and they did so with a comfortable margin. The credit for the victory went to the Gore performance in his debate with Perot and the subsequent repositioning of the pro-NAFTA side. To this, we would agree. It was not the economic arguments dominating the formulation of NAFTA that determined this end. The real fight came when the pro- and anti-NAFTA forces confronted each other on a level playing ground, with the narrative of general interest and character taking on the claims of special interest. The Gore–Perot debate changed the momentum and gave the chance of paving the path for the pro-NAFTA forces to follow, and they did with decided effectiveness.

Conclusion

What do we learn from this remarkable chain of events? Does the NAFTA debate prove the inefficacy of the science of economics in public debates? Maybe, although "prove" would be too strong a word, no matter what. Although we observed the crowding out of academic economists in the proceedings, we have not established conclusively the ineffectiveness of their arguments. Even when the carriers of a message are removed from the scene, their message may still carry. As David Colander pointed out in a critique on an earlier draft of this chapter, our readings do not take into account all that goes on in the bureaucracies and in the chambers of the members of congress. Staff members may have pushed the economic arguments – who knows, they may even have economics PhDs – which the politicians converted for public consumption. And then, these politicians may have distilled voices from the air and so were able to see the long-run advantages of free trade through a thicket of short-run costs.

Even so, if this kind of case study shows anything, it is that showing such positive influences of academic economics on public policy will be very hard. Then again, we do not know what would establish proof of a positive influence. All we can tell is that the anecdotal evidence and personal experiences that economists usually employ to state their claim to relevance do not suffice. They certainly do not measure up to the scientific standard that economists seek and expect in their own economic research.

The main outcome of this reading of the NAFTA debates is, as far as we are concerned, the confirmation of our point of departure: everyday rhetoric differs dramatically from academic rhetoric on economists. Politicians represent here the crowd of everyday economists.

After all, their job is to know what the people want and to speak in the rhetoric that their constituency will understand and appreciate. The rhetoric of academic economics does not serve them well. The mechanical, instrumental, and abstract mode of reasoning of academic economics does not allow for identification by the actors. Actual economic agents do not recognize themselves in a computable equilibrium or a constrained maximization set-up. Furthermore, the disciplined accounts of the real world tend to lack the drama that is needed to appeal to less disciplined thinkers. An economist may get excited about a solid piece of empirical work, the public yawns hearing that the results indicate that the effects of NAFTA are small. The rhetoric of special interests – jobs and environmental concerns – played well for the anti-NAFTA forces. Only when the political leaders were able to introduce character into the debate were they able to shift the momentum to their side. In the end the debate was all about the character of the United States and with that the debate moved away from the strictly economic arguments. By then policy entrepreneurs had already crowded out academic economists with their dramatic and impressionistic statements.

Notes

1. Jennifer Meehan was a senior at George Washington University when we did the research for this chapter. At the time of the NAFTA saga she worked for a US senator and had access to privileged information which facilitated our research.
2. The probable reason for this omission is of a conceptual nature, at least so I propose. Without a well-worked-out notion of knowledge mainstream economics is incapable of thinking of a role for scientific knowledge in the making of rational decisions.
3. Coats has edited various volumes that discuss economists in governments. Their main weakness is the dubious assumption that the presence of an economist signifies an impact of economic knowledge. Economics PhDs like the former Mexican president Carlos Salinas and the late Greek premier Andreas Papandreou may very well put their academic knowledge on the backburner and begin to think as politicians do. Who knows how much of their economic thinking remains after politics enters?
4. According to a search using the Lexus system.
5. According to a search using the Lexus system.
6. Cited in Bradsher (1993: A1).
7. In our immediate environments, the Senate chambers, and the academic community, NAFTA was all people could talk about. Placing bets on the outcome was the favorite thing to do in the economics department of George Washington University. A few days before the vote, the betting went against NAFTA. Opinions began to change only the day before the vote.

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6 Bridging the gap between the public's and the economists' views of the economy

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Over the past two decades, a substantial body of research has emerged showing that public opinion has a major influence on many public policy decisions, including in the area of economic policy (Monroe 1979, 1983; Page and Shapiro 1983; Shapiro and Jacobs 1989; Wright, Erikson, and McIver 1987; Erikson, Wright, and McIver 1989; Page and Shapiro 1992; Jacobs and Shapiro 1989, 1997). In addition, the public's views about the economy are often cited as being especially important to elected officials because of the pivotal role perceptions about economic conditions play in determining the outcome of elections (Fair 1978, 1996; Lewis-Beck and Rice 1992).

Opinion surveys report that the public sees the problems of the economy and adequate job creation as the highest priority for elected officials to address (Harris Poll, Roper Center for Public Opinion Research 1996), blames government when conditions fail to improve (Shapiro and Conforto 1980), and sees the economy and jobs as the most important substantive issues when making its voting choice for President (Voter Research and Surveys 1992; Voter News Service 1996; *Los Angeles Times* 1996).

Given the significance citizens' views have for elected decision makers, it seems important to understand the congruence between public perceptions of the economy and the views held by economists working in the area of domestic economic policy, as well as related findings drawn from official government data and research. A better understanding of where these views coincide or differ may strengthen the ability of professional economists to aid elected decision makers in bridging the gap between the two perspectives (Stein 1994).

This chapter seeks to address this concern. It uses the results of a pair of recent national surveys to contrast the views of the public and professional economists along three dimensions: assessments of current and past economic performance; expectations for the economic future; and perceptions of why the economy is not doing better. In the concluding section, we advance a number of possible theses to explain these differences. Throughout the chapter, we also look at the views of college-educated Americans, who tend to have a disproportionate role in policy making and leadership, and who are more likely than other Americans to vote.[1]

The survey of economists presented here falls in the tradition of such surveys conducted for *The Wall Street Journal* and *The Economist.* However, the present study has the advantage of comparing economists' views in a systematic way with the views and knowledge of the public as a whole.

Data and methods

The results reported here are based primarily on two surveys in a series conducted by the *Washington Post*/Henry J. Kaiser Family Foundation/Harvard University Survey Project. The purpose of this initiative is to examine public knowledge, values, and beliefs on major issues and challenges facing the country.

In the survey of public attitudes, a total of 1,511 randomly selected adults (including 478 college graduates and 1,028 non-college graduates) were interviewed over the telephone between July 22 and August 2, 1996. For the survey of economists, a total of 250 self-described domestic economic experts were interviewed over the telephone between July 17 and July 31, 1996. All economist respondents are members of the American Economic Association, have a doctorate in economics, and are employed full time as economists (*Washington Post*/Kaiser/Harvard 1996). In addition, supplemental questions were asked between September 20 and September 24, 1996, of a sample of 1,000 adults nationwide in a telephone survey (*Washington Post*/Kaiser/Harvard supplement 1996).[2] Other results reported in this chapter are based on questions asked in other national surveys of 1,000 to 2,000 adults each.

Of course, all surveys are subject to sampling error, which varies with the number of people in the survey and the magnitude of difference in the responses to each question.[3] For results based on 250 respondents, one can say with 95 percent confidence that error attributable to random sampling could be approximately ±7 percent; for a sample of 1,000, ±3.5 percent; for a sample of 1,511, ±3 percent; for a sample of 2,000, ±2.5 percent.

Economists have a long tradition of relying on revealed preferences rather than opinion surveys to explain public behavior. The use of opinion surveys raises two questions about the validity of public opinion polling in predicting behavior:

1. In the absence of particular incentives to do so, do respondents correctly report their views in public opinion polls?
2. Is there evidence that the level of public knowledge affects actual behavior?

What we know from public opinion research is that, while there are some areas where respondents do not always report their attitudes accurately (e.g., questions about racial issues), public opinion polls have been reasonably accurate on the outcome measure where actual behavior can be measured with considerable precision: vote choice in elections. Much of the reputation of public opinion polling has rested on the accuracy with which Americans report their voting intentions, a potentially sensitive topic of inquiry. For instance, the final preelection polls conducted by the Gallup Organization (which has the longest trend in preelection polling) have correctly predicted the eventual winner in nine of the last twelve presidential elections. In the other three races (1960, 1968, and 1976), Gallup's preelection surveys indicated that the race was within one or two points and too close to call. As predicted, all three of these elections were in fact close (Newport 1997).

While little research has been done relating public knowledge to specific economic behaviors, e.g., how misperceptions of the inflation rate might affect portfolio decisions, research has demonstrated an analogous relationship in the political realm. Research has shown that more extensive political knowledge promotes political participation, helps citizens construct stable, consistent opinions on a broad array of public policy topics, helps citizens identify their own interests and connect these with their political attitudes, and helps citizens link their attitudes with their actual political activity. On each of these dimensions, taking overall educational levels into account, the differences in behavior between the best and least informed citizens have been shown to be substantial (Delli Carpini and Keeter 1996).

Perceptions of current and past economic performance

Our survey finds that a large part of the public believes that the economy is performing less well than official government data suggest, as shown in Table 6.1. Unemployment was hovering near a seven-year low in 1996, yet only 37 percent of the public believes that the unemployment rate is lower than it was five years earlier. Nearly as many believe the unemployment rate is higher. Inflation over the five years from 1992 to 1996 was below 3 percent, a record not matched since the early 1960s. Yet only one in six Americans says that the inflation rate is lower than five years ago; nearly half say it is higher today. Even though the unemployment rate and inflation rate are frequently mentioned in media reports about the economy, only about one-eighth of the public can correctly cite either rate, within a half-percentage point. While government figures show the number of full-time jobs in the United States increasing, nearly half of the public believes that the number has decreased over the past five years. Similarly, while statistics show that there has been a substantial reduction over the past twenty years in the number of elderly living in poverty (US Bureau of the Census 1995), nearly six Americans in ten believe that this figure has increased over those years.

In their general evaluation of how the economy is doing today, nearly four in ten Americans do not think the economy is growing; this includes one in six who thinks the economy is either in a recession or in a depression. These beliefs are held in a period when real domestic product grew by 4.1 percent in 1994 and 2.9 percent in 1995 (Council of Economic Advisers 1996).

On average, Americans with college degrees have views that conform more closely to government economic data than those of non-college graduates. For instance, half of college

Table 6.1 Views of current economic performance

	General public	*College grads*	*Non-college grads*
Compared to 5 years ago, unemployment rate is ... [a]			
• **Lower**	37%	53%	31%
• About the same	28%	24%	30%
• Higher	33%	22%	37%
Compared to 5 years ago, inflation rate is ... [a]			
• **Lower**	16%	30%	12%
• About the same	34%	39%	33%
• Higher	46%	29%	52%
% correctly naming the current unemployment rate, ±0.5%a (**5.4%; 4.9–5.9% accepted**)	11%	24%	7%
% correctly naming the current inflation rate, ±0.5%a (**2.9%; 2.4–3.4% accepted**)	15%	29%	10%
During the past 5 years, number of full-time jobs in US has ... [a]			
• **Increased**	29%	41%	25%
• Stayed about the same	24%	21%	26%
• Decreased	46%	38%	49%
The US economy today is ... [a]			
• Growing rapidly	18%	12%	21%
• **Growing slowly**	42%	56%	37%
• Stagnating	20%	21%	20%
• In a recession	10%	7%	11%
• In a depression	7%	2%	9%
Poverty among the elderly over the past 20 years has ... [b]			
• **Decreased**	15%	18%	14%
• Stayed about the same	23%	23%	24%
• Increased	59%	56%	59%

Sources: [a] *Washington Post*/Kaiser/Harvard (1996); [b] *Washington Post*/Kaiser/Harvard (1995)

Notes: Correct answers are bolded. Columns may not sum to 100% because of rounding error and because “No opinion” responses of 3% or less are not reported.

graduates (compared to a third of non-graduates) knew that the unemployment rate was lower than it was five years ago. On four other knowledge measures – the inflation rate compared to five years ago, the current inflation and unemployment rates, and the number of full-time jobs compared to five years ago – college graduates performed better than non-college graduates, but the majority still gave an incorrect answer. In their general evaluation of the current economy, more college graduates than non-graduates knew the economy was growing, but still three in ten thought it was not.

In assessing the performance of the economy over the past twenty years, the public and economists hold views that are sometimes very different and at other times quite similar, as shown in Table 6.2. When asked first whether family incomes are falling behind the cost of living, and then whether wages for average workers have been falling behind the cost of living, the general public does not differentiate much between the two questions: about 70 percent believe that both are falling behind. Economists not only disagree, but differentiate between the two questions. Only 22 percent of economists agree that family incomes are falling behind the cost of living, while 42 percent of economists believe that wages for an average worker are lagging inflation. However, the majority of economists believe either that wages have stayed about even or that they have gone up faster than the cost of living. There is, however, one point of agreement: large majorities of both the public and economists perceive the income gap between the rich and the poor as being larger than it was twenty years ago, a position also supported by census data. Interestingly, on these three questions about past economic performance, college graduates held views almost identical with those of non-college graduates.

Important differences also exist over the evolving nature of the labor market. More than three-fourths of the public believes that the new jobs being created in the United States are generally low paying, and only 16 percent of the public feels that new jobs pay well. Economists are more divided in their views about wages for the newly created jobs: 32 percent agree with the public that new jobs are mostly low paying; 39 percent say they pay well; and 22 percent volunteer the opinion that the jobs are neither.

Expectations for the economic future

A large part of the public does not see the changes taking place in the national economy as leading to long-term improvements for the general population. Economists tend to have somewhat more positive views about these changes, as shown in Table 6.3. In looking at the long-term effect twenty years from now of changes like new technology, foreign competition, and downsizing, 54 percent of the public sees these changes as bad for the country, while 93 percent of economists see these changes as being positive.

In looking at individual issues, the gap between the public and economists remains. For example, 59 percent of the public sees the wave of downsizing of major corporations as being bad for the economy, while a majority of economists see downsizing as generally a positive

Table 6.2 Views of past economic performance

	General public	*Economists*
During the past 20 years, family incomes for average Americans have been ...		
• Going up faster than the cost of living	11%	35%
• Staying about even with the cost of living	19%	42%
• Falling behind the cost of living	70%	22%
During the past 20 years, wages of the average American worker have been ...		
• Going up faster than the cost of living	7%	18%
• Staying about even with the cost of living	21%	38%
• Falling behind the cost of living	71%	42%
Compared to 20 years ago, the gap between rich and poor is ...		
• Larger	73%	86%
• About the same	20%	11%
• Smaller	6%	2%

Source: *Washington Post*/Kaiser/Harvard (1996)

Note: Columns may not sum to 100% because of rounding error and because the small "No opinion" responses of 2% or less are not reported.

phenomenon. Majorities of both the public and economists agree that trade agreements and increased use of technology in the workplace are good for the US economy. But four out of ten Americans do not see trade agreements as being good for the economy and three out of ten do not see increased use of technology as something positive for the economy. Among economists, the dissenting minorities in these cases are less than one in ten.

On each of the questions in Table 6.3, college graduates have a more positive view than non-graduates of the changes taking place in the economy. This may be in part because technology, trade, and downsizing have tended to be more disruptive for those with lower levels of education.

The public is more pessimistic than economists about the intermediate economic future, as Table 6.4 reports. Only 24 percent of the public believes that the average American's standard of living will rise over the next five years, while 29 percent think it will fall. In contrast, half of economists think the average American's standard of living will rise, while only one in twelve see it falling. Only one-fifth of the public thinks their family's income will grow faster than the cost of living during the next five years. A bare majority see their family's income staying about even, but 27% think it will grow slower than the overall cost of living.

The public and economists hold more similar views about long-term economic prospects, as Table 6.5 illustrates. About four in ten of the public and half of economists see economic

Table 6.3 Views of changes in the economy

	General public	*College grads*	*Non-college grads*	*Economists*
In 20 years, changes like new technology, foreign competition, downsizing will eventually be ...				
• Good for the country	43%	58%	39%	93%
• Won't make much difference	23%	15%	25%	3%
• Bad for the country	31%	23%	33%	2%
Increased use of technology in the workplace:				
• Good for file economy	70%	81%	67%	97%
• Won't make much difference	12 %	8%	13%	2%
• Bad for the economy	17%	11%	19%	0%
Trade agreements between the US and other countries:				
• Good for the economy	55 %	71%	50%	89%
• Won't make much difference	14%	9%	16%	6%
• Bad for the economy	28%	17%	32%	3%
The recent downsizing of large corporations:				
• Good for the economy	21%	29%	19%	54%
• Won't make much difference	17 %	11%	18%	27%
• Bad for the economy	59%	58%	60%	16%

Source: *Washington Post*/Kaiser/Harvard (1996)

Note: Columns may not sum to 100% because of rounding error and because the small "No opinion" responses of 4% or less are not reported.

circumstances improving for the next generation. In addition, about half of the parents in the general public sample think that, compared to their own personal standard of living, their children will enjoy a higher standard of living. Interestingly, college graduates are not as optimistic as non-graduates on these two long-term measures. Only 26 percent of college graduates – compared to 42 percent of non-graduates – see the next generation as having a higher standard of living. Similarly, only 36 percent of college graduates – compared to 52 percent of non-graduates – expect their own children to have a higher standard of living than their own.

Table 6.4 Views of expectations for intermediate economic future

	General public	*Economists*
Over the next 5 years, the average American's standard of living will ...		
• Rise	24%	50%
• Stay about the same	46%	41%
• Fall	29%	8%
Over the next 5 years, expect your family's income to ...		
• Grow faster than the cost of living	20%	Not asked
• Grow about the same pace	52%	
• Grow slower than the cost of living	27%	

Source: *Washington Post*/Kaiser/Harvard (1996)
Note: Columns may not sum to 100% because of rounding error and because the small "No opinion" responses of 2% or less are not reported.

Table 6.5 Views of expe3ctations for long-term economic future

	General public	*College grads*	*Non-college grads*	*Economists*
Compared to your generation, expect the next generation of children to have ...				
• Higher standard of living	38%	26%	42%	48%
• About the same	35%	38%	33%	31%
• Lower standard of living	27%	36%	24%	20%
Compared to your standard of living, when your children reach your age, expect them to enjoy ...				
• Higher standard of living	49%	36%	52%	Not asked
• About the same	36%	43%	34%	
• Lower standard of living	15%	20%	13%	

Source: *Washington Post*/Kaiser/Harvard (1996)
Note: Columns may not sum to 100% because of rounding error and because the small "No opinion" responses of 2% or less are not reported.

Explanations of why the economy is not doing better

The public and economists have fundamentally different views about why the economy is not doing better than it is. Based on a review of almost two decades of public opinion polling on the economy, we chose eighteen of the reasons most frequently mentioned as possible reasons for the economy not doing better, and asked them of both the public and economist samples. Eleven of the potential reasons were general; the other seven had specifically to do with businesses.

Majorities of the public cite seven items off the general list as major reasons why the economy is not doing better. Specific percentages are given in Table 6.6. The most popular answers, in descending order, are that the federal deficit is too big;[4] too many people are on welfare; foreign aid spending is too high; education and job training are inadequate; taxes are too high; people place too little value on hard work; and people are not saving enough. Majorities of economists agree with the public on only two of these causes: inadequate education and job training,[5] and people not saving enough. Almost none of the economists mention foreign aid spending as a major reason for an underperforming economy. The importance of the latter is that, as shown in an earlier survey, the public believes more of the federal budget is spent on foreign aid than on Medicare, a conclusion that is factually incorrect by a large margin (*Washington Post*/Kaiser/Harvard 1995).

Four potential business-related issues are mentioned by majorities of the public as major reasons the economy is not doing better than it is: top executives are paid too much; companies are sending jobs overseas;[6] companies are not investing enough money in education and job

Table 6.6 Views of reasons why the economy is not doing better

	General public	*College grads*	*Non-college grads*	*Economists*
The federal deficit is too big	77%	76%	78%	32%
Too many people on welfare	70%	52%	76%	11%
Foreign aid spending too high	66%	47%	72%	1%
Education and job training are inadequate	64%	63%	65%	67%
Taxes are too high	61%	44%	67%	18%
People place too little value on hard work	59%	50%	62%	18%
People are not saving enough	51%	52%	51%	56%

Source: *Washington Post*/Kaiser/Harvard (1996)

Notes: Other possible causes include: too many tax breaks for business (cited as a “major reason” by 48% of general public, and 5% of economists); too many immigrants (47%, 1%); government regulates business too much (42%, 23%); and women and minorities get too many advantages under affirmative action (18%, 2%).

training; and companies are downsizing. None of these four possible reasons is cited by a majority of economists (Table 6.7).[7]

The responses of college graduates and non-graduates are similar in several cases, but the two groups differ sharply in a few areas. Foreign aid spending is mentioned as a major reason by 72 percent of non-graduates, compared to 47 percent of college graduates; too many people on welfare by 76 percent of non-graduates and 52 percent of graduates; and high taxes by 67 percent of non-graduates and 44 percent of graduates. However, even in these cases, the responses of college graduates still differ dramatically from those of economists.

Possible explanations of the gap between the public and expert views

The results of the *Washington Post*/Kaiser/Harvard surveys show a substantial gap between how the public and economists view the economy. Although the study was not designed to explain why the gap exists, we can offer six possible reasons based on our review of these surveys and other literature.

1 *The experiences of individuals may not mirror official data.* For example, when the economy is growing slowly, people may not perceive their financial gains, because they are relatively small increments to family income. During much of the last two decades, increases in average families' incomes have often occurred because of spouses working more hours in paid employment. This commonly means lost work in the home and extra expenses such as day care, transportation, and the need for paid in-home help. Taking these costs into account may lead the average family to see their net income, after

Table 6.7 Views of business-related reasons why the economy is not doing better

	General public	*College grads*	*Non-college grads*	*Economists*
Top executives are paid too much	69%	59%	72%	12%
Companies are sending jobs overseas	68%	53%	72%	6%
Companies are not investing enough money in education and job training	62%	58%	63%	36%
Companies are downsizing	59%	50%	62%	5%

Source: *Washington Post*/Kaiser/Harvard (1996)

Notes: Other possible causes include: business profits are too high (cited as a "major reason" by 46% of general public, and 4% of economists); technology is displacing workers (46%, 2%); and business productivity is growing too slowly (34%, 53%).

working costs are deducted, as growing at a much slower rate than portrayed by economic statistics (Levy 1996).

In addition, the public tends to focus on increases in cash income, not on overall increases in wage compensation that include fringe benefits. Over the past twenty years, employers' contributions to employee benefits have grown faster than wage income (Employee Benefit Research Institute 1995), but two-thirds of the public does not perceive employers' contributions to their fringe benefits, such as health insurance, as part of their family's income (*Washington Post*/Kaiser/Harvard supplement 1996).

2 *When people evaluate the performance of the economy, government statistics are only one of several sources of information they use.* Prior studies have shown that the public uses different criteria to assess the state of the economy than economists use (Kinder, Adams, and Gronke 1989). Asked to choose (from a list of nine possible sources) the two indicators people think give them the best indication of how the economy is doing, only 32 percent of the public mentions news reports on government unemployment and cost of living statistics. Nearly as many Americans (28 percent) cite as a key indicator the amount of buying activity they see in stores. More than half (55 percent) rely on the personal experiences of family, friends, and coworkers (Roper Center 1984).

At a point in time, these personal experiences may yield a different public perception of economic conditions than that described by official statistics. For example, during the past five years while the economy was growing, albeit slowly, two-thirds of Americans report that someone in their family had experienced one of the following three major economic disruptions: one in three Americans reported that someone in their family took a pay cut or worked fewer hours in order to keep their job; one in three reported that someone in their family was laid off; and nearly half of Americans reported that during the past five years their family's income had been falling behind the cost of living. In turn, these difficulties were often linked to a greater likelihood of financial problems such as an inability to save, delaying medical care, giving up on schooling, marital strife, problems with collection agencies, and so on (*Washington Post*/Kaiser/Harvard 1996). For these individuals, a slowly growing economy may have a different meaning than it does for those interpreting government economic data.

3 *A large number of Americans do not believe government economic statistics are accurate.* Overall trust in the federal government is near a twenty-three-year low (*Washington Post*/Kaiser/Harvard 1995), which seems to be affecting trust in government statistics as well. Asked to judge government reports on how well the national economy is doing, including statistics on the rates of unemployment and inflation, 26 percent say they think these reports are not too accurate and an additional 13 percent say they are not accurate at all. (Fifty-three percent said they thought these reports were fairly accurate, while only 7 percent said they were very accurate.) Even when they hear or read about a particular government statistic, many Americans express distrust. In September 1996, two-thirds of the public had heard or read about government statistics reporting that the

unemployment rate was lower than in recent years. But among those who had heard or read about such reports, nearly half thought that, based on their own experiences, the reports of lower unemployment were inaccurate (*Washington Post*/Kaiser/Harvard supplement 1996).

4 *The media tend to portray the condition of the economy as being worse than it actually is, leaving the public overly pessimistic about the nation's economic situation.* Studies have shown that the media have a major influence on public opinion, including attitudes about the economy (Iyengar and Kinder 1987; Iyengar 1991; McCombs and Shaw 1972; Zucker 1978). Recent research suggests that the media tend to emphasize the aspects of the economy that are getting worse and to pay less attention to the evidence that the economy is improving (Patterson 1993).

5 *Economists are more optimistic about the economic future because they are part of an occupational segment, made up of professionals and scientists, that may have been sheltered to some degree from the negative consequences of economic change reported in the survey by much of the public.* One question that could not be addressed in the survey was whether or not PhDs in different fields, MBAs, MDs, and lawyers would share views similar to those of economists. Are economists' views related primarily to their being highly educated and part of the professional class, or are their views primarily the product of unique advanced training in economics?

6 *Americans do not have a very good foundation of knowledge about how the economy operates, and therefore may be having a difficult time making accurate assessments of how the economy is performing.* In an extensive survey, Walstad (1996) demonstrates the rather low level of public knowledge of the economic system. For instance, only about one in three American adults knows that the consumer price index is the most widely used measure of inflation, or that the Federal Reserve sets monetary policy.

In our surveys, two particular questions serve to demonstrate the public's lack of belief in market forces. More than two-thirds (69 percent) of the public believes that when prices go up, it is mainly due to companies trying to manipulate prices to increase profits. Only 28 percent think price increases are mainly due to the laws of supply and demand (*Washington Post*/Kaiser/Harvard supplement 1996). We also asked about gasoline prices in our survey, at a time when they were rising. Nearly three-fourths of the public believed that the increase in gasoline prices was due more to the oil companies trying to increase profits than to supply and demand, while 85 percent of economists said the price increase was due to supply and demand (*Washington Post*/Kaiser/Harvard 1996).

Substantially more research needs to be done to understand the basis of the gap between public and expert views of the economy. However, the results of this study make it clear that economists need to do a better job educating the public about economic matters and spend more time communicating the implications of their research to the public. In the meantime, economists will have to deal with the reality that the public does not view the economy or its problems in the way the expert community does, and are likely to continue to communicate these divergent views to elected decision makers.

Notes

1. In the 1996 election, college graduates voted at twice their proportion in the general adult population (Voter News Service 1996).
2. The first set of telephone interviewing for polls of the general public and economists was conducted by Chilton Research. The supplementary telephone poll in September was conducted by ICR Research.
3. There are also possible sources of non-sampling error, including potential non-response bias, question wording, and ordering effects.
4. Although economists might see the effect of the federal deficit differently from the public's views, the public's concern about the deficit may be seen to reflect a degree of economic literacy about the events of the 1980s and early 1990s.
5. Similarly, in a recent *Wall Street Journal* survey, academic economists cited spending on education and research and development as the federal government policy (among eight listed in the question) that would have the most positive impact on economic growth (Wessel 1997).
6. A seeming contradiction between the public's beliefs that trade agreements are good for the country and that companies sending jobs overseas is a major reason the economy is not doing better can probably be explained by the way the public perceives the focus of trade agreements. The public is likely to see trade agreements as allowing US products to be sold abroad without barriers. The public is less likely to look at trade agreements as an incentive for US companies to relocate their facilities from this country to another.
7. Because the list of potential causes was derived from public opinion surveys dealing with issues salient to the public, it is not surprising that the public identified more of these items on each of the two lists as "major reasons" and that economists did not identify many of these as "major" from their professional perspective. On the first list, an average of 5.5 items were cited as major by the public, compared with 2.3 items by the economists; on the second list, an average of 3.8 by the public, compared with 1.2 by the economists.

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Part II

It’s not all academic

7 Economic knowledge, professional authority, and the state

The case of American economics during and after World War II

Michael A. Bernstein

> [T]he ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical [people], who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. ... I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas.
>
> (Keynes 1964: 383)

> Mos3t of the creations of the intellect or fancy pass away for good after a time that varies between an after-dinner hour and a generation. Some, however, do not. They suffer eclipses but they come back again, and they come back not as unrecognizable elements of a cultural inheritance, but in their individual garb and with their personal scars which people may see and touch.
>
> (Schumpeter 1962: 3)

In recent years, that structure of international hegemony sometimes called the *Pax Americana* has become less imperial and more interdependent with the conduct of foreign states. Yet the sway of American ideas in the social and policy sciences – quite notably in economics – has steadily increased. To better understand both the forms in which this cultural and intellectual dominance has been expressed and the means by which it has been justified and even celebrated throughout the world, an examination of its history would seem both warranted and useful. Clearly, the power of ideas, as John Maynard Keynes noted over a half-century ago, may often be underestimated. To the extent they serve as instruments of what we might call imperial authority, and as tools with which the legitimacy of particular forms of power may be established, "creations of the intellect" must indeed garner as much attention from scholars of empire and "world-systems" as trade flows, direct investment patterns, and mechanisms of unequal exchange. Even so, to characterize the impact of ideas within the context of empire in terms of simple, "internalist" notions of disciplinary maturation and avenues of scholarly communication would be both misleading and incomplete.[1]

What is needed, rather, is a more social–historical approach to knowledge production and distribution, one that looks not only at how ideas are produced and shared among scholars, but also at why they are promulgated and accepted across (as well as within) national boundaries. This kind of interrogation should afford a more profound understanding of imperial regimes and, in the case of American history, provide some insight regarding how deeply empire as "a way of life" has made its way into the interstices of American society.[2]

Recent studies of the Cold War (and of its attendant *Pax Americana*) have turned their attention increasingly to matters of AMERICAN intellectual and cultural life.[3] Hence reassessments of the *Pax Americana* in terms of the historical evolution and maturation of professional disciplines and groups therefore seems especially called for today. As integral parts of a nation's intellectual and cultural (not to mention social) superstructure, professional elites provide a venue for further investigations of the historical impact of major political and economic events like the post-World War II confrontation of the superpowers. By examining the effects of empire and Cold War on various professions, as well as the role of professionals in the Cold War years, we can achieve a more refined appreciation of the postwar era and thereby begin to rethink empire itself.

A particularly striking example of such a history is the case of the American economics profession. On the one side, the trajectory of theoretical development in the field was decisively affected by the pressures, constraints, and opportunities afforded by the Cold War preoccupations of the federal government, colleges and universities, and private foundations and "think tanks." On the other, the profession itself became an instrument for the further penetration of American capital, exports, and policies throughout the postwar world. Economists proved to be quite useful in the demonstration of the purported superiority of not only American goods, military capability, and technology but also American ideas and policies. In all of these respects, the social and political history of American economics affords useful opportunities to explore the causes and consequences of academic knowledge production, not simply within the scholarly domain (as with the so-called "internalist" approach) but also in terms of the political and professional authority at home and imperial authority abroad that expertise both animates and cultivates.

Academic reconstruction, American style

During and after World War II, American academic professionals were involved in the reconstruction and reconstitution of foreign faculties in both Asia and Europe. American specialists influenced both the establishment of new curriculums in their fields and indirectly the vetting of personnel. Postwar academic reconstruction ultimately involved the exportation of American-style thinking on scholarly matters to foreign lands. With the transfer of Anglo-American concepts and practices in economics to newly reclaimed foreign faculties, for example, alternative continental and Asian traditions in the field were either suppressed through overt exclusion or enervated by a deprivation of resources and prestige. An apparent Americanization of the globe in the late twentieth century may thus also be understood in terms of the reproduction of American academic agendas overseas.

Interestingly enough, official involvement of American economists in the support and operation of foreign economics faculties did not begin with World War II. For example, at the end of World War I, the Library of Congress, in association with the Smithsonian Institution and the International Exchange Service, asked the American Economic Association (AEA) to send copies of its journal and as many books as possible to devastated European libraries. Renewing participation in international scholarly organizations was not quite so easy. One prominent association member opposed rejoining the *Union Academique* because of its policy of boycotting German and Austrian professional societies. "[S]cience and letters," Harvard professor and former AEA President Frank Taussig wrote his colleague (and AEA Secretary–Treasurer) Allyn A. Young in 1919, "should be the first to shed the bitterness of war, and a union which looks to the maintenance of the war spirit seems to me undesirable." Young tried to assuage the fears thus expressed, pointing out that Austrian and German societies could ultimately join the *Union* with one-quarter of the membership concurring.[4]

Peacetime brought an extension of foreign activities. When the Library of the Tokyo Imperial University was destroyed in a massive earthquake in September of 1923, the AEA once again donated a complete set of the *Review,* along with other special association publications, for the rebuilding effort. The University of Yokohama was similarly aided. But it was no longer natural disasters or war's destruction alone that called forth such responses. In 1924 renewed subscriptions to the *Review* were granted without charge to the libraries at the Universities of Budapest, Leipzig, Munich, Naples, Petrograd, Turin, and Vienna. With the resurgence of war in the late 1930s the AEA again became involved in extending support to scholars caught up in the conflict. Much like the generosity it had shown to ruined European universities after the Great War, the Association early on tried to help national libraries and research institutes in China after the Japanese invasion. The outbreak of war in Europe served to further these efforts.[5]

Reconstruction brought the Association once again into the business of aiding professionals in war-torn areas. It was, however, a far more sophisticated effort than that undertaken after November, 1918. For now, in addition to contributing free books and copies of the *Review* along with cash donations to scholarly libraries in Europe and East Asia, the AEA became involved in the revision of curriculums and the rehabilitation and vetting of foreign faculties. American economists going overseas, either on official or personal tours, were asked to look up colleagues who had been imprisoned, wounded, or otherwise persecuted by German national socialism or Japanese imperialism. Letters to association members from economists abroad often contained information regarding colleagues who either had or had not collaborated with the enemy. Efforts were made to raise money for the relief of those who had opposed fascism and militarism. A note from a German colleague to former AEA President (and then

Democratic Senator from Illinois) Paul Douglas was forwarded to the Association offices because in it there was "a very valuable list of economists who either opposed Hitler or kept their honor clean." American economists were now in a position not only to secure greater influence and prestige at home but also to reconstitute virtually from scratch the European and Asian branches of the guild.[6]

Restoration of foreign scholarly libraries prompted the American Library Association to ask professional societies to provide book lists in their fields in order to guide rebuilding efforts. AEA officials canvassed the membership for suggestions and ultimately provided this information to the Library Association. With such books on the Association's final list as *Stalin, A Critical Survey of Bolshevism and Marxism: An Autopsy,* the ideological content of the library effort seems clear. This is of course hardly surprising. The point here is not that American economists would generally be loath to suggest books that extolled Marxism or Stalin, but that allied victory had the added impact of giving them a great deal of influence on the future course of foreign scholarship in the field. If postwar reconstruction served to recast Europe and Asia in the American image, as some scholars have suggested, the representations of that process in the academic and intellectual world should not be overlooked.[7]

There are a variety of examples of the transformation of foreign economics under American influence during the immediate postwar period. A particularly graphic case of the direct colonization of American economic thinking involved the 1960s restructuring of the curriculum of the London School of Economics by University of Chicago Professor Harry Johnson.[8] The introduction of Anglo-American economics was particularly hastened by the implementation of new programs of study in business management education, especially in Britain and France.[9] Partly because of its many ironies and ambiguities, however, and due to the (at times misleading) perception of the separation of eastern and western intellectual traditions, the instance of Japan is perhaps most striking. Before World War II, Japanese economic thought was distinguished by a rather eclectic reach and a profound continental influence. Graduate and postgraduate students often left such institutions as Tokyo University and Tokyo Commercial College to continue study in Britain, France, and Germany; the work of Marx figured as prominently in their training as that of the mainstream thinkers Alfred Marshall and A. C. Pigou.[10] Unlike the academic discipline in the United States (and Western Europe), Marxist economic thought in Japan enjoyed an increasing prestige and acceptance throughout the interwar decades.[11]

Military defeat and American occupation served only to enhance the reputation of left-wing Japanese intellectuals in general and of Marxist economists in particular. Having been dismissed from their academic posts, possibly imprisoned, or sometimes chased into exile, such individuals emerged in 1945 with impeccable political credentials in the eyes of American occupation authorities. They also of course enjoyed the respect and admiration of many Japanese who had either early or late come to oppose militarism. Prominent right-wing scholars and supporters of the war regime were conversely disgraced and purged. Distinguished

Marxist economists thus reappeared in positions of authority and power in Japanese universities.[12]

By the early 1950s, however, Japanese economics assumed an increasingly American look. The recasting of Japanese society along the political and social lines imposed by the Supreme Commander for the Allied Powers, Douglas MacArthur, had a decided impact on academic study.[13] Talented students of economics traveled more and more to American institutions such as the University of Chicago, Harvard, MIT, and Stanford. The work of Paul Samuelson (at Harvard and MIT) that sought to synthesize neoclassical and Keynesian theory became extremely influential, as did the empirical work of Simon Kuznets (at Pennsylvania, Johns Hopkins, and Harvard) on the measurement of national output.[14] What came to be known as "modern economics" (*kindai keizaigaku*) in Japan was, by the 1950s, based upon an Americanized "faith in notions of growth and progress, and ... a vision of the economic world as a mechanical system whose workings could be simulated by mathematical models."[15]

It is worth noting that the propagation of American economics in a postwar Japanese context was assisted by the resources provided by the Fulbright scholarships program and such research funding entities as the Social Sciences Research Council. Indeed, the mechanisms of cultural transmission and imperial dominance and legitimation rely as much on efforts to establish academic and artistic exchange networks as they do on overt exercises of power and supremacy. In this respect, the role of foundations and general philanthropic activity in the academic (re)construction of the contemporary world was significant.[16]

An additional historical observation should be made concerning the postwar trajectory of Japanese economics under American influence. There were peculiar generational consequences of the American involvement in the restructuring of Japanese economics faculties and curriculums. Given that, by the 1960s, many senior academic economists at Japanese institutions of higher learning were left wing, owing to the impacts of the American occupation in the early 1950s, the comparatively strange result emerged whereby young students of economics were not. Not surprisingly, this reality tended to encourage many talented young Japanese to pursue their doctoral degrees in the United States where their political convictions and interests tended to be closer to those of their teachers. Conversely, in the United States and much of Europe and Latin America, the opposite intergenerational political split emerged between students and faculty.[17]

The evolution of American economics during and after World War II

If American economics played a role (as I suspect many other academic disciplines did) in the ideological and social constitution of a postwar American empire, it is also true that World War II and the Cold War had a powerful, formative impact on American economic thought itself. The entire wartime experience of American economists had in fact played a major role in the postwar academic evolution of the discipline. From input–output analysis, to statistical estimation techniques, to national income account conventions, to international financial and commodity flow tabulations, the 1940s were an extremely innovative decade in the field's history. And these intellectual developments had taken place within the context of a grand crusade against fascism and totalitarianism. In this sense, World War II and, I would argue, its attendant reordering of the postwar world "[i]mparted to a community of humanist and social scientific scholars a concrete sense of the embeddedness of their ideas – and themselves – in history, which they brought back with them to their universities[,]" and, it should be added, which they sought to inject into the discourse of their respective disciplines.[18]

It was on matters of resource allocation and decision making that economists made perhaps their most significant contributions, and with which they (collectively as a profession) had their most significant wartime experience. Even before the attack by the Imperial Japanese Navy at Pearl Harbor, conversion to defense production had created virtually intractable problems of resource scarcity and waste for government officials. How to choose efficiently the timing and distribution of various productive activities necessary for the war effort became a major concern. With American entry into the war, allocation problems became only more intense.[19]

The impressive stature of the new work in economic theory that had been, in large measure, an outgrowth of the war years, carried over to the postwar era and the years of the Cold War. In a wide array of activities related to the defense establishment and the new global commitments of the United States, economic analysis came to play a significant role. With the development of game theory, however, the intellectual evolution of American economics and the concerns of a burgeoning national security state truly melded. Game theory had a powerful appeal for strategic analysts because of its focus on *conflict* and decision making.[20]

The 1940s' work of John von Neumann and Oskar Morgenstern signaled the emergence of game theory as a major part of economic analysis.[21] While it was immediately clear that their findings would be useful in microeconomic theory, over time it also became obvious that their work would be applicable to strategic choice problems and national defense planning. Game-theoretic approximations and simulations of two-person conflicts seemed appropriate scenarios in which to investigate the implications of the nuclear duopoly of the Cold War and the *Pax Americana*. It was no idle exercise for researchers at the RAND Corporation in Santa Monica, California, a major site of strategic gaming investigations, to relax over friendly contests of "Kriegspiel" and "Liar's Poker."[22]

The dramatic intellectual impact among academic economists of the work of von Neumann and Morgenstern paralleled the willingness of Washington to support the continued evolution of this particular line of inquiry. Research funding, distributed by the Department of Defense and affiliated agencies – such as the Office of Naval Research and subordinate service arms – was rapidly made available to those economic theorists, in particular mathematical economists, whose work in game theory and linear programming seemed to have potential value for the missions of the national defense establishment. More often than not, crucial support, both financial and logistic, was given to these activities by the RAND Corporation.[23]

Frequently under RAND auspices, continued research in game theory and linear programming flourished during the late 1950s and 1960s. The Corporation funded "Defense Policy Seminars" at UCLA, the University of Chicago, Columbia, Dartmouth, Johns Hopkins, MIT, Ohio State, Princeton, and Wisconsin. By 1965, RAND had created a graduate fellowship program to support training in a wide variety of fields in the physical sciences but also included economics and international relations. In that year, eight such fellowships were distributed among Berkeley, Chicago, Columbia, Harvard, Princeton, Stanford, and Yale. Additional support for game theory and strategic decision-making research came from that major instrument of the *Pax Americana,* the North Atlantic Treaty Organization (NATO) which at the same time established (and maintains to this day) a series of pre- and postdoctoral fellowships in the field. Continuing international game theory seminars, also sponsored by NATO, stand as additional examples of the close connections between the needs of the American security state, intellectual enterprise, and transnational influences in the advanced research and training of scholars.[24]

Throughout the 1950s and 1960s, these forces added to the growing self-confidence of the American economics profession, at home and abroad. This poise represented the coming of age of a powerful new field that, in at least the formal sense of collegiate and university organization, was in most cases less than a half-century old. AEA task forces sought to homogenize undergraduate and graduate training programs; association committees worked to "focus informed opinion" with respect to major policy questions not only among members but also in the public at large; and defense economics courses were introduced at major armed service academies under the direction of association members.

New subfields of the economics discipline, such as growth and development theory, garnered attention and resources owing to the interests of the government in fostering decentralized market growth in developing nations, a strategy imagined as a means to further American foreign policy interests and forestall Chinese and Soviet initiatives around the world. Policy makers also evidently hoped to secure greater access for American entrepreneurs to the economies of once colonial and now newly independent states. American economics assumed greater visibility on a global scale, in this regard, in addition to its growing respectability and status at home. The creation of a Council of Economic Advisers (CEA) within the Executive Branch during Harry Truman's presidency had, of course, already created high expectations regarding the status and importance of economics within the political realm.[25]

While the Council had, during both the Truman and Eisenhower administrations, a somewhat turbulent early history, not achieving its present relatively unchallenged standing until the Kennedy years, it nevertheless immediately became an object of interest to foreign governments and scholars.[26] In the spring of 1950, for example, a prominent CEA member, University of Chicago professor Roy Blough, undertook a revision of fiscal procedures in Turkey. Marshall Plan funds were used to support this effort to assist Turkey in the achievement of monetary stability and the balancing of its government budget – two crucial objectives of the Economic Cooperation Administration established for postwar reconstruction by the Truman administration. Blough was particularly concerned about the impact of military spending on Turkish public finance, and he recommended an aggressive set of reforms that would reorganize everything from the recruitment of personnel for Turkish governance to the rewriting of forms and records for the Ministry of Finance.[27]

The impressive example of an institution like the CEA had an impact on the policy practices of other nations. Some governments imitated the American institutional form. West Germany formed a Council of Experts to advise the Chancellor on economic matters, and the Canadian government added to its ministries an Economic Council. Arthur Okun, an eminent macroeconomist who served on the CEA under John F. Kennedy and Lyndon Johnson, spent several days with the Canada Council in 1970 to share his experience and advice from the vantage point of his new position at the Brookings Institution.[28]

Transnational networks of economic expertise, when and if they were forged in settings like that of the CEA, could also subsist elsewhere. Arthur Burns, one of the most influential Council members during the Eisenhower administration, pursued international connections after his service in the Executive Office of the President. As a member of the Columbia University faculty and a director of the National Bureau of Economic Research (NBER), Burns initiated and sustained a series of exchanges and visits with several foreign economics experts. In 1960, with the assistance of Bureau Director of Research Solomon Fabricant, he established a formal link between the Bureau and the National Council of Applied Economic Research of India. This relationship involved the intermittent exchange of personnel, especially the part-time assignment of Indian nationals to do work at the Bureau offices in New York. A few years later, similar arrangements emerged with the Japan Economic Research Institute. Overall, throughout the 1960s, a steady stream of economists from India, Japan, Poland, Singapore, the Soviet Union, and Yugoslavia made its way to the offices of the Council Chairman emeritus. Many of these visits involved discussions of the best techniques for the measurement of economic growth, wage and price levels, and technological change.[29] American economics had, in a wide variety of ways, made itself, throughout the postwar period, part of the evolution of the discipline worldwide.

A social/intellectual symbiosis: American economics and the Pax Americana

Just over three decades ago, William Appleman Williams argued that the tragedy and contradictions of American diplomacy ensued from the inability of the American government to view the world in anything but its own terms. Nationalist or regional efforts at self-determination, while extolled rhetorically, were more often than not viewed as "wrong or wrong-headed and ... opposed in favor of the emulation of the American example."[30] Attempts to Americanize the postwar world were, for Williams, the logical outcome of such political and cultural myopia, and they were also necessarily doomed to failure. The fact that any given program of foreign aid, intervention, or exchange would usually be premised on consciously expressed humanitarian impulses and convictions would and could do nothing to avert this unintended and, for Williams, tragic outcome. Episodes of what I have called (perhaps infelicitously) academic reconstruction serve to embellish upon and recast Williams' point. When subjected to historical and exegetical analysis, they offer us an enriched understanding of modern empire and world systems, as well as of the antagonisms inherent within them.

I have tried to suggest here that the means by which the postwar world was reordered in an American image were both expressed in and had a decisive impact upon the nation's intellectual and academic life. And I want further to suggest that this element of the *Pax Americana* of the postwar era deserves greater attention than has heretofore been the case. What matters is not whether a given train of development would have taken place in the history of American economics, but how a particular road was chosen. Far from being a product of dispassionate inquiry, some of the major advances in modern economic theory (of which game theory is an impressive example) were the result of a symbiosis, a mutual interaction with the wartime concerns of government and the national security agenda of the Cold War years.

To be sure, many historians of economic thought point to a seeming intellectual convergence of economic theory in both capitalist and communist settings as evidence of an apolitical, internalist evolution of ideas in the discipline. When, for example, Tjalling Koopmans of Yale University won the Nobel Memorial Prize in Economic Science in 1975, he shared the honor with Leonid Kantorovich of the Academy of Sciences of the Soviet Union. Both men had made crucial contributions to the development of linear programming – a major component of modern, advanced microeconomic analysis. Of course it is also possible to understand the coincidence of their work in terms of some of the historical processes outlined here. The Soviet Union, like the United States, faced exceptional problems with respect to military mobilization and planning and strategic assessment both during and after World War II. But in the Soviet case, as well, there was the added stimulus of the needs of the state for techniques of centralized economic calculation.[31]

It is possible to construe the American economics profession as an agent of, as complicit with, the Cold War ideology of the postwar United States, and at the same time to view the profession (if not its individual members) as in some sense a victim of the Cold War as well. What particular view one takes might depend on whether the vantage point is situated within or outside the ambit of the present-day profession itself. But all such impressions would border on assumptions of a fairly personal sort.[32] The point here is not to level accusations or deliver blandishments, but rather to portray a structure of political and social events that, in an historical context, generated particular intellectual and policy-oriented results. What is significant is that past choices that might have been made differently and that were made for a host of unconscious as well as conscious reasons powerfully circumscribed past and still delimit present conditions.

American economic expertise in the post-Cold War world

American ideology and its practical applications involving economic and social matters have today become almost canonical in a large part of the world. Devolution in the former Soviet Union, and the economic privations currently encountered throughout Eastern Europe and much of Latin America, have facilitated the penetration of individualistic concepts and instincts into societies that have been, for many decades, decidedly hostile to such intellectual and cultural transplantation.

In ways quite reminiscent of the activities of the immediate post-World War II years, American economists and business management specialists are once again positioned to bring their expertise to bear on other nations' problems. A "U.S. Business School" has been founded in Prague to aid in the transition to decentralized market decision making; Portland State University established a master's degree program in business administration in three Russian cities in 1993. Students and professors at the University of North Carolina, Chapel Hill, in 1990, sent over 1000 economics and business textbooks to ten institutions of higher learning in Czechoslovakia, Hungary, Poland, and Yugoslavia. A nonprofit organization, "Bridge to Asia," working with the support of the John D. and Catherine T. MacArthur Foundation, began soliciting donations of books, journals, and other scholarly materials in a wide array of disciplines for distribution throughout China, Indo-China, the Philippines, and Mongolia in the summer of 1993.

At Yale University, with the assistance of the Charter 77 Foundation of Budapest and New York, a "Civic Education Project" started in 1992 that sends graduate instructors and professors in economics, international relations, legal theory, political science, and sociology to assist in curricular reform in social science departments at Central and Eastern European universities, an effort followed in 1997 with the creation of a "Curriculum Consultants Exchange Program" managed by the United States Information Agency and the International Research and Exchange Board. Officials from the United States Internal Revenue Service have been advising Polish authorities for almost a half-decade on the imposition of the nation's first personal income tax scheme, while just last year the Securities and Exchange Commission began training Egyptian regulators dealing with newly devolved stock and bond markets. All these are but a few of the examples of the continuing and growing influence of American social science and related policy practice around the world.[33] That this burgeoning trend has been accompanied, in various circles, by a rejoicing in the international influence of the United States, and that it is invoked as an explicit rationalization for American policy, power, and international position, goes without saying.

To be sure, the mechanisms by which this state of affairs has emerged have as much to do with objective patterns of compulsion and coercion as they do with the more subtle and frequently uncontrived processes I have tried to describe here.[34] When negotiators for the European Community adopted a deregulation package for airline travel in 1993, they did so under extreme pressure from American aviation companies which (with the support of governmental officials) held out the prospect of exclusionary retaliation against Europe's flag carriers if the new regime had not been adopted. Mexico's decision to begin privatizing airport operations within its borders in 1995 was provoked in part by a desire to attract capital investment from American companies. And early in 1997, the international agreement to deregulate telephone markets worldwide, brokered by the World Trade Organization, was widely viewed as the result of private lobbying by American firms whose share of the global telecommunications market is estimated to increase, as a result, from 17 percent to 95 percent.[35]

American influence in policy matters has also been deployed through transnational agencies in particularly aggressive fashion. International Monetary Fund (IMF) assistance to Russia has been premised, for example, upon the acceptance of "technical assistance" from the IMF "to advise [that nation] on moving from a state-owned, government-run economy toward one based on the market forces of supply and demand and private enterprise." A similar accord between the IMF and the Ukraine was premised upon the initiation of a wide variety of "market reforms." Most recently, Thailand, desperately in need of international financial assistance as its currency has been battered by sustained speculation, submitted to the imposition of austerity measures in return for a $16 billion line of credit with the IMF. Needless to say, policy expertise and financial support for transforming economies have been delivered from American-controlled international agencies with high price tags.[36]

Whether an Americanized approach to understanding economic life, and formulating an associated policy agenda on the basis of that reasoning, will persist as a dominant motif in the wider world remains to be seen. Whatever the outcome, it is essential that it be understood and described within an historical setting, not by the invocation of the presumptions of internalist intellectual histories or reified claims about the "end of history" and a "New World Order."[37] Indeed, it would be unsound to suggest that there has not been resistance to the contemporary preeminence of American economic rhetoric and practice. For some parts of Asia, altogether different notions of economic planning and efficiency are also part of a continuing debate. In North Africa and the Middle East, there are in some cases active and strenuous efforts to sustain differences with the "West." What will ultimately happen in the former communist nations of Europe is also, at this point, manifestly unclear – a reality made vivid in the winter of 1997 with the outbreak of a virtual civil war in Albania.[38]

The ascendancy of particular points of view is not, of course, simply a matter of intellectual debate. A material environment of wealth distribution, diplomatic pressure, and military power also plays a decisive role in distinguishing between an "after-dinner hour" and a "generation." For this reason the role of ideas and patterns of thought, as an expression of and justification for prevailing political and social structures, cannot be denied. This is as true within a particular society as it is across national borders, within and between empires.[39] That power of ideas must necessarily command our attention. Moreover, in the context I have fashioned here, it should also challenge us to remember how very much we remain, to paraphrase Keynes, enthralled by economists – living, canonized, vilified, and extinct.

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Notes

1. I invoke here the debate, that spanned from the 1930s through the 1970s, among historians of science concerning "internalist" and "externalist" investigations of scientific change. Internalist arguments in science studies tend to focus on cognitive issues irrespective of political, social, and other external circumstances. See Kuhn's essay on "The History of Science" in Kuhn (1977, esp. 110–12).
2. With apologies to the late William Appleman Williams, *Empire as a Way of Life* (1982).
3. I cannot of course provide a comprehensive list of the works to which I allude, but some good examples are May (1988), Boyer (1985), Guilbaut (1983, esp. ch. 23), and Lipsitz (1981).
4. Taussig to Young, October 28, 1919, and Young to Taussig, November 19, 1919; Records of the American Economic Association (Special Collections, Northwestern University Library (hereafter RAEA)), Box 15 Folder, "Correspondence Ha–Zz 1919."
5. M.Y. Mok (National Library of [Beijing]) to Dewey, n.d.; Dewey to James Washington Bell (AEA Secretary–Treasurer), November 17, 1939; Bell to the National Library of [Beijing], November 22, 1939; RAEA, Box 89. H. D. Fong (Acting Director of the [Nanjing] Institute of Economics) to Dewey, December 28, 1939; RAEA, Box 89. Carl H. Milam (Secretary, American Library Association, Chicago) to the Association, September 22, 1938; Edwin E. Williams (Assistant to Milam) to Bell, April 13, 1939; Williams to Bell, May 4, 1939; Frederick V. Field (American National Committee on Intellectual Cooperation) to Bell, May 1, 1939; National Library of [Beijing] to Dewey, October 3, 1939; Bell to National Library of [Beijing], November 22, 1939; Bell to Chungshee H. Liu (Librarian, Science Society of China Library), April 11, 1939; RAEA, Box 28.

6. Kenneth R. Shaffer (American Book Center for War Devastated Libraries) to Bell, August 8, 1946; John O. Coppock (UN Relief and Rehabilitation Administration – Greece Mission) to the Association, August 13, 1946; Joseph D. Coppock (US Department of State) to E. A. Goldenweiser (AEA President), October 7, 1946; RAEA, Box 33. Robert Outsen (US Army Colonel) to the Association, May 3, 1951; Bell to Outsen, May 18, 1951; RAEA, Box 36. Also see Bell to Devereaux C. Josephs (Carnegie Corporation), December 26, 1946; Bell to Horace Taylor (professor, Columbia University), March 2, 1948; Paul H. Douglas to Bell, April 8, 1948; RAEA, Box 58. In the case of physicists and rocket engineers, there seems to have been less concern with the political past and ideological tastes of Austrian and German colleagues. See Gimbel (1990) and Hunt (1991).
7. RAEA, Box 93. On the role of postwar reconstruction in the twentieth-century Americanization of Europe and Asia, see, for example, Hogan (1985: 44–72), Maier (1977: 607–33), Rappaport (1981: 121–49), Borden (1984), Horowitz (1969), Mee (1984), and Milward (1984).
8. I leave aside, in this discussion, several cases of what might be called the reverse colonization of economic ideas – owing to the migration of scholars from abroad to the United States during the interwar and war years. An oft-repeated example is that of Joseph Schumpeter, the distinguished Harvard economist, who inspired a remarkable generation of American practitioners including the Nobel Memorial Prize laureates Paul Samuelson and James Tobin as well as Paul Sweezy, considered by many historians of economic thought to be one of the leading Marxist economic theorists in the United States. This consideration also implicitly raises the question of whether influential research in American economics had wholly indigenous origins in the late nineteenth and early twentieth centuries – or roots, instead, in the work of certain continental and British thinkers. Although I must leave such questions to one side in this essay, it has similarly (and traditionally) been claimed that, in the physical sciences, no distinctively American contributions of major importance emerged until the arrival of the masterful European *émigrés* of the 1930s, Albert Einstein most notable among them. See Kevles (1979) and, of related interest, Dennis (1991). Such received wisdom has only recently come under challenge. Mark Hineline (1993), for example, seeks indirectly to overturn the “Europeanist” model of American scientific development. To what extent the “brain drain” to the United States also affected the evolution of economics (and other fields) in non-American settings is yet another topic for further consideration.
9. In this regard, see, for example, the work of Locke (1989: 94, 144, 14751) which, despite its internalist framework, is especially useful. Also cf. Wall (1991).
10. The major examples of the contributions of Marshall and Pigou are Marshall (1961) and Pigou (1935).
11. In this, and in much of the discussion that follows, I rely in part on the work of Morris-Suzuki (1989: 103–4, 111, 131, 136–37, 163). While much of Morris-Suzuki’s argument is framed as a textual history of theory, her arguments provide a useful basis for the historicized claims I wish to make here. Also see Reischauer (1964), Bernstein (1976), and Hoston (1986).
12. Morris-Suzuki (1989: 103) mentions, in particular, Yamada Moritaro and Ouchi Hyoe at Tokyo University, and Sakisaka Itsuro at Kyushu University.
13. Again, here I would assume that what I argue was true for Japanese economics also held for many other disciplines. Indeed, the Marxist influence in Japanese historical scholarship remained a good deal stronger in the postwar world – especially at the national universities.
14. See, for example, Samuelson (1976, 1948) and Kuznets (1961, 1946, 1941, 1945).
15. Morris-Suzuki (1989: 136–37).
16. While focusing on the interwar rather than the postwar era, the work of Fisher (1983: 206–33) and of Craver (1986: 205–22) is particularly suggestive. Interestingly enough, as Craver mentions (p. 208), the Rockefeller Foundation provided a bit over $1.2 million

during the 1920s to assist in the initial establishment of the London School of Economics. On the general question of the role of philanthropy in the reproduction of cultural and political hegemony, I have also been inspired by Odendahl (1990), Hall (1982), and Arnove (1980). Also cf. Karl and Katz (1987) and Langemann (1983).

17. Readers may find of interest, in this regard, an essay by Lifschultz (1974). In his survey of the struggles between left-wing students and graduate economics faculties in the 1960s and 1970s, he quotes Robert Dorfman, a distinguished Harvard economist, commenting on a dispute in his department over a 1972 decision not to recommend tenure for a Marxist colleague (Samuel Bowles, now at the University of Massachusetts–Amherst): “The students [are] disturbed. They feel the traditional kind of economics we are oriented toward is evasive concerning the deep seated evils of the capitalist system” (1974: 281).
18. Katz (1989: 198). I provide further discussion of the American economics profession’s experience in the wake of World War II in Bernstein (1995, 1998).
19. A particularly compelling description of these difficulties is afforded by the War Records Section of the United States Bureau of the Budget. In its publication on *The United States at War: Development and Administration of the War Program by the Federal Government* (n.d.), the Section noted that

> [m]erchant ships took steel from the Navy. ... The Navy took aluminum from aircraft. Rubber took valves from escort vessels, from petroleum, and from the Navy. ... Many a plant was changed over to war production when its normal product was more needed than its new product. Locomotive plants went into tank production, when locomotives were more necessary – but the Tank Division did not know this. Truck plants began to produce airplanes, a change that caused shortages of trucks later on. In some cases, plants were converted at great cost of steel and copper, when a fraction of the previous metals involved would have brought a greater return at some other place in the economy. The scramble for a production we could not attain, brought us waste instead.

20. Dorfman, Sameulson, and Solow (1958) give an excellent summary of the essential ideas of game theory:

> the theory of games rests on the notion that there is a close analogy between parlor games of skill, on the one hand, and conflict situations in economic, political, and military life, on the other. In any of these situations there are a number of participants with incompatible objectives, and the extent to which each participant attains his [or her] objective depends upon what all the participants do. The problem faced by each participant is to lay his plans so as to take account of the actions of his opponents, each of whom, of course, is laying his own plans so as to take account of the first participant’s actions. Thus each participant must surmise what each of his opponents will expect him to do and how these opponents will react to these expectations.
> (1958: 2)

21. See their classic work (1947). Also see Luce and Raiffa (1958).
22. From a 1989 interview with Herbert Scarf, who worked at RAND from 1954 to 1957 and is now Sterling Professor of Economics at Yale University. See the extremely influential article by Wohlstetter (1959), a major figure in the application of game theory to defense concerns, and also Mirowski (1991).

23. See US Navy, Office of Naval Research (n.d.), Smith (1969), and Speier and Goldhamer (1959). Project RAND (an acronym for research and development) was created under United States Air Force supervision and later reorganized as the nonprofit RAND Corporation of today. I would suspect that the advent of computer technology also played no small part in promoting new work in mathematical economics and econometrics.
24. From Smith (1969: 16). Smith notes that, as a RAND consultant, Schelling wrote another classic text in game theory (Schelling 1960). See also Schelling (1957).
25. See Bernstein (1990: 407–16, 414–15). On the matter of development economics and growth theory, there is perhaps no better example of the resonances between that field and the Cold War concerns of the American government than Rostow (1971). It is important to remember that if the Cold War years privileged certain kinds of academic research, they also witnessed the enfeeblement of other intellectual traditions by both the passive means of deprivation of support, and the active efforts of university and government officials to deny employment and advancement to those deemed to be outside the mainstream. See, for a recent contribution on this matter, Schrecker (1986); and also see, of specific interest, King (1988).
26. The early struggles over the CEA, controversies that spoke to inherent issues of professional privilege, claims of objectivity, and the role of the "expert" in political affairs are a central concern as well in the larger project in which I am engaged on *American Economics in the American Century: The State and Modern Economic Thought*. On the fiftieth anniversary of the Council's creation, the AEA held a symposium on "Fifty Years of the Council of Economic Advisers." Of particular interest in that proceeding were the essays by Stein and Schultze, both subsequently published in the *Journal of Economic Perspectives* (1996).
27. Blough served on the Council from 1950 to 1952. On the Turkish matter, see Nahit Alpar (Financial Counselor of the Turkish Embassy at Washington, DC) to Blough, March 29, 1950; Henry W. Wiens (Program Review Officer, Economic Cooperation Administration Special Mission to Turkey) to Blough, April 11, 1950; Box 15, Papers of Roy Blough; also in Box 15, see also the "General File ECA Mission to Turkey–1950" and "General File–Tax Mission to Turkey 1949."
28. See Arthur J. R. Smith (Chair, Economic Council of Canada) to Okun, September 15, 1970; Okun to Smith, November 2, 1970; Smith to Okun, December 16, 1970; and Okun to Smith, December 10, 1970; in Box 30A (B Series), Papers of Arthur Okun. Okun, a Yale faculty member and later a Senior Fellow at the Brookings Institution, served as a member of the CEA from 1964 to 1968 and as its Chair from 1968 to 1969.
29. See Kato (Japan Economic Research Institute) to Burns, September 3, 1965; Fumio Aoba (Secretary-General, Japan Economic Research Institute) to Burns, July 2, 1965; Aoba to Burns, July 8, 1965; Burns to Aoba, May 10, 1965; Aoba to Burns, April 10, 1965; Aoba to Burns, February 28, 1965; Box 126, Arthur F. Burns Papers, 1928–1969. Also see Memo, Douglas H. Eldridge (Secretary, NBER) to Burns *et al.,* February 9, 1967, regarding visit by a team of economists from the Industrial Bank of Japan, Ltd; Takeo Kurai (Chief, Research Department of International Management Association of Japan) to Fabricant, September 1, 1964; K. N. Wahal (Commercial Consul of India in New York) to William J. Carson (Executive Director, NBER), August 24, 1964; Yoh Poh Seng (Department of Economics, University of Singapore) to Burns, May 10, 1964; Memo, Carson to Burns *et al.,* December 20, 1963, regarding visit of M. S. Dragilev of Moscow State University; Memo, Louise Smith (NBER staff-member) to Carson, June 26, 1963, regarding visit of Nicoli Cobeljic, Assistant Director of Yugoslavia Economic Planning; Memo, Fabricant to National Bureau research staff, March 29, 1963, regarding visit of Kazushi Ohkawa of Hitotsubashi University; and Memo, Fabricant to Burns *et al.,* April 25, 1963, regarding visit of Z. Bidzinski, Economic Counselor at the Polish Embassy, Washington, DC; Box 126, Burns Papers.

Burns served as Council Chair from 1953 to 1956. He returned to active federal service as Chair of the Board of Governors of the Federal Reserve System during Richard Nixon's presidency.

30. Williams (1988: 278).
31. Interestingly enough, Joan Robinson often suggested in her critiques of mainstream economics that orthodox neoclassical theory had more applicability in a planned rather than a decentralized market setting. See, for example, her "Consumer's Sovereignty in a Planned Economy," in Robinson (1975: 70–81).
32. It is prudent to note that many of those scholars who made critical advances in the areas of linear programming and game theory brought a wide array of political convictions to their projects. For some, in fact, research on such issues as game theory held out the promise of establishing a means to codify and resolve human conflict in ways that seemed less irrational, passionate, and brutal than several years of world war had done. There was even the hope that strategic gaming might demonstrate the ultimate irrationality of mutually assured destruction in a nuclear exchange. As von Neumann and Morgenstern had claimed in their classic work (1947: 31) that it might conceivably be possible "to find the mathematically complete principles which define rational behavior," to reduce the welter of psychological impulses and instincts for violence to understandable, and therefore presumably malleable, dimensions. Katz (1989) offers some interesting observations in this regard. For a stimulating discussion on this matter, I am grateful to my colleague Tracy Strong of the Department of Political Science at the University of California, San Diego.
33. See, for example, Kelly (1992), Gordon (1993), Engelberg, (1992), Student Affairs announcements column in the *Chronicle of Higher Education* (1990), Schmotter (1992), and the Program Announcement and Application of the Civic Education Project (1992–93). Economic transition in the Commonwealth of Independent States and Eastern Europe is also receiving increased attention from academic publications. See for instance the AEA's *Journal of Economic Perspectives* (1991) where a whole issue is devoted to articles derived from a "Symposium on Economic Transition in the Soviet Union and Eastern Europe." On the role of a particular American economist in fashioning the market transformations underway in Poland and Russia, see "The Revolutionary Jeffrey Sachs," *Harvard Magazine* (1992). On the efforts of "Bridge to Asia," see the organization's announcement in the *JEP 7* (1993: i).
34. One of the most extensively studied cases of American economic expertise being deployed in an international context is that of Chile. See Drake (1989) as well as his edited anthology (1994). Also see Barber (1995).
35. See "EC Nations Approve Airline Agreement," *Los Angeles Times* June 23 (1992: D2), Kraul (1995), and Gerstenzang (1997). Interestingly enough, various American foundations have, for some time now, sought to involve themselves in "helping" certain nations make the "transition to free markets." See, for example, Uchitelle (1990).
36. See Parks (1991), Mycio (1994), Blustein (1997), and Holley (1997a, 1997b). Market pricing principles have also been invoked, quite revealingly, to support a World Bank memorandum of some years ago suggesting that toxic waste dumping be focused in low-wage countries – as potential losses of income due to environmental injury would be relatively lower. See Henwood (1992).
37. See, for example, Fukuyama (1991). A similarly myopic, yet more learned treatment, is Skidelsky (1996).
38. Widespread corruption and theft in newly deregulated Albanian financial markets sparked unrest that quickly descended into violence. See Wilkinson (1997). Also see Pope (1996), Khor (1996), Singer (1996), and Cohen (1996).
39. Reflecting on the ways in which World War I would place American scholars in a uniquely powerful position to influence the process of reconstruction and conversion at both home

and abroad, Veblen (arguably the most original economic thinker the United States has ever produced) seemed to anticipate the late twentieth-century situation as well. He wrote:

> The fortunes of war promise to leave the American [people] of learning in a strategic position, in the position of a strategic reserve, of a force to be held in readiness, equipped and organized to meet the emergency that so arises, and to retrieve so much as may be of those assets of scholarly equipment and personnel that make the substantial code of Western civilization. And so it becomes a question of what the Americans are minded to do about it.
>
> Veblen (1965: 52)

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8 Foundations and economic knowledge

Radhika Balakrishnan and Caren Grown

Introduction

This chapter is concerned with the relationship between private foundations which fund economic research and the academic discipline of economics in the United States. Foundations have played a role in shaping this discipline, not only through the money they provide but also through the prestige they bestow. “When intellectual elites in our society are anointed, it is not with a knighthood or bishopric but with a grant from MacArthur, Guggenheim, or Nobel” (Goodwin 1989: 158).[1]

The role played by foundations in guiding economics research is a subject of continuing debate among economists (e.g., Goodwin 1989; Leonard 1991; Schultz 1982; Friedman 1994). The breadth of this debate can be summarized by the following points of view. On the one hand, critics such as Theodore Schultz decry foundations’ “policy biases” as an undue and distorting influence on academic economic research.

> The distortions in economic research ... are not a consequence of the reservations that the other social scientists have about economic research. The distortions on my list have come about mainly because of the policy biases of some foundations and of most government agencies in allocating funds for economic research and because of the accommodations of a goodly number of academic economists to these biases in order to obtain research funds.
>
> (Schultz 1982: 121)

Others, in contrast, feel that this relationship is one that needs understanding and renegotiation. “All the same, I cannot refrain from suggesting that if these tensions of economics with one of its most powerful patrons and their origins were understood better, the spread of economic ideas might in all respects be improved” (Goodwin 1989: 173).

This chapter is an attempt to understand these “tensions” between philanthropic foundations and academic economics in the United States. Recent developments in economics and philanthropy provide new openings to reexamine and renegotiate this relationship. It is our belief that, by fostering these new relationships, foundations and academic economists can improve the production and dissemination of economic knowledge.

Within economics, the last two decades have yielded a promising set of theoretical and empirical innovations. These developments, eloquently summarized by Kenneth Arrow, Samuel Bowles, and Amartya Sen (1993), include the displacement of the narrowly defined "economic man" in favor of more psychologically informed conceptions stressing people's limited ability to process information, their capacity for moral commitments beyond self-interest, and their ability to learn; a revival of interest in the process of innovation and the economies of large-scale production, leading to new understandings of how small initial differences can lead to large and sometimes irreversible differences (applications of which include processes of racial income inequality and divergent macroeconomic growth patterns); a burgeoning literature employing feminist theory to rethink both neoclassical and heterodox approaches to economic analysis; increased attention to situations where the unregulated pursuit of self-interest can produce undesirable results such as increased unemployment and environmental pollution; efforts to broaden income-based measures of living standards; recognition of the importance and far-reaching theoretical consequences of taking more adequate account of the environmental effects of economic activity; and lively interest in the economics of information and incentive problems due to asymmetric information in settings as varied as the provision of public services, labor markets, credit markets, insurance markets, and Third World agriculture (Arrow, Bowles, and Sen 1993: 4–5; see also Bowles and Gintis 1993; Heilbroner and Milberg 1995).

At the same time, private foundations' demand for economic knowledge is growing. Some have long funded economics research, seeking better knowledge of the "root causes" of social problems, the formation and implementation of public policy, or how economic theory shapes public discourse on complex social questions. Now with the end of the Cold War and the growing importance of global economic forces, foundation support for economic research is arguably greater than ever. Foundations interested in interdisciplinary research are finding it easier to involve economists in this work and important to do so since the above-mentioned innovations are making economic research more compatible with current work in other disciplines. Moreover, non-governmental organization (NGO) constituencies supported by foundations are demanding new kinds of economic knowledge to inform their actions and priorities in the global economy. Following the 1995 Beijing women's conference, for example, the women's movement has prioritized research and action on the global economy. Finally, several foundations have also recognized the value of economic analysis in the development of their grant-making programs.

The convergence of these developments creates the opportunity and necessity to reevaluate both sides of this would-be partnership. The following sections will identify the sources of old tensions and show where new bridges are being built. We are PhD economists who have worked for two large, private, US foundations as well as for several universities and research institutions. This chapter draws insights from our experiences in these different settings and from our research into the funding of economic scholarship by other major US foundations.

Foundations' role in economic knowledge production

Foundations play several important roles in the marketplace of economic ideas: as funders of economics research, as direct knowledge producers, and as intermediaries between the production and consumption of knowledge. Before considering each of these roles, we provide a brief description of the internal structure of foundations which is helpful for understanding their various roles in economic knowledge production.[2]

The funding strategies developed by foundations depend on a number of internal factors including differing staff and board interests, short-term-oriented policies, and foundation structure.[3] These influence whom foundations fund, which issues they fund, and the process of negotiating the funding.

There are several internally differentiated interests within foundations. The boards of directors of many foundations, though not all, make the final decisions on grant recommendations. More importantly, they set their foundation's program priorities. Board priorities may differ from the priorities of the program staff. The boards of many large foundations often have different world-views and experiences than foundation staff which may limit the vision and scope of the staff program strategy.

The bureaucratic divisions among different programs within foundations also have an impact on funding support. There is often a lack of communication across staff who work in different program areas. For example, program staff working on issues of the environment might desire to include more PhDs with a focus on environmental economics in their grant-making portfolios, but staff responsible for funding graduate training in economics may not be aware of these needs or may have different funding priorities.

Finally, foundations have policies that limit the potential for long-term change. For instance, many foundations make grants for periods of two to three years, allowing up to one renewal. Several foundations also have policies limiting staff tenure in a particular program area. Also, because foundations desire to find solutions to problems they are concerned with, they often fund research that has a current impact, as opposed to theoretical work whose policy implications are not easily discernible.

In sum, the division between boards and staff, the lack of communication across program areas, and the short-term policy orientation make it difficult for foundation staff to keep the long-term trajectory of a discipline in mind while funding those issues that conform to internal programmatic objectives. To make this more apparent, let us consider several recent examples of foundation funding for economics.

Foundations' role as funders of economic knowledge

The examples in this section illustrate at least three approaches to funding: support to strengthen the discipline of economics (NSF) or to change its direction; support for research aimed at illuminating social problems (the current Sloan, MacArthur, and Ford Foundation grant programs); and support driven by a political or ideological agenda (the John Olin Foundation, the Ford Foundation in the 1950s). These examples are not exhaustive. Other foundations have also funded economics directly, including the Smith Richardson and the Bradley Foundations. Yet they offer a glimpse into the different ways that foundations have supported and continue to support economics. And, as this brief survey will suggest, each of these approaches has contributed to tensions between donors and economics.

The National Science Foundation

Since 1990, the National Science Foundation (NSF) has provided roughly $15 million annually (120–30 grants) primarily for basic and applied research, although a small amount is directed to seminars and other activities designed to improve understanding of the processes and institutions of the US economy and the world system to which it belongs.[4] The NSF is the largest single funder of economics research.

The NSF program emphasizes strengthening both the empirical analysis and theoretical foundations of economics and improving the methods for analyzing and modeling economic behavior. A high priority is given to interdisciplinary research on global environmental change, international competitiveness, and political economy.

The NSF is, perhaps with one exception, the only agency concerned with the "health" of the economics profession.[5] For instance, in 1986, it supported a one-year postdoctoral and doctoral fellowship program aimed at integrating theoretical and empirical work at the frontiers of real-world economic problems. In 1986, the NSF also convened with Lee Hansen and Anne Krueger a summer institute session at the National Bureau of Economic Research, which led to the establishment of the Commission on Graduate Education in Economics.

The NSF continues to provide support for activities related to the state of the profession. The NSF has begun a dialog with the mainstream journal editors to ensure that data reported in articles is made available to those who wish access. In a complementary effort, the NSF awarded support to the University of Michigan to archive data from the mainstream economics journals and make it available to independent researchers on CD-ROM at no cost. It is supporting the Census Bureau to make its confidential economic data available to researchers at regional data centers. Finally, the NSF has recently funded a program to explore how race and gender issues have been incorporated into introductory economics textbooks.

The Alfred P. Sloan Foundation

The Alfred P. Sloan Foundation classifies its economics support into several areas under the broad topic of economic growth and competitiveness. Support for these activities totals approximately $8–10 million per year, or one-quarter of the Sloan Foundation's grant budget ($40 million).

The goal of the Sloan Foundation's program is to deepen understanding of the basic forces that maintain and improve a high US standard of living in a competitive global economy. The program spans a range of areas which affect the ability of US industry to compete in world markets: the vitality of the manufacturing industries, the availability and introduction of technology, management of the product development process, human resource management, the cost and availability of capital, tax incentives, trade policy, and international economics.

In 1990, the Sloan Foundation launched a major effort to establish interdisciplinary centers at leading research universities to study US industries. Centers include: the University of California, Berkeley, for semiconductors; Stanford for information processing; Carnegie Mellon and Pittsburgh for steel; Harvard for textiles and apparel; MIT for automobiles and pharmaceuticals; and Rochester Polytechnic for the powder metal industry. In addition, the Wharton School received support for a research center on financial services (banking, insurance), and MIT received funds for a center studying industrial performance across six OECD countries. The research teams at these centers are interdisciplinary, including economics, engineering, business, and finance. The total allocation for the industry studies program has been $30 million over five years.

In addition, the "economics" component of the program focuses on the contribution which economic analysis can make to understanding competitiveness. The Foundation has supported research to improve the techniques involved in assessing productivity change. It also awards special research projects related to competitiveness, trade, and innovation using classical economic approaches. For example, the Institute for International Economics, the American Enterprise Institute, the Brookings Institution, and the National Bureau of Economic Research have received grants between $100,000 and $200,000 each for such projects. Finally, Sloan provides small grants to individual researchers for topics related broadly to industrial competitiveness.

The Russell Sage Foundation

The Russell Sage Foundation (RSF) supported a seven-year initiative on behavioral economics, an interdisciplinary effort to improve the accuracy and empirical reach of economics by incorporating more realistic information about how people make economic decisions and how economic institutions work. It currently pursues a program in the social analysis of poverty that supports research on the social, economic, and institutional means of escape from persistent poverty.

Funded jointly with the Alfred P. Sloan Foundation, the behavioral economics program provided $2.6 million for forty-eight projects between 1984 and 1991. The Sage Foundation also supported three working groups investigating new topics in the field: one concerned with behavioral finance, another with problems of intertemporal choice, and a third with sociological approaches to economic behavior. Under the program, no direct funding was provided for postdocs or graduate fellowships, but this kind of support was included in several of the research projects that received funding. In addition, RSF held summer institutes of three weeks, each for the research teams.

The behavioral economics program was guided by an advisory committee of economists and other social scientists. The initiative's aim was to persuade the economics discipline to take account of work in other fields showing departures from the rational actor model. The research supported by RSF analyzed how other factors – such as mental limits on an individual's ability to calculate an optimal course of action, or social commitments to the welfare of others or to moral precepts such as fairness – influence both individual economic choices and the aggregate behavior of markets. The initiative aimed at building an exciting research agenda that would show how economics could gain from the interdisciplinary effort.

The John D. and Catherine T. MacArthur Foundation

In 1994, the MacArthur Foundation began making grants to support innovations in economic theory and research. MacArthur Foundation support is intended to encourage new thinking and research, especially that which will likely be useful in the analysis that underlies public policy development. Most of the work is conducted by networks of researchers from various institutions and disciplines, who work together on a specific area of economic inquiry. Each network functions as a kind of research institute without walls.

Five such networks have been funded to study three topics: inequality and poverty; the nature and evolution of individual preferences; and the economic dimensions of family life. Networks bring together economists with different expertise (e.g., theorists, econometricians, experimentalists, and historians) and scholars from other disciplines. In addition, the Social Science Research Council received support for a program designed to enrich graduate training in economics.

The Ford Foundation

The Ford Foundation's funding of economics can be divided into two phases, a historical phase which was driven by an ideological anticommunist agenda and a contemporary phase which is focused on solving social problems. In the 1950s, the Ford Foundation provided $750,000 in support of economic research. The primary grantees were MIT for research on the relationship between economic development and political stability, and the growth of governmental activity in Western Europe and the United States; the American University of Beirut for an economic research center; and Resources for the Future for a conference on conservation.[6] The Ford Foundation followed the recommendations of a committee composed of professional economists and established a special program called the Economic Development and Administration program which lasted through the 1970s (Goodwin 1989).

Today the Ford Foundation does not have a program of direct support for the economics profession. Rather, it awards grants for research on specific problems. Ford's international affairs program, for instance, has awarded a limited number of grants to institutions for economic issues related to development and transitions to market-based economies. Recently, the Foundation supported a group of feminist and macroeconomists to bring gender concerns into various macroeconomic and international finance models with the goal of improving macroeconomic policy making.

In addition, the Foundation has funded three minority fellowship programs, which includes support to students pursuing training in economics. The fellowships are for predoctoral, dissertation, and postdoctoral work. The American Economic Association was awarded a grant of $900,000 to organize an annual summer institute for minority undergraduates which would upgrade their quantitative skills and interest them in pursuing graduate work in economics. The program was initiated by the Sloan Foundation; Ford took it over in 1988.

The Rockefeller Foundation

According to David Grossman,

> over a 15-year period, beginning with the receipt of the Foundation's charter in 1913, officers of the Rockefeller Foundation considered three alternative modes of support for economic research: these were, first, the creation of a research institute bearing the Rockefeller name, staffed by trained economists but ultimately controlled by the Foundation; second, direct employment of the Foundation of social scientists working on contemporary problems; and third, support for autonomous institutions concentrating on empirical and cooperative research and focused on topics of social importance.
>
> (Grossman 1982: 59–60)

Jerome Greene, secretary of the Foundation, spent several years pursuing the creation of a Rockefeller research institute on economic science, which ultimately was rejected by John D. Rockefeller, Jr. The second approach was implemented in the mid 1920s with the hiring of a specialist who undertook research on industrial relations. The resulting work was not credible to the scientific community, and the Foundation abandoned that approach.

Another Rockefeller philanthropy pursued the third mode of support. In the early 1920s, the Laura Spelman Rockefeller Memorial (LSRM) became the principal vehicle for Rockefeller support of research in the social sciences. Established in 1918 with an endowment of more than $70 million, the Memorial awarded institutional grants to universities such as

Chicago, Columbia, Harvard, and Iowa State for three- to five-year research projects on economic problems. By 1929, when the Memorial was absorbed into the Rockefeller Foundation, it had spent approximately $20 million on social science research. LSRM funding emphasized the collection of data and the development of rigorous methods of research. The goal was objective scientific research to help understand social welfare problems. The Memorial aimed at supporting research that was holistic in its approach to social problems. By the late 1920s, the emphasis moved away from social welfare problems to support for research on the causes of cyclical fluctuations on the economy.

> The foundation supported programmes which it hoped would improve statistical measures of cyclical change and sharpen understanding of causal factors, and which would encourage the development of practical measures to reduce or restrict "industrial hazards" – a term that, in the language of the time, referred to the damaging effects of economic instability.
>
> (Craver 1986: 212)

Institutions such as the Social Science Research Council and the National Bureau for Economic Research were funded during this period in order to increase scientific research in the social sciences. By the early 1940s, the Rockefeller interest in the social sciences decreased, and the business cycle forecasting in particular was judged to be overrated (1986: 212).

The John M. Olin Foundation

The general purpose of the John M. Olin Foundation is to support projects that reflect or are intended to strengthen the economic, political, and cultural institutions on which the system of private enterprise is based. Two of the Foundation's four program areas target economics directly. Within the field of public policy research, the JOF supports research on the formulation, implementation, and evaluation of pubic policy in the social and economic fields. Grants are made in the areas of regulatory policy tax policy, fiscal policy, monetary policy, and welfare policy. In addition, the JOF has a targeted program on the relationship between law and economics. Support is awarded to selected university law schools or economics departments for programs in law and rational choice, including endowed chairs, faculty research, and workshops. Grants totaling approximately $9.8 million were authorized in 1992 for law and economics.

The funding styles of the foundations described above contribute to some of the sources of tensions between foundations and economics. The discipline-strengthening approach tends to recreate the status quo and narrow the scope for risky or radical experimentation. It leads to foundation support of mainstream and, often, elite institutions and individuals.

Foundations desiring to change the direction of a discipline may also focus support on elite institutions and individuals because of the legitimacy they bring but, in the end, may also recreate the status quo. When a pressure from outside strategy is used to change the direction of a discipline, foundations support scholars who may not be perceived as legitimate by the mainstream. Foundation funding, therefore, can provide

> reputability within a larger community and dignity within institutions where they are employed. If foundations in their wisdom give you a grant then your right to be heard is much increased and your claim on support and encouragement from others in society as well as your colleagues is vastly strengthened.
>
> (Goodwin 1989: 158)

On the other hand, this kind of funding can be perceived by the mainstream as being funder driven rather than as support for an organic intellectual development in the field.

The problem-solving approach has directed foundations to support short-term, policy-relevant research, paying less attention to the development of theory and empirical methodology. This leads to support for policy institutions as opposed to academic economics departments. Unfortunately, external foundation support for policy research has exacerbated the division between academic economics and policy think tanks rather than increasing policy-relevant work within academic economics.

Finally, the two foundations which pursued a particular ideological agenda have narrowed the scope for debate within the discipline. In the 1950s, the Ford Foundation funded economics research in order to help advance its agenda of fighting communism. This funding left a legacy of ideological division in the profession that lasted well into the 1980s. Similarly, the John Olin Foundation's support for economics and the law, which advances that foundation's agenda of promoting free market outcomes, has disseminated a very narrow economic vision to the very influential realm of politics and law.

Foundations' non-funding roles in the production of economic knowledge

The influence that foundations have on academic economics takes forms other than mere funding. Foundations play a number of roles supporting knowledge production. These roles impact not only the direction of the field but also the career choices that many economists might make.

First, they can be direct knowledge producers, employing in-house economists to conduct research on a particular problem or field. The Carnegie Corporation established the Carnegie Commission on Higher Education; the Ford Foundation funded in-house reports on energy called "A Time to Choose" (1974) and "Energy: The Next Twenty Years" (1979) (both cited in Schultz (1982: 125)). The work produced by in-house economists, while relevant to the policy goals of the Foundation, do not most often influence the views of academic economists.

Second, foundations also act as intermediaries between the production and consumption of knowledge. One example of how they play this role is through the establishment of organizations which either conduct or support research in the fields where they believe knowledge is needed or on questions where views are perceived to be too narrow. Organizations such as the Social Science Research Council and the American Council of Learned Societies are considered to be intermediary organizations. Additionally, foundations fund research at policy schools or at policy think tanks, including such institutions as Resources for the Future, the Brookings Institution, the Economic Policy Institute, and the National Bureau of Economic Research.

Foundations provide "value-added retailing" by supporting the refinement or enhancement of knowledge and its application in other domains. For instance, the Olin Foundation supported the development of laissez-faire economic theory and applied it to the fields of law and political science. The Carnegie Corporation funded a program at the National Bureau of Economics Research for physicians pursuing a PhD in economics. The Sloan/Russell Sage Foundation brought economists together with psychologists in the early creation of the field of behavioral economics.

Foundations' dissemination activities are another example of how they "retail" research. For instance, the MacArthur Foundation, which is the second largest funder of mental health research, has funded health and science writers to interpret Foundation-supported research published in the *Journal of the American Medical Association,* the *Lancet,* and others for the science pages of daily newspapers and television reporting. This "retailing" role of foundations has been positive, increasing the audiences which can be influenced by academic research.

The economics profession

The structure of the economics profession has also contributed to the tensions and problems described throughout this chapter. Four aspects of this structure are, in our view, particularly important sources of these tensions: the structure of graduate training, peer review, departmental fiefdoms, and tenure. We argue that each of these has contributed to narrowing the scope of inquiry for research and made it difficult to provide adequate analysis to the larger policy issues with which foundations are concerned.

Graduate training in economics has been criticized for not connecting the tools of analysis to the theory. A central concern of the Commission on Graduate Education in Economics (COGEE) is that "there is considerable scope for improvement in ensuring students' knowledge of economic problems and institutions enables them to use their tools and techniques to important problems" (Hansen 1991: 1054–87). Graduate students are seen as being able to use their tools but not taught what to use them for. Textbooks and curriculums have in the past lacked policy-relevant examples with little mention of real-world problems. Graduate training has also been perceived as too technique oriented with an overemphasis on math and econometrics and less on their use in economic thinking and problem solving.

Many younger economists wishing to undertake applied policy research end up looking outside of academic economic departments. They try to find positions in business or policy schools, specialized institutes or interdisciplinary research centers, government, or even foundations.[7] Unfortunately, this separation between economists interested in policy-oriented research and economists who develop theory perpetuates the abstract nature of graduate training.

Another problem is the peer review process used for publication criteria and access to funding (Colander 1989). While it can identify good-quality research and promising approaches, there are some weaknesses.

> Even among mainstream researchers, the view of what is and what is not acceptable research influences the type of research submitted. The word goes out ... about what research is and what research is not being considered for funding and proposals are shaped accordingly. Thus, we see a certain degree of faddishness in NSF funding – rational expectations in one period, large-scale models in another. This holds true for journals.
>
> (Colander 1989: 230)

Recent attempts by heterodox economists to open up the field of inquiry of the AER have not been successful.[8]

Third, academic departments often become fiefdoms, with senior members of departments enjoying substantial control over hiring/firing, tenure, and curricular decisions. This perpetuates a particular type of inquiry that cannot be challenged by those out of power. Many department chairs remain in their positions for long periods of time, only recruiting people who will help them to maintain the status quo.

Finally, the tenure process makes untenured faculty afraid to risk departures from standard paradigms or models. Tenure criteria specify the type of journals and stature of reviewers that are needed. By the time younger faculty receive tenure, they are too inculcated to move beyond their field of inquiry to new and unorthodox fields. Colander notes:

> I've spoken with many young economists who do not feel their research is leading anywhere, but they feel they must continue in order to get tenure. One would think that after they do receive tenure, they would be free to direct their own research, but by that time they are so caught up in the profession that to change their research focus is impossible.
>
> (1989: 231)

These structures within academia have in the past discouraged inter- and multidisciplinary research, marginalized heterodox perspectives, steered those interested in public policy away from academic economics departments, and created disincentives for communication across the ideological spectrum. However, as foundations are increasing their resources to economics, departments are becoming more open to interdisciplinary work, taking greater interest in public policy concerns, and encouraging dialog across perspectives.

Conclusion

There are signs that the tensions described above between foundations and the academic economics profession are waning. The reasons to overcome these tensions are many, on both sides. Foundations address a range of social problems, many of which have clear economic dimensions (e.g., environmental sustainability, the elimination of urban and rural poverty, the development of adequate social welfare systems, and problems of transitional economies, to name a few). Foundations are hungry for the knowledge, expertise, and insights of economists and other social scientists to help them comprehend and address these problems. Yet economists, until very recently, have been poorly (if at all) represented in foundation-sponsored interdisciplinary projects. When the Ford Foundation funded multidisciplinary graduate programs in social science and health, for example, it found it impossible to convince economists to join the effort. Similarly, when the MacArthur Foundation sponsored a competition for multidisciplinary research on the human dimensions of global environmental change, economists were generally absent from the teams of investigators. When strong economic analysis is missing, knowledge production overall suffers.

Academic economists can also benefit, individually and as a profession, from an improved relationship with donors. Beyond the obvious provision of research funding, foundation support also confers reputability on individual scholars and can help to enhance respect for individuals from the broader academic community. Sustained dialog with other disciplines also moves thinking forward in important ways. Interdisciplinary dialog can often generate exciting and cutting-edge research. Feminist economics, for example, is transforming the way we think about issues related to the "care economy" and the production of human capabilities by drawing insights from anthropology, history, and related social sciences (Nelson 1987; Beneria 1995). Likewise environmental economics, which draws on the knowledge of ecologists, promises to enhance the analysis of sustainable growth; and behavioral economics, which has adapted many insights from behavioral psychology and evolutionary biology, is improving our understanding of human learning and decision making.

Recent foundation grants show new relationships beginning to form along these lines. For instance, the MacArthur Foundation has assembled a diverse group of economists and other scholars to develop new analyses of inequality, economic globalization, and stresses on family life. The United Nations Development Program focus on human development is likewise stimulating new partnerships among economists and opening new areas of inquiry. While still relatively young and untested, each of these initiatives promises a potentially handsome long-term payoff. These changes would reinforce the success of the Russell Sage Foundation behavioral economics program which gave necessary impetus to research which is transforming traditional models of rational action (see for example the March 1998 *Journal of Economic Literature,* especially the articles by Rabin, Elster, and Bowles).

For such initiatives to succeed and continue, foundations and the economics profession must each try to foster the conditions which have made these new partnerships possible. For their part, foundations might aim to provide longer-term support for activities to broaden the scope of economic knowledge, including support for sustained interaction and collaboration among interdisciplinary scholars. And the economics profession, as a first step, could update the findings of the 1991 COGEE report on graduate economics education in light of the many changes and issues presented by the global economy. An updated COGEE report could develop new recommendations for graduate training and research aimed at enriching economic inquiry so that it might more adequately address the challenges of the coming decade. Foundations should be open to respond.

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Notes

1. Foundations in the United States are independent charitable institutions which provide funding support for a range of activities. Foundations' support for economics can be direct or indirect. This chapter is concerned with direct, intentional support provided by foundations to economics.
2. This discussion is based on the authors' experience in two large foundations and may not apply to other foundation structures.
3. External factors and opportunities also influence the choice of funding strategy, but we do not deal with that here.
4. NSF's grant-making budget was cut severely in the mid 1980s, but has been restored to previous levels.
5. The exception is the John Olin Foundation.
6. See Leonard (1991) for an interesting discussion of Ford support of economics as part of an anticommunist agenda.
7. Colander (1998: 16) argues a related point. He says that "applied economists are gravitating more and more to public policy schools and interdisciplinary programs. As the rigor of these programs increases, more and more of the demand for applied economists will come from them."
8. See also Paul Davidson's letter to the Executive Committee of the American Economics Association (August 8, 1994) and distributed through several e-mail networks including Femecon (the feminist economics listserv) and PEN-L (the radical political economics listserv).

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9 Can there be genre difference in economic literature?

Suzanne Bergeron and Bruce Pietrykowski

> An economist should be aware that he adopts more than a "mere style" when he adopts the conventions of a genre.
>
> (McCloskey 1990: 30)

Introduction

The rhetorical turn in economics is a small but growing movement. Over the past fifteen years economists, drawing inspiration from postmodern currents in literary studies, linguistics, philosophy, and feminist theory, have produced a diverse literature on the role of language in economics. McCloskey (1985, 1990, 1994) has led the way, challenging the still-dominant positivist faith of the discipline by showing that economists' facts and logics are all rhetorically produced by means of metaphors, stylistic conventions, and other devices. Her conclusion is that economic knowledge is best viewed – and produced – as always and everywhere a literary phenomenon.

A range of contemporary studies support and extend this conclusion. Examples include Rossetti's (1990) deconstructive reading of the work of Robert Lucas; Strassmann and Polanyi's (1995) examination of the gendered narratives that inform economics texts; and Milberg's (1996) look at how dominant metaphors have structured debates in trade theory – these elaborate some of the ways that academic economic knowledge is produced through textual strategies. Amariglio, Resnick, and Wolff (1990) examine the differences among neoclassical, Keynesian, and Marxian economic theories, suggesting that they arise in part from the deployment of different economic rhetorics and narratives. This in turn creates alternative sets of economic facts, each no more and no less "fictive" than the other. Klamer and Leonard (1992) and Amariglio and Ruccio (this volume) have compared academic approaches to economic narratives produced outside the confines of disciplinary boundaries. These purportedly non-scientific accounts are at odds with academic economic theories not because they are less "true" but because their knowledges are produced within different discursive frameworks.

In this essay we consider the character of economic knowledge conveyed by a non-academic genre, the modern realist novel. We offer a reading of the economic narratives found in the novel *Mating* by Norman Rush. Winner of the 1991 National Book Award for fiction, *Mating* is set in Botswana during the 1980s. It develops an account of a romance between charismatic development expert Nelson Denoon and the book's narrator, a 32 year old graduate student who throughout the novel remains persistently unnamed. The events in the bulk of the novel take us from the romance to daily life in an experimental rural development project named Tsau, an apparently successful, self-sustaining utopia run by and for dispossessed Botswanan women. The narrator's experiences and observations provide a rich and detailed account of how such a community might function, giving us a view of the economic organization of Tsau.

In this regard *Mating* can be read as an economic narrative – a type of theoretical model – with which the author is able to analyze resource allocation, the organization of work, Third World development, distributional issues, and gender and race in the economy. Rush, who spent five years in Botswana, concedes that he might have taken some authorial license in presenting his version of development initiatives that he encountered during his time in Africa: "Denoon's experimental project was a rather extravagant variation on some rural development projects set up ... in Botswana" (quoted in Hunnewell 1992). This extreme, or in the parlance of economics "representative," example helps to keep the reader engaged in what could be an otherwise overwhelming set of details. A novel is like an economic model in that it is only a limited representation of the world.

But literary genres such as the novels also promote a different kind of economic meaning generally geared to a different audience, and they form these readers' imaginations in ways that differ from academic accounts. As Martha Nussbaum (1995) has argued, the differences between novelistic and disciplinary economic approaches are significant. Novels persuade by making characters complex and distinct from each other, getting readers involved with them. By contrast, economists tend to see their characters as interchangeable and universalized sites of satisfaction. The participation of the reader is often made explicit at points in the narration of the novel whereas economics texts tend to presume a detached reader. The perspective and values of the author or narrator are also often made explicit in novels as well, in contrast to the academic economist's rhetorical conceit that he or she is merely channeling social reality.[1]

In our reading of *Mating* we investigate how the meanings conveyed and constructed in the novel correspond to or conflict with the dominant meanings created by writers and readers of standard economics texts such as the journal article and textbook.[2] We do not wish to claim that there is a single interpretation of Rush's work. Indeed, we offer two readings of the novel. The first is a classic realist interpretation of the novel and its relationship to markets and planning, on the one hand, and gender and development economics on the other.[3] In this reading the author and narrator of the story provide us with the stylized facts upon which we construct an economic understanding. At points these stylized facts are compared and contrasted with the facts, models, and stories of academic texts. Recognizing the limits to this realist reading we also offer another approach. Here the stylized facts presented in the novel are no longer accepted as the grounds for economic knowledge. Instead this reading examines the production of these facts through the narrative strategies of the novel, with an emphasis on the question of subjectivity.

The economic organization of Tsau

The narrator of *Mating* is a graduate student conducting field work in Botswana. Due to a conflict between her proposal and the data her dissertation research implodes. Without institutional support or clear purpose she stays on in Botswana for a while, enjoying the social life maintained by the international diplomatic and development community. At a cocktail party she discovers that the world-renowned development expert, Nelson Denoon, is carrying out a development project, Tsau, at a secret site in the desert. After this encounter, the narrator becomes obsessed with the idea of finding and traveling to Tsau, ostensibly to resuscitate her dissertation proposal. Yet there are romantic interests at work as well. Denoon is almost always the focus and the object of action or the object of the narrator's thoughts or intentions. From this reading, the older white male scholar – and save for some thirty pages, the only white male character in the last three-quarters of the book – commands the story even if he is not directly telling the story. This is mirrored in the economic development plan for Tsau. Denoon is the source of Tsau and the prime innovator, but the organization of the community is such that the women of Tsau ostensibly hold the political and economic power.

Tsau is almost certainly unlike any actually existing development project, yet it reflects many current concerns of development thinkers in terms of gender, economic organization, participation and sustainable development, and is a good conglomerate example of some of the different kinds of micro development initiatives that have been fashionable as of late. For example, chastened by what they see as the failures of an earlier development era, many contemporary theorists have turned away from the grand, universalizing theories that underwrote big, capital-intensive growth strategies of the past and have instead turned to pragmatic and locally based ideas and projects. Denoon's thinking is similarly situated. He self-consciously eschews a "pure" capitalist or socialist path for a mixed economy system that combines the most salient features of each system as defined by the needs of this particular village. In his blueprint for Tsau he concerns himself with even the smallest practical details – how to best harness the desert sun for solar energy, how to find and use water most efficiently, how to build the most efficient and comfortable latrine, how to carry goods efficiently from the center of the village to each person's cottage. He has designed the community along pragmatic lines but his goal is not a small one. His wish is to create a village that is based on the pursuit of freedom and empowerment for disenfranchised women.

The women he brings to the village have been culled from the margins of Botswanan society. They are poor, old, disfigured, former prostitutes – in short, women who had been turned away from their communities with little more than the government dole of a sack of mealie a month to sustain them. In Tsau they are given a house and a plot of land, collective use rights to a mealie field and a cattle herd, and a voice in the councils that make key decisions over the control of resources in the village. As the narrator remarks, "the idea behind that was to demonstrate that at least here something could be done about the economic disenfranchisement of women that was taking place in society at large as it modernized" (p. 175). The few men in the village, in contrast, are given some access to resources but are not granted property rights or much say in what goes on in Tsau. There even exists a sexual division of labor based on the undesirability of the task. Men, for example, are assigned work in the tannery, notorious for its stench.

In addition to these resources, all female landowners are given the right to participate in a voluntary labor credit system. Here labor is recompensed based on current valuations of community need. Payment is in scrip which can be used in the community storehouse to purchase a variety of goods to supplement the basic subsistence items available to all. "The value of the scrip earnable at different tasks is continually under revision, to induce people to opt for the most needful jobs" (p. 186). This system coexists with the communal production and distribution of meat, vegetables, and mealie; a private barter system; and a market for exports and imports based on the use of official Botswanan currency. This particular organization of economic life, while not entirely "novel," does combine elements of market economy with participatory planning in unique ways.

The concerns that drive this particular organizational structure are certainly ones that have been raised in academic economic accounts. For example, in mainstream neoclassical economic discourse the lament often heard about cooperative systems is that they are great as long as you are doing work that you enjoy. The story of free choice under capitalist market economies is then introduced as a solution to that problem. The market will allocate persons to jobs in such a way that distasteful jobs will be performed at premium wages or they will be performed by people who prefer what others disdain. This is the logic behind the theory of compensating wage differentials. In this sense work that is unpleasant to perform for the majority is either compensated more heavily (in order to cover the psychic disutility) or taken over by those who are not so inconvenienced. Yet, research on the existence of compensating wage differentials is divided. Oftentimes the sign on the coefficient measuring unpleasant work conditions runs counter to theory (Brown 1980; England 1992). The story of compensating wages then loses much of its persuasive power. The economist is left with several explanations for this failure, none of which is entirely convincing:

1. "Labor markets are simply not as competitive as the theory of equalizing differences assumes."
2. "The marginal worker's tastes may be different from those assumed to be in the a priori signing of the coefficients."

3. "The job characteristics are not well-measured."
4. "Omitted variables – individual characteristics that change over time and job characteristics – may be biasing the results."
5. "Testing the hypothesis on a sample in their early and mid-twenties is inappropriate."

While the present essay provides little support for an oft-used explanation, the task of choosing (or combining) the alternatives remains (Brown 1980: 131–33).

In the depiction of work at Tsau, on the other hand, while there is an attempt to raise the wage for more necessary work, monotonous work is partially socialized. The work becomes the joint production of two or more individuals. One woman performs the direct labor while another performs indirect labor aimed at reducing the monotony and routine associated with the task of the first. Recourse to the market to construct the proper incentive scheme – higher wages – is bypassed. For example, the narrator notes, "People doing repetitive work can have someone come and read aloud to them" (p. 193). This would likely conflict with the cost-minimization story of neoclassical economics but, as radical political economists point out, the use of supervisory labor is also a production cost which may not be necessary under alternative organization of production (Bowles 1985). In other words, a unit of supervisory labor is replaced with a unit of monotony-reducing labor.

Our effort to draw out a realist economic reading of the structure of production in Tsau is not unlike the effort made by Williamson (1980) to conduct a comparative institutional assessment of alternative forms of work organization. Williamson created categories based on hierarchy, contractual relations, and flow of product. Using these categories he assessed the relative efficiency of putting-out, federated, communal, peer group, inside-contracting, and authority-based organizational structures. All of the rankings were based on hypothetical work organizations. Indeed, one work organization, the federated organization of work, was not even thought to have existed. But, as Williamson assures the reader, "It is nevertheless useful to consider the Federated mode as an evolutionary development, even if only of a hypothetical kind" (Williamson 1980: 15).

Gender and economic development at Tsau

Tsau's women-centered organizational structure is inspired by Denoon's particular understanding of gender and economics. He argues, for instance, that in every known society "women are used and shaped as vehicles for male imperatives." The process by which this occurs may be different in each culture, but the end result, Denoon argues, is that men are parasites on women. Because of this, "men have no idea what women are or what they might be if left alone" (p. 291). His assumption is that women are actually more efficient than men. For evidence he cites the fact that among credit and producer cooperatives those run by women have been more successful. This echoes a well-worn argument among advocates of women-centered development initiatives, who point to the success of projects such as the

Grameen Bank of Bangladesh, which loans exclusively to poor women. The organization of Tsau is aimed at creating the conditions within which women's potential can be realized. This story is worth examining in light of economists' tales of women in development.

It has been observed by a number of critics that much of development theory and policy undertaken is based on the generally unexamined assumption that women's economic role was limited to the private sphere of the household (Elson *et al.* 1995; Moser 1993; Kabeer 1994). Women are often defined as passive, backward, and nurturing – unwilling to let go of traditional ways of life, dependent on their husband's income, and concerned primarily with the well-being of their children. The assumption accompanies the idea that all the productive work was done by men. Women's only perceived contribution is through their reproductive role in the household. The policies that follow from these gendered tales involved giving men education, property, credit, and jobs while taking what has been called a "welfare" approach to women – giving them food, teaching them about nutrition, cleanliness, and contraception and not much else.

The result of such policies, ironically, has been that women's welfare often declines as they worked harder for less pay and lost control over land and property. That is because this discourse results in making "invisible" workers out of many women (Escobar 1995: 170–72). Development practitioners such as Boserup (1970) began to voice concerns about how these policies were negatively affecting women's lives and these were taken seriously by the development community in the 1970s and 1980s. Nonetheless the story of the household made up of a nurturing, passive stay-at-home woman and an active male bread-winner persists, and is a common assumption upon which policies toward women in Third World economies are based even in our more enlightened era.

The criticisms generated in the 1970s and 1980s did lead to a different understanding of women and development that has been reflected in a number of initiatives and projects. A growing realization that women in developing economies are not all dependent housewives (it is estimated that about one-third of all households are headed by women), coupled with a concern with increasing levels of poverty among women, led to the construction of a new story about the potential role of women in the development process. The theories and policies that emerged have been dubbed the "Women In Development" (WID) strategy. Instead of Third World women being represented as tradition-bound nurturers, the WID approach conceives of them as "untapped potential." Women were not able to realize their potential because they were victims of patriarchy, not able to exercise free choice. Liberate women from the patriarchal institutional structure that victimizes them and keeps them from participating fully in the public sphere, it is argued, and they will be able to make the economic choices that can free them from poverty and subordination. As women are integrated into the market economy, it has been argued, they will also contribute to the economic growth of a society. Both equity and efficiency can be enhanced by integrating women into the market, giving them property rights, education, and access to jobs and opportunities that modernization had heretofore extended only to men.

With Tsau's emphasis on giving women property and opportunities that had not been available to them based on gender, the story of women in development in Tsau and the WID approach seem to have a lot in common. Give women what men have had and they will flourish. But Tsau does not quite fit the WID mold. For one thing, WID fits squarely in the modernization tradition; Tsau does not. While modernization theory and policy, including its WID variant, has linked development to increased Westernization, individualism, urbanization, and the declining importance of family and community (Banuri 1990), Tsau is organized along lines that stress cooperation, the strengthening of community ties, and building upon existing Botswanan traditions as the core of its development program. Denoon, after all, is initially introduced to us as the author of *Development as the Death of Villages,* a polemic which had apparently shaken the development establishment at the time of its publication for its sharp criticism of the idea that "development means Westernization," an idea that was in fact prevalent in the profession during the 1960s and 1970s (Marglin 1990).

Also, the organization of Tsau is not based on integrating women into existing institutions. In fact, it is based on the idea that such integration is not the answer to either the question of women's well-being or economic growth. Instead it is built on the foundation of empowering women by constructing a different set of institutions, ones that encourage them to express their own knowledge and needs instead of relying on the expertise of development professionals. This reflects Denoon's own humanist values, i.e., his "being for a society where human self-realization and liberation were a general outcome and not just for the most talented and richest" (p. 243). The community of Tsau is carefully constructed in this respect. For example, in council meetings everyone is allowed and encouraged to speak by taking turns rather than simply allowing the most vocal or confident to dominate.

By leaving men out of the decision-making process, making reproductive work a responsibility of the community, and creating an environment in which women can find their voices and express and fulfill their needs, Tsau attempts to transform gender roles. This reflects what Moser (1993) has called the "empowerment approach" to women in development. This view of women and development calls for fundamental social change. It challenges the view that markets by themselves will eliminate gender inequalities and improve the quality of life in poor communities. This has generated interest among theorists but it has been difficult for many development practitioners to imagine how this full-bodied idea of empowerment can be realized through policy (Kabeer 1994). The philosophical basis of Tsau's women-centered development strategy also reflects A. K. Sen's (1993) argument that development strategies need to focus more on empowering women, for poor women's often low expectations of themselves and their lives are not "natural" but are formed by their very lack of opportunity.

The ability to explore this way of thinking about gender and development is strengthened by the way that the novel explores the different responses of the women of Tsau to their economic situations. They are not all lumped together as "nurturers," "rational choosers," or even "poor Botswanan women." As Mueller's critique of mainstream development economics insists, reliance on statistics and other "standardizations" that is the common practice of academic texts constitutes an erasure of women's lived experiences (Mueller 1987: 8, cited in Escobar 1995: 180). Novels, on the other hand, persuade by getting the reader involved with the characters. In order to keep the reader interested, characters are presented as unique individuals with more complex motivations and responses than we would generally find in academic accounts.

So in contrast to the stories of women's role in economic development that base themselves on universalistic and abstract notions of gender and economic well-being, the story of Tsau relies much more on specificity and context. Rush's characters differ from the knowing, rational homo economicus of the WID approach and the altruistic, nurturing femina economica of the welfare approach. For instance, the economic choices of the women of Tsau are relational as opposed to individualistic. Some examples: those who choose to work in the kitchen do so in part because they find the cook's constant yelling and berating somewhat humorous; the women who capture snakes hold a place of honor of nearly mythic proportions; a much-needed rainstorm is believed to be caused by an action taken by the narrator, thus winning her favor from the members of the community; people often do a better or worse job at something depending on whether their labor benefits someone they like or don't like. Clearly their behavior does not always reflect what Paula England calls the "separative self" assumption of neoclassical choice theory (England 1993).

But neither are they simply nurturing, connected, and altruistic. There is a temptation to argue that they are more "whole" and closer to reality than the one-dimensional women found in many economists' narratives, but they are obviously not real. They are fictional characters in a novel who differ from those fictional women (and men) found in economics texts (Nelson 1993; Ruccio 1991).

(Re)presenting economic agents in fiction

The characters in *Mating* are understood through their intentions and choices. Agency, as expressed through an investigation of the motivation and choices of the characters, is one of the key narratological and rhetorical devices used by novelistic discourse to engage the reader (Suvin 1988). Intentionality and choice are rhetorical moves that also make economics persuasive (McCloskey 1994). The difference, however, is that in the novel, behavior is presented and understood as more complex. The characters are not merely pursuing higher levels of satisfaction in a novel, but are enacting their relationships to others as well as to their often contradictory inner impulses in these choices. Even Denoon is a socially embedded and complex figure. His highly abstract theories emerge from his relationship with people like the narrator, whose supportive but critical engagement keeps him from indulging in certain excesses, as well as from his own internal personal struggles that are never completely resolved.

All narratives will leave out certain aspects and emphasize other aspects of economic life. Novels differ from economic accounts in that they self-consciously express only part of life, inviting us to wonder about the rest. They do not purport to tell the whole story nor are they read that way. The narrator of our novel reminds us of this at one point. Noting her own obsession with observing and recording every detail, she worries, "My story is turning into the map in Borges exactly the size of the country it represents" (p. 245). Even with the excessive observations of this highly cerebral woman, however, the readers know they are seeing Tsau through the particular lens of a human, first-person narrator, who offers them one set of details while reminding us that the village is buzzing with other activities, alternative stories.

Economists, Martha Nussbaum (1995) points out, might respond by saying that their writing does not intend to tell the whole story, either. Economics does not offer a complete account of human behavior. Instead, it constructs simple models that allow economists to predict. It is, however, important to have reminders that there is a more complex picture of human behavior to which these models are accountable. This is doubly important in economics, Nussbaum observes, because the simplified models of economics often take over and begin to talk as if they have captured the range of human behavior, as in this quote from Stigler: "all of man's deliberate forward-looking behavior follows the principles of economics" (Stigler, cited in Nussbaum 1995: 47). Such notions derive from the modernist conceit that the economy comprises a disembedded sphere of instrumental action such that economic theory can be used to analyze economic life everywhere. The alternative view is one that sees economies and economic theories as social constructions. If we accept that economic knowledge is produced within a community of socially engaged persuaders, then we should also consider a new script for economic agents, whose own economic activities are enacted through symbolic and social schemes.

We are not suggesting that economists begin writing novels. But novels can raise questions about, and provide insight into, the world of economic actors. One important difference is the treatment of subjectivity. There is no totalizing "I", no universal key or entry point to understanding the subjects in the novel; instead they are, as Samuels and Samuels put it, "working out what they are to become" (1997: 77). This is the only way to understand the multiplicity of Botswanan women who inhabit Tsau. Each one has a different set of responses to the economic policies set up by Denoon and as the plot unfolds their reactions and loyalties change and shift. Each woman is herself a multiplicity. Constituted in both the private and public spheres they are impoverished but providers, vulnerable yet others depend on them. While they are empowered by their ownership and control of wealth, even this is a questionable gain because their land and homes are located in the middle of the Kalahari desert.

If the novel *Mating* allows us to see the multiple subject positions held by the women in the community of Tsau, it also allows us to consider the social embeddedness and fragmented subjectivity of its author Nelson Denoon. Unlike the texts of economics, which presume that the author is an autonomous, objective, and rational Cartesian subject, this novel explores the multiplicity of desires and intentions that drive Denoon to conceive of and interact with Tsau in the way that he does. On one level, Denoon is presented to us as the consummate social scientist, a highly complex multidisciplinary academic pursuing an approach to development that avoids the missteps of the past. He is attuned to the failures of modernization strategies that have caused so much pain and resistance in developing economies due to their inappropriate technology, environmental degradation, lack of political participation, gender bias, cultural imperialism, and assumptions that the Western development "expert" knows what is best for the "backward" recipients of development.

Instead he takes a postmodern turn, eschewing a grand narrative of development and instead taking the best that we have learned from different cultures and grafting them together onto existing Botswanan traditions. He encourages the community members to go out and visit each other during an evening stroll, an idea which he got from reading Tolstoy (Rush 1991: 205). Someone in the village reads to those doing manual labor in a tradition borrowed from Cuban cigar manufacture which Denoon admires. He does not want to be the "expert" and tries hard to support the women's decisions (such as the importation of certain luxury goods or the desire to have guns to kill lions) even if he disagrees with them (p. 323). And of course he mixes plan and market in a self-conscious rejection of the meta-narratives of socialism or capitalism in the West.[4]

But we can read Denoon another way Strangely, there are parallels between the story of Nelson Denoon and the story of Robinson Crusoe. Like Crusoe, Denoon feels compelled to leave behind the stifling traditions of his own culture for an adventure. Denoon escapes to an island in the middle of the Kalahari desert. Like Crusoe's island, Tsau becomes, in Denoon's mind, a return to the state of nature. He is prone to using the metaphor of the organism when describing Tsau. For instance, the morning after a big rainstorm he strolls about the village, overlooking the cleanup efforts in a paternalistic manner and musing to himself about what a self-sufficient organism the community has become. Again, when the citizens want rifles for hunting, he expresses concern because Tsau is an organism and should take only what it needs and nothing more (p. 313). While paying lip-service to the idea that the village is run by and for the women who inhabit it, in his heart he thinks of it as his. The women are his pliant natives, his "gal" Fridays, who accept his experiments with good humor and child-like fascination.

As the novel progresses, one becomes overwhelmed by the dreariness associated with Denoon's well-meaning but transparent attempts to control things. Half-way through the novel, the narrator comments on the symmetry and order of everything and muses that there are thousands of villages in Botswana that are disorganized, hideous, and demeaning but the people living in them are about as cheerful as the people in Tsau (p. 196). This troubles her, but not as much as Denoon's well-meaning attempt to create a political-economic "map" of the village which codifies all the characteristics of each resident (p. 305), much in the same spirit of Robinson Crusoe, who keeps an accurate ledger of his resources on the island.

Denoon, despite his best intentions, remains a technocrat for whom the women and the village of Tsau are the "others" that need to be known and controlled. He, like the colonizers he so vocally despises, believes he can civilize these women by appealing to their ahistorical, transparent "good sense" (Spivak 1988: 305). As the residents begin to rebel against the institutions that he has imposed upon them, for instance firing the woman who reads novels to the manual laborers or railing against his fanatical import-substitution schemes, he is truly perplexed. In this sense, he is not that different from "real" social scientists. What is different is that the novel can explore the hubris that underlies his approach to development.

Conclusion

Knowledge is about persuasion. And we believe the knowledge-generating genres should be extended to include the novel. True, not all writers have a particular ideological position they want us to buy, but even the most innocuous of authors whose only intent is to entertain us must at least be able to persuade us to believe in the characters enough, to take interest in them enough to turn the next page. Further, the intent of the author is not the sole definition of the meaning of a work of literature. Poststructuralism would maintain that the readers actively engage in the production of meaning by utilizing signifiers in relation to their own particular universe. It was in this sense that we sought to present a particular economic reading of Norman Rush's novel, *Mating*. We chose this novel because of the close affinities between the issues raised by the narrator of the text and topics in economics: namely, the relationship between market and plan, individual versus group behavior, economic development and the gendered construction of the economy.

The comparison of academic economic discourse with the economic knowledges produced in the novel, however, does more than offer another story about how the economy works. The examination of alternative genres also decenters the dominant discourses in economics. It exposes all economic discourse as a particular type (or set of types) of language game. As such, when utilized, when entered into, this language game speaks to a particular set of problems in the life-world of economic actors. Economists can speak of unemployment and investment but not easily, not persuasively, of self-esteem, psychological power, guilt, or shame. Economists can speak of competition, exit, and even a limited form of voice but not of loyalty. The discourse of economics is partial and therefore limited. This is not to suggest that there is a comprehensive discourse out there that we can grab hold of. All discourses are partial and fragmentary and therefore offer a disjointed view of social life. The problem for the dominant schools of thought in economics is their inability to own up to their limitations.

Alternative genres therefore add another fragment to our own way of seeing. The novel examined here provides the following direct payoff. It allows us to envision an economy differently gendered, in which women are the dominant actors and in which men are subaltern; in which the desires of men are debased and a communitarian ideal is thoughtfully constructed, threatened, and daily reproduced. It provides an intellectual space within which to imagine a differently gendered economic sphere. It need not signal the abandonment of the dominant economic discourse but it would go far toward the demystification of the peculiar stories told by economists.

Notes

1. Brown (1993) presents another reading of the difference between the two genres. She observes that while novels are characterized by a more dialogic form of discourse – multivoiced and open-ended – economic discourse is more monological – written and read as if a single authoritative voice controls the text. The consequence of this stylistic difference is that economics writing underscores the idea that there is only one true reading of a text, while novelistic writing is more open to the possibility of multiple readings of texts.
2. The journal article and the textbook each represent a particular genre of economic writing. As McCloskey (1994) and Bazerman (1988) point out, the arrangement of the typical economics journal article reflects the style of the laboratory experiment, creating a sense that the reader is an observer in that laboratory. The textbook genre, on the other hand, persuades by convincing the reader of the authority of the text. This is done by presenting economic models as if they are uncontested facts and minimizing or ignoring debates and controversies in the literature (Klamer 1990; Swales 1993).
3. This way of reading a novel was recently undertaken by Samuels and Samuels (1997) who found a social economy approach at work in a recent novel by Jane Smiley.
4. Interestingly, this parallels the view of the author, Norman Rush. In a recent issue of *The Nation,* Rush argues that a successful alternative to capitalism will be *ad hoc* and pluralistic, eschewing the "foundational conceit" of socialism as we have known it. He concludes that "It's going to be very post-modern in the terrain where socialists used to browse" (Rush 1994: 94).

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Part III

Reconstructing the academic conversation

10 Postmodernism and identity conditions for discourses

John B. Davis

Postmodernist thinking represents a collection of critical perspectives on modernist thought that together share the view that the modernist *episteme* of unified, certain knowledge is neither realizable nor coherent. One way in which this is often expressed is in the form of a critique of essentialism, or the idea that such classical epistemological notions as true, real, correct, logically necessary, and the like are required foundations for science and understanding. Many postmodernists doubt that these notions are ultimately viable, and argue that they rather function in an authoritarian and dogmatic manner to suppress discourses subversive of modern bureaucratic rationality. Essentialism, it is further argued, mistakenly makes our intellectual ideal that of a complete and systematic representation of the world. But intellectual activity on any candid reading, postmodernists insist, reflects undecidability, disorder, and indeterminacy on the one hand, and overdetermination and rivalry on the other. That is, we are both unable to ever really settle most things in life, and also unable to really narrow the range of competing discourses on virtually any given subject matter.

I think this critique valuable and insightful in many respects. It has been well developed by a variety of contributors across many contemporary disciplines,[1] and is persuasive in a variety of ways to an increasing number of thinkers, including many trained in and still largely sympathetic to modernist tenets. In this chapter I am chiefly interested in the future trajectory of postmodernism, especially as the efforts of its proponents are decreasingly directed toward the critique of modernism – with the success and growing acceptance of that critique – and more aimed at explanations of how discourses function to generate new thought. Surely one of the key perspectives postmodernism offers is the idea that thought is continuously dynamic and open ended rather than always converging toward a single set of static truths, the modernist ideal. Is it then too much to ask for further analysis of this dynamical process and for discussion of what this “un-system” involves? Some postmodernists might say that it is indeed too much, that we can only record moments of undecidability, disorder, and indeterminacy, and that epistemological nihilism is an inevitable and even healthy mindset.

I reject this view for two reasons, one theoretical and one practical. First, theoretically speaking, it seems that the topic of competing and incommensurate discourses, whether at a point in time or across time, is a subject which we can coherently investigate in analyzing how people disagree with one another. This topic is the chief theme of this chapter. Second, practically speaking, it seems imperative from a progressive political point of view that postmodernists learn how to defend openness, pluralism, and tolerance in discourse against reactionary forms of modernism. Doing this, however, involves both showing clearly and reasonably persuasively how modernism can be morally and politically unhealthy for society, and also showing that there exists a handful of "essentials" underlying the non-anarchic play of competing discourses that explain how a postmodern world is livable. This topic is a secondary theme of this chapter touched upon in the last section below.

My position might then be best put as holding that nihilism – or the view that we can only record moments of undecidability, disorder, and indeterminacy – is misguided, but that what might alternatively be termed principled relativism – as will be set forth here – is meaningful and desirable. In what follows I try to investigate conditions that might fulfill and characterize a principled relativism, and then turn to look critically at postmodernist nihilism. In the first section, a dilemma is first posed for postmodernist discourse analysis that I suggest derives from its past path of development as a set of ideas critical of modernism. In the second section, one means of addressing this dilemma is set out in terms of a discussion of what I term identity conditions for discourses. In the third section, I turn to market exchange models used to elucidate interaction between discourses to give a specifically economic application of the idea of identity conditions for discourses, and then reexamine the original dilemma and its suggested solution from this new vantage point. In the final section, I briefly address the secondary theme of the chapter, argue in favor of principled relativism and against nihilism, and make a number of concluding remarks about political–ethical issues that postmodernism raises against modernism.

A postmodernist non-communication dilemma

In the collection of papers from the 1994 conference "Pluralism in Economics: Theory, History and Methodology" (Salanti and Screpanti 1996) in Bergarmo, Italy, Warren Samuels argues – correctly in my view – that alternative economic methodologies each possess their "own internal limitation and there is no single, unequivocal, conclusive meta-principle" upon which we can rely to choose among those methodologies (Samuels 1996: 67). That economic methodologists have in the past sought some "single, unequivocal, conclusive meta-principle" may be due to a mistaken view of what the application of philosophical concepts to economics can accomplish. A modernist view of the matter would have it that philosophical ideas can provide firm, unproblematic foundations for economic ones, and that philosophical ideas once grasped are relatively uncontroversial and convincing. A postmodernist view of the matter might have it that philosophical ideas are complex and problematical, and that their use is better seen as shorthand reference to entire philosophical theories, each of which possess strengths and weaknesses relative to competing theories and the philosophical ideas that summarize them. Given that philosophical debate appears to have all the characteristics of an undecidable exchange, it seems that Samuels is correct in inferring that prescriptivist economic methodologies in the Popperian–Lakatosian tradition are misguided in searching for "the principles of knowledge acquisition which permit accurate identification, description and explanation of the subject" (p. 68).

A second, stronger claim Samuels makes is that "there is a fundamental, tautological relationship between the assumed principles of knowledge acquisition and the knowledge which is produced" (p. 68). Perhaps "tautological" is too strong a term here, but it must at least be close to the sense of Samuels' position, which is also expressed in terms of an idea widely accepted among postmodernists that one cannot "step out" of one's own discourse; that is, there is something inherently contradictory about the idea that one might be detached from the way one sees things. I think that there is a dilemma here that results from conjoining this second proposition that knowledge is somehow tied to its conditions of production to the proposition in the previous paragraph that there are no unequivocal meta-discourses. This may seem odd, since on first glance the two propositions seem to be mutually supporting. Let me then expand upon and reconstruct Samuels' case in an attempt to bring out what I believe to be the dilemma in question. In his view:

1. knowledge is tied to its conditions of production; and
2. there are many distinct discourses on any given subject (because the conditions of knowledge production are diverse).

From this it follows that:

3. there can be no unique meta-discourse on any subject.

But from this one might also plausibly infer that:

4. different discourses and their producers are non-communicating.

This conclusion, however, surely poses a dilemma for postmodernism and its critique of modernism. On the one hand, if different discourses and their producers are non-communicating, then no one is in a position to confidently say that there is no single meta-discourse – and thus argue that the project of modernism is misconceived. In effect, undecidability across different discourses undermines defense of the (shared) claim that there is no single meta-discourse. On the other hand, if postmodernists agree that the modernist project is misconceived, then explicitly shared ground does seem to exist between discourses after all. This both raises doubts about the postmodernist critique of essentialist modernism, and suggests that knowledge production may not be that closely tied to its conditions of production.

I think this dilemma more difficult to discharge than many postmodernists might suppose. In a sense, it is one member of the class of the ancient one-and-the-many or unity-and-plurality paradoxes that first received especially clear expression in connection with Plato's theory of forms. Plato's problem was how instances of things dissimilar and yet related to one another each fell under some universal category representing their shared quality. Here in its contemporary form the problem is manifested in the dual demand that discourses be dissimilar in nature, yet also share a common, motivating moment (that there is no meta-discourse subsuming them, the project of essentialist modernism). The plurality side of there being diverse discourses is self-evident, but perhaps it seems odd to say that different discourses must share a unity in something's non-existence or in the absence of a meta-discourse. To say, however, that different discourses are each dissociated from a single essentialist language is to make one important claim about the origins and nature of each. It is to say that each possesses a specificity or particularity that derives from their like resistance to translation into one general language or logic. But then it is one general language that defines them all, if only in a negative sense. The dilemma at hand, then, concerns the implications of emphasizing either the plurality or the unity sides of postmodernism's combining a defense of diversity and a mutual distancing from modernist essentialism.

Of course all dilemmas are dispellable to the extent that one is willing to embrace the consequences of taking one horn or the other of the dilemma. For postmodernists, I suggest, the process of future adjustment will require becoming clearer about the idea that discourses appear non-communicating. Saying that different discourses are not backed by a common meta-discourse makes discourses out to be non-communicating in only one specific sense. Are there, then, other forms of linkage or communication between discourses compatible with this? And might these other forms of linkage or communication preserve both the specificity of different discourses in terms of their separate conditions of production and yet still support a critique of essentialist modernism? Samuels would allow that there are indeed forms of communication between discourses other than just the shared rejection of a single meta-discourse, since he does not embrace the conclusion of the reconstructed argument above that radical non-communication is a necessary implication of discourses having diverse conditions of production. In saying how else discourses communicate, then, we might attempt to resolve the dilemma above by showing that there are linkages between distinct discourses that do not imply essentialist categories.

Note that an alternative resolution of the dilemma here would be simply to embrace non-communication in a radical fashion, thereby giving up the search for a form of communication between discourses and also a shared critique of modernist meta-discourse. In effect, modernism would be defeated simply by the practice of individuals always operating in terms of self-contained discourses, rather than by argument. This nihilist solution, however, seems an undesirable way of dispelling the dilemma facing postmodernism, chiefly because an articulate critique of modernist essentialism is presumably important to the defense of diversity. But before developing this conclusion in the last section below, attention ought first be given to how it might be thought that the dilemma set forth above has come about historically with the emergence of postmodernism.

My thesis here is that the dilemma facing postmodernism has its origins in the way in which postmodernism historically developed as a critique of modernism. Suppose – to tell a slightly apocryphal story – that scholars struggled for many years with the classic, modernist correspondence problem regarding how our representations of the world relate to the world. These scholars' difficulty for many years was that they believed there to be one underlying reality, though they found themselves committed to competing and often incommensurate ways of representing that reality. Finally after many years of frustration and fruitless debate over whose representation of reality was correct, some scholars asserted that the idea of a single, independent underlying reality must itself be contradictory, because – reasonably enough – the idea of a single reality is itself a discursive item, and all discursive items possess multiple senses. There only exist these postmodernists then argued – different discourses, or different modes of representation. But now the dilemma emerges. That it was originally thought that there exist genuinely distinct, alternative discourses depended on the idea that, were there a single, unique underlying reality, then there had to be a single, unique mode of representation of that reality. That is, the idea of the distinctness of a discourse was rooted in the idea of its possible uniqueness as the only correct representation of a single reality. Yet if we now say that no single, underlying reality exists, then the past basis for saying that discourses are genuinely distinct and different from one another has been removed. Moreover, unless new criteria for explaining the idea of distinctness and difference are developed, it cannot be ruled out that discourses are more alike than different from one another – a development which might ironically then encourage neomodernists to argue that "different" discourses tend to, say, "converge" on the "correct" representation of a single, underlying reality.[2]

On this view, much current postmodernism preserves, if in a latent or implicit manner, an important presupposition of modernism in that postmodernism's concept of difference as uniqueness is an inadvertent inheritance from modernism. Uniqueness, it seems fair to say, is an essentialist notion in that it depends on the idea of a single correspondence to a single reality. To say something is unique involves making a complete and comprehensive survey of the world, in order to say that one and one thing only occupies a certain place in that world. But postmodernists need not explain difference in terms of the idea of uniqueness. There are other ways of explaining the concept of difference that postmodernism might adopt – ways which we would hope would make speaking about difference compatible with jointly denying a single meta-discourse exists, sustain the critique of modernism, and thus serve to dispel the dilemma above. What this suggests is that for postmodernist thinking to be successful it needs to be elaborated independently of that critique of modernism that specifically treats discourses as self-contained and non-communicating. What is rather needed, more specifically, is an account of discourses' relative autonomy from one another, since an account of this sort would presumably make a discourse's distinctness a function of its lateral juxtaposition to other discourses, rather than a function of its possession of the essentialist property of uniqueness. I now turn to how such an account might be attempted.

Identity conditions for discourses

If essentialist reasoning tries to explain representation in terms of correspondence to something beyond representation, non-essentialist reasoning strives to remain within the ambit of representation, that is, it strives to account for distinct forms of representation in terms of the whole of representation or in a holistic manner. This involves explaining the relative autonomy of different discourses by reference to the principles that account for the boundaries between discourses, where focusing on the dividing lines between different discourses makes their distinctness a function of their relation to one another. Holistic reasoning, that is, operates in terms of concrete wholes whose parts are from the outset the (internal) determinations of those wholes. A concept of difference developed along these lines does not trade in the concept of uniqueness, since the whole's parts – here different discourses – are different from one another as related parts of one whole – or of discourse generally. Difference is understood immanently, as it were, rather than absolutely.

How specifically, then, should the boundaries between discourses be conceptualized? When we speak of boundaries between things we suppose we are simultaneously concerned with those boundaries and the distinct and identifiable things those boundaries permit us to distinguish. Further, to say that one has some distinct and identifiable item is to say that one could elaborate identity conditions for that item which would allow us to distinguish and reidentify that thing in a variety of settings and through change in the way we talk about things. Identity conditions, that is, are criteria used for singling out, identifying, and relabeling things we want to pay special attention to, and reflect the implicit ontologies of the language we employ. To say that there are identity conditions for discourses, then, is to say that there are criteria for singling out, identifying, and relabeling different discourses. The business of doing this, moreover, both establishes the boundaries between discourses and determines the relative autonomy or identity that different discourses may be said to possess.

Of course trying to say what makes one discourse distinct from another is a herculean task, since, in contrast to tangible things such as a table whose visual outline and tactile qualities offer us obvious starting points, discourses are changing collections of relatively elusive conceptual moves and practices that may well seem to lack any apparent identity whatsoever.[3] Nonetheless, I suggest that the relative autonomy or identity of discourses be understood in terms of the functional roles played by two different types of concepts operating in any given discourse, where these two types of concepts are distinguished according to the contributions they make to a discourse's unity and distinctness respectively.

First, every discourse possesses concepts and notions which we may agree are central to or constitutive of that discourse. Like core concepts in Lakatosian research programs, these concepts and notions may be thought key to that discourse's unity as an identifiable discourse in the sense of being unique to that discourse. Second, every discourse also possesses concepts and notions which, though not constitutive of its unity or specific to that discourse, nonetheless play a role in that discourse. Unlike in the Lakatosian conception, these latter, non-constitutive concepts may be regarded as boundary-markers, since they are both found in other discourses and yet still play a role in the discourse under consideration. As opposed to explaining the unity of a discourse, these latter concepts may be understood as means by which we establish the distinctness of a given discourse. In effect, they enable us to pick out just where the discourse in question comes into contact with other discourses.

Both kinds of concepts, then, are necessary to explaining the relative autonomy or identity of a discourse in terms of its unity and distinctiveness from other discourses. An example may help clarify this conception. In post-Keynesian discourse the notion of true uncertainty is regarded as a constitutive element in equilibrium unemployment arguments. In neoclassical-synthesis Keynesian discourse the notion of rigid wages is regarded as a constitutive element in equilibrium unemployment arguments. Each concept, then, contributes to the unity of these two Keynesian discourses. In contrast, the concept of an unemployment equilibrium, though it is employed in both post-Keynesian and neoclassical-synthesis Keynesian discourse, is constitutive of the unity of neither argument. As a concept, it thus contributes to our picking out the boundary between the two forms of argument. In effect, its differential appropriation in the two discourses tells us where the two discourses both come into contact and yet remain distinct.

Some, perhaps, will think this conception of a discourse with two different types of concepts cumbersome and unnecessary to explaining the relative autonomy or identity of discourses. Why not simply explain what makes discourses distinct and different in terms of their constitutive notions alone? The problem with proceeding in this manner is that it leaves us with postmodernism's apples and oranges, non-communication problem. If a discourse's constitutive concepts are specific to that discourse alone, then in attending solely to them we lack a way of relating discourses to one another. However, in differentiating between a single discourse's constitutive and non-constitutive concepts we put ourselves in a position to explain that discourse's identity specifically as a relative autonomy, or as an autonomy relative to other discourses. The key to this conception, it should now be apparent, is in being able to say that both types of concepts must operate in any given discourse. Not just a discourse's constitutive concepts, but also its associated penumbra of non-constitutive concepts must be seen as necessary to the understanding of that discourse.

Of course, saying that non-constitutive concepts are as necessary to a discourse as are its constitutive concepts sounds odd, but this is an entirely reasonable view to adopt if discourse is understood holistically. Then, though constitutive concepts are specific to individual discourses, they still need to be understood as operating in conjunction with a further apparatus of concepts that are not specific to that discourse. Holistic reasoning generally operates with complex wholes which may not be disassembled without destroying the whole, and which also accommodate different functions for different elements in those wholes. Here it is suggested that constitutive notions account for discursive unity and non-constitutive notions point to discursive boundaries that together explain the relative autonomy or identity of discourses.

Does this conception, then, help us address the non-communication dilemma advanced above? The following section attempts to answer this question in a positive way by considering a rather different set of grounds for operating in terms of the approach outlined. It has been suggested, for example by Deirdre McCloskey (1994), that discourses and those who use them communicate much in the way that economic actors interact in markets, and consequently that we can develop an understanding of discursive interaction or how discourses communicate in terms of a model of market exchange. We thus turn to the market exchange model of discursive interaction in an effort to determine what more we might learn about communication from this perspective.

Market exchange and discursive interaction

Markets typically involve decentralized exchange between economic agents specialized in different types of production within an overall division of labor. Neoclassical economic theory generally gives the idea of exchange a decidedly modernist interpretation by representing economic agents as atomistic individuals, each with their own well-defined endowments and axiomatically described preferences, whose exchange with one another generates gains from trade for each, as if through the mechanism of an invisible hand. Taking this as a model for the interaction of different discourses, a neoclassicist might then say that though individual discourse producers each have their own linguistic endowments and conceptual preferences, their discursive trade and interaction with one another reflects an underlying logic or meta-discourse that to neoclassical economists works much like how universal constrained optimization results in a general equilibrium between independent producers. Just as, that is, seemingly very different economic agents' trade with one another reflects one, underlying meta-discourse of trade that may be captured in sets of equations whose joint solution can be proven to exist, so that discourses and their producers generally, on the traditional neoclassical model of market exchange, presumably share a common meta-language or deep grammar that makes communication possible.

There are ways, however, to represent market exchange as a model for discursive interaction that bypass the modernist features of the neoclassical account. Distinguishing between Methodology and methodology as does McCloskey (1994), we might say that discursive trade and interaction are not guided by an underlying logic or meta-discourse but rather by multiple, evolving norms of conversation. "There is ... no Methodology of economics ... only sustained verbal and written interaction which defies abstract characterization, because it is inherent in the unavoidably concrete relationships obtaining between economists" (Davis 1990: 83). One reason to think this is that there is growing evidence that economic agents are not appropriately all modeled as individual, constrained optimizers each operating within a general equilibrium. Thus psychologists have argued that human decision making often does not satisfy the axiomatic requirements of neoclassical theory (cf. Thaler 1992), ethicists have argued that individuals in markets often act from non-self-regarding, non-utility-enhancing, altruistic motives (e.g., Sen 1987), feminists have argued that power and patriarchy socially determine the actions of women and men (Ferber and Nelson 1993), and a range of heterodox economists see class, corporate power, culture, social values, and a variety of other explanations of behavior as being centrally involved in markets. None of these types of explanations are neatly suited to producing a modernist determinacy in the analysis of exchange in markets. This strongly suggests that there are good reasons to believe that market participants do not share in a single higher logic in their respective interactions with one another, and that we accordingly ought to attend more carefully to different and changing forms of behavior in market activity. But if this is the case, then modeling discursive interaction as market exchange in terms of a formal symmetry of behaviors explicable in terms of a single mathematics is entirely misguided. Rather, we should seek to explain the changing and often incompatible means by which very different discursive agents negotiate exchanges with one another without supposing that a determinate formal apparatus lies behind the concrete phenomena.

Before considering how to go about this, however, we should note one very tangible advantage to using concepts of market exchange to model discursive interaction. Saying that individuals and discourses interact with one another much in the way that market participants engage in exchange implies that somehow discourses do succeed in communicating despite their origins in very different conditions of production. Indeed, this conclusion is only reinforced should we agree that, contrary to much traditional thinking in neoclassical economics, there is no single meta-logic underlying real-world market exchange. Then the fact that exchange does occur tells us that economic agents' particularity is compatible with their discursive interaction. The task that confronts us, then, is to explain just how discursive particularity is compatible with discursive interaction understood as a kind of trade. An example applying the discourse analysis developed in the last section is suggestive.

Consider household exchange between women and men in abusive domestic violence relationships where trade is treated as a form of discursive interaction. On the view above, constitutive and non-constitutive concepts characterize the respective discourses of women and men. How may we understand domestic violence in marriages involving production specialization and exchange in terms of these two kinds of concepts? Farmer and Tiefenthaler (1997) explain domestic violence in non-cooperative relationships where men derive utility from violence against women, and women derive utility from real income received in exchange. While the Farmer–Tiefenthaler analysis explains the behavior of both women and men formally in terms of a single mathematics of constrained optimization, we may depart from and reinterpret their utility analysis to differentiate two distinct discourses in the different arguments of women and men's respective utility functions. Only men, not women, derive utility from violence perpetrated against women. Thus we may say that constitutive of the discourse of men engaged in spousal abuse is a set of concepts that tie self-esteem to spousal abuse. In contrast, women may be said to understand their status as a product of patriarchy. The concept of patriarchy is constitutive of their discourse. Thus though formally each may be said to have utility functions, a more concrete analysis of their preferences gives us a basis for saying that they each possess a core of specific concepts that make their discourses highly incommensurate with one another.

At the same time, however, there are non-constitutive concepts in the discourse of each which are specific to neither discourse, but which work together with each one's constitutive concepts. Here we may refer to concepts which each possesses that concern such things as the value of family and home, the importance of joint income, cultural expectations about married life, desire for companionship, and so on.[4] As non-constitutive, this latter set of concepts operates differently for women and men according to how they respectively integrate them together with those concepts constitutive of their two respective discourses. Thus women may understand the sacrifices to abuse they make personally for family and children as part and parcel of living in a patriarchal society. Alternatively, abusive and violent men may see family and children as further aspects of their own self-magnification. Each consequently shares a set of (non-constitutive) concepts, but those concepts function differently for each in two distinct discourses. Thus their two discourses are relatively autonomous and identifiable by having both a distinct core of concepts and by sharing concepts that mark out the points of contact or boundaries with one another.

The Farmer–Tiefenthaler analysis also explains the breakdown of abusive relationships and the termination of exchange between the women and men involved in them in terms of a threshold or threat point at which women cease to accept the marriage's combination of real-income transfers and spousal abuse. In our framework, the respective discourses of women and men cease to communicate. We might say, using the Farmer–Tiefenthaler emphasis on women's shelters and support networks as a form of real income, that in these circumstances women's discourse drops those non-constitutive concepts shared with men regarding family and home, and adds new non-constitutive concepts shared with other abuse victims regarding personal security and non-patriarchal family life. On the assumption that core, constitutive concepts still help locate different discourses specific to different groups of women in shelter and support networks, say, concepts regarding class, education, and social advantages, then discursive interaction reemerges when different women's discourses differently integrate their respective core, constitutive concepts with their shared, non-constitutive concepts, which mark out points of contact and boundaries between relatively autonomous discourses within shelter and support networks.

Using a market model of discourse, then, discursive interaction, like economic exchange, is periodic, interrupted, and shifting. Indeed, we may further complicate the picture above in two ways. First, on a postmodern view of discourse as a form of exchange, discursive parties presumably trade at many sites, in the process simultaneously reconstituting themselves in a variety of ways as they integrate multiple sets of shared, non-constitutive concepts with their constitutive ones. Second, nothing in the analysis here requires that core-constitutive concepts be unchanging. To the extent that we are successful in characterizing concepts specific to a discourse, constitutive concepts possess a degree of stability. But clearly on the exchange model of discursive interaction the abundance of contacts between discourses argues for change in core, constitutive concepts. Of course discourses also die and are born. Without attempting to say how changing interaction between discourses in terms of non-constitutive concepts impacts on core concepts, we may simply say that the continual resiting of discursive interaction contributes to the elimination, creation, and transformation of discourses.

Thus there is considerable undecidability and indeterminacy in the framework developed here to explain the relative autonomy and identity of discourses. Yet this undecidability and indeterminacy neither overturns that framework, nor leaves us with the non-communication dilemma set out above. Discourses do communicate with one another without recourse to a single meta-discourse (as individuals may interact in markets without a neoclassical formalism), and yet discourses may still be understood in terms of their distinct conditions of production. Does this framework, then, offer solid grounds for sustaining the postmodern critique of essentialism? The answer to this question can perhaps best be given by comparing nihilism and relativism.

Nihilism, relativism, and the politics of postmodernism

What is nihilism? In their recent discussion of Keynes, Jack Amariglio and David Ruccio (1995) take Keynes' late emphasis on animal spirits and uncertainty as an impenetrable barrier to calculative rationality, and thus as an important postmodern element in Keynes' thinking that helped introduce indeterminacy and undecidability into contemporary economic discourse. They see this as part of "a progressive slide into nihilism" on Keynes' part, but argue that Keynes should be praised rather than condemned for it.[5] Generally, then, nihilism for Amariglio and Ruccio and many postmodernists is the view that discourse is always incomplete, fragmented, and laden with indeterminacy. Embracing nihilism thus means rejecting the modernist practice of hierarchically privileging order over disorder, and recognizing that attempts to "domesticate" uncertainty are ultimately doomed to fail (also cf. Amariglio and Ruccio 1994).

This view would seem to imply that the discursive world cannot be made up of different, relatively self-contained discourses, since to suppose this would be to posit some degree of order over the disorder. While Amariglio and Ruccio, as well as other postmodernists who have written on nihilism, are more disposed toward the idea of dialog between distinct, relatively self-contained discourses than the characterization of nihilism here would seem to suggest (cf. Amariglio, Resnick, and Wolff 1990; Ruccio 1991), it is nonetheless instructive to consider the consequences of nihilism for the dilemma set forth in this chapter. Thus, were uncertainty and undecidability pervasive, it would follow that communication and shared understanding between different postmodernist discourses would not obtain. In the thinking developed above, it would not make sense to say that these discourses shared a set of non-constitutive concepts pertaining to a shared critique of modernism. In effect, on a nihilist view diversity swamps common ground. But this jars with the evident common ground postmodernist discourses share against modernism.

There is a related consequence of embracing pervasive indeterminacy and undecidability. If disorder always conquers order, so that one can never hope to "domesticate" spheres of discourse, then difference dominates coherence absolutely. Radical uncertainty understood in this way, then, inverts the completeness and finality sought in modernist rationality, since it still claims that there is one, single reality (characterized now in terms of universal fragmentation and omnipresent disorder), and still proposes to work in terms of a single language (that of indeterminacy and undecidability). Nihilism, as argued above in connection with the historical origins of the concept of difference in postmodernism, simply works in terms of an alternative set of absolutes. In effect, it opposes core concepts of indeterminacy and disorder to modernism's core concepts of determinacy and order, but shares non-constitutive, boundary concepts of a single language and a single reality. Postmodernism understood in these terms is a form of discursive interaction with modernism, rather than an internally differentiated whole of postmodernist voices relatively autonomous chiefly in respect to one another.

I think the latter form of postmodernism – that is, one that differentiates postmodernist voices relative to one another rather than relative to modernism – is the preferred one. And in place of nihilism, I also recommend postmodernists adopt what was earlier labeled a principled relativism. On this conception particular discourses possess temporary and relative stability that enables their comparative investigation, though nothing in this suggests they can be arranged in any kind of hierarchical order. What can instead be achieved is a cross-discourse type of investigation that builds an account of differences between discourses in terms of their differential appropriation (via their respective constitutive concepts) of shared non-constitutive concepts. Generally, then, communication is relative to the discourse in which one operates, just as Samuels argued. But our ability to explain the relative character of discourse turns on the principles involved in reading across discourses – here tied up with the treatment of constitutive and non-constitutive concepts. Thus a principled relativism offers postmodernism a means of preserving an emphasis on undecidability and indeterminacy while also insuring a form of communication between different postmodernist approaches.

Nihilism, in contrast, suffers at least two important vulnerabilities as a postmodernist approach. In the first place, discursive exchange and interaction chiefly with modernism is unlikely to serve as an effective critique of modernism, since – on the model of discursive interaction adopted here – the core concepts specific to modernism are not noticeably at risk when nihilism and modernism discursively interact over shared commitment to a single (though different for each) language and reality. No doubt convinced modernists, perhaps neomodernists, will say that gaps, discrepancies, undecidable moments, and so on are just a part of an inexorable progress toward knowledge. In the second place, focusing on the relationship between postmodernism and modernism detracts from attention to multiple interactions among multiple discourses. But attention to the latter is not only important for understanding the dynamics of discourses – what might be thought the positive project in postmodernism – but also for simply demonstrating that there exists no single, meta-discourse.

This last point is a valuable one to conclude upon. One dimension of postmodernism that especially deserves emphasis is the form of its political progressiveness. While historically Enlightenment modernism was politically progressive in defending rights of individuals against theocratic power, today postmodernism is politically progressive in defending tolerance and openness against modern bureaucratic rationality. Indeed, the defense of diversity and pluralism appears to be the chief practical consequence of postmodernist discourse. That program, in its many aspects and dimensions, seems well served by exhibition and analysis of the variety of forms of discourse and their modes of discursive interaction. The argument in this chapter attempts to map out some of this dynamic.

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Notes

1. For economics, in particular, see the collection of papers in Samuels (1990).
2. Hausman's (1992) treatment of economics as an inexact science might be understood in these terms.
3. It is worth pointing out that there are many items just as amorphous as discourses in regard to identity that we customarily treat as distinct and reidentifiable. From the social world, for example, there are one's moral obligations, a certain group's employment prospects, the legal rights to those accused of crimes, political platforms, customs, and so on, seemingly in a list almost without limit. Indeed, most of the "things" we are interested in social life have rather intractable identity conditions. That we nonetheless deal with them regularly as distinct and reidentifiable implies we have coherent means of doing so.
4. Note that all these items may be framed in utility terms.
5. Coddington (1982) initiated the nihilism critique of Keynes and Shackle, but spoke of it pejoratively.

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11 The role of econometrics in the neoclassical research program

James R. Wible and Norman H. Sedgley, III

In recent years, prominent practitioners of applied empirical economics have become critical of the role and practice of econometrics within economic science. An entirely "endogenous" methodological literature has grown up with econometricians such as Edward Leamer and David Hendry and applied theorists and policy specialists Lawrence Summers, Kevin Hoover, Thomas Mayer, and others raising conceptual and philosophical questions about the conduct and place of econometrics within economic science.[1] This is unusual because methodological debates typically feature methodologists almost exclusively. For the most part, methodologists are generalists who do not practice econometrics or whatever subdiscipline is being scrutinized.

In this debate about econometrics, the issues being raised are fundamentally self-critical. These self-critical econometric critiques can be synthesized now because there has been several decades of intensive econometric innovation and practice. It is also an appropriate time for an exploration of the longer-run intellectual promise of the econometric endeavor. Our reconsideration of these issues is not an attempt to provide yet another skeptical survey of some failed area of applied econometric inquiry.[2] Instead we make use of more recent economic methodology and philosophy of science. Our point of view is that econometrics – as a primary component of an applied empirical social science – makes most sense within a methodological or philosophical position known as critical realism. More specifically, an analytical, evolutionary critical realism is now emerging in philosophy of science and economic methodology. This position has roots within the ideas of Karl Popper, Imre Lakatos, Charles Sanders Peirce, F. A. Hayek, and others. To some extent, T. S. Kuhn (1970) has also influenced the development of this critical realism. Of these several variations of critical realism, Lakatos's methodology of scientific research programs may be most useful in characterizing the role of econometrics within economic science. This critical realism is also consonant with an explicit recognition of an economic dimension to science.

An analytical, evolutionary critical-realist evaluation of econometrics will be both sympathetic and critical. It will be sympathetic because it offers a philosophical position from which an empirically informative econometrics might be a real possibility. Without this prospect, econometrics would amount to nothing more than an ever escalating, deductive, intellectual parlor game.[3] It will be critical, because a critical-realist view implies that the world and the economy are extremely complex and thus econometrics must be quite complicated. In this view, some knowledge about the external world is indeed possible. But empirical knowledge is more difficult and costly to obtain, more fragile to interpret and to understand, and more subject to revision or obsolescence than the more prevalent versions of empirical economics, such as positive economics, have ever led us to imagine.

External discontent with econometrics

Although the critical literature on econometrics is largely an internal dialog, we begin with a brief account of the role of external criticism in economics. For the case of econometrics, there are some significant similarities between internal debate within econometrics and the role of external criticism in economics. In the history of economics, there is a long tradition of external criticism. Neoclassicals have been continually criticized by Marxists, institutionalists, and Austrians.[4] And sometimes neoclassicists have returned the scrutiny. Usually such external criticisms have been ineffective and ignored. There are substantive reasons for such ineffectiveness: (1) to the extent they have dissimilar conceptions of economic theory, (2) to the extent they have differing notions of the nature of economic science, and (3) to the extent they disagree about the role of facts and models in economic inquiry, there may be little to be gained from an in-depth awareness of one rival school's critical appraisal of another – at least in the short run. When it occurs, internal criticism is often more effective. Internal criticism comes from someone who is mostly sympathetic to the aims, vision, and research methods of economic science as it is practiced by a particular scholar or a certain group of economists.

While the external criticisms of one school of economists by another range across a whole spectrum of issues, some of these criticisms have focused on econometrics. External critiques of mainstream econometrics, if taken seriously, could preclude or seriously restrict the exercise of conventional empirical inquiry in economics. For example, Austrians, particularly Hayekians, believe that economic reality is so subjective that aggregate models of any variety are uninformative.[5] The Austrian position is a micro–micro point of view. The real knowledge in the market process is qualitative and lies beneath or behind quantitative variables. Real knowledge is what each transactor acquires in his or her idiosyncratic market situation. Prices merely inform us of relative scarcity as it exists elsewhere in the economy. Prices and other variables are already in an important sense aggregated. Econometric models and variables which further aggregate knowledge and information are essentially wasting a great deal of knowledge about particular circumstances of time and place.

Post-Keynesians also have criticized mainstream econometrics. Their critique is not as extreme as for Austrians. Post-Keynesians occasionally use econometric methods, particularly if evidence can be garnered to support important aspects of the Post-Keynesian vision of economic processes. But Post-Keynesians are mostly skeptical of econometrics.[6] In this regard, they are like Keynes who emphasized an important subjective element in economic processes.[7] Empirical evidence is possible and often informative. However, the problem is that evidence is relevant only as long as the underlying structures or processes which generated the data remain dominant in economic affairs. For Keynesians and Post-Keynesians, there can be significant structural breaks in economic activity which invalidate a great deal of existing empirical information about economic affairs. The obsolescence of the data and the inferences drawn from the data are never more than a crisis or innovation away.[8]

There is another line of criticism of econometrics which comes indirectly from Milton Friedman's (1953) well-read essay on positive economics. While there are many philosophical flaws in the essay and these flaws have made it an easy target for uncritical dismissal (Boland 1979), Friedman's essay can be read as a plea for the use of more statistical and econometric methods in economics. Friedman wrote the essay when the theoretical methods of economists were more verbal than mathematical and when the applications of statistics were more descriptive than inferential. The essay on positive economics, though not explicitly econometric, espouses a great deal of optimism about the role of empirical evidence in resolving important differences about the economy among economists of many persuasions. In retrospect, what stands out is that Friedman thought that empirical evidence could really help decide whether Keynesianism or monetarism was a better conception of aggregate economic activity. He remarked that:

> Differences about economic policy among disinterested citizens derive predominantly from different predictions about the economic consequences of taking action – differences that in principle can be eliminated by the progress of positive economics – rather than from fundamental differences in basic values.
>
> (Friedman 1953: 5)

But Friedman's essay has been severely criticized. At issue is whether the optimistic Friedmanian vision of the role of evidence in economics is warranted. In economic methodology, this criticism was focused on the issue of falsification. Falsification is the idea put forth by Karl Popper (1959) that the use of evidence in science is mostly in rejecting or refuting theories or hypotheses. In Friedman's essay there is significant but limited use of falsification. Mark Blaug (1976: 149) highlighted Friedman's mention of falsification concluding that "Friedman is simply Popper-with-a-twist applied to economics."

In the last half of his book, *The Methodology of Economics,* Blaug (1992) reviewed close to a dozen important areas or subdisciplines of research in economics.[9] In his view, falsification was not practiced in any important area of economic research. Blaug's aim was to entice economists to a higher standard of scientific practice. The immediate effect was quite the opposite. Many methodologists questioned whether falsification, as championed by Popper, Friedman, and Imre Lakatos, could be practiced at all in economics. Blaug's criticism of empirical research in economics seemed to have an unintended consequence causing some to question whether an objective positive economic science was possible.[10]

Internal discontent with econometrics

While methodologists have been raising fundamentally skeptical questions about the role of econometric empirical evidence in economic science, what is so remarkable is that econometricians have begun to do the same.[11] In a well-known article, David Hendry (1980) returned to the criticisms John Maynard Keynes made more than half a century ago. Keynes' (1939) comments were written in a review of Jan Tinbergen's statistical research on business cycles. In this context, Keynes used the term *statistical alchemy* to describe Tinbergen's work:

> No one could be more frank, more painstaking, more free from subjective bias of *parti pris* than Professor Tinbergen. There is no one, therefore, so far as human qualities go, whom it would be safer to trust with black magic. That there is anyone I would trust with it at the present stage, or that this brand of statistical alchemy is ripe to become a branch of science, I am not yet persuaded. But Newton, Boyle, and Locke all played with Alchemy. So let him continue.
>
> (Keynes 1940: 156)

Hendry then comments on the radical nature of Keynes' criticism raising the issue of whether any economic theory is testable:

> Forty years after Keynes wrote, his review should still be compulsory reading for all who seek to apply statistical methods to economic observations. Taken literally, Keynes comes close to asserting that no economic theory is ever testable, in which case, of course, economics itself ceases to be scientific – I doubt if Keynes intended this implication. However, his objections make an excellent list of what might be called "problems of linear regression."
>
> (Hendry 1980: 396)

On Hendry's list of econometric problems that were noted by Keynes are things such as:

1. omitted variables;
2. models with unobservable variables;
3. badly measured data based on indexed numbers;
4. multicollinearity;
5. misspecified dynamic patterns and lags;
6. inappropriately assumed linearity of the model;

7. incorrect prefiltering of the data;
8. confusion of causes and correlation;
9. inaccurate prediction of non-constant parameters;
10. confusion of statistical and economic significance.

To Keynes' list Hendry (1980: 396) would add other problems such as:

11. stochastic misspecification;
12. incorrect exogeneity assumptions;
13. inadequate sample sizes;
14. aggregation;
15. lack of structural identification;
16. an inability to go backwards from empirical results to a given initial theory.

Given this long list of problems, Hendry is concerned whether econometrics continually generates spurious results, that is, whether econometrics is worse than statistical alchemy:[12]

> Thus we have "econometric modeling," that activity of matching an incorrect version of [an economic process] to an inadequate representation of [a data generating process], using insufficient and inaccurate data. The resulting compromise can be awkward, or it can be a useful approximation which encompasses previous results, throws light on economic theory and is sufficiently constant for prediction, forecasting and perhaps even policy. Simply writing down an "economic theory," manipulating it to a "condensed form" ... and "calibrating" the resulting parameters using a pseudo-sophisticated estimator based on poor data which the model does not adequately describe constitutes a recipe for disaster, not for simulating gold. Its only link with alchemy is self-deception.
>
> (Hendry 1980: 401)

In spite of such a highly negative assessment of the state of econometrics, Hendry concludes with some optimism. He believes that "false" models are being rejected and that "striking progress" has been made since Keynes made his skeptical critique of Tinbergen.[13] But the progress which has been made has been quite costly. Econometrics has become increasingly technical and inaccessible to non-specialists.

Just a few years after Hendry's self-questioning of the future of econometrics, another major article appeared by another noted econometrician. Although he cited Hendry's article, Edward Leamer's (1983) piece was quite independent of Hendry's. Leamer focused on the theme of deception asking how inferences can be made which are indeed believable. The title of Leamer's paper, "Let's Take the Con out of Econometrics," suggested that econometrics required whimsical assumptions which could lead us to doubt its credibility:

> I believe serious attention to two words would sweeten the atmosphere of econometric discourse. These are whimsy and fragility. In order to draw inferences from data as described by econometric texts, it is necessary to make whimsical assumptions. The professional audience consequently and properly withholds belief until an inference is shown to be adequately insensitive to the choice of assumptions. The haphazard way we individually and collectively study the fragility of inferences leaves most of us unconvinced that any inference is believable.
>
> (Leamer 1983: 43)

Leamer's first criticism, that econometric results are whimsical, echoes the Austrian themes of subjectivism and skepticism discussed above. The major difference is that the subjectivism which was ascribed to the economic agent and the economic process in the Austrian view now contaminates the otherwise objective econometrician. In Leamer's view, it is the econometrician who is faced with so many subjective choices that the outcome of econometric research is in doubt. Leamer's second criticism, that econometric results are quite fragile, is reminiscent of post-Keynesian criticisms. Post-Keynesians believe that the ordered patterns of economic activity are quite fragile and therefore econometric research and results also would be quite fragile. Leamer's analysis of the fragility of econometrics rests in part on a sense of the complexity of econometric investigation itself. But his reasons for econometrics being complex and fragile also stem from the complexity and fragility of the underlying economic process. He asks whether random and/or controlled experiments are possible. He also considers how much prior information is necessary to constrain the ranges of parameters. Both of these questions suggest that the complexity and difficulty of econometrics is partly due to the complexity of the economic world being investigated. Leamer also proposes a partial remedy to the whimsical character of econometrics. He suggests a type of sensitivity analysis relating assumptions and inferences. He believes that the econometrician should report how an inference changes as variables are added to or deleted from a report of statistical findings. He calls this sensitivity analysis (Leamer 1983: 38).[14]

The doubts about the role of econometrics as an empirically informative subdiscipline in economics have been more skeptically stated by Lawrence Summers (1993) in "The Scientific Illusion in Empirical Macroeconomics." Summers reviews much of the interplay between theory and empirical evidence in macroeconomics over the past few decades and argues that formal macroeconometrics has not performed very well:

> Many macroeconomists and most econometricians believe and teach their students that (i) empirical work in macroeconomics should concentrate on identifying "deep structural parameters" characterizing preferences and technology; (ii) the best empirical work in macroeconomics formally tests substantive hypotheses rigorously derived from economic theory; (iii) sophisticated statistical technique can play an important role in

> sorting out causation in systems with many interdependent variables. These beliefs constitute the core of what I regard as the scientific illusion in empirical macroeconomics.
>
> This paper argues that formal empirical work ... which tries to "take models seriously econometrically" has had almost no influence on serious thinking about substantive as opposed to methodological questions. Instead the only empirical research that has influenced thinking about substantive questions has been based on methodological principles directly opposed to those that have become fashionable in recent years.
>
> (Summers 1993: 129–30)

Summers further maintains that econometric evidence has never changed anyone's theoretical position about macroeconomic issues or problems:

> I invite the reader to try and identify a single instance in which a "deep structure parameter" has been estimated in a way that has affected the profession's beliefs about the nature of preferences or production technologies or to identify a meaningful hypothesis about economic behavior that has fallen into disrepute because of a formal statistical test.
>
> (Summers 1993: 130)[15]

Hendry, Leamer, and Summers are not alone in writing skeptically about the empirical informativeness of econometric research. Thomas Mayer and D. N. McCloskey have written several criticisms of empirical methods in scientific research. Mayer considers some of the problems of econometrics in his article, "Economics as a Hard Science: Realistic Goal or Wishful Thinking?" Mayer (1980: 172), a conservative macroeconomist, actually considers whether "we should abandon econometrics altogether." Instead, he suggests the need for greater skepticism and for reconceiving econometric evidence as circumstantial evidence. In a more recent piece, Mayer (1996) has written about the fundamental limitations of quantitative modeling and that economists should give a role to qualitative information in their research.[16] McCloskey has written many critiques of econometrics with the most recent being a co-authored piece, "The Standard Error of Regressions" (McCloskey and Ziliak 1996). In this piece, they argue that the distinction between statistical and economic significance has been lost in contemporary econometrics.

Inductivism, two types of instrumentalism, and the role of evidence in economic science

The preceding self-critical appraisals and expressions of doubt about econometrics clearly raise the question of the role of econometrics and statistical evidence in economic science. There seems to be a clear expectation that the role of econometrics is to provide evidence to help resolve theoretical disputes and to inform us about the nature of economic activity. There is also a realization that econometrics is failing to perform these roles.

In the history of mainstream economics, there have been several major conceptions of the role of empirical evidence. There may be many other conceptions but it is better to keep the broad outlines of this discussion as simple as possible. In the nineteenth century economists, then usually called political economists, did raise the issue about how economic theories obtained empirical content. The discipline of economics was seen as a deductive enterprise particularly under the influence of such luminary figures like James Mill and David Ricardo.[17] Economists of the time maintained that their theories possessed empirical content. The position was probably best argued by John Stuart Mill who held to an empirical conception of abstract ideas called associationism.[18] Abstract ideas were a consequence of the mind associating the patterns of inputs from the senses in one way or another. Thus abstract ideas were already empirically informed in virtue of the empirical mental processes by which they were created. For economics, the implications of theory could be obtained by deduction from these empirically informed laws of economics.

In the twentieth century, the Ricardo–Mill view of the empirical content of theories and the predominantly deductive nature of economic science was reasserted by Lionel Robbins (1935) in the 1930s and then by Daniel Hausman in the 1980s. In response to some of the criticisms and failures of econometrics of the sort surveyed previously, Hausman has argued that economics still practices a methodology of scientific investigation that is not substantively different than the Millian deductivism of the mid nineteenth century. He remarks that: "The temper and character of modern economics still embodies the Millian vision of the discipline as a separate science" (Hausman 1992: 225). Hausman of course is aware of the creation of formal statistical inference, the subsequent appearance of econometrics as a semi-autonomous discipline in economics, and the invention of modern computers and software. His point is that evidence plays a very weak role in the development of economic ideas in a discipline dominated more than ever by escalating sophisticated methods of deductions as found in mathematical and econometric modeling. Such modeling is largely cut off from an awareness of facts and thus virtually impossible to test.

Until Friedman's essay, the major alternative to the Ricardo–Mill position on the empirical content of theories was the institutionalist view. Institutionalists under the influence of the American pragmatists John Dewey and Charles Sanders Peirce looked for broad descriptive patterns in economic activity.[19] As a young man, Dewey had renounced Hegelian idealism in favor of his version of pragmatism which he called instrumentalism. Peirce appears to have been influenced by Kant, the British empiricists from Hume through J. S. Mill and Stanley Jevons, and Scottish realists. Peirce preferred a formal method of inquiry using statistical inference while the Deweyian instrumentalists adopted descriptive procedures of observation. W. C. Mitchell took up the instrumentalist conception of observation with the aim of creating a comprehensive statistical description of economic activity.[20] The object of such statistical data was a qualitative characterization of obvious patterns in economic activity rather than formal modeling and statistical inference.

With this historical hindsight, Friedman himself appears to be a transitional figure between the instrumentalist descriptivism of the institutionalists and the more formal methods of contemporary econometric inquiry which also have been labeled as instrumentalism of a different variety (Hirsch and de Marchi 1990). The story of a more formal version of instrumentalism in scientific inquiry begins with formalism in mathematics and the rise of logical positivism as a rigorous form of empiricism. Logical positivism began in Vienna in the 1920s and spread to England and was merged with British empiricism in the 1930s and 1940s.[21] It was the logical positivists who maintained that an analytic model could be created which was independent of the facts. This represented a sharp break with Mill's conception of empirically informed abstract ideas. In the positivist view, the formal abstractions of models had to be related to a corresponding empirical version which could be tested (verified) by the facts. This was the correspondence theory of truth. Karl Popper and others explored the problems with verification and the correspondence theory of truth. Popper's creation of falsification as an alternative to verification is now one of the best known contributions to philosophy of science in this century. But the shift to falsification was just the beginning of a philosophical debate which became much more complex. When the philosophical debate over the nature of reality and the relationship of theories and evidence got quite complicated, the scientists turned their attention elsewhere. Astronomers, physicists, and other scientists created models with concepts and assumptions so far removed from the realism of common sense that they abandoned positivist talk about the search for truth and crucial experiments. They became instrumentalists. They simply decided to be agnostic about the issues of truth and realism of models and theories. This line of instrumentalism coming out of the natural sciences was concerned with the predictive accuracy of scientific models. However, the positivist conceptions of an abstract model as separate from the facts and its companion notion that empirical inference occurs as a process of correspondence between a theoretical model and the facts were retained. For a natural science instrumentalist, the question of science was not the truth status of the model or the realism of its assumptions. Rather the natural science instrumentalist was concerned with predictive accuracy relative to a previous or rival model or theory of the natural phenomena being investigated. Furthermore, a conclusion that econometrics has failed or has been oversold seems to require a natural science version of the positive economic instrumentalism in Friedman's essay.

From an instrumentalist to a critical-realist economic conception of scientific investigation

In contrast to Leamer, Hendry, Summers, and Mayer, many applied scientists pay little attention to the longer-run systemization and integration of empirical results into a credible, coherent philosophical vision of their subject matter. As long as scientific models yield some progress in terms of improved predictive results, the focus is on further forecastable novelties.

This attitude is an instrumentalism of the natural science variety. Furthermore, it is the natural science version of instrumentalism which has been so clearly criticized by the practicing econometricians and applied policy specialists. If Blaug, Mayer, and McCloskey and econometricians such as Hendry, Leamer, and Summers are mostly correct in their criticisms of conventional econometric practice in economics, then economics may need a new conception of the role of evidence in economic science. While a new philosophy of economic science will require the long-run efforts of many economists, econometricians, and methodologists, a critical-realist alternative can be outlined. Of course others have already begun this task and the clash between instrumentalism and realism is an old one in economics.

In place of instrumentalism an amended version of realism is offered.[22] To distinguish it from previous versions, this one is called an analytical, evolutionary, and economic critical realism. The view presented here is a synthesis of the views of several realists, the most prominent being Karl Popper (1965, 1972), Imre Lakatos (1978), C. S. Peirce (1878), and other important influences such as Nicholas Rescher (1978a, 1978b, 1989, 1996), David Bohm (1957), Nicholas Georgescu-Roegen (1971), and F. A. Hayek (1964, 1968, 1969). Lawrence Boland's (1989) monograph on economic model building and Thomas Mayer's (1995) book on doing economic research are broadly compatible with critical realism. And quite recently Kevin Hoover (1994a) has presented an interpretation of the role of econometrics from a realist position which is remarkably similar in its broadest features to what follows. Hoover argues that econometrics is an extension of the process of observation. Furthermore, a realist philosophy of economic science is now being developed at Cambridge University in England.[23] The economic dimensions come from recent research on an economics of science.

Without reviewing the whole debate between instrumentalism and realism either in philosophy of science or with regard to Friedman's positive economics essay, there are three broad themes which can be used to characterize this analytical evolutionary and economic critical realism. An exploration of critical realism is a vast topic which could be expanded beyond these three themes. This is not the place for such an expansive presentation. The aim is to present some key philosophical points which allow us to make better sense of econometrics. The first theme is a broad ontological premise which characterizes the nature of the world. It is the idea of *complexity*. Heretofore most real-world content in economics has been reduced to the ideas of scarcity and choice. The Robbinsian definition of economics which is found in most textbooks asserts a view of the world with minimal content. An idea of complexity would add considerable real-world content to a view of the world and the economy. The second theme is *theoretical pluralism*. Theoretical pluralism recognizes that – in the context of complexity – observation, evidence, and the use of statistics are almost as theoretical as the explanatory or scientific theory which is being investigated. The third theme is an economic idea that all science takes place in an *economic context*. Typically economic factors are ignored when science is being discussed. Here we argue that economic dimensions are too important to be left out of the picture of science and econometrics.

An analytical evolutionary, critical-realist view begins with the idea of an evolving, hierarchically structured world. This is the idea of *complexity*. A complex world is one which has many layers and levels of law-like order.[24] A central theme of the conception of realism developed here is that the world is an evolving, hierarchically structured complexity of relational properties. This is a meta-position. What the specific relational properties are, whether they can be represented theoretically with mathematical models, and whether the properties can be quantitatively measured and described statistically are all questions that would be answerable only with actual scientific research. But first of all, what is needed is a vision of the world in which the scientific process might possibly inform us about things in the external world.

What is important for an analytical, evolutionary critical realism is that nature itself is viewed as being analytically creative and evolving. This is the position of Peirce which Kevin Hoover (1994b) has noted. In a primary way, nature is the creative force generating the fundamental analytical properties of the world. Hoover (1994b: 299) remarks: "Realism for Peirce is the doctrine which asserts the existence of generals." Then in a secondary way, nature also allows for the evolution of self-conscious reflective beings who reason analytically. Such beings can create hierarchies of analytical properties and abstract systems for representing many of the analytical hierarchies of properties in the real world. Thus nature is the original generative source of analytical hierarchies and also provides the context for the emergence of science. It is in the context of a world with ontological and conceptual complexity that science can emerge.

Having explored some aspects of the idea of complexity as a world with an evolving hierarchy of levels of order and pattern, the second broad theme of an analytical, evolutionary critical realism is *theoretical pluralism*. This takes us into conventional scientific methodology and philosophy of science. A world which is as complex as the one described above will not be easy to observe. Observations will need to be constructed and this construction must be guided by theoretical concepts. Thus a world characterized by ontological complexity implies a theoretically pluralistic scientific endeavor. One particular critical realist has already made a well-known attempt to characterize the theoretical pluralism of the scientific process. The late Imre Lakatos has authored his methodology of scientific research programs. In economics, Lakatos's methodology has been found to be particularly useful in reconstructing episodes in the history of economic thought. Here we would like to put the Lakatosian framework to a different use. Lakatos's (1978) methodology of scientific research programs could also be used to characterize the role of econometrics within economic science.

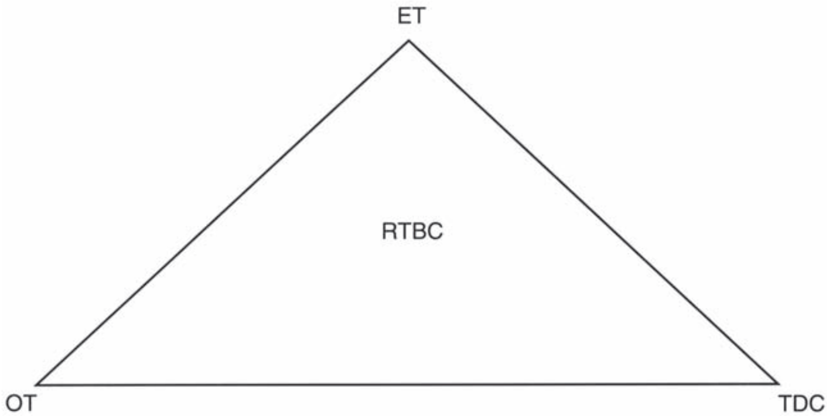
Like Popper and Peirce, Lakatos maintains that science takes place at a high level of abstraction. Lakatos has recognized that sophisticated theoretical concepts are used in the construction and interpretation of evidence. Thus Lakatos has rejected the positivistic notion that simple unambiguous facts can be used to test a theory. Instead he conceives of a high-level theory, a "scientific theory," and a lower-level theory, an "interpretative theory," which are used to create the facts. Thus empirical testing is really a clash of theories, theoretically constructed facts versus a substantive scientific theory. Lakatos states it like this:

> We must use a *pluralistic model.* In the pluralistic model the clash is not "between theories and facts" but between two high-level theories: between an *interpretative theory* to provide the facts and an *explanatory theory* to explain them; and the interpretative theory may be on quite as high a level as the explanatory theory. The clash is then not any more between a logically higher-level theory and a lower-level falsifying hypothesis. ... It is not that we propose a theory and Nature may shout NO; rather, we propose a maze of theories, and Nature may shout INCONSISTENT.
>
> (Lakatos 1978: 129, 130)

If we focus on the role of empirical investigation, particularly within a research program, a conception of the role of evidence may emerge which actually involves three levels of theories. Obviously the explanatory theory, because of its prominence as the theory being tested, needs to have a clearly defined role. However, the empirical side of science can be further subdivided into two theoretical levels. What Lakatos identifies as an interpretative theory may be further subdivided into two distinct types of theories. In many sciences, there is a theory of how the numbers which are used as an input into the processes of science are actually generated. Thus there is a theory of how data and experiments are constructed. Once the data is obtained, there is also a theory of how appropriate and believable statistical inferences ought to be constructed and tested on the basis of the data. This aspect of science is also quite theoretical and may be known as the "metrics" of the scientific discipline. This amended Lakatosian notion of the theoretical nature of both data construction and statistical inference in science is portrayed in Figure 11.1. Here scientific inference within a research program is pictured as a three-cornered theoretical struggle among three high-level theoretical components: an explanatory theory, ET, which is meant to be the theory being tested; an observational theory, OT, which is used to draw valid statistical inferences; and a theory of data construction, TDC, which describes in great detail how the raw numbers were created or should have been created.

Consistent with the ontological complexity and theoretical pluralism of a critical-realist view of science is an economic dimension. *Economic constraints* are a property of the real world and have implications for the conduct of science.

It is economists who have most paid attention to the implications of scarcity and analytically represented resource limits with models of consumer and producer choice. A minimal way to represent an economic dimension of science can be represented by a joint resource, time, and budget constraint (RTBC). Such a constraint has been placed in the middle of the triadic theoretical pluralism portrayed in Figure 11.1. Scientific research and inference proceed subject to available resources. Most recently the economic aspects of science have been explored as a new subdiscipline called the economics of science. The



ET	An explanatory theory
OT	An observational theory
TDC	A theory of data construction
RTBC	A resource, time, and budget constraint

Figure 11.1 The triadic theoretical and economic nature of empirical testing within a scientific research program

concerns for economic aspects of science can be traced back to Peirce's (1879) neoclassical-like model of research project selection. More recently Popper's situational logic of choice in the social sciences has been portrayed as an "economic approach" to the choices faced by a scientist. Hands (1985: 85–86) remarked: "Popper's entire philosophy of science is simply *an application of the method of neoclassical theory.*" Stigler (1982: 112) at one point called for an "economics of science." Other recent contributions dealing with economic issues such as misconduct, market failure, the marketplace of ideas, and the economic organization of science include those of Hands (1994, 1997), Mäki (1993, 1997), Diamond (1996), Dasgupta and David (1994), Wible (1998), and many others. An excellent overview of the literature has been penned by Sent (1997).

A critical-realist economic conception of the role of econometrics

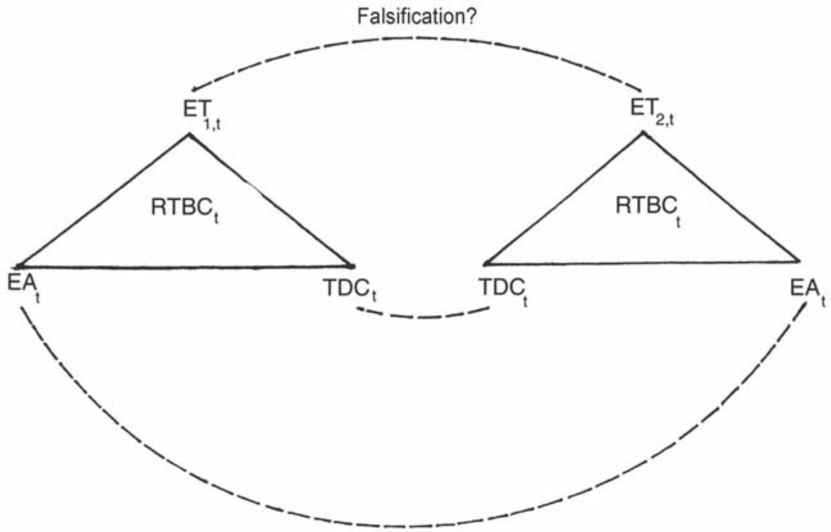
Having elaborated an analytical, evolutionary critical-realist conception of science in the context of economic constraints, we are now in a position to more specifically characterize the role of econometrics within neoclassical economics. Holding the idea of complexity in abeyance for the moment, the theoretical pluralism and the resource constraints faced by any applied empirical science can be reinterpreted with regard to economics and econometrics. The first task would be to apply the theoretical triad to economic science. Beginning with the highest level of abstraction, the explanatory theory (ET) could be interpreted as a neoclassical theory tailored to a specific class of issues. Examples would be labor theory, capital theory, human capital theory, production theory, consumer theory, international trade theory, industrial organization, etc. Neoclassical theories have common features such as an assumption about the optimizing rationality of the agents in the economic process and environmental assumptions concerning scarcity, the degree of competition, and the stability of equilibrium. The second aspect of empirical testing is an observational theory. An observational theory would be the econometrics used to make valid statistical inferences relative to the explanatory theory. Here EA stands for econometric analysis. Besides theory and econometrics, the third aspect of empirical testing is that data is needed for testing an empirical model. A theory of data construction (TDC) is the methodological framework used to construct the numbers. In a narrow sense, it may involve how a panel study was constructed or how a government agency observes some aspect of the economy and collects the data. In a broader sense, a TDC includes anything affecting the construction of the data. Additionally, the economic constraint, RTBC, is brought forward from Figure 11.1 because we must recognize that econometric research, like anything else, is done in the context of scarcity.

This theoretical and economic vision of testing in science is further amplified in Lakatos's conception of scientific revolutions. Explanatory theories grow within a research program. A research program is in large part a succession of improved versions of an explanatory theory in response to evidence. The role of evidence within a research program is supportive and positive rather than falsifying or refutational. Thus falsification rarely occurs within a research program. Instead a rival research program is created which shares quite similar conceptions of the role of evidence and the theory for constructing the observations taken as facts. Scientific progress accelerates when a progressive scientific research program supersedes a degenerating rival. Thus a Lakatosian vision of scientific progress involves a clash of theories between research programs. This clash ranges over multiple levels and domains of theoretical abstraction.

The role of econometrics within neoclassical economics can be portrayed in reference to Figure 11.2. One task of econometrics is to create better versions of an explanatory theory over time. This is how most scientific research is conceived.

Almost every empirical researcher is directed to create an improved version of the theory being investigated. Take either explanatory theory in Figure 11.2. These are denoted as $ET_{1,t.}$ and $ET_{2,t.}$ The second part of the subscript, the *t,* signifies that each explanatory theory, ET, changes through time. Assuming that a theory has already received significant empirical support, for most researchers the role of evidence is to show that a better version of the theory has been created. Thus a successful piece of applied econometric research would be the basis for concluding that $ET_{1,t+2}$ is better than $ET_{1,t+1}$.

A second task is to compare two different theories of an economic process or problem. Figure 11.2 also portrays a doubly triadic conception of scientific testing in economics. A clash of two competing explanatory theories is portrayed. When methodologists or



ET	An explanatory theory
OT	An observational theory
TDC	A theory of data construction
RTBC	A resource, time and budget constraint

Figure 11.2 The role of econometrics in a theoretically pluralistic neoclassical research program: successive and progressive explanatory theories

philosophers of science talk about criticism and where falsification takes place in science, they mean a clash of empirically supported explanatory theories. The hope would be that one of the two theories could be shown to be better than the other. For Lakatos, the competing research programs share a common observational base. In our terms, this means they share the same econometrics, the same conceptions of the data, the same numerical data, and identical research support. For Lakatos, a common observational basis was needed in order to make the comparison of ET_1 and ET_2 rational. With this being the case, the evidence used in support of one theory might possibly count against its rival.

At this point, the issue of complexity needs to be revisited with respect to econometrics. Without a critical-realist conception of a hierarchically complex and evolving world, expectations of what could be accomplished with econometrics could be too extreme and too optimistic. Such excessive expectations would lead to a continuous state of disappointment and skepticism about the empirical informativeness of econometrics. When one listens to econometricians giving their results of an empirical investigation, all but the most self-critical seem to suggest that the time horizon for an appropriate inference is governed by the methodologies and computer-assisted technologies of statistical inference. One critic has called this attitude one of instant rational assessment (Weimer 1979). However, good econometrics and data are just a beginning of the process of using empirical evidence. Furthermore, no matter how difficult or complicated it may be, econometrics needs to be done with as much skill as possible. Once an empirical inference has been established for a while and has been supported by other studies which vary the conditions, the variables, and the data to some degree, then there is a possibility that evidence could be used to appraise competing theories, ET_1, and ET_2. More than likely there is speculation in advance, that if certain evidence holds up, it will favor one theory over another. But all of this takes time. The complexity of the world and the complexity of the use of evidence by highly skilled econometricians and economists as portrayed in Figures 11.1 and 11.2 take much more time, more material resources, and greater critical argument than statistical methodologies alone imply. Econometricians participate in a broader scientific debate than just statistically oriented econometrics. Both the evidence and their specialized judgments which they have produced are important aspects of a much broader process of scientific inquiry. Scientific, as opposed to mere statistical, inference is a long-run process.

Our more richly detailed picture of scientific inquiry in econometrically assisted economics is further complicated if the observational bases supplementing ET_1 and ET_2 are imperfectly competitive. Heretofore, we have assumed that the two competing research programs with rival theories, ET_1 and ET_2, share the same econometrics, resources, and methods of data construction. Over time it is entirely possible that one research program will begin to develop or prefer somewhat different econometric methods or slightly dissimilar data sets. It is also possible that they will have different levels of financial support. Without similar levels of resources, a relative comparison of hypotheses may fail for economic reasons. Thus we could have imperfectly competitive research programs because they have highly differentiated their econometrics, their data sets, and their levels of financial and material resources. Such differentiation allows one group of scientists to clarify and identify their unique contributions to science thus making it more difficult for rivals to displace them. As long as such differentiation among competing research programs occurs, the process of reaching a consensus on the basis of empirical evidence is even more prolonged.

While some might think that all of this complexity both in its ontological and methodological forms is negative and potentially harmful to econometrics and to the scientific status of economics, nothing could be further from the truth. The process of reaching empirically based judgments in a science is a long-run process and it is a resource-intensive economic process. The long-run time horizon of science may be greater than the longest time horizons that economists have considered in conventional economic processes. The scientific long run may be longer than the classical long run of 8–15 years, which at one point was the average length of the business cycle. Perhaps it may be closer to Keynes' conception as that period of time in which we are all dead or to Peirce's (1878) idea of a long-run convergence to truth. Judgments about what econometric evidence is really important may await the decisions of future generations of economists. In the meantime, evidence produced by econometric inquiry is used to shape and reshape existing economic theory, theoretical disputes, and econometrics itself. Our analytical, evolutionary critical realism suggests that the world and the economy are partly knowable insofar as things, entities, and processes are created with analytical properties. Thus there are reasons for restrained optimism. The processes of empirical inquiry are worthwhile and quite possibly essential for our survival. Real information about the world and economic affairs is possible. But the processes of empirical investigation are much more difficult, more resource intensive, and thus more imperfectly competitive than existing methodologies of econometrics and positive economics science would lead us to believe. And the evidence discovered is more fragile and more subject to obsolescence as the economy evolves than we have been lead to believe. Instrumentalism of either variety understates the difficulties and overstates the possible accomplishments of econometrics within economic science. Hopefully, an analytical, evolutionary critical realism does not do the opposite and make econometrics appear too difficult thus diminishing its role too substantially. Our aim was a more balanced portrayal of the real difficulties of econometric inquiry in the context of a world characterized by ontological complexity, theoretical pluralism, and resource scarcity, and by the emergence of empirically informative applied scientific inquiry.

Notes

1. Indeed there are important precursors to this methodological literature in econometrics. Contributions from Keynes (1939), Orcutt (1952), Leontief (1971), and Black (1982) provide critical appraisals of important issues in the literature. This chapter is based on a previous essay by one of the co-authors, Sedgley (1996).
2. Compare with Hausman (1985) who reviews the literature on the difficulty of falsification in economics with Blaug (1992) who still holds that falsification should be the methodological standard for applied econometrics.
3. This propensity for deductivism has become known as the Ricardian vice. What is so unusual is that this vice is yet so prominent in spite of Friedman's essay on positive economic methodology and even in the face of the econometric revolution of the past half-century in economics.
4. Hollis and Nell (1975) critique the neoclassical mainstream from the Left, Fusfeld (1980) from the institutionalist point of view, and Paque (1985) from the Austrian perspective.
5. See Hayek (1948a, 1948b, 1968).
6. For example, Paul Davidson's (1994) *Post Keynesian Macroeconomic Theory* presents no econometrics.
7. Pesaran and Smith (1985) portray Keynes' dual role both as a creator of macroeconomic modeling and as one of its sharpest critics.
8. Minsky (1986) locates this instability in the financial system.
9. The first edition of Blaug's book was published in 1980.
10. Blaug (1992) reviews this literature in the preface of the second edition of his book.
11. Gerrard (1995) provides an excellent critical review of much of the recent methodological literature in econometrics.
12. Gilbert (1986: 304) calls Hendry's list the "pathology of the estimators."
13. See Hendry (1980: 402).

14. An excellent critical appraisal of Leamer's suggestions for econometrics has been written by McAleer, Pagan, and Volker (1985).
15. Some of the difficulties of macroeconomic econometric models have been evaluated by Peach and Webb (1983).
16. Data mining has been an activity of econometric practice which has been heavily criticized for its apparent arbitrariness. For more on this subject see Hoover (1995) and Mayer (1997).
17. These points are made in some detail in T. W. Hutchison's (1994) essay, "James Mill and Ricardian Economics."
18. The relationship of associationism to abstraction in economics is explored by Wible (1980: ch. 6).
19. For discussion of Dewey and Peirce see Wible (1984, 1994, 1999).
20. An excellent overview of Mitchell's contributions to the study of business cycles and a comparison of his empirical methodology with modern macroeconometric modeling can be found in Lodewijks (1989: 39–40).
21. Suppe (1974) overviews the rise and role of positivism.
22. All scientific theories which have received a great deal of empirical support have instrumental value whether one takes a realist position or not. Even realists recognize that theories and models which perform well are good tools and should not be discarded frivolously.
23. A 1996 special issue of the *Review of Social Economy* (Winter) contained articles on realism and economic analysis by six different authors associated with Cambridge University in England. One of those authors, Tony Lawson (1989, 1995), had previously written two critiques of econometrics from the realist perspective.
24. The idea of complexity is clearly developed by Hayek (1964), Bohm (1957), and Georgescu-Roegen (1971).

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Part IV

Teaching matters

12 A picture is worth a thousand words

Ulla Grapard

Introduction

Economists have begun to explore the rhetoric of our discipline, seeking to reveal the narrative construction and gendered nature of economic discourse. Both are important projects of the new economic criticism. In learning to deconstruct our stories and their reliance on popular metaphors we have had recourse to the use of methodologies from other disciplines, particularly linguistic and literary criticism.[1] This chapter will employ a semiotic framework based on Roland Barthes's "Rhetoric of the Image" (1985) to explore some of the exclusionary strategies displayed in cartoons, movie stills, and other images found in an undergraduate "Money and Banking" text. My aim is to show how a rhetorical approach may help to answer questions left unanswered or simply unasked in previous research on gender and economics.

Recent data shows that we continue to see disproportionately small numbers of women graduating with economics degrees at the undergraduate and graduate levels. As the total number of economics BAs has declined in the 1990s, women have received a steady 28 percent of this total (Siegfried 1997). At the graduate level, this percentage drops significantly as a given cohort moves from the first year through completion of the PhD. In 1994–95, for instance, this percentage ranged from 30.5 (first year) to 23.2 (completed PhDs). Since 1974, when only 10 percent of graduates were women, the share of women among new PhDs increased by 5 percentage points every six years. That progress has not continued into the 1990s (CSWEP 1997).

Something clearly is happening to women in economics. It therefore becomes critically important to look at how students are encouraged or discouraged from pursuing studies in our discipline. For reasons of equity we must be concerned with systematic differences in opportunities and outcomes that may be related to disciplinary affiliations. An additional motivation for this inquiry flows from a desire to understand how power, privilege, and authority are constituted and perpetuated in the academic world through processes marked by distinctions of race, gender, and class.

A rhetorical approach to the presentation of disciplinary subject matter has largely been missing from research on gender differences in economics education. Efforts to explain women's relatively low participation in economics degree programs have mostly focused on the role and determinants of women's lower average scores on various tests. Yet in studies of male/female differences in economics test performance, the variables one might expect to find significant in explaining these differences turn out to do a rather poor job. A gender effect remains even after controlling for different high school backgrounds and mathematical abilities (Anderson, Benjamin, and Fuss 1994; Hirschfeld, Moore, and Brown 1995); and there are conflicting results when studies try to examine possible sex role effects (Bailey and Rask 1997; Canes and Rosen 1995; Dynan and Rouse 1997). One study suggests that women's better grades in non-economics courses make them more likely to chose alternative majors (Dynan and Rouse 1997). Yet these quantitative studies offer little or no account of the remaining gender effect.

New "qualitative" studies in feminist economics have begun to consider how this gender effect may be linked – as cause and as effect – to such factors as the small number of female economics faculty, or the strong yet widely unacknowledged biases of neoclassical economics (Ferber 1995; Ferber and Nelson 1993). The "chilly climate for women" described in the literature on classroom gender bias (Hall and Sandler 1982) is a common starting point for much of this work. Scholars are investigating the "chilling" effects of practices ranging from overtly sexist remarks (e.g., "disparaging comments about women as a group and sexist humor or demeaning sexual allusions" (Hall and Sandler 1982: 3)) to more subtly gendered messages concerning the "masculine" or "feminine" qualities of certain fields of study (i.e., gendered images of who should or should not aspire to join a particular disciplinary community). The cumulative effect of such practices is clearly damaging to the educational process and to individual students, some of whom will shy away from majors they come to see as inappropriate.

A rhetorical approach is well suited to investigate these issues. Unlike previous studies which have examined gender bias in economics textbooks by literally counting the number of pages on which the word "women" appears (Feiner and Morgan 1987; Feiner and Roberts 1990; Feiner 1993), the analysis in this chapter will focus on the illustrations (diagrams, cartoons, motion picture stills, and the like) contained in an economics text. Using Barthes's semiotic framework, I will examine the "rhetoric" of these illustrations, particularly the signals they convey about who belongs in the economics discourse – and on what terms.

It seems that you can indeed say in pictures things too outrageous to put into words, as long as it is for a good laugh. Since the overt purpose of including such pictures is to make the material appear less cut and dried to the audience, one presumes that they represent the author's or editor's opinion of what will appeal to the average student. Many students will appreciate the humor of the selections because they can enjoy the play with cultural codes, while others may find the images disturbing. It may seem trivial to focus on the illustrations rather than the text in an economics book; but I want to problematize the trivial because I believe it is in the trivial that power is exercised most innocuously. It is when we laugh, when we are made to believe that "this isn't really serious," that important ideological work takes place.

I will argue that the illustrations examined below function as part of a wider disciplinary process whereby economics, like other academic fields, continually (re)creates itself as a gendered community of "knowers." Images such as these participate in this process by explicitly sexualizing and genderizing the context in which teaching and learning take place. By constructing the intended reader through a web of cultural and ideological signs, textbooks simultaneously construct the non-typical reader, the one who doesn't belong in the picture, the "Other." Women are particularly likely to feel excluded from this community of insiders, though the masculinist ethos of the discipline tends also to exclude a great number of both male and female students from various ethnic backgrounds, including Caucasians.

Making semiotic sense of pictures

Semiotics, the science of signs, has long grappled with the theoretical issues surrounding the interpretation of texts and images.[2] In his classic "Rhetoric of the Image" (1985), Roland Barthes attempts to answer the following questions: How does meaning come to the image? Where does meaning end? And if it ends, what is there *beyond*?[3] He develops a theoretical framework for interpreting images as he analyzes an advertisement for pasta, tomato paste, and cheese put out by the manufacturer of *Panzani* products.

The message of the image as a whole is constituted by a source of emission, a channel of transmission, and a medium of reception. In the case of an advertisement the sender's intention is clear: to increase sales by motivating buyers to purchase Panzani products. But how does the message do this? How can we analyze the various components of the text/image to understand how it works to persuade people to think and act in a certain way?

Barthes suggests that the photographic ad conveys three messages. First there is a linguistic message, whose support is the caption and the labels in the picture. The code a reader needs to interpret this message is simply the spelling and vocabulary of the (French) language. Barthes's second message consists in what he calls the obvious meaning of the image. The image yields several discontinuous, non-linear signs and its coded, iconic (connoted) meaning can be understood through the language of cultural symbols. A shopping basket spilling over connotes freshness; tomatoes (red), peppers (green), coupled with the warm yellow color of the script in the ad, as well as the name Panzani, connote what he calls *Italianicity*. To understand this cultural code, it is necessary to know the tricolor of the Italian flag and the stereotypical French (and American) culinary association between the pasta in the shopping basket and tomato paste, or tomatoes and pepper, as signifying Italian. Yet another sign is aesthetic: the image in the ad evokes memories of *still life* paintings. The knowledge required to decipher this code is distinctly cultural; one must be familiar with a certain Western tradition of painting in order to read this sign. Such language must include what he calls the "surprises of meaning" (1985: 36). Barthes therefore points out that there will be a certain "variability of readings," that the image is "crisscrossed by the system of meaning," that "[t]he language of the image is not merely the entity of utterances emitted ... it is also the entity of utterances received." Since all readers will not have the same cultural and historical knowledge and background, it raises the question of the limits to the notion of a shared connotation of the image. In the case of the ad, the stereotypical concepts connoted must be known widely enough to potential consumers in order to be effective. Barthes argues that the connotation is neither natural nor artificial but historical or cultural. "[I]ts signs are gestures, attitudes, expressions, colors, or effects endowed with certain meanings by virtue of the practices of a certain society" (p. 17).

The third message, or third meaning, is less obvious to untrained readers of cultural signs. This non-coded iconic message is "constituted by what remains in the image when we (mentally) erase the signs of connotation" (p. 31). Barthes also calls it the obtuse meaning, and it is his closest answer to the question he raises about what might be *beyond* language in an image. He discusses the obtuse meaning in relation to a series of stills from two of Eisenstein's films. For the purposes of this chapter, the importance of this third message is that it manages – by opening "onto the infinity of language" – to confer a sense of naturalness, a universality to the signs of the image. By perceiving and experiencing the image in a manner that is not descriptive, that is non-coded, and that is beyond language, we respond emotionally in such a way that it makes us less aware of the historical and cultural construction of what we see in the image (p. 44).

Barthes's framework is helpful in the analysis of textbook illustrations because it distinguishes among the three kinds of messages: the linguistic message revealed in captions and two related messages (ostensible and obtuse) of the image. The textbook on "Money and Banking" is illustrated with film stills, to which *invented* captions have been added, and with a number of humorous drawings or cartoons from *The New Yorker* magazine. As far as the linguistic messages of the captions go, the text in all instances provides "parasitic" messages intended to enliven the message of the image. This form of caption is more prevalent in humorous drawings where the funny bone is tickled by the elements of surprise or paradox which exist between image and text.

My proposed reading of the illustrations is in some sense a reading against the grain. The analysis is structured to point to the existence of semiotic codes which allow us to explore the meaning of an image. When I focus on certain signs and connotations, certain readings become possible; certain codes become intelligible. Particular readings are thus chosen from a series of variable readings. As mentioned, Barthes makes it clear that the language of the image consists not only in what is deliberately emitted; it must also be understood to encompass the "utterances received." Specifically, as Barthes points out, the text can have both an anchoring and a relaying function. The anchoring function directs us to choose the right level of perception: it limits fluctuations toward overly idiosyncratic interpretations of the image or toward "dysphoric values" (p. 29). The relaying function of the text means that the text is complementary to the image: the message's unity occurs at a higher level, that of the story.

The anchoring and relaying functions of the captions thus direct our interpretation in a certain way. They focus our reading on certain signs. It should be clear that my receipt of the textbook's messages is mediated by particular historical and cultural locations and knowledges. When I create an alternative set of titles and captions for the images provided by the textbook authors, I do so in order to persuade an audience that my perception and interpretation of these images is significant and meaningful.

The semiotic approach thus structures the analysis of text and images in a way that will reveal some of the ideological work that takes place in these illustrations. While it is nowhere explicitly stated, I presume the illustrations are put in place to enhance the learning process. Several studies on illustrations in textbooks, however, fail to provide a convincing case for the educational value; it seems that even when illustrations are intended to provide relevant pictorial interpretations of the subject matter, students show little benefit from an illustrated text compared to purely verbal explanations.[4] Yet, pictures clearly do something in textbooks. The only function that seems to be accomplished in the case of humorous illustration is that of making the reading more enjoyable.[5] Part of that enjoyment, I argue, is in fact a teaching experience of a different sort. The illustrations help create a community of gendered readers; they serve an ideological purpose by sending spoken and unspoken messages about which students belong in economics.

The images

The seduction[6]

In this picture (Figure 12.1) from *Gone With the Wind,* Clark Gable is sitting at a table playing poker. The stakes seem to be high; there are a great deal of tokens – symbolic money – on the table. The caption reads: "I'll bet a $5,000 savings and loan deposit that you've got the Old Maid."

The caption transmits a linguistic message. It is in plain English, yet it is impossible to understand its meaning separate from the image. It presumes a shared cultural context and a knowledge of the card game "Old Maid." In this game the point is to avoid holding the Old Maid card in your hand at the end of the game. If you get "her" during the game, you aim to pass her on to another player. The sexualized context is deliberately created by mentioning an old maid, i.e., a woman who has been unsuccessful in the marriage market. The term *old maid* doesn't mean simply "single woman," just as the title *bachelor* means more than just "unmarried man." In fact, the male term carries connotations very much the opposite of old maid: while *she* has been unable to secure a sexual partner, *he* has escaped the trap of marriage and domesticated desire. His sexual status is enhanced by the absence of a marriage partner. Looking at the image, we see in his pose, in his flirtatious gaze, in his cocky mustache, and especially in his cigar, Clark Gable as the seducer. His body language and gestures (the

Figure 12.1
Source: Based on Ritter and Silber (1977: 60)[7]

signifiers) connote seduction (the signified). The book's caption may also connote Gable's confidence, as "seducer," that he will not end up with the Old Maid.

My point is the following: when a male student sees this picture, he is encouraged to think of himself as occupying the role of the seducer, and to feel a distinct unease if he cannot. Acquiring the power and knowledge of the economists will give him membership in the club where men play men's games and say "Frankly, my dear, I don't give a damn" to the women they seduce. When a female student looks at the picture, she is likely to be torn by its message: on the one hand she may feel attracted to the seducer – after all, the cultural and sexual codes create the "legitimate" forms of desire, and if a female student has lived in our culture, she will recognize and respond to the code in some fashion. At the same time she will realize that she is the kind of person who can turn into the old maid, the one who is to be avoided in this game at all costs. Once the learning context has been sexualized through this picture, she has the option of identifying with the only female model presented or to deny her body and her sexuality and pretend to be one of the boys. The question then becomes: Will they let her play? Or, will the text suggest alternative models? Figure 12.2 will show one alternative role. Figure 12.3 will make it clear that she cannot hope to become one of the boys.[8]

The lecture: the madonna and the whore

In this still (Figure 12.2) from the 1939 film *Horse Feathers,* Groucho Marx is sitting in the lap of a blond, sexy woman. They are on a day bed or a settee covered in shiny satin, surrounded by soft pillows. The caption has him saying: "Now for those lessons I promised you ... when saving exceeds investment ..."

As in Figure 12.1, the linguistic message is serving a relaying function. It brings a narrative element to the image. The contrast between the teaching situation described in the caption "... those lessons ..." and the scene of seduction in the still is what will make us laugh. The sexualized teaching context is even more obvious than in Figure 12.1, since the presence of the image in a textbook is reinforced by the caption. Groucho Marx is the "teacher" of economics. He literally sits in the lap of his "student." This picture introduces the female body and its ambiguous cultural representation. The student in this case is portrayed in a pose evoking both the madonna and the whore. She gazes up at him with adoration and with a desire for the (sexual) power and knowledge he possesses. At the same time she anchors him and cuddles him safely in her arms, as a mother would do. Her body is supporting him as he ostensibly focuses his attention on the abstract concepts he is trying to teach. He is looking absentmindedly up into the air while his hands are all over her body.

So what is this image teaching us? If we are willing to accept the notion that students will approach the image as gendered beings whose identities are continually constructed in social contexts, it is easy to see how male and female students might read their roles differently, albeit through a shared cultural code. *He* learns that knowing economics will satisfy his needs for both motherly love and sexual satisfaction. To become a member of the economists' club, he doesn't even have to deny that he is a little boy at heart, because, as the picture clearly shows, the teacher, in fact, is not different from the male student in this regard. The female student is likely to read the situation through a very similar lens. She too will see her role in the teaching situation in the gendered terms presented, i.e., as one of support and adoration. She also learns that her body, rather than her mind, is what will allow her access – vicariously – to the power and the knowledge. There is in this picture no message that tells her that she can be the teacher, the creator, or even transmitter of knowledge. Unless, of course, she can convince herself that the story only applies to blond bimbos. In other words, if she plays by

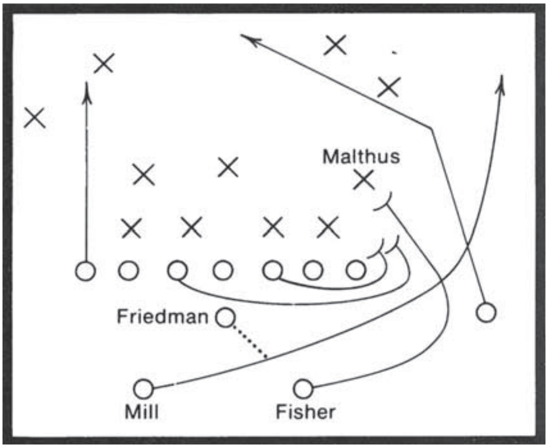
Figure 12.2
Source: Ritter and Silber (1977: 203)
Acknowledgment: Copyright © 1999 by Universal City Studios, Inc. Courtesy of Universal Studios Publishing Rights, a division of Universal Studios Licensing, Inc. All rights reserved.

the rules of the game, without letting her body become a "trap," it may seem possible that she could create a different scenario for herself. Figure 12.3 speaks to that option.

The rules of the games your mother never taught you

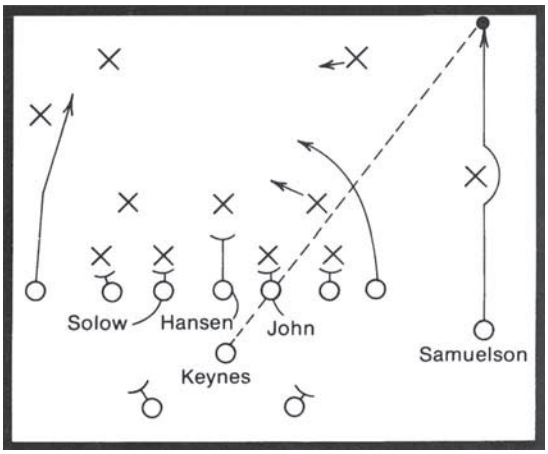
The textbook's title for this display (Figure 12.3) – for want of a better word to capture the totality of text and diagrams on this page – is *How to Score (Old-Timers' Day)*. It is intended to illustrate the monetarist–Keynesian debate. The complete reliance on sports metaphors,

HOW TO SCORE (OLD-TIMERS' DAY)



Monetarist Power Sweep

Milty Friedman hands off to J. S. Mill—who streaks down the right sideline behind a big block (actually a clip) by Swifty Irving Fisher that completely upends Big Tommy Malthus.



Keynesian Long Bomb

J. M. Keynes hits Poor Paul Samuelson with a TD pass (as Howard Cosell goes wild in the booth)—fantastic blocking by the unsung heroes of the front line, led by Bob Solow, Alvin Hansen, and Elton John (betcha didn't know he was a closet Keynesian).

Figure 12.3

Source: Ritter and Silber (1977: 299)

imagery, and symbols makes even the linguistic message of the captions cryptic. The codes necessary to decipher both text and diagrams on this page are such that only a very select group will "get it." Although it is our contact sport par excellence, American football is not well known to many of the foreigners studying economics in this country. A violent and sexualized context is created through the mental images of the game's pushing and shoving bodies, and the title – *How to Score* – immediately brings to mind alternative meanings of the words *to score.*

To see the funny side of the display, you need to know who the *players* are. Academic economists usually do. And while many students don't, by looking at this they'll know who they need to know in order to be in the know. An additional humorous touch is the inclusion of the two outsiders, i.e., non-economists, Howard Cosell and Elton John. A sports commentator seems a natural choice in a display about the *game.* The rock-and-roll star's presence is funny because he clearly doesn't belong. His outsider status is emphasized when his presence is sexualized by reference to him being a closet Keynesian (rather than gay).

The fact that the diagrams may make absolutely no sense as a football play is part of the message of exclusion. Only the possessors of the code would know whether that is the case or not. Those who understand that the diagrams refer to American football and who can understand such diagrams when they *do* make sense are already a select group. They are the ones who at some point in real life are allowed on the playing field. Another select group of people is made up of those who know the "economists-cum-players" in the diagrams. The two sets overlap to some extent, and one of the important distinctions of those that are members of this joint set is that they are never, ever, women.

And that is the most important message the display conveys. Women students, no matter how they choose to portray themselves in an academic context, are basically told: "Stay out if you are not one of *us.*" The potential members of the club, those in the overlapping set, must be male. "You may know your economics and your economists, but do you play ball? Or do you belong in that part of the world where Xs and Os mean kisses and hugs?"

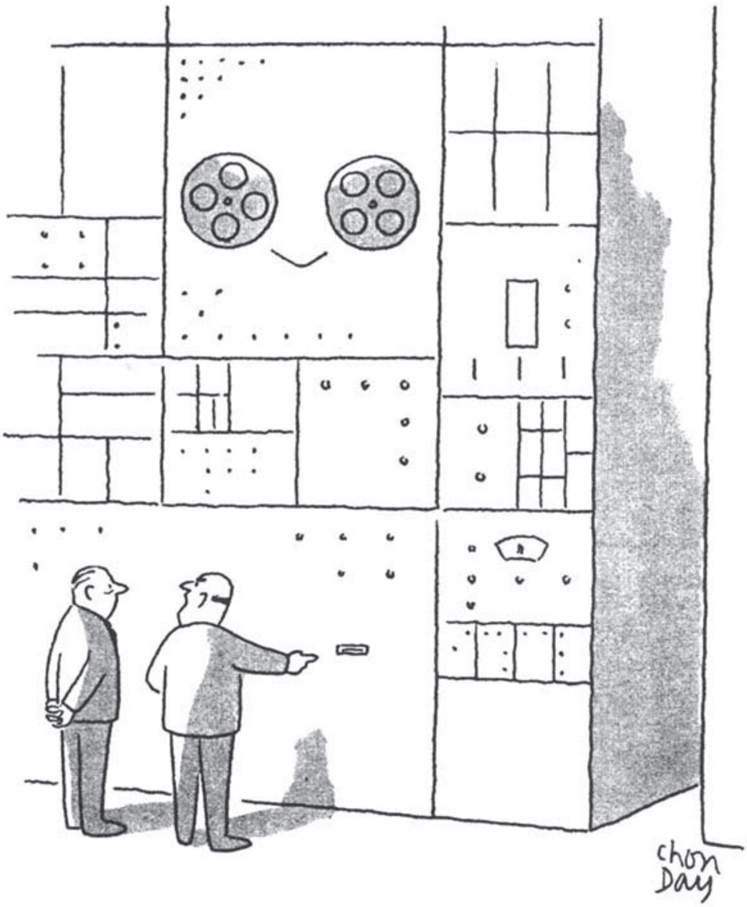
The postindustrial society

This cartoon (Figure 12.4) from *The New Yorker* magazine shows two middle-aged men standing in front of an large, vertical, early-model computer. The caption reads:

> The machine then selects the likely equation from a complicated pattern of theoretical probables. It calculates these, and the correct answer is printed on a card. Then our Miss Swenson files them God knows where, and we can never find the damn things again.

Suppose the caption instead had read: "Then our Mr. Smith files them God knows where, and ..." In that case it would still be a funny cartoon for several reasons. The speaker may not fully understand the technological processes he talks about; perhaps our technology is more advanced than our ability to use it efficiently; our theories and ability to do complex calculations are worth little if we can't put our hands on the practical results. Something along these lines would still make it a joke even if Mr. Smith was responsible for the disorder.

But the specific mention of our *Miss* Swenson introduces an element of gender politics through its mobilization of cultural stereotypes concerning women in the workplace, women and science, and women as the embodiment of disorder. Miss Swenson is not an important active subject in this world although, as the pun shows, she has a certain amount of negative



"The machine then selects the likely equations from a complicated pattern of theoretical probables. It calculates these, and the correct answer is printed on a card. Then our Miss Swenson files them God knows where, and we can never find the damn things again."

Figure 12.4
Source: Ritter and Silber (1977: 363)
Acknowledgment: Chon Day © 1971 from The New Yorker Collection. All Rights Reserved.

as the pun shows, she has a certain amount of negative power from the men's point of view. The power of the logos, however, belongs to the men who can use and produce the knowledge of the equations and the "theoretical probables." She, the single working woman, doesn't know the importance of the material she is dealing with; her contact with the scientific rigor is limited to her handling of the material output. This mirrors the old-school views of women as consumers and distributors, but not producers, of economic knowledge. Here it is the messiness of Miss Swenson that is responsible for the disorder. This drawing feeds on a long tradition of cultural stereotypes that sees men as representing culture and women as representing nature.

Once gendered bodies are introduced in the text, male and female student responses are again likely to differ even as both share the cultural codes. At the level of identification and construction of subjectivity through the learning process, the positions of the male and female student are not at all symmetrically gendered. In this message, femaleness is represented as body, mess, and disorder. Maleness is present in the role of the rational producer and user of knowledge.

Domesticity

In this cartoon (Figure 12.5) from *The New Yorker,* a rather well-off, middle-aged couple sit together in their living room. It could be the hour before dinner, they are having drinks, and perhaps she asked him "So, how was your day?" The husband sounds like he works in the area of international finance, and his impatience shows in the tired features of his face as he finishes up a lengthy, complicated explanation of movements in the capital markets with a "*Now* do you understand?"

While he sits back in his chair, crossing his legs, a drink in his hand, his wife sits across from him on the edge of her chair, a blank or puzzled expression on her face, her hands folded in her lap like a good little girl. Her drink still stands on the table. The picture of the husband is drawn in a way that confers weight, size, and power. This is a man in control of the situation. His control is evident in his ability to speak forcefully about speculation and international money flows with authority. Physically he is drawn quite a bit larger than his wife. His body, even as it appears contained and controlled in his seated pose, takes up two and a quarter inches in a frame of three and three-quarter inches. In contrast, the space taken up by the wife's tightly drawn body doesn't exceed three-quarters of an inch.

This is a very different teaching situation than the one found in Figure 12.2. Gone is seduction and flirtation. This image is one of domesticity and domination. He oppresses directly with his economic knowledge, his impatience may mean he would rather she didn't bother him with her questions or her presence.

The fact that his explanation is totally bizarre and impenetrable is what makes the cartoon funny. Who could *ever* understand him? The message conveyed is that he must be living in a different world since what obviously makes sense to him is sheer nonsense to the

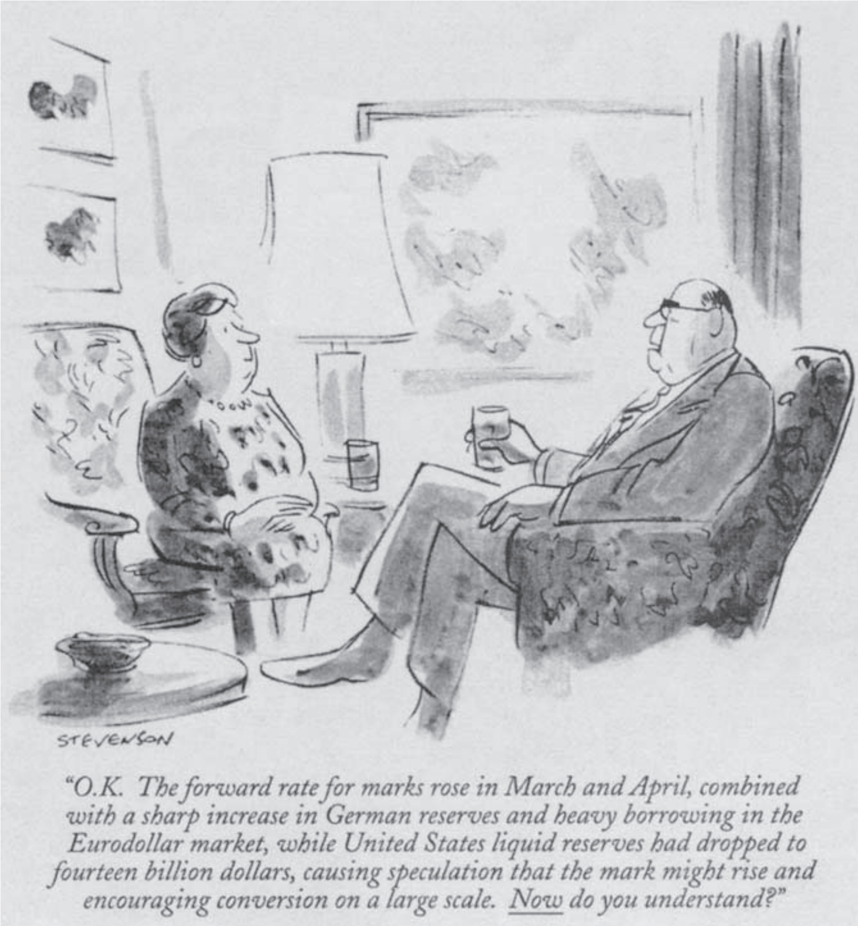


Figure 12.5
Source: Ritter and Silber (1977: 491)

rest of us. The cartoon is funny because it mocks the jargon and pretense of total control that characterize so much of the discourse of economists and public policy officials. In reality, however, it is precisely because those with the power of (economic) knowledge also tend to exercise other kinds of power over people that the cartoon is conceivable. It *is* true that power belongs to those who have specialized knowledge, or who can pretend they do.

In this picture, maleness is contrasted with femaleness in the unequal possession and exercise of economic power and knowledge. The image shows that the possession of economic knowledge can confer the ability to dominate, but it also shows that power and domination are embedded in gender relations, so that men and women have unequal access to this "privilege." While both female and male students are more likely to identify with the wife in this situation, their positions are different. He, by force of being male, can aspire to the power and privilege that – although it is being ridiculed – is very real. She, on the other hand, sees that the acquisition and exercise of power is a gendered and gendering enterprise from which she is excluded *because* she is female.

The new editions

The illustrations discussed above are found in the 1977 edition of a popular money and banking text. In recent editions (1993 and 1997), many of the illustrations have been changed. The few film stills in the 1993 edition come from the *Star Wars Trilogy,* and they are not gendered as the earlier stills were. Most of *The New Yorker* cartoons are carried over from the earlier edition. In a completely revised ninth edition from 1997 we no longer find any film stills; the total number of illustrations has decreased; and some of *The New Yorker* cartoons are more recent, i.e., from the 1980s. The illustrations no longer portray women as the butt of every joke. This does not mean, however, that ambiguities of gender and gender relations are not still prominently involved in the choice of images.

Daddy goes shopping

This illustration (Figure 12.6) shows the circular flow – one of the most fundamental teaching tools in economics. In this version of the diagram, black silhouettes show people in the midst of activities that are behind the flows of money and of goods and services in the economy. Illustrating the labor market, we see a male manual laborer swinging a mallet and next to him a woman pointing to her computer screen. She does not have to be a secretary, but she might very well be, given our occupational structure. There is a man with a shopping cart and two grocery bags by the heading "Consumer Expenditure." It seems to work against facile stereotyping to have a man depicted in this role, although – given his suit and the number of bags – it is unlikely that he is doing the weekly shopping for a family of four. A man's hand is pushing buttons on a calculator illustrating "Saving." This is counterbalanced by the presence of a female analyst conducting a financial presentation under the heading "Investment."

This diagram is included here primarily to contrast it with the depiction of gender roles in the earlier edition. There is clearly an effort to get away from the most blatant instances of sexist and misogynist depictions of women. Whether the exclusionary narrative practices are fundamentally changed, or whether they show up in "new and improved" versions, is another question. The image of the circular flow in the 1997 edition (p. 419) shows some interesting changes. We see a clear effort to pay attention to the timeliness of illustrations as they aim to reflect changes in our perceptions of the American economy. The manual laborer with his mallet has disappeared. He is replaced by two men studying a blueprint. One wears a hard hat, white shirt, and tie; the other wears a business suit. A woman is no

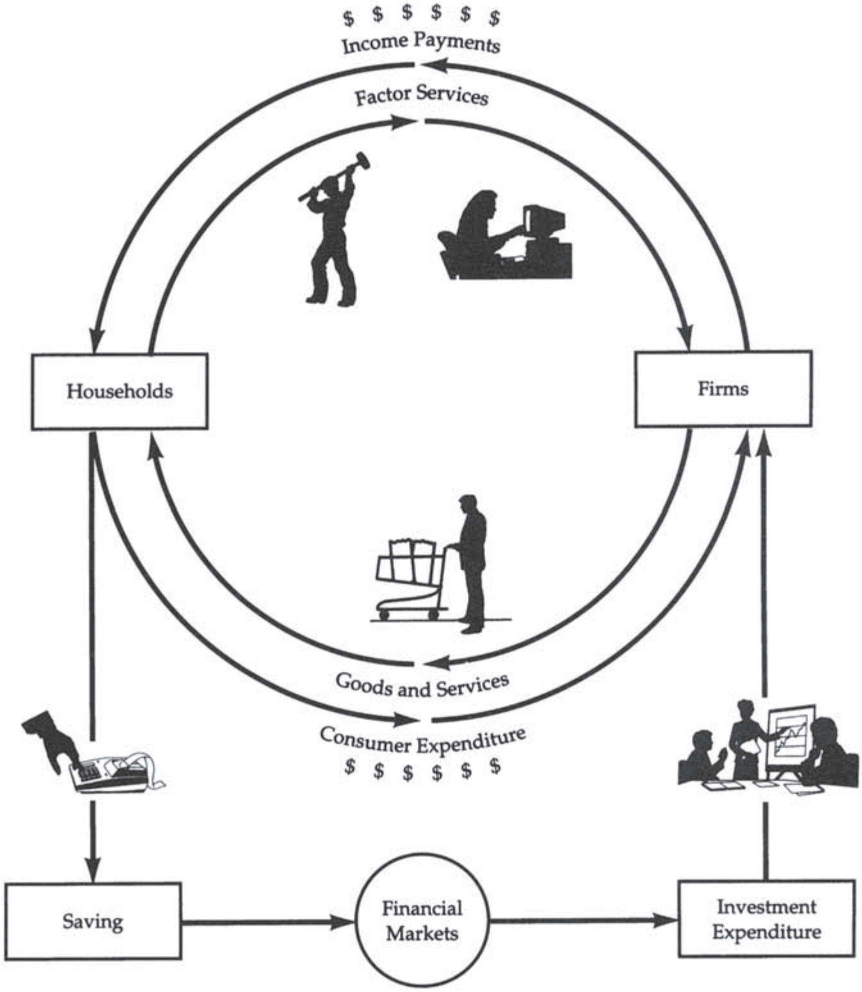


Figure 12.6
Source: Ritter, Silber, and Udell (1993: 293).
Acknowledgment: L Ritter/W Silber, *Principles of Money, Banking, and Financial Markets* 8th edition (figure 2 from page 293). © 1993 L Ritter and W Silber. Reprinted by permission of Addison Wesley Longman Inc.

longer pointing to her own computer; a man is sitting in front of the screen while she is standing, bent over and pointing. The man with his shopping cart has been replaced by an African American woman with a shopping basket. Gender, bodies, and color clearly matter enough to warrant that they be shaken up and redistributed across the page in new configurations.

Phallic fallacy or fantasy?

In this cartoon (Figure 12.7) from *The New Yorker,* three captions accompany three drawings, each showing the scene of a man lying on a couch confiding in his psychoanalyst.

The analyst is shown as a clone of Sigmund Freud – he is bald, wears glasses, and has a mustache and a goatee. As the patient talks, there is an almost imperceptible change in the doctor's appearance, as if he can't quite believe what he is hearing, or perhaps that what he hears is precisely what he had hoped for. The cartoon is funny because of the paradox that the two possibilities may be true at the same time.

The patient is in effect saying that his feeling about money and women are hopelessly intermingled. Every time he starts talking about the price of gold and what he should have done to increase his wealth, he interrupts that train of thought to talk about his wife and his crumbling marriage. Buying and selling gold, his wife coming and going, it gets all mixed up.

At the conscious level, we share a cultural assumption that love and money should not be subject to the same calculus. Love and emotional security belong in the private sphere, while money and the profit motive belong in the public sphere. For the man on the couch, the lack of a separation between the two spheres is causing problems. For him there is no domestic refuge.[9]

If we begin to explore the unconscious connections between gold and sexuality, however, we discover a long tradition that – in contrast to the *separate spheres* philosophy – precisely insists on a very close connection between money and sexual development. Both Marx and Freud have written about the symbolic role of money. Freud sees an intense preoccupation with money as a sublimation of feelings associated with a sexual development arrested in the anal phase.[10] Jean-Joseph Goux reports that Ernest Jones, a British psychoanalyst, in his study of symbolism writes that: "Metal coins, however, and most of all gold, are unconscious symbols for excrement" (1990: 117).[11] Goux himself suggests that there exists a parallel between the symbolic function of gold as a standard of value in the exchange of commodities, and the role of the phallus which, according to Lacan, serves as the standard of value in the world of "objects of desire" (p. 32). Without going further into a discussion of these interpretations, the point is that, for some people in our culture, there exists a strong, unconscious, and symbolic link between gold and sexuality. It is a connection that, according to Freudian psychoanalytic theory, is experienced as part of the individual's process of maturation. Freud's theories on the connection between gold, defecation, and libido concern instances where the developmental process has in one way or another gone wrong, and those cases have always referred to male experiences. It is also a link that, at the social level, connects the economic power of wealth with the phallic power of the logos.

At the conscious level, then, men and women in our culture may well share the notion that there "ought" to be a separation between the private and the public spheres. However, they also have some unconscious reactions that put them in very different positions when

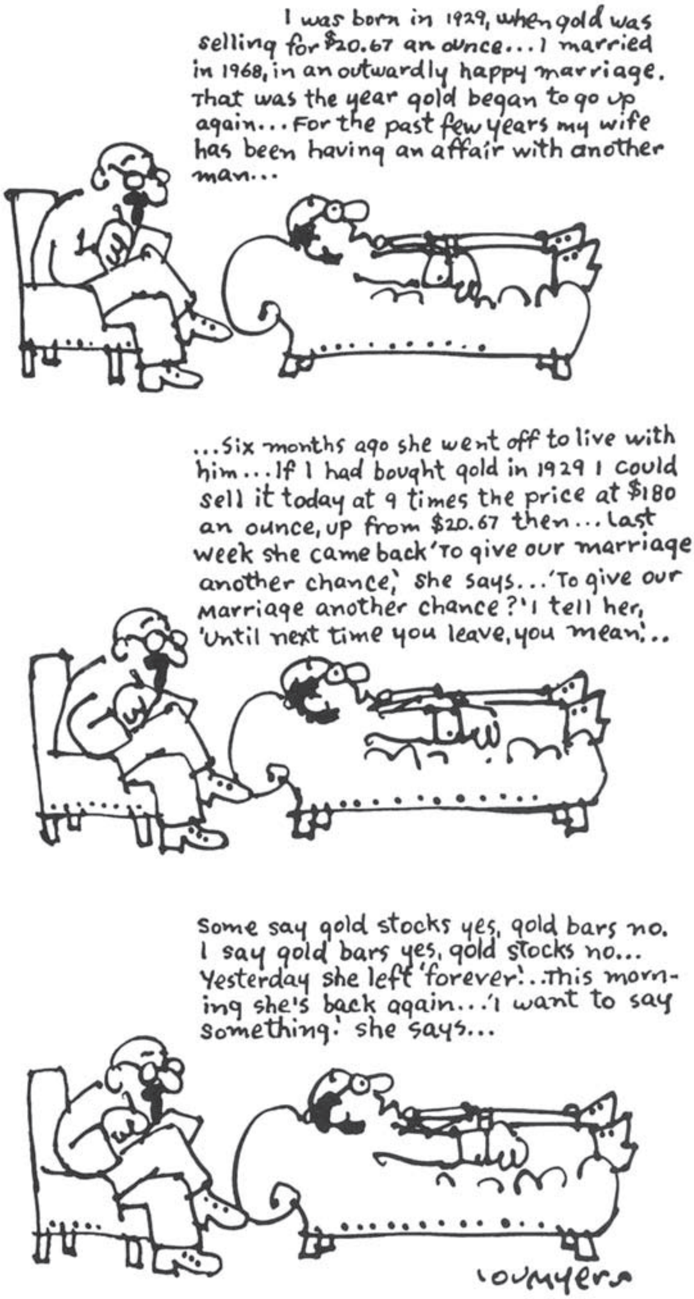


Figure 12.7
Source: Ritter, Silber, and Udell (1993: 609)
Acknowledgment: Lou Myers © 1975 from The New Yorker Collection. All Rights Reserved.

they look at this cartoon's story about the symbolic roles of gold and sexuality. The preoccupations depicted by the textbook illustration, are, at the personal level, constructed around an exclusively male experience.

The Trobriand Islands revisited

In this 1971 cartoon (Figure 12.8) from *The New Yorker,* four native inhabitants of a South Sea island are sitting cross-legged in native garb, surrounded by carved shields and totems, discussing their optimal "monetary policy." The caption reads: "Then it's agreed. Until the dollar firms up, we let the clamshell float."

The paradox that makes this funny lies in the contrast between the *natives*' sophisticated

"Then it's agreed. Until the dollar firms up, we let the clamshell float."

Figure 12.8
Source: Rittel, Silber, and Udell (1993: 606)
Acknowledgment: Ed Fisher © 1971 from The New Yorker Collection. All Rights Reserved.

approach to international finance and our cultural stereotypes about simple-minded, primitive people. Although the four policy makers have a system of exchange that has not developed a more advanced form of money than sea shells, we get the feeling, in this cartoon, that they somehow outsmart the financial wizards of the developed countries in this interaction.

The linguistic message in this case is fully understandable to those who are aware that cowry shells in fact have served as a medium of exchange and as a store of value on some islands in the South Pacific.

The drawing, however, points to issues that go beyond this obvious interpretation. The garments and ornamentation of the four persons not only bespeak the "charm of the natives" in a colonial vein; they also point to a certain gender confusion. We cannot say with certainty who is male and who is female in this picture. This is extraordinary since cartoons and drawings usually exaggerate gender stereotypes so that we can distinguish males from females by relying on commonly accepted codes (as in the silhouettes in Figure 12.6). So why do we in this picture find such a confusion of hair, hat, pipes, beards, earrings, glasses, necklaces, wraps stopping at the waist, and muumuus covering the chest? What is the connection between the depiction of *natives* and the uncertain gender assignment? In a colonial context, it is not uncommon to find references and depictions of native males that portray them as more feminine than masculine. One of the first examples in literature is undoubtedly Daniel Defoe's character Friday from the novel *Robinson Crusoe*. The description of Friday's looks and demeanor is exactly as ambiguous with respect to gender as is this cartoon (Grapard 1995). This is because colonial domination is constructed on the basis of a view of the male native as feminine. Even if biologically he is considered to be a man, he is not part of the realm of the *symbolic masculine* which accords the privileges of maleness in the colonizing culture.

When we return to the caption of the cartoon from this perspective, we now see that it is a sad mockery. Because, in the real world where the World Bank and the IMF reign, the sea shells don't have a chance. The lesson we learn from this image reinforces what we saw in other illustrations about the gendered nature of power and knowledge. Although the joke is no longer ostensibly criss-crossing the female body, the gendered discourse has found another body, another *Other* for its fun.

Conclusion

In this chapter I have attempted to take the conversation about the practice of economics in a new direction. Adding a "textual" reading of textbook images to the textual analysis of the written text seems especially important because our students increasingly find themselves surrounded by communications presented in the form of visual imagery. I have found it helpful to look to semiotics for a methodological approach to the analysis of textbook illustrations. I argue that the images discussed function in a manner similar to what Barthes says about the photographic connotation. He says about the function of the institutional activity of signification that "on the scale of society as a whole, its function is to integrate, in other words to reassure humanity." The reassurance that takes place in these illustrations, however, seems to take place through cultural codes that reassure male students much more than female students. The sense of community that is fostered is invariably created through exclusionary narrative strategies. Even as the most disparaging depiction of women and femaleness seems to disappear between the second and the ninth editions examined here, it is still the case that a gendered, sexualized structure underlies this textbook's efforts to "reassure humanity."

Notes

1. Important contributions to this rapidly growing literature include Brown (1994), Grapard (1995), Henderson (1995), Henderson, Dudley-Evans, and Backhouse (1993), Klamer, McCloskey, and Solow (1988), McCloskey (1985, 1994), Milberg (1996), Nelson (1992), Polanyi and Strassmann (1995), Rossetti (1992), Samuels (1990), and Strassmann (1993).
2. According to the American founder of the modern theory of signs, Charles Sanders Peirce:

   > A sign, or representamen, is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the interpretant of the first sign. The sign stands for something, its object. It stands for that object, not in all respects, but in reference to a sort of idea.
   >
   > (Cited in Nöth 1990: 42)

   Ferdinand Saussure's model of the sign rejects the triadic model of Peirce by excluding the referential object. For Saussure, the linguistic sign can be compared with the two sides of a paper where thought, or concept, is the front and sound, or sound-image, is the back. The two sides make up the sign as a whole. One cannot cut the front without cutting the back at the same time (Nöth 1990: 59). Saussure used the terms signified for the thought-concept and signifier for the sound-image. Barthes's work is much influenced by Saussure's semiotics.
3. Barthes (1985: 22). The quotations are from *The Responsibility of Forms,* a collection of essays on music, art, and representation. I particularly rely on the first three essays, "The Photographic Message," "Rhetoric of the Image," and "The Third Meaning."
4. See Duchastel (1980) for a discussion of the reviews of research on illustrations in texts. Although he questions a tendency to talk about the role of illustrations in general rather than specific terms, he says that "Among the attempts to confirm the value of text illustration, more seem to have failed than have succeeded" (p. 285).
5. Bryant *et al.* (1981) specifically examine the effects of humorous illustrations in college textbooks and find them to have no effects on information acquisition or motivation, positive effects on "appeal," and negative effects on "persuasiveness."
6. The titles given to the images in the text of this chapter are mine.
7. This is a sketch (by Julia Meyerson, an artist and illustrator) of the still photo that appears in the Ritter and Silber text. We requested permission from Warner Brothers to use a copy of that photograph in this essay. But after reading an earlier draft of the essay, they declined our request.
8. I want to emphasize that my analysis is concerned with the interpretation of coded images

which, in this case, appeared in a textbook in 1977. The fact that this and other illustrations disappeared in subsequent editions is probably an indication that the authors or the publisher felt the need for change. I am not saying that there were no women who persisted in economics on intelligent terms in 1977 – only that the illustrations in a book such as this did not seem to present that option.

9. For an analysis of the gendered discourse of the public and private spheres in the works of the social contract theorists and Adam Smith, see Grapard (1992).
10. He argues that certain character traits such as orderliness, parsimony, and obstinacy "are to be regarded as the first and most constant result of the sublimation of anal eroticism." And that "The connection between the complexes of interest in money and defecation, which seem so dissimilar, appears to be the most extensive of all" (Freud 1908: 173).
11. Goux further notes that Jones also suggests that the power or value of certain primitive amulets or talismans stems from their "unconscious signification which are simply symbols of – predominantly male – genital organs" (1990: 117).

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13 Mandating knowledge

The role of the Advanced Placement exam in secondary economics education

Claire Sproul

> The final standards [for the teaching of economics in grades 1–12] reflect the view of a large majority of economists today in favor of a "neoclassical model" of economic behavior. ... The task was to produce a single coherent set of standards to guide the teaching of economics in America's schools. Including strongly held minority views of economic processes risks undermining the entire venture.
>
> (Siegfried and Meszaros 1997: 249)

> American economics is currently in the grip of a narrowly technocratic species of professionalism that is failing to fulfill the reasonable aspirations of many of its members, including students, faculty ... and above all, nonacademic employers.
>
> (Coats 1992: 348)

Most Americans are woefully ignorant of even the most basic premises of any of the variety of economic theories on the academic landscape. During the 1980s, several studies were published deploring the lack of "basic" economic knowledge among the US citizenry. During the 1986–87 academic year, the Joint Council on Economic Education tested the economic knowledge of more than 3,000 high school students using the Test of Economic Literacy (TEL) (Brasfield, Harrison, and McCoy 1993: 100). The results (only 41.7 percent of the TEL questions were answered correctly) led many to conclude that "the U.S. high school population is characterized by *very low economic literacy rates*" (Brasfield, Harrison, and McCoy 1993: 100; emphasis mine).[1] More recently, Merrill Lynch studied US adults and found that four out of five lacked basic knowledge of economic concepts (*Wall Street Journal* 1996: 2). Like many commentators on this subject, I find this lack of knowledge disturbing.

I find it equally disturbing that each of these studies defines "basic economic knowledge" as *neoclassical* economic knowledge. Despite the rich variety of potential explanations for human economic interaction, the neoclassical economists who produced these tests focused exclusively on one – no small irony given their theory's insistence that more choices are always preferred to less.

These worries about "low levels of economic literacy" have sparked a movement to introduce neoclassical economics into US classrooms from preschool to high school and to develop nationwide standards to guide this instruction (Siegfried and Meszaros 1997; Buckles and Watts 1997). These initiatives have been largely funded by private donors such as the Junior Achievement Foundation, the Calvin K. Kazanjian Economics Foundation, Inc., the AT&T Foundation, and the National Council for Economics Education. As one sign of their impact, many states now require at least one economics course for high school graduation. And Princeton's Educational Testing Service (which brought us the SATs and the GREs) has developed an Advanced Placement (AP) curriculum in (neoclassical) economics.

While I strongly support the movement to develop economic literacy among pre-college students, I believe this movement could benefit from a thorough questioning of its own assumptions. I teach Advanced Placement microeconomics and macroeconomics at an independent secondary school. So in this essay I will focus on my experience with one aspect of the economic literacy movement: the constitution of economic knowledge through the Advanced Placement curriculum. I will do this by offering answers to several basic questions: Who created this curriculum and how did it attain such power and prestige in the collegiate marketplace? What is included and what is excluded, and why? What are the pedagogical impacts of this curriculum? And what do we lose in adopting such a curriculum? Or, in a more positive light, what might we gain by exploring other alternatives? I will argue that the move toward economic literacy affords extraordinary opportunities, particularly at the high school level, to begin refashioning how we think about economics. But as currently instituted, the AP economics exam prevents us from realizing these opportunities.

The AP economics curriculum is divided into two separate exams, micro and macro. Students may take either test or both, depending on their high school's offerings. In 1995, 18,264 students, representing 1,787 secondary schools, took the economics exam, and 1,675 colleges considered their scores for course credit (College Entrance Examination Board 1995: 30). AP exams (in economics or any other field) generally attract students primarily for two reasons. First, because most universities and colleges believe that high scores on the exams are markers of mastery of the subject matter, they often award course credit for scores in the 3 to 5 range.[2] For students who expect to earn high marks, the exam offers a way to earn credit for introductory courses prior to entering college as well as a way to save money, since exams cost $70 each compared to college courses which can cost up to $3,000 each.

Ironically, despite the free market bent of the AP economics curriculum, ETS (Educational Testing Service) holds a virtual monopoly on this type of service. It maintains the monopoly, in part, by claiming that the AP program "is a cooperative educational endeavor of secondary schools, colleges, and the College Board" (College Entrance Examination Board 1995: i). Indeed, the College Board bills itself as a "national nonprofit association that champions educational excellence for all students" (College Entrance Examination Board 1995: vi). The size and significance of the program cannot be underestimated:

> AP courses are offered in more than 10,000 high schools in every state in the United States, every province and territory in Canada, and 63 other countries. They are recognized by nearly 2900 U.S. and foreign colleges and universities.
>
> (College Entrance Examination Board 1995: i)

If students want college credits for a high school course, in most cases they have no alternative but to take the relevant AP exam.

Second, the AP designation on a college applicant's transcript is often taken to indicate a student who is working at an honors level. ETS tells us (humbly enough) that "college faculty find [AP] students far better prepared for serious academic work" (College Entrance Examination Board 1995: i). Moreover, because students across the country take identical exams, their scores offer colleges another "level playing field" (besides the SAT) on which to judge applicants.[3] Thus, as students (and their families) strive to distinguish themselves from the masses, they feel compelled to take AP courses whenever possible.

This lesson was not lost on me. When I arrived at the Bryn Mawr School, the economics course was not an AP course. It did not attract the most capable students, and it did not carry a high intellectual reputation. I proposed offering the AP economics exams as a strategy for elevating the perceived importance of the material among students and faculty alike. The school encouraged my efforts. It had every reason to support this move, since the parents of prospective students often list the offering of AP courses as a key indicator of the quality of a school. In a city with many high-quality independent schools, such factors play an important role in matriculation numbers. As we conference with parents, teachers hear again and again of the importance of the AP offerings.

Thus, market pressures (both in secondary and college admissions) conspire to give ETS enormous power over the type of knowledge which is taught to hundreds of thousands of students across the country. Who, then, constructed this knowledge and what type of knowledge have they produced? The AP exam was developed in the 1980s by a group of (presumably neoclassical) economists (College Entrance Examination Board 1995: 1). "In establishing the courses and the examinations, the committee surveyed the economics departments of the top 200 AP user institutions concerning their economics curriculums" (College Entrance Examination Board 1995: 1). The committee has, thus far, pursued a highly conventional course of study, with the microeconomics exam relying solely on the neoclassical model, and the macroeconomics exam relying on a traditional macrotheory. And, indeed, the College Board states clearly that "the aim of an AP Economics course is to provide the student with a learning experience equivalent to that obtained in a typical college introductory microeconomics or macroeconomics course" (College Entrance Examination Board 1995: 3). In other words, the aim of the AP curriculum is to duplicate, as nearly as possible, the transmission of *one type of economic knowledge*: the neoclassical variety taught at all US universities. Since there are very few universities offering any alternative curriculums, the AP exams in economics ignore those approaches. Indeed, in the reams of material produced by

ETS to aid the teacher, I can find no mention of alternative economic approaches, i.e., post-Keynesian theory, feminism, Marxism, Austrian economics, institutional economics, etc. (See, for example, Day 1994 or Griffin 1994.)

I find this focus on one type of economics – as dictated by universities via ETS – troubling on at least two levels. First, teaching ideology-as-truth is toxic to a democracy (Wolff and Moseley 1992). And second, I believe that the steadily rising trend toward collegiate control of secondary curriculum can potentially devastate the creative possibilities uniquely present in the high school structure.

My first argument against the current economics exams involves the issue of choice. Given the number of neoclassicals who hail the great virtues of individual choice, I find it rather bizarre that they present their theory as if there were no other possible approach to thinking about economic issues. That is, they teach their version of economics as (capital T) Truth (McCloskey 1985). True to its stated goal, ETS mimics this approach in the AP economics exams. Many high school students, who take the AP economics exams because economics is a prerequisite for a non-economics major (e.g., history, business, etc.), may never again encounter this material. In other words, that senior economics course may be the only time in their lives when students have the opportunity to think about basic social questions. A few questions spring immediately to my mind:

- What should be our obligations to ourselves as individuals? to our family? to our community?
- How should we structure our economic interactions? How should we relate to the Earth? Should it be just property or should we see that relationship in a more complex and complicated manner?
- How does race or gender affect us? How should they affect us?
- What does "class" mean? Should we allow people to "rent" their bodies so that other people can make profits?

A rich opportunity exists in these questions: teachers could facilitate a process whereby students work through both ancient and newer wisdoms on these issues as well as begin to produce their own answers. Instead, we are tied to neoclassical theory: a single set of answers. I see this lack of diversity in knowledge as potentially toxic to democracy, which thrives on a constant infusion of new thinking. This problem, far from unique to the AP curriculum, extends to the entire profession:

> [T]he current facade of democracy within established professional [economics] institutions is apparently insufficient for a genuine competition of contending views in the same market, such as in the pages of the AER. What the science, the professors, the texts, and the students need is genuine debate.
>
> (Parvin 1992: 77)

Instead of welcoming diverse new and old ways of approaching economics, we are teaching students to sing the mantra of the market – as Newt Gingrich leads us in dismantling the government, as we traverse the road to Technology Nirvana, as industrial jobs leave the country. We owe it to our democracy to provide the public with theoretical choices.[4] As it stands, we are not teaching our students to question, to think for themselves, to invent new answers.

We also owe our students honesty about the theoretical premises of our ideas. Within the AP curriculum, there is virtually no recognition of the debatable nature of the assumptions that any economic theory must make. Of the eight sample syllabi offered in the official teaching handbook for the AP micro exam, only one acknowledges that neoclassical economics might have a few detractors (Day 1994: 30).[5] Despite eons of philosophical, religious, psychological, and sociological debate regarding the nature of human nature, we are told that "students should gain an understanding of how consumers choose goods in the market to maximize their satisfaction" (College Entrance Examination Board 1995: i). Having settled that major philosophical issue in one sentence, the AP microeconomics curriculum moves to the really important material: income and substitution effects, demand curve derivation, and elasticity. And, despite devastating critiques of property rights on many sides, the AP curriculum presents the standard view of property-as-resources. It seems to me that even if we are not up to the challenge of presenting more than one way to think about the world, we might at least try to be intellectually honest enough to let students know that our theories rest on assumptions that are debatable. How can we possibly expect a democracy to flourish and grow with a single doctrine taught as Truth?

The second issue I want to raise in thinking about the AP curriculum is its impact on the secondary school agenda. Because of the structure of many high schools, US educators have a wonderful set of opportunities for exciting and innovative teaching. Faculty members from various disciplines, even in larger high schools, see one another on a daily basis. Whether we teach in public or independent schools, teachers usually share common spaces and resources (e.g., faculty rooms, copying machines, etc.). We are able to talk informally and often about our respective courses. Despite the heavy teaching loads common in most high schools, this environment is relatively conducive to collaboration in comparison to the collegiate environment. The potential for interdisciplinary work is virtually unlimited in the high school setting.[6]

Typically, pedagogical innovations flow "up" the educational hierarchy. That is, they begin at the primary level, work their way into secondary schools, and roost at last in the university. The most recent example of such a progression is the interest in different learning styles and the corresponding innovation of evaluation procedures, which many colleges have just begun to explore. Again and again, however, teachers and administrators, excited about pursuing these potential innovations, run headlong into the demand that we generate excellent student performance on college-created, traditional examinations.

> Ask any Essential School person to name the biggest obstacle to reshaping curriculum and assessment at the secondary level, and the answer inevitably turns to college admissions.[7]
>
> (Nathan 1995: 30)

Many of the exciting educational options I outlined above are undercut by the AP exams in general. This is especially so in economics. Alternative evaluation procedures take time to develop. The truly excellent ones often take weeks of classroom time. The AP economics curriculum puts tremendous pressure on any teacher attempting to take advantage of the secondary setting because it requires a high level of mastery of fairly technical material. By the time a teacher has adequately covered the material deemed essential by ETS, the year is quite over. (Ironically, I know of no university professors who hold their students to the high standard set by ETS. That is, the introductory economics college courses with which I am familiar cover far less material than ETS requires.)

While I certainly do not advocate "lower" academic standards, I do believe that we can do better in advancing the cause of economic literacy at the secondary level. Rather than teaching a single theory in great detail, we ought to consider offering students several theories as well as some notion of the basic assumptions implicit in each. (See, for example, Wolff and Resnick (1987) for a basic text comparing neoclassical and Marxian approaches to the economy.)

Frankly, I am not convinced that our society has achieved all that it could. And I also believe that neoclassical economics, the ideology that validates the so-called "American way," could benefit from a little healthy competition. High schools could be a place where we start to generate new ideas. Highs schools have the potential to tap into community resources. Unlike the university, we have students who return to real homes at night – with younger and older siblings, with adults at different phases in their lives. All these people are potentially rich pedagogical resources for the high school. Students can be amazing and gifted thinkers, despite their ignorance of such important concepts as, say, elasticity. Perhaps we ought to see what they might create given the opportunity.

As a teacher of economics, I want to help my students challenge both the implicit assumptions and the explicit conclusions in the AP curriculum (as well as the curriculum taught at most universities): that neoclassical economics is the single, correct way to look at the world; that human nature can be reduced to a small set of uncomplicated statements; that markets are the pinnacle of human achievement. I also want to give my students some choices in how they think about the economic world; I want to give them a sense of the ideological options available to them.

Notes

1. For a more detailed description of these studies, see Baumol and Highsmith (1988) or Becker, Green, and Rosen (1990).

2. Advanced Placement exams are scored on a scale of 1 to 5. A 5 indicates "extremely qualified," a 4 indicates "well qualified," a 3 indicates "qualified," a 2 indicates "possibly qualified," and a 1 merits "no recommendation" (College Entrance Examination Board 1995: 30).
3. To be fair to college admissions directors, it is extremely difficult to compare students who come from widely disparate educational systems. An "A" in one school system may be comparable to a "C" in another, and so admissions people look for as many "objective" measures of student achievement as possible.
4. Parvin (1992) does a remarkable job of arguing that teaching a single theory of economics is also immoral. I commend this article to anyone interested in the subject.
5. The syllabus, prepared by Princeton University's Elizabeth Bogan, includes a "Discussion of Critiques of Mainstream Economics," with three readings, one of which is Baumol and Blinder's (1992) commentary "Dissenting Opinions." Editor John Day comments that this syllabus is "a very ambitious college syllabus" (Day 1994: 27).
6. For instance, in the past four years, I have had the good fortune to work with our technology specialist in developing a unit combining computer skills with economic analysis. I am also considering developing another unit on the economic roots and social consequences of the technology revolution. This second unit would have several interdisciplinary components: history, technology, economics, and even literature. One might wonder how I manage to circumvent the demands of the AP curriculum. Unlike most schools offering AP courses, Bryn Mawr chose to structure the economics course in an unusual but clever manner. Rather than tying every section of the course to the AP material, we offer an additional class meeting, on a bi-weekly basis, focusing exclusively on exam preparation. While this approach sacrifices some of the rigor that a daily meeting would achieve, it also allows me some freedom to explore some of the possibilities outlined above.
7. The Essential School movement, founded by Ted Sizer at Brown University, has been working for years to reform high school education.

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14 Strategy and tactics in the pedagogy of economics

What should be done about neoclassical economics?

Grahame F. Thompson

Introduction

In the Preface to the 1951 second edition of *Economics: An Introductory Analysis,* Paul Samuelson's opening paragraph reads:

> This book is designed for a one-semester or two-semester course in introductory economics. It is intended for the *intelligent citizen interested in a general education,* and it tries to supply a *theoretical understanding of the economic institutions and problems of American civilization* in the middle of the twentieth century.
>
> (Samuelson 1951: v; emphasis added)

By the time of the 1992 fourteenth edition, the opening paragraph reads:

> Economics has developed as a *science over more than 200 years.* For almost *half a century, this book has served as the standard-bearer for the teaching of elementary economics in classrooms in America and throughout the world.* Each new edition has *distilled the best thinking* of economics about *how markets function* and about what society can do to improve people's living standards.
>
> (Samuelson and Nordhaus 1992: xv; emphasis added)

These two paragraphs neatly sum up the claims made by Samuelson's formidable book and role it has played in economics teaching. Reading its various editions produced over that half-century (nearly a quarter of the entire scientific life of economics according to its author) demonstrates the changing contours of what has been considered to constitute the theoretical terrain of modern economics. In fact Samuelson's other remarkable book, *Foundations of Economic Analysis,* first published in 1947 (a year before the first edition of *Economics*), more strongly embodies his theoretical project, and indeed much of what has come to be understood as the theoretical underpinnings of modern conventional economics in general.

Foundations was written during the late 1930s. Its first substantive chapter is entitled "Equilibrium Systems and Comparative Statics" which sets the tone for the entire first part (comprising 250 pages). Dynamic analysis is introduced in the second part (comprising 100 pages), though this is still set within a familiar partial equilibrating framework. It is this second part that gave the book a distinctive, if slightly underdeveloped, edge. As is well known Samuelson's claim, elaborated in his now famous opening sentence to the *Foundations,* is that:

> The existence of analogies between central features of various theories implies the existence of a general theory which underlies the particular theories and unifies them with respect to those central features.
>
> (Samuelson 1947: 3; emphasis removed)

In fact, this characteristic Samuelsonian claim to the unity of economics is something that pervades his *Economics* as well (Skousen 1997; see also Samuelson 1997). The diversity of economics discourse is systematically denied by this legacy, something that has made it doubly difficult for a more heterodox approach to the pedagogy of economics to claim a legitimacy and gain a voice.

The point of raising these preliminary remarks about Samuelson's books is not to introduce a general discussion of their character and significance, but to register a certain terrain upon which the study of modern economics at university level is located. Any attempt to broaden the teaching of elementary economics education has had to grapple with the legacy of the Samuelsonian framework marked out by these two books. The formidable authority of the "conventional textbooks" in economics teaching is hard to comprehend for those unfamiliar with the full rigors of introductory economics teaching, but it is something which more heterodox teachers have had to continually confront.

What, then, is that orthodox intellectual framework? Broadly speaking it comprises the idea that economics represents a singular and unified science (thus it speaks with a single voice – "Mathematics is a Language," a slogan to be found as the frontispiece of *Foundations*), organized around the twin issues of static and dynamic equilibrating market mechanisms. That market system is primarily specifiable as a perfectly competitive one, which is given a privileged theoretical status. It is a fully determinate system, largely devoid of problems of genuine risk and uncertainty (though the equations that specify the system are couched in thoroughly "stochastic" terms).

It is arguable that the entire history of Samuelson's *Economics* centrally embodies these features in its analytical structure, but as the two quotes with which this section began indicate they have been addressed in a nuanced manner. The earlier editions in particular played them through a more discursive format (making the analysis available to the "intelligent citizen interested in a general education") that was sensitive to the institutional specificities of the economy it was describing (if it did not stray much beyond the contemporary "problems of American civilization"). A glance at those first four editions published up to 1958, however, indicates a somewhat different format from the ones that followed. It was the 1961 fifth edition that signaled the real change to what is indicated in the 1992 Preface as the book's thoroughly modern agenda: the importance afforded to establishing the book's scientific credentials, the centrality of uncovering the theoretical secrets of the market mechanism, the best in modern thinking, etc. The style lost much of its discursive and institutionalized feel as it increasingly embraced the tight and formalized structure now followed by every conventional economics textbook. However, it would be churlish to suggest that Samuelson (now with the added assistance of William Nordhaus) abandons an institutional discussion altogether in the fourteenth edition of *Economics*. The text contains a good deal of institutional discussion, mainly associated with the US economy, but it does lack a central address to the comparative consideration of the role of institutions in economic analysis in the sense that it is raised below.

Samuelson's work, then, particularly his *Foundations,* represents the first truly formal and mathematical treatment of the properties of a market economy, seemingly building on Adam Smith's discursive treatment, but also quite dramatically changing it. It established a thoroughly neoclassical approach to the market system, particularly in respect to its treatment of microeconomics, with perfect competition taken as the exemplary market form. It originated much of the rigorous theoretical foundation that still underpins the orthodoxy of modern neoclassical economics.

How to confront the Samuelsonian legacy?

Broadly speaking one must begin here with a depressingly familiar observation. How often has one been to conferences where the issue of the intellectual dominance of neoclassical economics is on the agenda without the discussion ending up as a dispiriting collective acceptance of the impossibility of doing very much about it. In as much as a strategy to try to confront it can be discerned, it amounts more or less to one of the following.

The traditional response has been to invoke a kind of perspectival relativism; to look for different and potentially competing paradigms, models, world-views, or philosophically informed methodological "isms" with which to confront the neoclassical orthodoxy. In particular these usually criticize heavily the neoclassical approach for its underlying rationality assumptions, the other approaches suggesting alternative specifications of the behavioral motivations and norms for economic agents and the systems in which they operate. Neoclassical economics is thus found wanting on the basis of a number of scientific/truth criteria, or according to various other methodological principles. This is what I will term the "epistemological critique" approach. In general it is long on methodological critique but short on analytical techniques adequate to replace the full panoply of the neoclassical orthodoxy.[1]

In recent years this rather predictable and standard response has been challenged from a different quarter. The newly emerging alternative involves looking at the discursive rhetoric of economics, examining its pedagogical protocols and practices of persuasion and argument, and playing to the "linguistic register" of economics as a socially embedded practice (McCloskey 1985, 1994; Klamer 1984; see also Thompson 1993). This approach has resulted in the downgrading of the traditional big methodological issues and disputes in favor of a more modest agenda of looking for the metaphorical analogies, narrative strategies, “story-telling” agendas, and the like, of particular economic forms of analysis to uncover their modes of rhetorical address and protocols of persuasive argumentation. This approach I term the “rhetorical encounter.” But rather like its distinguished predecessor, this approach has promised much but delivered little, I would suggest. The disappointment lies in its inability to generate an alternative packet of analytical tools and techniques of investigation that offer more than just a critique of the existing orthodoxy. In this respect it resembles the “epistemological critique” approach.[2] Indeed, its most illustrious proponent remains quite content with the reigning orthodoxy. McCloskey has declared herself well satisfied that neoclassical economics would come out on top in the persuasive dialogical conversation between economists.

In contrast to both of these approaches, the idea behind the present chapter is to think of the nature of economic pedagogy as one involving an uncertain oscillation between “technologies of order” on the one hand, and “practices of intervention” on the other: the elaboration of a style of reasoning that sees economics and pedagogy as problematically aligned along a shifting frontier and involving a series of evolving “skirmishes” along that frontier.[3] With this approach there is no dramatic appeal to a set of methodological shortcomings of neoclassical theory (or any other school of economics for that matter), or an invocation of its mistaken metaphorical borrowings from other disciplinary fields, or to the success or otherwise of its rhetorical exegesis. Rather it is to point to the potentially historical encounters between orders and interventions. It does not condemn all of neoclassical economics out of hand because there is no “all” of neoclassical economics. The way neoclassical economics operates is contingent – dependent upon with what it is aligned and under what circumstances, and with what pertinence it is “used.” The particular productive skirmish with neoclassical economics under contemporary circumstances is designated here as a strategy of “bypassing and outmaneuvering” the full implications of its pedagogy by taking this pedagogy to its limit, so to speak. What exactly this new approach entails is elaborated and illustrated below in the context of the experience of teaching economics on a number of Open University courses with which I have been closely involved, and in particular a current course called “Economics and Changing Economies.”

Escaping the legacy?

It is with this context in mind that this chapter describes an attempt to escape both the full constraints of the Samuelsonian legacy *and* the critical responses that have so far been constructed against it. The main reflection refers to the Open University introductory course in economics titled “Economics and Changing Economies.” The Open University is a national distance teaching institution and the largest university in the UK. This course appeared for the first time as a full, commercially published textbook of over 1100 pages in 1996 (Mackintosh *et al.* 1996), though it has been taught since 1995, and will continue to be taught, as a course in the university's undergraduate profile in a slightly different format for at least another six years. My main concerns in what follows are to profile the innovative features of the course book (hereafter designated *E&CE*) and some of the implicit and explicit thinking that went into its design.

Until recently the tone of most "alternative" economics courses and textbooks has been an oppositional one (classically embodied in the aptly titled European alternative textbook *Anti-Samuelson* (Linder and Sensat 1977)). As the title of this chapter suggests, *E&CE* followed a new strategy. The attempt was to teach the canon of modern economics, but at the same time to "challenge it from within" so to speak. This strategy of "bypassing and outmaneuvering" involved taking the canon to its limits so as to demonstrate its implications in the changed context of the mid 1990s. In this, the course team was aided by some fundamental changes in the nature of economic discourse that have occurred since the mid 1970s which accompanied the ending of the long boom, and which are only now beginning to register properly within conventional economics. As we shall see the consequences of this are to challenge Samuelson and Nordhaus's 1992 claim that the fourteenth edition of *Economics* embodied the latest thinking in economics. In many ways that text already looked dated. Maybe the masters have at last lost their touch? Interestingly, the 1992 edition contains a long reflective introductory section – entitled "Economics and perpetual youth" – in which the main author reminisces on the history of his textbook while showing little sign of excusing himself from involvement in future editions. Thus *Economics* remains a formidable vehicle for the dissemination of a particular brand of economics (if for no other than reasons of "hysteresis"), and it looks likely to continue to fulfill this function in the future.[4]

Still, there is no merit in picking this particular textbook for the critical focus and reflections elaborated here other than for its historical, rhetorical, and iconic status. *E&CE* was not set up as an alternative or as a rival to a book like *Economics*; its objectives, coverage, and other details are quite different. The purpose of this comparison is simply to mark out a polemical space between two different intellectual projects.

Changes in the economy and in economics

The background to many of the innovations contained in *E&CE* lies in the evolving nature of the discourse of economics as well as in the economies it is designed to help elucidate. In this section I mention a few of the most important of these as perceived by those responsible for organizing *E&CE*. Some of these are fairly obvious, some no doubt are controversial, some were in the perception of this author only and would probably not all be endorsed by colleagues on the course team or the consultants who were employed to help produce it. Nevertheless, since this is a personal reflection on the nature of a production process with which I was closely involved I claim the privilege of elaborating these for myself. They were certainly in *my* mind during the discussions involving establishing the course content and in the production of its teaching materials. It must be added, however, that the production process of OU courses is a collective one. None of the course team is solely responsible for any of the innovative features of the course, and this author acknowledges learning as much as anyone from the stimulative intellectual environment associated with such collective decision making.

The long boom of the post-World War II period had a remarkable effect on the nature of economics, as reflected in Samuelson's own prestigious writings. The problem for those economists trained in the early part of this century was, on the one hand, the nature and reasons for economic cycles, and on the other the nature and reasons for unemployment (of both labor and other resources). Of course these twin economic problems were intimately related to one another in the economic discourse of this period, and they served to mark it out with a particular character that stressed a radical uncertainty associated with the future and a real and growing role for government intervention in an attempt to manage such fluctuations. The post-World War II long boom did not so much totally undermine these as economic issues but inflected them in a novel and subtle way. Those economists trained in this postwar period increasingly switched from an engagement with the deep fluctuations in, and the long-term growth of, the real economy and the reasons for unemployment to a study of the microbehavioral postulates of an essentially (self-)equilibrating economic system, and the evolving new macroeconomics which stressed the stabilization of economies over their growth prospects. Their focus of investigation switched.[5] And the long boom "licensed" this switch in emphasis. Unemployment and cyclical activity had been "solved" by the judicious application of Keynesian demand management policies. The steady forward march of economic growth was the order of the day.

But of course these problems were to return with a vengeance after the mid 1970s, and with them came a change in the manner of economic investigation. Issues of uncertainty and risk forcefully reappeared on theoretical and policy agendas. But that was not all. There was clearly no simple going back to the manner of analysis of the 1920s and 1930s, though some of the earlier themes did reemerge. The economic context of the 1990s is not the same as that in the early decades of this century. Key changes concern the growing integration of the international economy, the consolidation of oligopolistic firms and market forms, and the transformative nature of many domestic economies occasioned by a shift in economic dynamic toward the Pacific Basin and by the opening up to market forces of what used to be referred to as Eastern Europe and the Soviet Union. All of these issues featured strongly in the thinking behind the content of *E&CE,* and they were manifested in the *theoretical* way it was constructed, as discussed in a moment.

That generation of economists who learned their economics in the 1960s and 1970s, and even in the early 1980s, could not have escaped the ubiquity of that part of the neoclassical paradigm stressing partial and general equilibrium analysis, the determinate nature and "certainty" of the economic process, the key status of perfect competition, etc., that pervaded and characterized "orthodox" economics. One consequence was that a large section of that generation were put off this kind of analysis by its essentialist and teleological character and by a sheer boredom with the formalism that it engendered. They looked for something "more relevant" and radical.

But economics, even "conventional" economics, has changed (or perhaps put better, is changing). The certainties behind the perfectly competitive model are no longer there; for instance, as imperfectly competitive institutional forms and behavior have come to widely characterize the economic mechanism. With the strong emergence of non-Anglo-American dynamic economies the institutional specificities of different capitalisms have gained a renewed intellectual credence amongst economists. An "open economy" can now no longer be treated in the same way as the essentially closed one of the Keynesian orthodoxy. These issues have penetrated to the heart of conventional economics and are not something confined to a marginalized group of dissatisfied "alternatives." The rash of "new" prefixes testifies to this resurgence: the "new-institutionalism," the "new-Keynesianism," the "new-trade theory," the "new-growth theory," etc. Now, while these theoretical developments do not by any means break totally with neoclassical orthodoxy, they offer an exciting new glance on economic analysis which has served to stimulate a range of interesting and intriguing policy proposals and possibilities.

In its own modest way, the attempt by *E&CE* has been to take these leading-edge developments and render them into a comprehensible account for an undergraduate student audience. Whether this has fully succeeded remains for others to judge. In attempting this, however, the effect has been to try to turn the orthodoxy in on itself, to push it to its limit by reflecting back on the conventional wisdom of its analysis and policy formulation (or lack of it). Whilst this was not always a fully conscious process in the way *E&CE* was written, it represents the "intellectual effect" of stretching and demonstrating the limitations of the conventional wisdom's pedagogic processes. The next section tries to make some of these somewhat abstract, and no doubt rather bold, claims more concrete by examining how certain key issues were tackled in *E&CE*.

Developments and differences

An important objective for the OU course team was to allow a number of different "voices" to appear in *E&CE*. In part this was because of necessity. One person could not have prepared all of the course materials. But this was also and above all for pedagogic reasons. A principle of the institution responsible for *E&CE* and those on the team that produced it was that there is genuine merit in having a range of voices present in any course. This reflects a recognition of the plurality of theoretical positions and modes of expression that pervade economics. It was thought this needed to become apparent for students, but at the same time there was no wish for *E&CE* to go down a fully developed "perspectives" route.

The “range of voice” issue was also compounded by the various internal and external authors who contributed to *E&CE*. A real danger in releasing so many disparate voices is that the overall output appears to students as incoherent and confused. Clearly a key task is to have a focused intellectual agenda and to very actively intervene at the editorial stage. This the course team, and particularly the course team chair, did with great effect, but there remains an inevitable residual difference in the character and specific intellectual agenda of a number of chapters, something thought acceptable (even worthwhile) in the context of the wider intellectual benefit derived from that plurality. The objective was not to promote “competing” voices, however, since it was thought this would confuse students at introductory level. “Different” but not “competing” was the objective.

A second overall objective of *E&CE* was to remain sensitive to institutional particularities and specificities. Thus “institutions,” their role and function in any economy, and a stress on the comparative importance of these, figure centrally in the chapters. The term “institutions” covers two broad categories of agents or activities. The most recognizable are organizations like companies or households. But the term also covers social norms, legal frameworks, rules, and habits. This second aspect involves a broader definition of institutions (beyond, for instance, the definition and treatment in a book like Samuelson and Nordhaus’s *Economics*). The term is used in both these senses in *E&CE*.

For instance, they are neatly brought together first in Chapter 3, which looks at the way the personal sector and households can be considered as institutionally bound economic agents. The consumption function and a demand curve are derived from this analysis. Thus *E&CE* uses definite institutions to derive key analytical devices, not the other way round. Second, institutional specificities are deployed to critically reflect upon the comparative performance and competitiveness of different national economies, as in the case of the financial system (Chapters 15 and 19 – which consider the differences between “insider” and “outsider” financial systems) and the labor market (Chapters 21 and 24 – where the notion of “neo-corporatism” is introduced and discussed) amongst others.

Perhaps the key theoretical innovation introduced in the first book of *E&CE* is illustrated by Chapters 5 to 8. These deal with what is usually termed “the theory of the firm.” The traditional way this is handled in textbooks, including to an extent Samuelson’s *Economics,* is to first set up the demand and supply diagram as a preliminary introductory device, and then to examine how this supply and demand mechanism operates as first perfect competition, then monopoly, and then monopolistic competition and oligopoly are analyzed in sequence. This framework was almost reversed in *E&CE*. The course team was at pains not to elevate perfect competition to a theoretically privileged position, but just to view it as one among a range of possible market forms, perhaps with only a residual intellectual curiosity given the nature of real economies. Beginning from the observation that imperfect market forms are the dominant ones in real economies, and that the pathbreaking work is currently going on around imperfectly competitive model building, the decision was taken to begin by examining the oligopolistic form in the context of strategic competition. This introduced a key analytical device that was used extensively throughout the rest of the course, that of game theory. If anything in *E&CE* can be said to stand in for the usual centrality given to the supply and demand technique it is that of elementary game-theoretic models. A warning is in order here, however. Just as with the supply and demand framework, game theory can also be overplayed in economic analysis. Not all situations present themselves in terms suitable for game-theoretic approaches, so this technique needs to be deployed only where appropriate.

But the decision to substitute oligopoly for perfect competition as the typical introductory competitive form was not taken simply for the seemingly pragmatic reason that it is pedagogically more satisfactory for students – the fact that they can identify more easily with conditions associated with oligopoly than with perfect competition – though this has its own merits. There was also a good theoretical reason for doing this.

This reason concerns the nature of the supply curve in economics. First, there is no supply curve for oligopoly. Second, there is a confusion over the relationship between a firm's marginal cost curve and its supply curve, most books treating them as substitutes in imperfectly competitive situations. Third, strictly speaking the industry supply curve can only be properly derived for the perfectly competitive case. Thus the common practice of setting up the supply and demand framework *before* dealing with the perfectly competitive case is misleading. (This is not an accusation that can be leveled at *Economics,* however, since although the perfectly competitive model continues to be treated first and as the exemplary case, the supply curve is properly derived from this context. This is followed by the full supply and demand analysis before the other market forms are considered.) In Chapter 8 of *E&CE,* however, it is only after dealing with the other market forms and then perfect competition that the supply and demand framework is constructed and its equilibrating properties discussed. Presenting it this way is thus theoretically more rigorous than the usual textbook version. In addition, putting it later in the sequence avoids the misleading impression that the supply and demand mechanism is the appropriate one in which all the competitive market forms can be placed and assessed. Of course the conventional textbooks are not quite so crude as this; as indicated above they nuance their discussion of the appropriateness of the supply and demand framework, but the fact that it consistently precedes discussions of the other market forms makes it more difficult to make clear to students that the supply curve with which they customarily become familiar is really only applicable under rather specific and particular circumstances. It is not the ubiquitous "tool" of analysis it has come to signify. Here we have a very concrete example of how taking the conventional approach to its limit demonstrates the restricted applicability of one of its most cherished devices.

The advantage of the sequence as registered in Chapters 5 to 8 is that it not only places the supply and demand framework in its proper intellectual context, but also means that strategic interdependence along with market power (considered at length in Chapter 6) are foregrounded. These can then be treated as just as important analytical devices as supply and demand from the point of view of economic investigation. This enables *E&CE* to be more neutral in respect of the theoretical foundations of subsequent economic analysis in the textbook, and in terms of economic policy. This becomes particularly important for Chapters 8 and 12 to 14, which, amongst other things, deal with issues of strategic industrial and trade policy. It enables the forms of intervention embodied in these policies to be more easily treated as a natural consequence of a particular market form, rather than as a result of a "market failure" of some kind.

The second part of *E&CE* focuses upon an open economy environment, and is thus driven by the concerns of "open economy macroeconomics." This is now usual in introductory textbooks, but many of these have not yet fully thrown off the legacy of the closed economy model. The sequence in most textbooks is first to deal with a closed economy situation and then to "bolt on" any additional open economy features. By contrast *E&CE* deals with the open economy environment from the start. In regard to the construction of the aggregate demand schedule, this has important implications. It seems that remnants of the traditional approach continue to pervade the fourteenth edition of *Economics*. Take the discussion of why the aggregate demand schedule slopes downwards. Here it is the mechanism of the real money supply that does the trick in the conventional approach, rendered through the operation of the Pigouvian real-balance effect. As the aggregate price level falls, people's real monetary balances are worth more, which they will run down through their spending, which in turn creates additional output and income. This remains an essentially domestically orientated story.

But if we take a fully open environment, in the first instance it is adjustments operating through the international accounts that are likely to be responsible for the downward-sloping aggregate demand schedule. Here the contrast is between the domestic price level and the world price level. The consequences of a divergence between these is explored in terms of the effect this will have on domestic aggregate demand – as the domestic price level falls relative to the world price level there will be an increase in the net foreign demand for domestic goods and services. There is clearly likely to be a secondary effect in the money market of this mechanism. But any fall in the domestic price level, for whatever reason, will decrease the demand for *nominal* money balances, and this will result in downward pressure on interest rates. Lower interest rates will tend to stimulate demand by reducing costs of borrowing and promoting a more optimistic business environment.

This story, told in greater detail in Chapter 17, sets the tone for the way macroeconomic adjustment is taught in Book 2 of *E&CE*. It illustrates a commitment to a different intellectual agenda, but again one that does not so much oppose the conventional story as to demonstrate its limitations or short-comings from within.[6] It is an issue of the inflection of the analysis – toward an embrace of the full implications of a radically integrating international economy or to stick with an analysis that is still essentially national in form. In part, of course this may reflect the different nature of national economies. The United States remains less internationally integrated than an economy like that of Britain for instance.

A final point to make in this review of differences and contrast is to stress the "ethical" dimension in the economic analysis offered to students by *E&CE*. Questions of distribution, which raise ethical issues, are of course central to most textbooks, and they appear in this one as well. But the differences arise in the manner of their treatment. The standard approach is to couch solutions to ethical concerns solely in terms of interpersonal comparisons of welfare, and in terms of the trade-off between equity and efficiency. While this is covered in *E&CE,* in Chapters 22 and 23 in particular, it does not exhaust the treatment. These chapters also consider gender and racial inequalities, where the argument is that "rights" are as important in the determination of economic outcomes as are the exercise of economic incentives and rewards. Questions of fairness and values have as much to do with legal rights in respect to equal treatment before the law or in the labor market, for instance, as in the establishment of "property rights" as such. "Human rights" as the condition of, or outcome of, a collective societal existence play their own role in the generation of values and ethical standards. These in turn enter the "solution matrix" involved with distributional issues. As is demonstrated in these and other chapters this has definite effects both upon the measurement of inequality and poverty as well as upon interventionary policies and their outcomes. In general, the discussions in all the chapters of *E&CE* where policy initiatives arise are sensitive to who are the winners and losers, whether these be individuals or collectivities of various kinds. But this is not all because the notion of efficiency itself is not ethically neutral, contrary to the conventional wisdom. The argument, beginning in Chapter 1, is that historical processes and institutional specificities account for *both* differences in efficiency *and* distributional outcomes. Furthermore, different values, norms, and ethical standards can also be accounted for in terms of these (social) processes and institutions. This is the main interdisciplinary message of *E&CE.*

Conclusion

There is always a danger in trying to be different. But if nothing is ventured then nothing is gained. The British Open University is in a unique position of being able to try new, often interdisciplinary, initiatives in its teaching programs. These it still positively encourages. The collective and open nature of the production process means that a consensus needs to be sought in terms of content and style, but far from stifling intellectual development it seems to stimulate it. Whether the initiatives and innovations contained in *E&CE* as described above are sensible or successful remains for others to judge. The argument is absolutely not that *E&CE* is an alternative or substitute text for something like Samuelson and Nordhaus's *Economics*. It is not. The text is selective in coverage rather than comprehensive as the orthodox textbooks must be, because *E&CE* is designed for a particular student audience. However, it does try to do some new things with the economic orthodoxy, and as such offers a contribution to a strategy for bypassing and outflanking that orthodoxy's less attractive analytical features. It also does *other things* than the orthodox textbooks, which in many ways means that it does a lot more than they do.

Notes

1. A rather successful current variant of this position is exemplified by Philip Mirowski's attempt to reinterpret (and heavily criticize) the modernist program in economics as one that systematically borrows its methodological cloths almost exclusively from the mechanical images of nineteenth-century physics (Mirowski 1989, 1994; de Marchi 1993). I offer a critique of this in Thompson (1998).
2. A moment's reflection should alert us to the fact that, whilst positing themselves as alternatives, these two approaches are but variants of an invariant structural commonality. They share a central concern with methodological issues, though they deal with them quite differently, and they are fundamentally predicated on a "critical-realist" epistemic foundationalism. Both defer to the "real" as the site for the origin of their meaning and sense, though they engage with this in a critical fashion. This is in distinction to the nominalist approach being promoted here, where it is the level of the designation as such that encodes meaning and sense, rather than this being "somewhere else" (in the "real").
3. Such that one can easily establish the intellectual credentials for this type of approach, I would point to the work of the early Foucault on the one hand (particularly Foucault 1970, 1973) combined with Hacking on the other (particularly Hacking 1983). A "technology of order" from this point of view is a certain set of rules and practices that constitute a relatively coherent discursive complex that can work consistently on an object of investigation, while a "practice of intervention" designates the modes of intervention in that discursive complex that have the effect of challenging and altering it.
4. However, *The Economist* believes there may finally be a real (and better) competitor to *Economics,* written by Gregory Mankiw (1997) and for which Mankiw was apparently paid $1.4 million in advances (*The Economist* 1997).
5. Of course this is not to say that economic fluctuations or unemployment were ignored, just that they took a secondary position, set now in the context of elaborating the partial and general equilibrating conditions of the market mechanism as a whole. It should strike the contemporary reader, for instance, as surprising how little there is in Samuelson's *Economics* about uncertainty and risk (and, indeed, in his *Foundations* as well), though the 1992 edition contains a chapter devoted to this.
6. This way of dealing with the issue does not address all the legitimate objections raised by David Colander to the standard AS/AD treatment in economics teaching (Colander 1995). His objection is to the theoretical inconsistencies and confusions he sees in deriving and using the AS/AD framework, particularly in the case of the AS curve. He stresses a dynamic disequilibrium adjustment process as one consistent with, first, a proper Keynesian model and, second, with the reality of the economic process itself. He argues that there is a reciprocal interactive effect/response between supply and demand as specified by a multiplier mechanism. The two curves are not independent – demand calls forth its own supply. On the other hand, the demand adjustment invoked by the Pigou effect is just too weak to carry all the weight of the adjustment process.

   The basic trouble here lies with the partial adoption of the instantaneous price adjustment process of extreme versions of the neoclassical synthesis model (a simplified, less extreme, and "student friendly" version of which is presented in *Economics*), and adapting it within the AS/AD framework. On a critical history of the relationship between the IS–LM and AS/AD frameworks for macroeconomic analysis see Pearce and Hoover (1994), King (1994), and Darity and Young (1995). Perhaps fuller consideration of these difficulties should be included in any revised version of *E&CE*.

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15 A working knowledge of economics?

Richard McIntyre

Economics for a trade union audience starts with two strikes: it is abstract and quantitative. Most trade unionists don't share the economist's fascination with abstract relationships. They want something that speaks directly to their lived experience. And while particular numbers or simple charts may be memorable, trade unionists tend not to be as fascinated with endless quantification as economists are.

Of course this is not all that different from facing an introductory principles class. The difference is a trade union audience tends to be more purposeful and thus more demanding, and unlike a college class, you are likely to have them for an hour or two, perhaps an evening, or at most a couple of days, rather than a semester.

I generally begin my talks to trade union audiences by trying to make them feel at ease and to draw their own views on the economy onto the floor. The former is done most easily with a story or a joke. These days I tend to want to convey that things are not always what they seem, so I might start with the following.

> A Dubliner walked into a bar in Cork, ordered three pints of Guinness and sat in the back of the room, drinking a sip out of each one in turn. When he finished them, he came back to the bar and ordered three more. The bartender asked him, "You know, a pint goes flat after I draw it; it would taste better if you bought one at a time." The Irishman replied, "Well, you see, I have two brothers. One is in America, the other in Australia, and I'm here in Dublin. When we all left home, we promised that we'd drink this way to remember the days when we drank together." The bartender agreed that it was a nice custom and left it at that.
>
> The Dubliner became a regular in the bar, and always drank the same way: he ordered three pints and drank them in turn. One day, the Dubliner came in and ordered just two pints, and sipped first one, then the other, as before. All the other regulars noticed and fell silent. When he was about to leave, the bartender said, "I don't want to intrude on your grief, but I wanted to offer my condolences on your great loss." The Dubliner looked confused for a moment, then a light dawned in his eye.
>
> He laughed. "Oh no," he said, "everyone's fine. I've just quit drinking."

This or a similar story has the effect of loosening people up and allowing me to set up a point I want to make later in the talk. Of course, ethnic humor is definitely out these days and someone might be offended. I used to say that if you can't laugh at yourself I'll do it for you, but this doesn't really work anymore. So I stick to making fun with groups I belong to, mainly economists and the Irish. If there is time I also like to do something interactive at the beginning. I do an exercise in Rawlsian justice in which I ask the group to suggest what characteristics would determine people's income if the world ran according to their ideals, but they would not be able to determine their own characteristics in that world. I then ask them to compare the importance of those characteristics in the ideal world with what actually exists. I sometimes ask them to compare their ideal income distribution to the current one. Invariably, trade unionists (as well as students) want hard work and skill to count for more than they do and property and birth status to count for less in determining income. They also want more equality than currently exists in the United States.

This exercise is important as it validates the idea that what non-economists think about the economy is important. I also use it to break down the fact/value distinction. None of us (including economists) check our values at the door when we enter into discussions of the economy. To see economic argument as moral argument rather than purely technical is liberating.

So a joke or story and an exercise are effective in lightening the mood and lessening the group's apprehension about economic "science." And here is my dilemma. I need to deflate the scientific pretensions of economics both because of what I believe and because I think it is necessary for the work I want to do with trade unions. At the same time, I realize that it is my very scientific credentials, combined with a reputation for being understandable and generally sympathetic to unions, that keep the invitations to speak (and the checks) rolling in. So while economics as science silences the participants and gives all power to the speaker, to present economics as simply structured and intelligent conversation about the economy threatens my ability to have my views heard.

Over the past ten years I have given over 100 talks to trade union and related groups. I have tried to walk the fine line between being an economist who can help these people think about concrete problems and being a critic of economics as it is currently practiced. I believe I have found some techniques that work. I haven't always practiced them. For instance I once presented econometric results on school privatization to a Washington, DC forum for public school teachers. I was invited back the next year but was gently asked to leave the econometrics at home. I once gave a talk on public sector collective bargaining to an industrial relations forum, in which I tried to work out some new ideas about social movements. The head of a state teachers' federation, a friend of mine, began her subsequent remarks by saying that she didn't understand a word I had said and she would simply ignore my remarks and explain to the audience why the breakdown of negotiations was generally caused by elected officials needing a strike for political reasons.

These incidents are embarrassing. I have developed the following principles for "talking union," which have generally worked for me:

1. Know your audience.
2. Be partisan but not too partisan.
3. Tell a convincing story.
4. Challenge your audience.

I will discuss each of these principles, and then present summaries of two talks in which I use them.

Know your audience

Trade unionists are generally intimidated by economists. This is because of the two strikes I mentioned above and also because their experience with economists is generally as talking heads on local and national news shows or newspapers who generally oppose the union perspective on important issues. As McCloskey has long argued, economists are not especially good at conversation. Instead they tend to pontificate, berate, and belittle. A conversation involves knowing and learning something about the other person.

Peter Hart conducted a survey of union members and led eight focus groups for the AFL-CIO in the run-up to the 1996 elections. What he found was quite revealing. Unions cannot presume that the rank and file will support "Labor's" political perspective. I have found this in my own work with teachers' unions. Even in the leadership there are many who are eager to engage in and embrace the government-bashing perspective of the House republicans. In the focus groups Hart found that members neither recognize nor understand the political threat that the latest version of the New Right poses to working people and to organized labor.

Hart found four obstacles to the labor movement's attempt to mobilize members around its legislative and political goals. First is a profound disengagement from politics. Union members knew literally nothing about the agenda of the republican Congress, and were very cynical about both politics and politicians. Even more disturbing, most members had no firm ideological framework for processing information about politics and public policy. While economic insecurity was their dominant concern, there was no ideology which linked economics, politics, and government. Often, trade unionists reach for conservative explanations of these links, largely because these are the most readily available. When presented with a progressive agenda, participants in the focus groups tended to agree with it, but they also tended not to come up with it on their own.

Third, partisanship is viewed negatively. Both major political parties are seen as failed institutions, and more or less equally so. I found this out myself when, again speaking to a teachers' group, I was criticized for making critical remarks about Bob Dole. This was a week before the presidential election of 1996, and I was referring to Dole's teacher bashing at the republican convention. Nonetheless, my remarks were seen as unnecessarily critical. Union members literally believe that *neither* party represents their interests.

Fourth, members often look at union leadership as just another boss. "The union" is often equated with the leadership, not the rank and file. The profound alienation from the political process is mirrored by a similar alienation from trade unions.

Most of my talks have been to local and national leaders, but I have also spoken many times to rank and file. In the former case it is important to acknowledge that any message that we develop together has to be convincing to a rank and file which will support a progressive position if it is developed carefully, but does not easily come to such a position on its own. When speaking to a more general audience, I am careful not to wrap my message in the mantle of the trade union leadership or the historical commitments of the labor movement, since these are generally neither understood nor accepted.

Be partisan, but not too partisan

Partisanship here is referred to in a class sense, not in terms of political parties. It is important for union members to believe I am generally "on their side." Now this is tricky since they often don't know what side they're on, or they are on many sides simultaneously. But there are a few things that generally work.

If I have done the exercise in Rawlsian justice I can refer back to that. Income inequality is growing and we share a sense that there is something "unfair" about this. Inherited wealth and property are rewarded too highly, hard work and skill not highly enough. Economics is often obfuscation in the interests of the economic elite. These are things I both believe and have found to be effective in winning trust.

But if I seem to be too partisan, I am taken as a shill. This is, again, the fine line that has to be walked. There is featherbedding in union workplaces, especially in the public sector. Many trade union leaders are content to preside over the withering away of their membership so long as they can retain their perks. And so forth. I don't necessarily bring these things up, but I don't try to explain them away when someone else does.

Tell a convincing story

As Klamer and Meehan write elsewhere (Chapter 5) in this volume, story-telling is much more important in everyday economics than it is in the academy. And despite the postmodern critique of narrative, I have found that a very traditional narrative structure works best. I generally follow the old public speaking rule: tell 'em what you're gonna tell 'em, tell 'em, and tell 'em what you told 'em. The story should have a beginning, a middle, and an end. It should have some tension in it that is resolved or at least a resolution can be posed. There should be heroes and villains, or at least good guys and bad guys. There should be pictures.

Here's where economics training actually comes in handy. A graph which clearly illustrates a point is worth at least 350 words. One of my favorite graphs shows real median weekly wages from 1950 to the present (see Figure 15.1). The graph represents a roller coaster with a steep climb to 1973 and then a more or less continuous fall. I use it to illustrate the real pressure on living standards that the average American feels.

The central theme of the story I tell to accompany this picture is the crumbling of the social infrastructure that supported the substantial gains made by unionized public and public service employees in the 1960s, 1970s, and 1980s. The dramatic slowdown in growth in the mid 1970s has been accompanied by an historically unprecedented upward redistribution of income and wealth. Given the prevailing cultural and political context in the United States, those most hurt by these economic changes tend to blame marginally better off working people rather than corporate power. That this resentment has a material basis is indicated by another graph (not shown here) which compares average salaries and teacher salaries in a particular school district. I don't have to go into Keynes' stress on relative wages or Veblen's work on consumption to drive home the point. Even if incomes for financial speculators and corporate CEOs rose more dramatically and to astounding heights, it is teachers and other public sector workers who are likely to receive the wrath of their neighbors, since they are real, whereas Michael Milken and Bill Gates might as well be cartoon characters.

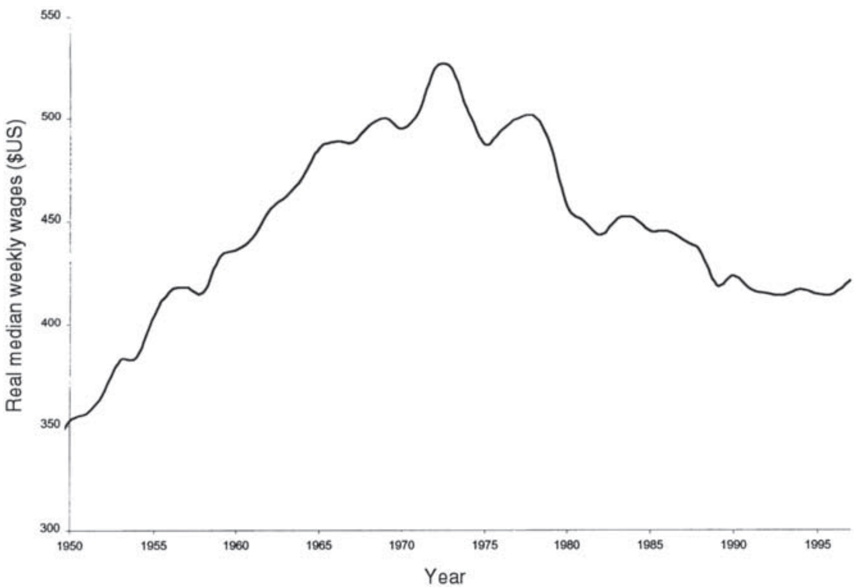

Figure 15.1 US real median weekly wages, 1950–97

This right-wing populist interpretation of what I call (following Wallace Peterson) the "Silent Depression" and the "Great Redistribution" (my term) is reinforced by the "Demographic Revolution." In most urban and many suburban areas in the United States the schools "look" much different from the schools that the aging European-descended populations remember. The powerful dynamics of age and race play out in many debates over public spending and public need, although often below the surface.

Finally, there *is* a "crisis of the family," although perhaps not precisely the one that Dan Quayle or Newt Gingrich see. With many fewer full-time homemakers, and with the "no-income family" as the fastest growing family type, schools are looked to for more services while parents increasingly have neither the time nor the money to support such services.

Public teachers' organizations are in fact hated, and this hate comes from very real processes of socioeconomic change, but these changes are generally viewed through the lens of right-wing populism. I try to encourage public sector unions to acknowledge this reality while providing a different lens through which to view it. These pictures seem to help.

Challenge your audience

This illustrates my last point, and reinforces the second clause of point 2 above. Trade unions, especially in the public sector, have done a reasonably good job of delivering the goods to their members. They have done a poor job of educating that membership and building a broad working-class alliance. The average working person loves the people who teach their children and hates teachers' unions. This is no more contradictory than most of the other beliefs that people hold. NEA (National Education Association) and AFT (American Federation of Teachers) can argue all they want that teachers are not overpaid relative to others with equivalent educations. (This is true by the way, even after adjusting for the shorter work year.) They will still be resented because they have not shared in the downward income slide, and because their working conditions have improved while most Americans' have deteriorated.

So know your audience, make them feel like you are on their side but not uncritically, tell a good, illustrated story, and challenge them to rethink some of their positions: this is the formula I have tried to use. I will illustrate it now in more detail, drawing on a talk I give to local teachers' union presidents on school privatization, and another to international groups on trade, employment, and wages. The language I will use here is the language I use in my talks and presentations. It is not the usual voice of the academic economist.

Current example: school privatization

The day after the Hartford, Connecticut school board canceled its contract with EAI, a for-profit school management company, the front page headline in *The New York Times* read

"Lure of the Education Market Remains Strong for Business." There are now many public education workers and union leaders who have experience with the continuing business push for a share of what the privatization consultants call the $340 billion a year education "industry." The abdication of fiscal and moral responsibility of the radical right wing in the US House of Representatives continues, with New York state alone expected to lose over $1 billion in federal aid to education. Local representatives of the radical right continue to wreak havoc, with special tax giveaways to business already passed and deep education cuts hidden in various state budget proposals.

Moreover, the economic and demographic trends that the radical right has played on continue unabated. Median real wages continue to decline, making teachers' salaries, which are hardly exorbitant, look out of line to deindustrialized blue-collar workers and downsized middle managers. The racial and ethnic mix of the schools continues to change in ways that frighten an aging white population in a country which may be more racially polarized than at any time in the last twenty-five years. And the crisis of the family continues unabated, with hard-pressed parents working ever harder to stay in place, leaving less time for the schools and little sympathy for teachers.

If you want a rosy scenario you should invite a marketing professor not an economist. Yet not all is bleak. Ironically, the quasi-Nazi campaign of Pat Buchanan brought an ugly truth to light: that the behavior of large, globally oriented corporations is partly responsible for the plight of the US worker. The entire US trade deficit can be accounted for by goods and services that used to be made in America but are now produced in the foreign-owned subsidiaries of US-based corporations. Minus the racist rhetoric, this has been the analysis of progressive democrats and trade unionists since the early 1970s, but the Wall Street wing of the democratic party has effectively quashed that message.

Buchanan was quickly swept under the rug, but he did us a service by focusing the public's attention on corporate greed. There was a time when corporate greed did not hold a lot of menace for public sector workers. They might sympathize with the plight of their brothers and sisters in the private sector, but were relatively immune, since public employers were not union-busters. We know this has changed. Capital mobility and downsizing are as much a threat to public workers as they are to workers at AT&T or IBM.[1] Entire communities are susceptible to sudden loss of jobs, or to a decision by a major business to move elsewhere. Communities, states, and nations are being played off against each other in a giant bidding war that undermines local tax bases while at the same time penalizing smaller businesses that don't have the leverage to get special tax breaks.

Still, public sector workers face a unique situation. Louie Anderson, former chief negotiator for the United Food and Commercial Workers Union, once described collective bargaining as follows: "You peek into the employers' bank vault to see how much he's got in there. Then you run in and take as much as you can and run out fast before the door gets closed."

This is not how public sector collective bargaining happens. Private sector workers don't have to justify their demands as being consistent with good public policy. They just have to demonstrate they have the muscle to enforce those demands. Even where they have the muscle, public sector workers often cannot use it without offending state and local taxpayers who cover much if not most of their salaries.

Public sector workers are forced to argue that their demands for better pay, benefits, and working conditions are not just good for them, but good public policy too. The UAW doesn't have to claim that eliminating outsourcing in the auto industry is good for America. But this is precisely what public sector unions must do.

There is a radio ad placed by the United Teachers in New York in which a teacher talks about class size, out of date school books, and her desire to be paid what she is worth. The appeal is to the public's sense that more money for education in general and teachers especially makes sense for society, not just for the teachers.

I find the ad appealing but then I'm biased and public relations is not my field. But the appeal to community is, I believe, the most effective way to frame our message at this moment. And while such an appeal should be mainly positive, we should not shy away from pointing out the ways in which unconstrained corporate capitalism undermines community. And we need to be clear that the problem is not just in the private sector.

Are there people for whom the current level of taxation is burdensome? I will talk about this more in a few minutes, but the answer must be yes. Does this mean that the state cannot afford a decent public school system in which teachers and other school workers are paid decent salaries? The answer, of course, is absolutely not. The complaints that such an extraordinarily wealthy country[2] cannot afford decent public schools and public employees who are paid decent salaries is ludicrous. But it is consistent with the notion that profitable corporations must lay off thousands of employees to remain competitive or exorbitantly prosperous. Universities cannot afford to guarantee decency to the people who really make education work.

The ideology of downsizing, of cutbacks, of union-busting destroys community. It presumes that it is the health of the corporation that really matters, and that we can have prosperous communities only with profitable corporations. This is precisely backwards.

I don't always agree with former labor secretary Robert Reich, especially about policy, but I find much of his analysis of our problems convincing. I would like to quote him at some length, from a recent interview.

> During the next few years, this country is going to be forced to do some very hard thinking about what it means to be a nation, and also what it means to be a community. The budget battle that's going on now in Washington is just a small piece of that larger public discussion. Ultimately we have to decide whether we are no more than an economy sharing a common currency in which the primary glue binding us together is the business transactions we do with one another, or if we are still a society in which we have special obligations to one another as citizens.
>
> (Reich 1997: 6)

Karl Marx argued many years ago that capitalism has precisely this effect: all human relations are turned into business transactions. While Reich is no Marxist, this particular observation carries much contemporary significance. Reich continues:

> What's the purpose of a corporation? Is it merely to maximize shareholder returns, or does a corporation also have special obligations to its employees and the communities in which they live? If it's only to maximize shareholder returns, then the burden of proof falls upon CEOs to show how meeting that goal is likely to improve the standard of living of all people in our society. ... Corporations are creatures of law. They don't exist in nature. We have decided to organize them in a certain way. It could be that in this era of electronic capitalism, we have to think creatively about a slightly different form of organization, which maximizes shareholder returns, but also living standards for a much broader segment of our society.
>
> (Reich 1997: 7)

Of course it would help if Reich's friend the President would show more backbone and if the interests of financial capital were not so obviously dominant in the Democratic Party. But let's face it. All of us would like to benefit from corporate largesse. Many of us have employers in our communities who are decent corporate citizens, so we are reluctant to be painted as antibusiness. But unless we are willing to address the same issues that Pat Buchanan is, and that Reich, in a more sophisticated way, is, we will not be able to take advantage of the opportunity that the current political moment offers. It is ironic that corporate greed is a more potent issue for the extreme right wing than it is for liberals or the Left. Even mainstream corporate America has noticed. A recent *Business Week* editorial argued that corporations, like churches or schools, are essentially part of civil society and need to do more than just boost their stock prices.

Rather than asking how we can reorganize the schools to benefit the economy, we should be asking how we can reorganize the economy to benefit the schools.

The current organization of the US economy rewards a narrow slice of the US population – those at the very top of the income distribution. Pat Buchanan knows this. It is time for us to stop denying it. We don't need to follow his prescription, and most of us will reject his views on social and cultural issues. But he knows what the people know: that which benefits corporate America does not generally benefit the people.

What does putting community before corporations mean in practice? More than we can possibly go into here today. For us, it means reclaiming the idea of the public workers movement as a movement for social change. This is a return to our roots but it is not an idea that most of our current membership understands. For a long time we have benefited from the status quo. In our own interest we must rediscover ourselves as a force for social change. We must also try to understand and channel the anger and pain that working people all over this country feel, rather than so often acting defensively.

For example, let us take the delicate issue of property taxes. As former Senator Russell Long once said, the average American's view of taxes is "Don't tax you, don't tax me, tax that fellow behind the tree." Or as Edina Monsoon, one of the characters in the situation comedy "Absolutely Fabulous," once said, "Just tax the stupid people." No one enjoys paying taxes. But the property tax can be especially burdensome, particularly in tough economic times. What makes the property tax attractive from a tax collector's point of view – its invariability relative to economic conditions – makes it a burden for the taxpayer, since while income and sales taxes go down when economic growth stagnates, property taxes do not.

In most states, the property tax is increasingly important as a source of school revenues. Whereas state aid and property tax revenues made roughly equal contributions in the mid 1980s, local property taxes account for roughly three-fifths of all school spending in most states today.

Increased reliance on the property tax is not a winner politically, since it shifts the debate over school budgets more completely to the local level, where resentment of teachers is likely to be a hotter issue than it is in the capitol, and property taxes are especially a burden for the elderly who may be predisposed to oppose reasonable school budgets already. It is of course true that replacing the property tax with other state-level taxes is not feasible: in New York, to replace the property tax would require all other state taxes to rise by 41 percent. But it is also true that continuing the trend toward reliance on the property tax will almost surely lead to grassroots taxpayer revolts.

Of course tax burdens vary from city to city and town to town. There may be some places where the tax burden is egregiously high. But overall, the state and local tax burden is not especially high, and property taxes are not outrageous. Unfortunately in this case, economics does not always determine politics. The perception that property taxes are outrageous, just like the perception that teachers are generally overpaid, may be incorrect, but it is perceptions and not "reality" that count. Simple opposition to property tax relief, or just pointing out that a complete shift away from property taxes as the school funding base is impossible, is dangerously inadequate.

In my opinion, the best strategy would be to emphasize 50–50 state and local funding. This implies support for modest property tax relief IF such relief is coupled with modest increases in other taxes or savings generated in other parts of the state budget. Merely pointing out to people that their property taxes really aren't all that high is a good way to lose disastrously.

And a shift away from the property tax can be supported on the grounds that it builds community. Why should children in any one town suffer if property tax revenues decline due to a major employer fleeing to Mexico? More state aid would spread the burden of paying for such corporate strategies, and supporting a shift to state rather than local funding for this reason would highlight the real reasons for our shrinking local tax base.

This could be part of a project of reversing the radical right-wing shifting of fiscal and operating responsibility from the national level to the state and from the state to the localities.

While there is some truth to the notion that Washington bureaucrats are out of touch with what is happening in the provinces, it is also true that the logical end point of the right-wing strategy of devolution is that each individual would be solely responsible for themselves: the notion that we are a society in which success and failure depends on our own efforts *in the context of* a web of supportive institutions and relationships would be completely thrown out the window. Is the United States a community, or merely a collection of individuals tied together through business transactions?

Ultimately, of course, we need a new Congress. Even if your favorite union officers were governor and majority leader of the State Senate we would be hard pressed to increase state aid to schools when Washington is threatening massive cuts to education. Our job this year is to be sure our membership understands the depth of the crisis we face, that we reject the notion that giving more to those who already have too much is the way to solve our problems, and that we elect leaders in our towns, our cities, in state capitols, and Washington, who will secure the health of our communities before worrying about increasing the wealth of the already rich.

Is this excessively "partisan?" I don't think so. Most economists hide their politics behind a facade of science. For me, being an economist means I have certain tools and skills that I can use to further the causes I believe. It does not mean being a "disinterested" scientist. The dangers of economic science and its effects on working people are nowhere as apparent as in debates over trade. Trade unionists "know" that trade liberalization and capital flight are bad for workers. Yet their beliefs are ridiculed.

Another example: unions and free trade

I often begin trade-related talks by distributing and having the audience take a world economic geography quiz. Again, my purpose is to help them see that their own insights into economics are valid, but first I want to establish my superior knowledge and understanding. A geography quiz is very effective here.

Having done that I discuss the theory of comparative advantage. There is usually someone in the audience who remembers the elements of Ricardo's theory. In a formal labor education setting I would actually develop Ricardo's cloth and wine example with a few rough numbers. This would show that specialization raises world output even though England is superior in both lines of production. I would then give the historical context for Ricardo's theory, which I will do here in a moment. In a public presentation I would simply try to convey the essence of the theory, usually with the old professor and secretary story.

In this case the story happens to be true. I am both a better typist and a better teacher than my secretary. But more work in total gets done if she specializes in typing and I specialize in teaching and we trade. This story is fairly intuitive, and as long as it is developed relatively quickly, no one is angered by its sexist implications.

Which I then immediately demonstrate. Because, of course, I get to specialize in the higher-paid occupation. And that initial difference gets exacerbated. Being a university professor gives me access to other income-earning opportunities such as consulting. It sharpens the mind, at least when the students are good. Professional development is available to me in greater amounts than is true for my secretary.

So comparative advantage tells something important about the gains from specialization but little about the distribution or dynamics of those gains. Free trade became an article of faith in Anglo-American economics because, since English manufacturers no longer needed protection by the period of the birth of modern economics, they wanted to and could dominate world markets. Tropical agriculture and non-food agricultural imports did not compete with domestic production, and the rapid expansion of population and wealth in England provided sufficient markets. Such ideas are nowhere near as influential in Germany and Japan, which industrialized in response to England, and where the state and various social institutions, not free trade, were seen as the key to prosperity. A clear article describing these issues is James Fallows' (1993) "How the World Works," which I have sometimes distributed in a labor education setting.

Of course free trade in the British empire ruined ancient crafts and impeded the growth of industry outside the metropolis. Germany, the United States, and Japan – the most successful "late" industrializers – practiced protection along infant industry lines, as had England in its mercantilist period. Free trade remained popular in England until the Depression, when it was displaced by imperial preference. In the United States, free trade displaced protectionism during the Depression. The collapse of the world economy had led to beggar-thy-neighbor strategies – tariffs, subsidies, currency depreciations – as each major country tried to export its unemployment. The new democratic coalition of 1936, grounded in capital-intensive, international production and financial companies, shifted US policy towards free trade (Ferguson and Rogers 1984). The historically remarkable position of the United States in 1945 allowed it to orchestrate movement toward freer trade outside of agriculture and textiles during the 1946–73 "Golden Age." Free trade remains a potent ideology today despite the widespread practice of protection.

Potent and disabling. Trade unionists and others who question the wisdom of ever freer trade in goods, money, and property are greeted with condescension by economists. Two examples should suffice. Even though textbook writers acknowledge that free trade does not necessarily promote economic well-being, that it increases overall income is usually sufficient to lead to ridicule of those questioning orthodox trade policy. According to one popular undergraduate textbook, the problem is "In essence, the level of economic knowledge is not sufficiently advanced. Politicians will listen to economists only if the voters are listening as well, but too often, deafness reigns" (Brown and Hogendorn 1994: 209).

Frank Graham, one of the leading Chicago economists of the early half of the century, was more forceful. He described comparative advantage as

> the universally valid analysis underlying the argument for free trade. Time, place, and circumstance are irrelevant thereto. Whether a country is rich or poor, big or little, old or new, with or without high standards of living, agricultural, industrial, or mixed, makes no difference. It is a matter of mathematics, quite independent of environment, that there is an *inherent* gain in the specialization along the lines of *comparative* competence which unshackled trade tends to develop. There is no possible refutation of this analysis. Advocates of restrictive trade policy must, in logic, accept it as a fact and attempt to show that the gain may be outweighed by economic or other considerations of superior importance. ... The *presumption* is always in favor of free trade, since the gain therefrom is certain, and the loss, if any, dependent upon incidental circumstance.
>
> (Cited in Irwin 1996: 224–25)

This kind of intellectual bullying is at least implicit in all orthodox discussions of trade. In order to validate the everyday economics that much of my audience brings to the table, it is important to point out the flimsiness in the comparative advantage story. But I also lay down a challenge. Trade agreements do sometimes prevent free rider problems. Competition sometimes shifts resources from less to more efficient industries, increases the variety of goods available, and allows for specialization promoting capital goods. Countries (or classes) in a weak competitive position may derive fewer benefits from trade, but protection, if it is not tied to a policy of adjustment, is a policy of despair.

There are three general problems with the free trade position which can be explained fairly easily to trade union audiences. First, as the above quote from Graham illustrates, it is an idealism. Political and social forces that determine a country's position in the international division of labor are just wished away. I illustrate this by going back to Ricardo's wine and cloth example. Harry Magdoff published a lovely article in *Monthly Review* in the 1970s that can be used to show that the division of labor between England and Portugal had little to do with comparative advantage and a lot to do with Portugal's need for British protection from Spain. Portugal signed a series of concessionary trade agreements with England between 1642 and 1703, which put the Portuguese in an increasingly dependent position and opened their empire, including Brazilian gold mines, to England.

So Portuguese cloth making was smothered, capital flowed into wine making (primary products) which the British promoted as an alternative to uncertain French supplies, English cloth making was stimulated, and trade deficits meant that gold passed to England, helping London become a bullion/financial center. Britain got to specialize in the more technologically dynamic industry.

Why Portugal anyway? Portugal, of course, had pioneered European entrance to the Indian Ocean economy in the sixteenth century. Both Portuguese and Spanish expansion can be usefully tied to Western Europe's balance of payments deficit with Asia and the Middle East. With little to offer in return for Asian goods, the Spanish sought a solution in pillaging the Americas for their silver and gold. The Portuguese solution was to set up a kind of Mafia operation in the Indian Ocean, controlling the critical passages at Aden, Goa, Colombo, and Malacca, and offering to let trade continue if they received protection money. (A map works especially well here.) The Dutch went the Portuguese one better and began taking control of luxury goods production, especially in Indonesia. The English adopted the best of Portuguese and Dutch imperialism, and added reorganization of the production of bulk commodities. So England is effectively dominant in Asia and the Americas by the middle of the seventeenth century. What contribution the empire made to the British Industrial Revolution is a matter of endless academic debate. But trade unionists find the connection between England's dominant position and its rapid takeoff between the middle of the eighteenth and nineteenth centuries plausible.

Just as plausible is the idea that Japan was the first Asian country to join the ranks of the industrialized because it retained its sovereignty and did not allow the reorganization of its economy according to lines dictated by the European metropolis. I use tables to show that by the beginning of the twentieth century China and India were highly oriented toward Western trade while Japan's trade was roughly balanced between Asia and the West. Japan also was able to avoid becoming specialized in primary production. Thus independence from the European-sponsored reorganization of the world economy and political/military strength allowed Japan to become itself a metropolitan power in Asia.

The speed with which the United States and Germany gained on England between the American Civil War and World War I is striking. And this was largely a product of protectionism, the development of the multiproduct and global enterprise in the United States, and the development of bank-led industry in Germany.

What is generally believed to be natural and efficient turns out to be historically created in the context of colonial and nationalist rivalry. As Magdoff argued, we tend to fetishize markets and prices, failing to see the market as merely an instrument of existing institutions, the product of politics and culture.

So comparative advantage can't really account for the pattern of trade between England and Portugal, it doesn't explain how England got to be number 1, nor does it explain how the United States, Germany, or Japan caught up. This hardly seems to be a theory worthy of the arrogant adulation given to it by economists.

Having put comparative advantage in its proper place, I can then move on to discuss whatever is the most important trade issue for the particular audience I have. They are now able to appreciate why economists see specialization and trade as a good thing, but also see the class and national interests often lurking behind the theory of comparative advantage.

Enrollment in undergraduate economics courses in the United States has declined in recent years. For those of us who find mainstream economics to be mostly apologetics, this is a good thing, even when it causes us a bit of job insecurity. But economists remain potent in the public arena, if only because all officials and elected figures like to have access to credentialized people who will give them legitimacy for what they want to do in any case.

Things are not always what they seem. Although I have been critical of contemporary economics in my academic work, I have been able to use my professional credentials to educate trade union and other popular audiences on the major economic issues of the day. I have done this by entering into conversation rather than talking at people, being partisan but not a shill, thinking of economics as story-telling not science, and challenging my audience. Hey, it works for me!

Notes

1. I often say "us" or "we" instead of "public workers" as I am a member of the American Association of University Professors.
2. I usually refer to the particular state or city in which I am making the speech.

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