

GLOBAL DEVELOPMENT AND ENVIRONMENT INSTITUTE

WORKING PAPER NO. 00-06

**Telling Other Stories:
Heterodox Critiques of Neoclassical Micro Principles Texts**

Steve Cohn

August 2000

Tufts University
Medford MA 02155, USA
<http://ase.tufts.edu/gdae>

Telling Other Stories: Heterodox Critiques of Neoclassical Micro Principles Texts¹

Steve Cohn

scohn@knox.edu

(Draft Copy: Not for Quotation)

I. The Need for Critique

“Part of the (ideological) service (of economics) consists in instructing several hundred thousand students each year. Although gravely inefficient this instruction implants an imprecise but still serviceable set of ideas in the minds of many and perhaps most of those who are exposed to it. They are led to accept what they might otherwise criticize; critical inclinations which might be brought to bear on economic life are diverted to other and more benign fields. And there is great immediate effect on those who presume to guide and speak on economic matters. Although the accepted image of economic society is not the reality, it is what is available. As such it serves as a surrogate for the reality for legislators, civil servants, journalists, television commentators, professional prophets—all, indeed, who must speak, write, or act on economic questions.” (John Kenneth Galbraith, *Economics and the Public Purpose* [1973] p. 7).

Currently, more than one million students take principles of economics classes (introductory micro and macroeconomics) annually in the United States.² These courses will be the main contact with formal economic theory for most undergraduates³ and will

¹ This paper grew out of a workshop co-sponsored by the Global Development and Environment Institute (GDAE) and the Department of Economics of the University of Massachusetts at Amherst in the spring of 2000. (See Appendix 1 for a description of the workshop.) About 25 people participated in the on-site workshop over its 15 week lifespan, and more than 50 people were part of an on-line discussion list associated with the workshop. Space limitations preclude thanking all of the folks whose comments flowed indirectly into this paper. Special thanks is due however to Yahya Madra, the workshop’s research assistant. I’d also like to thank GDAE and Knox College for financial support. An earlier version of this paper was given last summer at a conference in London sponsored by the Association for Heterodox Economics.

² John Siegfried, secretary-treasurer of the American Economic Association, estimates that there were 1.36 million students enrolled in introductory economics courses in the U.S. in 2000 (Siegfried, Spring 2000, p. 203).

³ Salemi and Sigfried (5/99) calculate that 44% of all students will take an economics course in their college career, while less than 3% will major in economics (p. 355). In 1980, 59% of all econ enrollments were in principles courses, 41% in advanced courses (Siegfried and Wilkinson, p. 136). Total principles enrollments were 10 times larger than the next best enrolled economics course.

influence how they think about economic issues.⁴ Only a few percent of all students studying introductory microeconomics will likely use a textbook that seriously challenges the neoclassical paradigm.⁵

Even professors critical of neoclassical theory tend to adopt mainstream textbooks when teaching micro principles. These instructors usually include comments questioning neoclassical theory in lecture and assign some readings from alternative paradigms. There are several reasons for this choice. First, there are relatively few non-neoclassical principles texts currently in print. More importantly, many heterodox professors feel a need to teach students the neoclassical paradigm in order to prepare them for upper level economics courses or business school classes. Others feel it necessary to teach and critique neoclassical intro texts in order to prepare students to "talk back" to texts in the future. Some heterodox professors teach in neoclassical departments where textbook adoption choices are made as a group. Others (especially untenured professors) feel subtle pressure to conform to colleague expectations in "core" courses.

The challenge of "teaching against the text" is extremely difficult. The need to "cover the text's material" constantly threatens to crowd-out critique. Like the major cereal producers who fill-up supermarket shelf-space with multiple variations of themselves, the neoclassicals' canonization of standard material precludes attention to the competition. This phenomena asserts itself at the curricular level as well, where core "(neoclassical) theory courses," applied classes, and mathematical and statistical course requirements have managed to crowd out topics like economic history and the history of economic thought.

While the textbooks' formal presentations of the mechanics of neoclassical theory (indifference curves, etc.) are only partially retained by most readers, the texts' project of teaching students "to think like economists" is relatively effective in establishing a language, a system of metaphor, and overall framework for posing economic issues.⁶ It is this "framing" or paradigmatic lens that needs critique.

⁴ Based on survey results from students taking introductory economics, for example, Whaples (Fall 1995) writes, "Learning economics did seem to change many students' minds about what is fair, convincing them that market outcomes are equitable." (310)

Walstad (1997) found that respondents who scored high on an index of economic knowledge were more likely to: favor leaving responsibility for monetary policy to the Fed, oppose taxing business to reduce the federal budget deficit, oppose increasing government spending for jobs as a way to stimulate economic growth, oppose government price controls on oil and gasoline prices during a Mideast crisis, and oppose setting import restrictions as a means of reducing a trade deficit. Walstad also found that college course work in economics had a lasting effect on economic knowledge scores. See also Saunders (1980).

Paul Samuelson, the proud father of the modern principles textbook, has been quite aware of its political and ideological impact, commenting, "I don't care who writes a nation's laws, or crafts its advanced treaties, if I can write its economic textbooks." (Mankiw, p. ix).

⁵ Because textbook sales are proprietary data, it is difficult to construct market shares. Aggregate data, and private communications with authors, however, suggests the non-neoclassical, share is very low.

⁶ As Bruce Roberts writes, "...the mathematical abstractions of Arrow-Debreu models pose less of an obstacle to a truly Marxian vision than the more homely attitudes encapsulated in the phrase 'thinking like an economist'—the real educational goal of every basic economics course. The 'spontaneous ideology' of

There are many excellent collections of multi-authored essays critical of bits and pieces of neoclassical theory that are reasonably accessible to beginning students. There are also many "readers" that explore the implications of different economic paradigms for public policy debates. These materials are frequently assigned as reserve readings in introductory courses taught by heterodox professors, but are often judged less important than the purchased textbook by students. Neither of the collections presents a unified critique that **runs alongside** a standard textbook. The essays are free standing and do not generally draw analogies between their topics.

While linkages can be supplied in class by heterodox professors, a text that offered a sustained critique (chapter by chapter) of a typical mainstream textbook could be very useful in helping students to construct an alternative framework for thinking about economics (or at least helpful in problematizing the neoclassical framework and inviting attention to alternatives)—and in making students more self-conscious about what "thinking like an economist" means.⁷

This paper explores what a critical commentary on micro principles texts might look like, examining what is to be critiqued and how to do it.

the discipline marks economics as a knowledge, a *savoir*, which, in Althusser's phrase, is always 'at the same time a *savoir-faire*—that is, the definition of a know-how-to-act-in-relation-to-this-knowledge, and its theoretical and social function.' ... (I)t is only a mild exaggeration to characterize neoclassical theory as mathematics *in the service* of inculcating 'appropriate' attitudes-in-relation-to society and economy—denying the asymmetries of social position, eternalizing the historically conditional in the form of 'natural' conditions, individualizing that which is collectively constituted, compartmentalizing the overlapping spheres of social life as the provinces of different specialties..." (Roberts 1996, 196). I'd like to thank Kenan Ercel for bringing this quote and Roberts' essay to my attention.

⁷ The only existing chapter by chapter critical commentary that I am aware of is Marc Linder's Anti-Samuelson (Urizen 1977). While quite insightful at times, the critique was generally limited to Marxist ideas and the voice was too strident to engage most American students. The work seems better suited for readers already somewhat conversant and sympathetic with Marxist ideas. Parts of some non-neoclassical textbooks and books comparing economic theories (such as Wolff and Resnick's Economics: Marxian vs. Neoclassical) can also complement mainstream texts and provide a critical perspective. But as these works were not designed as commentaries they don't generally offer a critique that runs alongside mainstream texts.

Steven Keen of the University of Western Sydney in Australia posted the text of his new book (*Debunking Economics: The Naked Emperor of the Social Sciences*, Pluto Press, Annandale, Australia) on the web in the spring of 2000. It is a very interesting book and while it doesn't attempt a detailed chapter by chapter critique of standard texts, it does try to raise methodological objections to key neoclassical arguments in the order they occur in a standard text. It is well written and insightful.

I have not read the book closely enough to comment fully upon it in this working paper, but hope to flesh out this footnote in the future. My current impression is that the text would be a difficult read for most undergraduates and would be hard to assign alongside a standard text. It would be better used in an upper level "paradigms debates" course or senior seminar in which students reflect upon competing schools of thought.

II. Outline of A Critical Commentary

Preliminary Questions

The logic of a critical commentary suggests the need to explore several issues. Is there is a "typical" or "generic" neoclassical microeconomics principles textbook? Is there enough common ground (or at least a common set of disagreements with neoclassical analysis) among heterodox economists to construct a shared critique? If there is a common ground, what is it, and how might it be conveyed to students?

I will not spend much time in this paper exploring the degree of standardization in neoclassical micro principles texts. My critique of neoclassical analysis will formally apply only to Samuelson and Nordhaus's *Economics* 16th ed. (hereafter SN). However, preliminary results from a workshop I directed last spring at the University of Massachusetts comparing six different neoclassical texts, suggests that the critique has much more general application.⁸ I'd welcome feedback as to whether my comments about SN would apply to the neoclassical texts others are familiar with.

I will spend a bit more time in the paper trying to demonstrate that there is much common ground among heterodox critiques of neoclassical principles texts.⁹ The agreement flows from common objections to neoclassical methodology. Different heterodox critiques often complement rather than contradict each other, as they explore different implications of their methodological grievances with neoclassical theory.

I will spend the bulk of this paper exploring the question "what is to be critiqued."

III. Structure of Critique: Overview

The paper's next six sections outline the logic I've found most helpful for structuring a critical commentary on micro principles texts in ways that afford common ground across heterodox paradigms. Section IV contrasts the subtexts that motivate and undergird neoclassical principles texts with the agendas of heterodox paradigms. Section V offers heterodox critiques of principles texts at the highest level of abstraction: raising epistemological objections to the texts' claims of scientific authority, holist objections to the texts' methodological individualism, dynamic objections to the texts' static methodology, and institutionalist objections to the texts' de-contextualization of economic life. Section VI downshifts the level of abstraction. It focuses on the

⁸ Informal conversations with textbook authors suggests that the review process employed by major publishers wrings out idiosyncratic variations in textbooks, forcing published authors to conform even more than they would voluntarily to stylized presentations. Aslanbeigui and Naples (1996, Rethinking, p. 2) report the same finding.

⁹ ICARE (the International Confederation of Association for the Reform of Economics) is attempting to promote broader coordination among heterodox economists at the institutional level. It might be productive for ICARE to organize a conference of heterodox economists focused on substantive and pedagogical issues related to principles courses. I believe GDAE is planning to organize internet resources to promote cross pollination amongst heterodox groups about principles classes.

heterodox objections to the structure of general equilibrium theory, critiquing the assumptions of: homo economicus, perfect competition, perfect information, and automatic full-employment. The analysis highlights how principles texts generally **note but ignore** problems with these assumptions when organizing economic analysis and recommending public policy.

Section VII focuses on heterodox critiques of principles texts' treatment of race and gender, distributional, and environmental issues. The critical commentary will use these subjects as threads to illustrate how the objections noted above reappear in different contexts. The goal is to weave a pattern of critique across different chapters. Section VIII addresses probably the most important part of the critical commentary. It critiques the "rhetoric" of neoclassical principles texts, attacking the key "stories," metaphors, and language used to embody and define neoclassical abstractions. Section IX contrasts neoclassical and heterodox approaches to public policy analysis. Section X offers some brief concluding remarks.

IV. Objections to Neoclassical Subtexts.

By "subtext", I mean the tacit assumptions underlying neoclassical analysis and the projects motivating it. Endnote 1 lists thirteen that seem especially important. I'll focus on two here: (1) The assumption that the goal of economic analysis is to facilitate economic efficiency and economic growth, and (2) the linked assertions that perfect markets do this best, real world markets do this reasonably well,¹⁰ and policy makers attempt this with great difficulty.

The paradigmatic and normative dimensions of these subtexts (e.g., the elevating of efficiency over equity concerns, and market over non-market activities) are obscured in SN behind a positivist façade. Critiquing this subtext is tricky. SN's initial focus on the concepts of scarcity, efficiency, opportunity costs, exogenously given tradeoffs, production possibilities frontiers, etc. is offered as a common sense way to "set the table" for economic analysis. But it is more than this; it's putting the table in a particular room (the marketplace), taking people's appetites as exogenously given, deflecting attention from other potential subjects, and so forth.

In the critical commentary I will illustrate why micro principles texts can be defined as much by what they aggressively exclude as by what they include. By introducing the ideas of political-economists like Fred Hirsch and Richard Easterlin early in the critique, by noting that economies produce people and distributions of power as well as goods and services, that capitalism creates as well as meets needs, etc., I hope to demonstrate the bounding and delimiting of economic discussion attempted in the early chapters of neoclassical texts.¹¹

¹⁰ Characteristically, the move from perfect to real markets is accomplished with the wave of a "magical hand".

¹¹ Debates over the definition of economics offer one venue for this kind of analysis. Feminist economists have been especially helpful here. GDAE's new principles text, *Microeconomics in Context* has a very

Let me illustrate what I mean by “sub”texts and tacit assumptions more concretely with a different and relatively minor example. In Chapter 1, SN write, “In the United States and most democratic countries, most economic questions are solved by the market” (8). The word “democratic” is a red herring here. It has no analytic function, but suggests (without any logical or empirical argument) that democratic peoples prefer markets, or that markets lead to democracies, or perhaps that the absence of markets leads to dictatorships, etc. The meaning is murky, but the subtext is clear, markets are good. The question of the relationship between political and economic systems is an important one, but the treatment here is ideological rather than analytical.

The specificity of neoclassical subtexts can be illuminated by identifying the alternative subtexts and tacit assumptions in heterodox paradigms. Among these are: a skepticism about capitalism and a desire to explore its full societal implications; a greater concern for equity issues than is common in neoclassical thought; a skepticism about the ability of market exchange to meet the full range of human needs, and a concern about the dangers of capitalism exhausting the environment. These concerns generate a different agenda for principles courses than that found in standard texts.

V. Basic Methodological Objections to Neoclassical Analysis

Despite the difficulty of engaging students, I strongly favor beginning a critical commentary with explicit discussion of epistemological and other methodological issues. If done right (and this is hard), the discussion can be exciting (as it illuminates previously hidden issues) and empowering (as it permits students to “talk-back” to otherwise authoritative texts).

1) Kuhnian Challenges to Neoclassical Theory’s Positivist Epistemology.

The point here is to assert the paradigmatic nature of economic discourse and to deny neoclassical theory the authority it claims as **the** voice of science. Rereading SN I was struck by the extraordinary number of times the text portrays neoclassical theory as scientific and Samuelson as a scientist. For example, Samuelson is described as “One of those rare scientists that can communicate with the lay public” (p. v). Elsewhere: “The ultimate purpose of economic science and of this text...” (p. 5), “Economists use the scientific approach to understand economic life.” (p. 6), “Economics is at its core an empirical science” (xxx). The intent is clearly to command belief. The impression is given that the text’s conclusions meet the canons of the scientific method—emphasizing empirical testing. There are sweeping claims for enduring truths expressed in the passive voice. For example, “History—at least economic history—has taught the world certain basic economic principles that have been learned and tested the hard way. Repeated recessions and inflationary booms have been the economists’ substitute for the chemists’ controlled laboratory experiments” (xxiv). “We have therefore chosen to focus on the

effective chapter criticizing neoclassical texts for conflating intermediate goods (such as GNP or aggregate consumption) with final goods (human well-being). Their text calls for discussion rather than assumption of what constitutes human well being and economic success.

central core of economics--on those enduring truths which will be just as important in the twenty-first century as they were in the twentieth. Microeconomic concepts such as scarcity, efficiency, the gains from trade, and the principle of comparative advantage will never lose their central role in economics as long as scarcity itself exists" (xxix). "You may have heard the saying, 'From each according to his ability, to each according to his need.' Governments have learned that no society can long operate solely on this utopian principle. To maintain a healthy economy, governments must preserve incentives..." (7). "Theoretical approaches allow economists to make broad generalizations, such as those concerning the advantages of international trade and specialization or the disadvantages of tariffs and quotas" (6). "From dozens of studies, economists have concluded that is *likely* that raising the minimum wage will reduce employment of low-wage workers" (6).

Interestingly, SN used to give greater attention to the paradigmatic dimensions of knowledge. Some earlier editions of *Economics* included a graphic that could appear as an antelope or a bird (depending on how one viewed it) to illustrate the plausibility of competing beliefs. Even in these editions, however, SN followed a "**note but ignore**"-strategy with respect to problems with positivism.

The purpose of raising epistemological issues in the critical commentary is to challenge neoclassical theory's "command of belief" and to open principles classes to the idea of paradigm competition.¹² The argument turns student attention to authors' subtexts and debates over the definition of economics and permits much subtler treatment of the positive/normative distinction¹³ than offered in standard texts.¹⁴

¹² The assertion of the paradigmatic nature of knowledge (and the social embeddedness of ideas) is a common starting point for many heterodox paradigms, such as Marxist, radical, feminist, institutionalist, and Post-Keynesian theory.

¹³ A key claim being that because the choice of paradigms is "subjective," "positive" analyses necessarily include "subjective" and normative dimensions. When economic knowledge is treated as the product of social contexts (reason "in context," rather than Reason in the abstract), it is easier to assert the need to give special attention to the concerns of the disadvantaged. This need reflects the expectation that social systems will tend to produce cultural and ideological justifications for their social order or social hierarchy.

In illustrating this point one can begin with examples of social ideologies that students see as self-serving, such as medieval notions of natural law that justified the divine rights of kings or serfdom, 19th century assertions of the "white man's burden" that justified colonialism, and karmic explanations that justify the subordination of women. One can then ask about the merits of contemporary socio-biological (Bell Curve) and supply side-economic explanations for economic inequality. Students may be outraged by the first three and encouraged to take a closer look at the fourth and other contemporary apologetics.

¹⁴ Aslanbeigui and Naples' review of the four leading principles textbooks in the mid-nineties (McConnell and Brue, Byrns and Stone, Baumol and Blinder, and Lipsey et al.) and two relatively innovative neoclassical texts (Stiglitz and Colander) found all 6 texts emphasizing a positivist methodology, though Stiglitz and Colander's arguments were more nuanced (Aslanbeigui and Naples 1996, p. 12). The texts all try to maintain their scientific authority. They deploy variants of the fact/value dichotomy to explain disagreements among economists. The implication being that the folks in lab coats agree on how the economy works, but disagree about what is a desirable income distribution or a reasonable trade off between equity and efficiency, etc. .

Raising epistemological issues also invites attention to how neoclassical textbooks attempt to convince readers of the validity of their claims. This attention invites critique of various positivist assertions (especially the cultivated impression that neoclassical claims are empirically validated like those of chemistry or physics).

The goal of epistemological critique is not to demonize neoclassical theory, but to treat it as one paradigm among many, setting the stage for raising other methodological critiques as listed below.

2) **"Holist" (H) Critiques of Methodological Individualism (MI).**

The attack here is on neoclassical theory's micro foundations approach, which treats the individual as an exogenous starting point (w/ exogenously given preferences and ways of making sense of the world). Different heterodox paradigms raise holist criticisms in different ways (through analysis of: "class structures and modes of production," "social structures of accumulation," systems of "patriarchy," patterns of "institutional reproduction," impacts of social contexts, etc.) but they all assert the need to study human behavior within the causal logic of a social system. The key claim is that a coherence exists at a higher level of integration than the individual.

Holist models stress both the infusion of social contexts into economic activity and the impact of the economy on social institutions. In a complicated way a holist approach facilitates discussions of power and "meta externalities" (the influence of economic practices on cultural and other social practices). The approach invites attention to the big issues in economic analysis, such as: the social basis of economic inequality, the social basis of environmental problems, the proper role of markets in a good society, the nature and desirability of different forms of capitalism, and the nature and desirability of alternatives to capitalism. These latter topics are less attended to in neoclassical texts, though there are frequently subtexts about them.

Holist critiques of principles texts tend to stress the need for historical analysis in order to understand the feedback flows and evolutionary logic of an economy. Holist theorists attack principles texts for their synchronic format and tendency to treat variables endogenous to a social process as exogenously given. They note neoclassical texts' frequent resort to ad hoc appendages and street corner sociology (e.g., people act altruistically in the family and selfishly in the economy, capitalism will solve the population problem through the demographic transition, the collapse of the Soviet Union proves that socialism can't work, etc.), in order to flesh out analyses constrained by methodologically individualistic principles (similar to the way neoclassical texts inevitably deploy non-positivist modes of argument to organize and assert their ideas).

Aslanbeigui and Naples found that all of the texts give some attention to problems with simple positivist models (e.g., noting practical difficulties with falsification or the interdependence between facts and theories). As with SN, however, the texts adhere to a "note but ignore strategy".

3) **Dynamic Objections to Comparative Statics.** To some extent the dynamic/static dichotomy is a subset of the H/MI distinction, but it is sufficiently broad (and conceivable w/o a holist approach) to merit separate attention. From a holist perspective, rather than focusing solely on hypothetical equilibrium conditions (in a time frozen world), the critique expands inquiry into how a social system evolves (a la Marxist analysis, radical analysis, classical political economy, and post-Keynesian analysis).

From an MI perspective the critique challenges the habit of comparative statics. The approach highlights the implications of disequilibrium (a la Post Keynesianism) and path dependency, both downplayed within neoclassical principles texts.

4) **Objections to "Misplaced Concreteness"¹⁵ (the problem of excessive abstraction).** This critique challenges the simplifications made (often for the purpose of mathematical tractability) in neoclassical texts. As all theories must simplify, the problem is not that details are missing, but that necessary information, material whose inclusion would often alter the conceptual framework organizing the discussion, is absent. Concern about excessive abstraction brings us back to "subtext" issues, as what a paradigm deems important to explain influences what is a permissible abstraction.

Marxist objections to the treatment of labor as just another input, feminist objections to reducing all relationships to exchange relationships, institutionalist objections to neglect of institutional contexts, environmentalist objections to treating nature as a commodity, all illustrate this kind of critique of principles texts. Neoclassical authors often write about Giffen goods (but not positional goods), insatiable and transitive utility functions, (but not inter-personal utility comparisons), how tastes and preferences may change with income, but not in response to advertising, etc. From a heterodox perspective, they abstract from the wrong material, or as Yogi Berra would say, they make the "wrong mistakes".

The problem of "excessive generality" is closely related to that of "misplaced concreteness". For some subjects neoclassical theory's use of a highly abstract, static, and MI-oriented approach is reasonable. The problem with the paradigm is its aggressive extension into areas for which it is inappropriate, especially vis a vis its simplistic policy implications. "If you have a hammer the whole world is a nail", and the neoclassicals would bludgeon all into an abstract commodity space.

To drive this point home, I like to use a variation of the "emperor has no clothes" story. The emperor has some clothes, the problem is his wardrobe is limited and worn in inappropriate circumstances. The same outfit appears in the bedroom as the boardroom, in the car market and the computer market, etc.

Neoclassical theorists often argue that many of the objectionable assumptions in principles texts (such as perfect information or homo economicus) reflect the need to

¹⁵ The term "misplaced concreteness" is highlighted by Daly and Cobb in *For the Common Good* (1994) and is a key concept in ecological economics.

simplify “high theory” for beginning students. “No one really believes in general equilibrium theory any more,” and “Everyone is aware of the aggregation problem in capital theory,” are common rebuttals to heterodox economists’ objections to principle texts. These rebuttals fail for two reasons. First, the texts generally use the “simplified” analyses, **without qualification**, to recommend public policies!¹⁶ Secondly, what principles texts retain from “high theory” reveals as much about what is the subtext of “high theory,” as what is accessible to introductory students.

The concepts of disequilibrium and positive feedback away from equilibrium, for example, are as comprehensible to undergraduates as introductory texts’ preoccupation with equilibrium. The former’s invisibility reflects neoclassical theory’s subtext about market optimality more than the relative complexity of the two concepts.

As Keynes wrote in the preface to the *General Theory*, “The ideas which are here expressed so laboriously are extremely simple and should be obvious. The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds” (Keynes viii).

We shouldn’t allow neoclassical economists to “run away” from their textbooks. The tracts educate well over a million students a year and lay the groundwork for much of educated opinion about economic issues. They should be defended or abandoned. In critiquing principles texts we should quote from the books themselves and if charged with attacking straw men, ask who is to blame: the textbook authors who built these scarecrows, or the photographers who took their picture?

¹⁶ While not taken from a principles textbook, the first quote below typifies the neoclassical mind set. It was taken from a key energy planning study by the Ford Foundation. “For the purpose of estimating how resources should be allocated and how the economic and political processes of society will allocate them in the long run, the competitive model is of great value—even in the face of market defects....in summary markets work well enough to allow us to predict trends on the basis of real costs and scarcities, and then to use long run cost minimizing models to predict responses to these prices” (Keeny 1977, 46-47).

More directly relevant to our concerns, SN write, “A general-equilibrium market system will display allocative efficiency where there is perfect competition, with well-informed producers and consumers and no external effects. ...The basic point to see is that, because prices serve as signals of economic scarcity for producers and social utility for consumers, a competitive price mechanism allows the best mix of goods and services to be produced from a society’s resources and technology” (270-271).

After subsequently discussing various “market failures,” they add, “After reading this list of qualifications, you may wonder about the relevancy of the competitive theory. Taken literally, no one could believe that a perfect and absolutely efficient competitive mechanism has ever existed. But the insights of the competitive theory still retain a great deal of validity.

The perfectly competitive model of the economist is like the frictionless vacuum of the physicist. In the long run, many imperfections turn out to be transient as monopolies are eroded by competing technologies. While oversimplified, the competitive model points to many important hypotheses about economic behavior, and these hypotheses appear especially valid in the long run.

“...put your money with the competitive model...and you will probably end up wealthier than the sophisticated skeptics” (275).

VI. Critiques of the Assumptions of General Equilibrium (GE) Theory

These critiques operate at a lower level of abstraction and generality than the methodological arguments noted above. Most of the objections are well known. They are cited below to illustrate how they will be woven together in the critical commentary.

The analysis will concentrate on objections to the assumptions of: Homo Economicus, Perfect Information, Perfect Competition, and Says Law (permanent full-employment). The objections will be linked to the methodological critiques noted above and to each other in order to generate patterns of critique across chapters. The goal of the analysis is to teach students to see different examples of critique as like each other, so that they can draw similar analogies and independent critiques on their own. One critique that will surface repeatedly, for example, is objection to the texts' "note but ignore response" to the unrealism of its assumptions.

Footnotes will often elaborate critiques with reference to their expression in different heterodox paradigms in order to give students an introduction to non-neoclassical schools of thought.

Rather than detail objections to each of the 4 assumptions noted above, I will discuss a few representative objections in order to illustrate the logic of critique in the commentary.

Homo Economicus (rational, isolated, self-interested man). Building on holist objections to methodological individualism, one line of critique attacks the texts' refusal to explore the socially constructed nature of tastes and preferences and the texts' portrayal of individuals as isolated monads with independent rather than inter-dependent utility functions. Both habits prevent neoclassical theory from exploring the waste of positional competition.

A second line of critique builds on objections to excessive abstraction, and over-simplification. Folbre (1994), for example, asserts the need for models of human action to include attention to issues of identity as well as self-interest in order to understand the nature of solidarity and aspects of collective action. Goodwin et al. assert the need for economics to attend to the impact of context on decision making, arguing that people may sometimes make more thoughtful decisions as citizens than consumers, even when deciding the same issue.

A third line of critique attacks the static image of the person present in most neoclassical textbooks, noting for example, that women's specialization in household production may be economically "efficient" in the short run and socially destructive in the long run (reproducing discrimination and gender inequality). The critique warns that markets may not always provide the best mechanism for addressing dynamic questions with societal feedback due to framing effects, marginalist constraints, and the problem of unintended consequences.

A fourth line of critique builds on epistemological arguments and explores the limitations in neoclassical theory due to its gendered history. Many problems with neoclassical textbooks, such as their lack of coverage of women's experience (e.g., insufficient attention to household production and non-market caring labor) and sole reliance on the "separative" rather than "empathetic"-self, reflect this legacy¹⁷.

Taken as group, many of the critiques challenge the image and subtext of market optimality underlying neoclassical texts.

Perfect Competition (PC) While there are separate sections in SN on monopoly and oligopoly markets, most summary statements about supply begin with the preface, "in a perfectly competitive economy." The commentary will try to draw attention to the assumption of perfect competition by abbreviating it "PC" and analogizing it to "political correctness" (i.e., it is the required or approved way for analysis within the neoclassical paradigm).

A key line of critique reflects concerns about excessive generality and misplaced concreteness. It highlights "details" like the widespread presence of economies of scale that challenge the textbooks' prevailing PC assumption of rising marginal cost curves. The analysis offers dual economy models in place of PC models and asserts the need for theories of pricing and investment appropriate to the reality of strategic competition amongst massive, capital intensive firms.¹⁸

Building on holist methodology, the commentary will also explore how large firms exercise power, replacing narrow neoclassical images of economic influence (monopoly firms' ability to reduce supply in order to increase price) with multi-dimensional models of corporate influence over consumer tastes and preferences, state policy, the media, and other institutions (such as universities and foundations). Reference will be also made to "Social Structure of Accumulation" models, which situate the nature of corporate organization, labor policies, inter-firm competition, etc. within larger political-economy models of capitalist development.

A third line of critique reflects dynamic objections to static models. A key point involves attention to the implications of path dependency. One argument emphasizes the ability of large firms to "create" as much as "discover" efficient development paths through the capture of learning curve cost reductions, scale economies, and other path dependent advantages. These mechanisms can tilt economic development towards

¹⁷ Paula England (1993) suggests that the "empathetic self" is capable of making inter-personal utility comparisons and criticizes neoclassical texts for failure to discuss such comparisons under the guise of positivist principles.

¹⁸ See Aslanbeigui and Naples (1996a) for how such arguments might be made in principles texts. See also Cohen (1996). Jim Crotty is currently doing some very interesting work putting similar themes into a global context for a critique of neo-liberalism.

technologies that permit powerful firms to capture economic rent on their firm specific capital.¹⁹

Once again a major goal of the critique will be to demonstrate that the textbook's presentation reflects the organizing logic of a subtext geared toward demonstrating market optimality. The claim that prices reflect marginal costs (and therefore "real costs"), for example, is a key part of the subtext and is maintained even in the face of data to the contrary.

Should attacks on the notion of marginal cost pricing be successful, I would expect the neoclassicals to shift to another definition of "real cost" pricing, but not to give up the claim that market prices have a special legitimacy. It is in fact this belief that allows honest neoclassicals to accept the textbooks' stories because they find them "basically" or "fundamentally" true, if not "exactly" true. This is not an unreasonable position, but it is a paradigmatic claim, not a "positivist fact."

Perfect Information The positing of perfect information is another assumption dictated by the optimality subtext. A key line of critique again involves claims of excessive abstraction and misplaced concreteness. In general equilibrium (GE) theory, all markets are treated as idealized, equilibrium markets overseen by an auctioneer. The information problems associated with the labor market (for example, incomplete contracting), credit markets (imperfect knowledge of future behavior), and product markets (lemons, etc.) are generally ignored or de-clawed.

Holist and epistemological insights about the social construction of information (as opposed to the "objective givenness" or objective production of information) are similarly ignored. Fusing attacks on perfect information and homo economicus assumptions, Levin²⁰ criticizes textbook economics for not paying greater attention to the role of emotion and habit in decision making. He offers an interesting feminist-post-Keynesian analysis that links socially constructed conventions to the likelihood of herd behavior and the potential for macroeconomic disequilibrium.

Post-Keynesian and Marxist critiques of textbook economics often stress the failure of static models to adequately capture disequilibrium realities. In GE theory, for example, no trades are permitted outside of equilibrium, so acknowledgment of imperfect information is subverted by the assumption that "mistakes" are corrected before they can alter equilibrium states.

Some neoclassical economists have made serious efforts to respond to some concerns about incomplete information. The New Keynesians' inquiry into the

¹⁹ Cohn (1997) applies this analysis to the shaping of nuclear power technologies by corporate development strategies rather than technically determined efficiency criteria.

²⁰ Lee Levin presents a nice synthesis of feminist and post Keynesian methodology in his analysis of investment decisions in "Toward a Feminist, Post-Keynesian Theory of Investment" in Kuiper et al. 1995.

implications of asymmetric information address aspects of some of the issues noted above. This research, however, has not altered very much the equilibrium and optimality presentation in SN's principles text. I would be curious to know if this "note but ignore" response is true for other principles texts. Preliminary results from the micro-critique workshop at U Mass this spring, suggest it is.

The neoclassicals tendency to declaw imperfect information problems is illustrated nicely by early attempts to respond to concerns about uncertainty by substituting probability distributions for perfect knowledge. The latter enabled neoclassical models to substitute expected values for actual values and protect key optimality subtexts. More recent strategies acknowledge "true uncertainty", but argue markets respond better to these problems than government planners. Again, this is a plausible though debatable judgment. It is not, however, a positivist truth.

Full-Employment The assumption of full-employment in micro principles texts falls out of the equilibrium conclusions accompanying the assumption of perfect information. I've listed it separately, however, because of its central importance to economic theory.

Some critiques based on imperfect information, such as Post-Keynesian critiques, raise employment concerns due to insufficient aggregate demand. New Keynesian analyses of imperfect information suggest a tendency for disequilibrium wages to cause excess supply in the labor market.

Critiques based on concerns about excessive abstraction and misplaced concreteness point to the need for economic analysis to move from abstract models to more concrete specifications, like those of the dual labor market. The analysis of unemployment in this case needs more embedding in larger social contexts.

As noted below, radical and Marxist theories of the profit rate, raise different rationales for the likelihood of unemployment. All of these critiques tend to challenge the laissez-faire conclusions of GE theory and lay the groundwork for a more activist, Keynesian-oriented macro policy.

VII. Three Final Threads of Critique

Along with the methodological critiques and objections to the assumptions of GE theory noted above, the critical commentary will try to run threads across principles chapters critiquing the textbooks' treatment of race and gender issues, distributional issues, and environmental issues. I expect these topics to be of special interest to students and illustrating general critiques with reference to them should enliven the presentation.

Race and Gender The critique takes off from epistemological concerns about the traditional erasure of women's experience from social theory and deployment of characteristically male modes of conceptualizing experience cited earlier. It also asserts

the centrality of race relations in American societal life and calls for economic theory to integrate race and gender issues into its analysis at a very high level of abstraction.

The analysis builds on holist critiques of methodological individualism (MI) and critiques of excessive abstraction that highlight the relevance of constructs like dual labor market theory for understanding race and gender discrimination. The analysis suggests the usefulness of thinking about discrimination in systemic rather than localized ways, that is thinking about interlocking patterns of reproducing institutions and beliefs, which are not perceivable with an MI lens.

It also builds on non-neoclassical theories of the profit rate (see below) that explore the potential usefulness of discrimination as part of divide and conquer strategies in the workplace.

Distributional Issues One of the surprising things our survey of neoclassical principles texts found this spring was a retreat from distribution theory, that is, a tendency for the texts to give relatively little attention to analyses of what determines “the return to capital,” or “economic profit,” or the split in national income between labor and “property income.” Some of this is due, perhaps, to uneasiness about the Cambridge controversy, though few books acknowledged this explicitly. A preference for focusing on issues of “efficiency” rather than “equity” and a reluctance to draw attention to competing theories (neo-Ricardian, Marxist, radical, etc.) may also be involved.

For the most part, principles texts appear to rely on general discussions of marginal productivity theory, some specific attention to labor market issues, and appeals to analogy for explanations of other “factor market outcomes.” “Economic profit” is generally treated as a residual or accounting error and is explained in an ad hoc and almost careless manner.²¹

Many heterodox critiques (e.g., Marxist, radical, and neo-Ricardian) emphasize the role of social struggle in determining wage and profit rates. The struggle may be over national bank policy and the target level of unemployment in the economy, union legislation, safety-net policy, restraints on capital mobility, the pace of labor in the workplace, etc., but the implication is that distributional prices are partly political. Heterodox theory also tends to embed wages and profits in an institutional context, replete with labor contours, dual labor markets, degrees of monopolization, socially determined expectations of expected returns, divide and conquer labor management strategies, etc.

Heterodox analysis questions the inherent optimality and functional legitimacy that principles texts tend to give market distributions. The critique challenges, for example, neoclassical economists’ frequent objection to comparative worth legislation by challenging the assumption that market wage differentials necessarily reflect marginal productivity differences.

²¹ For an especially thoughtful analysis of introductory textbooks treatment of the origins of profit see Naples and Aslanbeigui 1996.

I am not sure what the most effective critiques of the texts distributional stance is. I have a fairly good idea about how to handle labor market issues, but am especially puzzled about how to approach capital market questions, for example, what aspects of the Cambridge controversy would be appropriate topics for a critique. I look forward to hearing people's suggestions.

Environmental Issues I decided to weave an environmental thread throughout the commentary for three reasons. First, the subject seems of great interest to students. Second, many kinds of abstract objections to neoclassical theory can be illustrated with environmental arguments. Third, capitalism may pose a serious threat to the environment, or put differently, the environment may serve as a constraint on capitalism.

Heterodox critiques of neoclassical environmental economics can be grouped into three major categories: (1) criticisms that focus on the inadequacy of market illuminated tastes and preferences as guides to social well-being; (2) critiques that find environmental variables ill-treated as economic commodities; and (3) criticisms that find neoclassical treatment of equity issues unsatisfactory.

I'll offer only a brief illustration of each of these critiques. The issues are treated in a bit more depth in Cohn (1/6/97). Holist analysis of how tastes and preferences are constructed in capitalist economies raises numerous challenges to optimality claims for market organized use of natural resources. Fred Hirsch's *Social Limits to Growth* offers an especially incisive critique focusing on the wastefulness of positional competition. Ecological economists like Herman Daley frequently assert the uniqueness of environmental resources for cultural, spiritual, and functional reasons. The problems associated with using a static, methodologically individualistic and commodified view of human experience surface when attempting to address inter-generational equity issues within a neoclassical framework.

VIII. Telling Other Stories

As McCloskey and others have demonstrated, neoclassical texts employ a wider array of persuasive techniques than permitted by their positivist methodology. McCloskey tends to celebrate the "rhetoric" of neoclassical theory. The commentary will attack it, critiquing many of the stories told, the metaphors used, the analogies drawn, and the framing language deployed. The objection is to the substance, rather than form, of neoclassical rhetoric. McCloskey's critique tends to be just the opposite.

McCloskey and others have argued persuasively that paradigms often organize discourse through classic stories (analogous to the role Kuhn gives to shared exemplars). These stories define the otherwise ambiguous content of neoclassical abstractions. Though they tend to be treated as window dressing for the weak minded by neoclassical commentators, they are necessary for the theory to have a real world rather than simply algebraic content. It is only after the stories have been assimilated that the symbolic generalizations in neoclassical texts appear to be able to stand on their own. The stories

teach students how to think about economic issues and just as importantly how not to think about them (i.e., what to ignore when approaching economic analysis). They often smuggle into the analysis tacit assumptions and subtexts that would be harder to assert in more formal modes of argument.

A heterodox critique needs to deny the “naturalness” of neoclassical rhetoric, for example, to reveal the “theory-laden” rather than “descriptive” quality of the language used or to demonstrate the inappropriate assumptions hidden within innocent sounding metaphors. To be effective a critique must also offer compelling alternative stories that embody an alternative frame of analysis and convey an alternative subtext.

In the commentary I hope to demonstrate how the formal objections to neoclassical theory outlined in the first part of this paper apply to neoclassical rhetoric. While the commentary will begin with formal arguments (as this paper did), the bulk of the text will concentrate on deconstructing and problematizing neoclassical stories, as these are the parts of principles texts that usually stick with students.

Neoclassical Stories By neoclassical stories I mean metaphorical argument. The metaphors can take many forms, such as: (1) fictional and/or historical examples used to illustrate abstract ideas, such as the illustration of the benefits of trade and gains from specialization frequently adduced from the Robinson Crusoe story; (2) figures of speech such as the “invisible hand;” (3) classic case studies, such as the diamond-water “paradox of value;” (4) “parables,” such as the neoclassical theory of capital; and (5) thought experiments, such as the reverse engineering embodied in general equilibrium theory’s statement of what a pareto optimal outcome would look like.

I’ve listed below many examples of neoclassical stories in the order they often appear in principles texts. Suggestions for additions would be most welcome along with feedback on whether folks thought the “stories” below were common in principles texts and/or introductory class lectures.

- The story of Robinson Crusoe
- Mandeville’s bees and Adam Smith’s selfish butcher and baker Radford’s POW camp
- The image of the Invisible Hand
- Adam Smith’s pin factory
- Ricardo’s Britain (textiles)-Portugal (wine) example of comparative advantage.
- The image of Consumer Sovereignty
- Deployment of and subtle retreat from verbal pictures of Utility theory
- The Paradox of Value
- The Auctioneer
- Say’s law
- General Equilibrium Theory’s picture of the “Circular Flow”
- The Aggregate Production Function
- The Economy as Marketplace (supermarket) rather than workplace (factory)

- Product markets as grain markets
- Crowded "apple-pickers" & over-extended managers (as fictional examples to motivate the "Law" of Diminishing Returns)
- Capital as a "thing" (embodied roundaboutness)
- The Leaky Bucket (eternal Equity/Efficiency tradeoff)
- Economics as a "Tool Kit"

Problematizing Neoclassical Stories. The Robinson Crusoe (RC) story can be used to illustrate the commentary's strategy for critique. Neoclassical texts generally use the RC story to illustrate the benefits and natural occurrence of trade and specialization.²² Reflective of MI thinking, Crusoe and Friday live outside of society on a desert island without a history. Their behavior allegedly emerges as a natural response to their environment analogous to the way Adam Smith's characters or Radford's prisoners of war are led to construct market economies in neoclassical texts. The lessons drawn from the story are implied to apply to the more complicated world we live in.

The late Stephen Hymer wrote a brilliant critique of this story.²³ His analysis pulls together all four of our methodological objections to neoclassical theory. He notes that in the actual RC story by Defoe, you need to know the history of Crusoe and Friday to understand their economic relationship. Friday is essentially Crusoe's fawning servant. You also need to situate their behaviors within a holist analysis of the customs and beliefs of 17th century England. Crusoe, a part time slave trader, relates to the dark skinned Friday in a colonial manner. Crusoe's domination of Friday and their island's division of labor depends significantly on Crusoe's rifles and indoctrination of Friday in a colonial Christianity. The decisions that Crusoe and Friday make need to be understood in a path dependent rather than static context.

Similar objections can be raised to other neoclassical stories. For example, in *The Wealth of Nations* Adam Smith notes that the specialization he celebrates in the pin factory also leads to a deadening of the spirit, an observation usually left out of principles texts. Smith laments, "The man whose life is spent in performing a few simple operations...has no occasion to exert his understanding.... He naturally loses, therefore, the habit of such exertion and generally becomes as stupid and ignorant as it is possible for a human creature to become." (Bowles and Edwards 1993, 33) Excerpts from Braverman's *Labor and Monopoly* capital can be used to elaborate this dehumanization in chilling detail and to link its causes to the logic of a social system rather than the impersonal necessities of technology or the limitations of human nature. The end result is a challenge to Panglossian optimism about market outcomes.

²² Mankiw asks, for example, "Robinson Crusoe can gather 10 coconuts or catch 1 fish per hour. His friend Friday can gather 30 coconuts or catch 2 fish per hour. What is Crusoe's opportunity cost of catching one fish? What is Friday's?" (Mankiw 1998, 53).

²³ "Robinson Crusoe and the Secret of Primitive Accumulation," *Monthly Review* 23(4) Sept. 1971. Hymer notes, "The contrast between the economist's Robinson Crusoe and the genuine one mirrors the contrast between the mythical description of international trade found in economics textbooks and the actual facts of what happens in the international economy" (12).

Harry Magdoff's analysis of the geopolitical origins and path dependent implications of the historical division of labor between England and Portugal provides a nice critique of principles texts use of Ricardo's example to illustrate the logic and benefits of "free trade". Magdoff shows how various treaties imposed on Portugal by British military power shaped its trading relationship with England. Whether the resulting specialization might have emerged in the absence of British naval power is not discussed. Steve Resnick has challenged the tendency of neoclassical textbooks to treat production possibilities frontiers (PPFs) as exogenously given parameters, by lecturing in introductory classes on the historical creation of the PPF's of England, Africa and the new world in the days of triangular trade. Feminist attention to the undesirable dynamic implications of women's specialization in domestic production similarly illustrates the need for dynamic and holist rather than static analysis of the benefits of specialization.

Fred Hirsch's analysis of the tendency for the unbridled pursuit of self-interest to erode the "social capital" necessary for economic efficiency and social well-being offers an entry point for critiquing the neoclassical lessons drawn from Mandeville's bees and Adam Smith's bakers. Bowles et al.'s analysis of the waste involved with the supervisory costs of adversary labor relations serves a similar function. I like to tell the story of two homeowners on a beautiful mountainside who each want to have the highest deck on the mountain. Independently pursuing their own self-interest they cut down the forest to build their towers. The result is a naked landscape's indictment of the logic of positional competition.

Pushing neoclassical metaphors to their limit, some neoclassical economists suggest treating "love" as a scarce commodity and suggest that by utilizing people's greed rather than good will, capitalism offers an efficient moral economy. Holist thinking can lead in different directions, suggesting, for example, that "love" may be a better understood as a "capacity" whose presence increases with use (suggesting capitalism may be ethically flabby rather than efficient). Kelman (1981) similarly notes that putting a price on something can change its nature, in criticizing neoclassical suggestions that fines for littering be viewed as the price of littering. The goal of all these alternatives metaphors is to problematize the over-simplified policy recommendation of neoclassical texts to "let the market work".

The metaphor of consumer sovereignty is an obvious target. It's a bit puzzling why there are not more student objections to the "monarch of the market" imagery that dominates the textbooks. Critiques need to offer dramatic examples and eye catching statistics²⁴ to force attention to the texts' over simplification of consumer behavior.²⁵ It

²⁴Goodwin et al. offer some eye-catching statistics. See Galbraith (1973) for some nice vignettes.

²⁵ In SN's 700+ page book, for example, there is 1 page listed under advertising in the index, which turns out to refer to 1 paragraph.

would probably also be wise to attack tacit claims that the only alternative to consumer sovereignty is the image of consumers as puppets completely manipulated by firms.²⁶

Goodwin et al. and others have offered nice critiques of principle texts use of the diamond-water paradox of value, noting that to some extent the value of diamonds is high because the price is high (Veblen's status effect) rather than the price being high because the value is high. The example can also be used to highlight the dangers of abstracting from institutional details as the market for diamonds is managed by De Beers. Ultimately, one must assume the conclusions that the paradox of value is designed to demonstrate in order for the diamond-water story to play the role it does in principles texts.

The auctioneer metaphor dissolves as soon as it is given critical attention. Numerous post-Keynesians have lacerated the equilibrium assumptions derived from the tantoment process embodied in the auctioneer and it is scandalous that these problems seldom appear in micro principles texts.

Similar critiques can be mounted against numerous other neoclassical metaphors, such as the appeal to images of "Natural Law" (Says Law, the Law of Diminishing Returns, the Law of Supply and Demand, etc.) Case studies of declining cost industries can be used, for example, to challenge the "law of diminishing returns" and the textbooks' habit of offering competitive grain markets as the model for all product markets.²⁷ Once again, the texts' "note but ignore" strategy (in this case for handling increasing returns to scale) needs simultaneous attack. Students come away from existing textbooks with the framing image of a competitive market, the critique will try to replace this with a more realistic image of a dual economy, populated with grain and auto markets, both situated in complex and institutionally structured environments.

Highlighting Neoclassical Slight of Hand. Another way of conveying the slipperiness of neoclassical rhetoric is to point to sleights of hand in principles texts, such as:

- The treatment of the Household as an individual (which can be used to draw attention to problems with methodological individualism)
- The treatment of Labor as a regular commodity and erasure of the labor/labor power distinction
- Portrayal of the modern economy as a barter economy

²⁶ Marxist metaphors highlight financial and industrial capital's lust and competitive need to expand (accumulate) rather than insatiable consumer appetites as the motor force of economic evolution. Juxtaposing the two images offers a nice contrast.

²⁷ Peter Dorman has suggested using images from Peter Cronon's book *Nature's Metropolis: Chicago and the Great West*, to demonstrate the socially constructed nature of even of grain markets.

- The misuse of *Ceteris Paribus* (i.e. the holding constant of factors that logically vary when the target variable is changed, such as the level of aggregate demand when wages fall)
- The derivation of real world conclusions from idealized models without rigorous theoretical or empirical argument (what I call the “magical hand wave” of neoclassical theory)
- Failure to acknowledge the difficulties involved with empirical demonstration of neoclassical claims and misleading assurances that the texts’ conclusions rest on more or less indisputable empirical results.
- Failure to acknowledge well-known problems with neoclassical capital theory.
- Use of questionable analogies to make theoretical claims and public policy recommendations. My favorite here is the oft-repeated claim that because two people benefit from exchange, so must two nations. The argument ignores distributional issues, the implications of path dependency, problems of the second best, social externalities, and so on.

Noting Framing Language. Most neoclassical texts employ phrasings that celebrate market experience and encourage skepticism about social governance of the economy. The talk is of: “free,” not private enterprise, “free,” not unguided, trade; “command,” not planned economies; employers and employees, not capitalists and workers; government intervention in, not government guidance of, the economy, etc. Broader arguments about the “commodification” of experience in neoclassical language might also be attempted. Once again the goal would be to establish in students’ minds the paradigmatic, rather than “natural” nature of neoclassical analysis.

Coverage Issues. The paradigmatic character and limitations of neoclassical principles texts can also be illustrated by noting gaps in the topics covered, such as insufficient attention to: household production, alienation in the workplace, alternatives to capitalist organizations of work, the implications of path dependency, and the implications of “feedback” from the economy to other social spheres. Once again the goal of the exercise would be to problematize “thinking like economists” so that students would approach political-economic issues with more subtle imaginations than their textbooks.

IX. Policy Analysis

Economic theory is usually driven by policy objectives. The questions asked (and not asked) usually reflect subtexts tied to political-economic projects. Neoclassical theory is animated by the belief that capitalist markets are wonderful instruments for organizing economic activities and solving information, coordination, and motivation problems. The major neoclassical goal is to figure out how markets work for the purpose of making them work better.

Heterodox economists often (but not always) feel that markets must be embedded in powerful systems of social governance to function acceptably. As you move to the left, skepticism grows and the need for more fundamental oversight increases. These differences are reflected in heterodox critiques of neoclassical policy analysis. The critical commentary will conclude with a chapter outlining these objections. I will illustrate the kinds of critique I have in mind with two examples.

Critique of Neoclassical Welfare Economics. The neoclassical model implies that perfect markets (those without market imperfections and with acceptable equity adjustments) find the optimal solution to economic questions. The theory goes even further and suggests that ideally policy makers should respond to market imperfections by reproducing what a perfect market would produce. This is a quite radical prescription and would replace democratic political decision making with technocratic market shadowing.

The neoclassical project would restructure institutions to find market solutions (privatizing the seas, privatizing education, transforming public safety into a commodity, etc.) and reorient policy making towards the dictates of cost-benefit analysis. Space limitations preclude seriously challenging this vision here, but it will be vigorously challenged in the commentary. One important line of critique treats markets as cultural institutions with framing effects rather than neutral mediums for registering human wants and possibilities.

Bowles writes, for example, "Markets not only allocate resources and distribute income, they also shape our culture, foster or thwart desirable forms of human development, and support a well defined structure of power" (Bowles 1991, 11). The insight finds support from a surprising source. Ronald Coase, in his famous essay "The Problem of Social Cost" (a seminal piece for free market environmentalism) notes how different institutional arrangements might respond to negative externalities. He concludes by noting, "Economists who study problems of the firm habitually use an opportunity cost approach and compare the receipts obtained from a given combination of factors with alternative business arrangements. It would seem desirable to use a similar approach when dealing with questions of economic policy and to compare the total product yielded by alternative social arrangements. In this article, the analysis has been confined ... to comparisons of the value of production, measured by the market. But it is, of course, desirable that the choice between different social arrangements for the solution of economic problems should be carried out in broader terms than this and that the total effect of these arrangements in all spheres of life should be taken into account. As Frank H. Knight has so often emphasized, problems of welfare economics must ultimately dissolve into a study of aesthetics and morals" (Coase 128).

Critique of Principles Texts' Distributional Stance. Introductory texts tend to assert an inevitable tradeoff between equity and efficiency, implying that debates amongst economists over distributional issues reflect different value judgments about the merits of equality rather than different "scientific" conclusions about how the economy

works. Besides challenging these claims by citing many efficiency enhancing redistributive policies (see for example, Bowles 1999), heterodox critiques link many equity/efficiency tradeoffs to socially constructed constraints (such as the challenge of managing alienated labor in a capitalist economy), rather than to the necessities of natural law. The analysis demonstrates why the debate between liberal and conservative economists over where to resolve the equity/efficiency tradeoff fails to reflect the full range of potential debate.

X. Conclusion

There is a significant need for a critical commentary on micro principles texts. There is enough common ground across heterodox paradigms to construct a shared critique. The key task is to offer students a sustained argument that challenges neoclassical ways of reasoning. By drawing analogies between different critiques over many chapters and making special efforts to challenge neoclassical "stories," a critical commentary can enable students to "talk back" to the texts.

I hope folks will forward me (scohn@knox.edu) suggestions for critiquing principles texts (especially alternative "stories" that challenge neoclassical tales), as there is a reservoir of critical teaching among heterodox economists that could be mobilized in a commentary. In the long run I hope to establish a web page alongside the commentary book that elaborates the critiques and invites folks to share teaching ideas.

Steve Cohn, Ph.D. is an Associate Professor of Economics at Knox College. He is a Research Associate with G-DAE, directing the institute's micro-critique workshops which bring together professors and graduate students at different universities for semester long seminars critiquing neoclassical principles texts and assessing heterodox alternatives.

NOTES

- 1) Among the most important subtexts of neoclassical theory are the following claims:
 - a) Neoclassical economics (NEC) is a scientific theory with claims on belief similar to modern physics. While economists disagree at the margin on some issues, there is widespread agreement on the basic principles of neoclassical economics. NEC is a positive theory, normative issues are the province of other disciplines.
 - b) Markets and capitalism are natural.
 - c) People are naturally greedy and markets permit the harnessing of self-interest in the service of the common good. Capitalism is successful, in part, because it offers an incentive system that builds on "human nature."
 - d) Markets are spheres of rationality, freedom and voluntary exchange.
 - e) Political environments promote special interests and irrational behavior. (This latter claim is not exercised too hard.)

- f) Capitalism is statically efficient, and static efficiency should be a major social goal in our inevitable battle with naturally given scarcity. Price signals marginal social cost on the supply side and marginal social benefit (measured by willingness to pay) on the demand side.
- g) Capitalism is dynamically efficient (though this isn't formally argued).
- h) The primary goal of economic policy should be to promote economic growth, as growth provides the basis for solving all of our problems (elimination of poverty, resolution of egalitarian pressures (through access to a larger pie), resources for redressing environmental problems, promotion of world peace, solution to population pressures through demographic transition, etc.
- i) A key aim of public policy should be to promote perfect market outcomes and address equity issues (subject to the equity/efficiency tradeoff).
- j) People receive from markets what they (or the factors they own) contribute. Redistribution (of endowments or final goods) shrinks the pie. Whether to redistribute is an ethical question, separate from economic science.
- k) While many of the assumptions of General Equilibrium Theory (homo economicus, perfect competition, perfect information, Says Law, etc.) are unrealistic, the world is close enough to the idealized picture to infer the characteristics of a capitalist economy from the idealized model. (Another version of this claim implies that markets come "closest" to idealized general equilibrium outcomes rather than "close to" idealized outcomes.)
- l) The state is basically a technocratic instrument for pursuing democratically chosen objectives, though it may be captured by special interests on many occasions.
- m) The demise of the former Soviet Union proves socialism can't work.

REFERENCES

Aslanbeigui, Nahid and Michele Naples (eds.). *Rethinking Economic Principles: Critical Essays on Introductory Textbooks*. Boston: Irwin, 1996a.

_____. "Positivism Versus Paradigms: The Epistemological Underpinnings of Economic Debate in Introductory Textbooks" (1996b) in Aslanbeigui and Naples 1996a.

Bowles, Samuel. "Globalization and Redistribution: Feasible Egalitarianism in a Competitive World." (mimeo) 7/99.

_____ and Richard Edwards. *Understanding Capitalism: Competition, Command and Change in the U.S. Economy* (2nd ed.) NY: Harper Collins, 1993.

_____. "What Markets Can—and Cannot—Do". *Challenge* July-August 1991.

_____ and David Gordon and Thomas Weisskopf. *After the Wasteland: A Democratic Economics for the Year 2000*. NY: M.E. Sharpe, 1990.

Braverman, Harry. *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*. NY: Monthly Review Press, 1974.

- Callari, Antonio and David F. Ruccio (eds). *Postmodern Materialism and the Future of Marxist theory: Essays in the Althusserian Tradition*. Hanover New Hampshire: University Press of New England-Wesleyan University Press, 1996.
- Coase, Ronald. "The Problem of Social Cost" in *Economics of the Environment: Selected Readings* edited by Robert Dorfman and Nancy Dorfman. NY: Norton, 1972.
- Cohen, Avi. "Why Haven't Introductory Textbooks Resolved Sraffa's 1926 Complaints? The Realism of U-Shaped Cost Curves and the Dominance of Perfect Competition". In Aslanbeigui and Naples 1996a.
- Cohn, Steven. *Too Cheap to Meter: An Economic and Philosophical Analysis of the Nuclear Dream*. Albany NY: State University of New York Press, 1997.
- _____. "Shall I Compare Thee to a Summer's Day: Methodological Debates in Environmental Economics". Paper delivered at the Allied Social Science Meetings, Union of Radical Political Economists panel. 1/6/97.
- Daly, Herman E. and John B. Cobb. *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*. Boston: Beacon Press, 1994.
- England, Paula. "The Separative Self: Androcentric Bias in Neoclassical Assumptions" in *Beyond Economic Man: Feminist Theory and Economics* edited by Ferber and Nelson. Chicago: University of Chicago Press, 1993.
- Folbre, Nancy. *Who Pays for the Kids: Gender and the Structures of Constraint*. Routledge, 1994.
- Galbraith, John Kenneth. *Economics and the Public Purpose*. Boston: Houghton Mifflin, 1973.
- Goodwin, Neva, and Frank Ackerman, Thomas Weisskopf, Oleg Ananyin, and Kevin Lancaster. *Microeconomics in Context* (forthcoming).
- Hirsch, Fred. *Social Limits to Growth*. Cambridge, Harvard University Press, 1976.
- Hymer, Stephen. "Robinson Crusoe and the Secret of Primitive Accumulation". *Monthly Review* 23(4), Sept. 1971.
- Keen, Steven. *Debunking Economics: The Naked Emperor of the Social Sciences*. Annandale, Australia: Pluto Press, Forthcoming.
- Keeny, Spurgeon M Jr. et. al. *Nuclear Power: Issues and Choices*. Cambridge, MA: Ballinger, 1977.

Keynes, John Maynard. *The General Theory of Employment, Interest, and Money*. NY: Harcourt, Brace & World, 1964.

Kelman, Steven. "Cost Benefit Analysis: An Ethical Critique". *Regulation* January/February 1981.

_____. *What Price Incentives: Economists and the Environment* (Boston: Auburn House Publishing Co.) 1981.

Kuiper, Edith and Jolande Sap, with Susan Feiner, Notburga Ott and Safiris Tzannatos. *Out of the Margin: Feminist Perspectives on Economics* (Routledge) 1995.

Levin, Lee. "Toward a Feminist, Post-Keynesian Theory of Investment" in in Kuiper et al. *Out of the Margin*, 1995.

Linder, Marc and Julius Sensat Jr. *Anti-Samuelson Volume 1: Macroeconomics: Basic Problems of the Capitalist Economy*. New York: Urizen Books, 1977.

_____. *Anti-Samuelson Volume 2: Microeconomics: Basic Problems of the Capitalist Economy* (New York: Urizen Books) 1977.

Magdoff, Harry. "Economic Myths and Imperialism". *Monthly Review* 23 (7), December 1971.

Mankiw, N Gregory. *Principles of Economics*. NY: Dryden Press, 1998.

McCloskey, Donald. *The Rhetoric of Economics*. Madison: University of Wisconsin Press, 1985.

Naples, Michele and Nahid Aslanbeigui. "What *does* determine the profit rate? The neoclassical theories presented in introductory textbooks". *Cambridge Journal of Economics* 20, 1996, 53-71.

Nelson, Julie. "The Study of Choice or the Study of Provisioning? Gender and the Definition of Economics". In Ferber and Nelson *Beyond Economic Man*, 1993.

Roberts, Bruce. "The Visible and the Measurable: Althusser and the Marxian theory of Value". In Callari and Ruccio *Postmodern Materialis*, 1996.

Salemi, Michael and John Siegfried. "The State of Economic Education". *American Economic Review* 89(2), May 1999

Samuelson, Paul and William Nordhaus. *Economics* (16th ed.). NY: McGraw Hill, 1998.

Saunders, P. "The Lasting Effects of Introductory Economics Courses". *Journal of Economic Education* 12(1), 1980.

Siegfried, John. "How Many College Students are Exposed to Economics?" *Journal of Economic Education* Spring 2000.

_____ and James Wilkinson. "The Economics Major: What It Is and What It Should Be. The Economics Curriculum in the United States : 1980". *American Economic Review* 72(2), May 1982.

Walstad, William. "The Effect of Economic Knowledge on Public Opinion of Economic Issues". *Journal of Economic Education*, Summer 1997

Whaples, Robert. "Changes in Attitudes among College Economics Students about the Fairness of the Market". *Journal of Economic Education*, Fall 1995.

Wolff, Richard and Stephen Resnick. *Economics: Marxian versus Neoclassical*. Baltimore: Johns Hopkins, 1987.

Appendix 1: Micro Critique Workshop

In the spring of 2000 the Global Development and Environment Institute (GDAE) at Tufts University and the Department of Economics at the University of Massachusetts at Amherst jointly sponsored a workshop critiquing standard neoclassical microeconomics principles texts and exploring alternative introductory microeconomics texts. This appendix describes the structure of that workshop and invites proposals to GDAE for similar workshops during the 2000-2001 academic year.

Our workshop had three major goals: (1) to help heterodox graduate students and veteran instructors prepare accessible critiques of micro principles texts for teaching purposes; (2) to aid in the writing of a critical commentary on neoclassical micro principles texts; and (3) to provide feedback to the authors of a new heterodox micro principles text, *Microeconomics in Context*.

The workshop met eight times, roughly every other week from February to May 2000. The first session addressed workshop mechanics and then explored the different dimensions of neoclassical principles texts that invite critique, such as:

- the assumptions made (e.g., rational economic man, exogenous tastes and preferences)
- the methodologies adopted (e.g., methodological individualism, equilibrium modeling)
- the policy implications drawn (e.g., promotion of "free trade," celebration of market mechanisms)
- the topics underemphasized (e.g., household production, the exercise of power in the economy)
- the sleights of hand displayed (e.g., treatment of the household as an individual, reduction of experience to consumption)
- the main narratives to be challenged (e.g., growth as the central societal goal, perfect competition as the norm)
- the images to be problematized (e.g., consumer sovereignty, market optimality)
- the classic stories to be refocused (e.g., the contextless world of Robinson Crusoe, the equilibrium world of the auctioneer)
- and, of course, the economic theories to be critiqued (e.g., marginal productivity theory, utility theory, etc.)

The first session also discussed the kinds of paradigmatic lenses that might generate alternative perspectives (e.g., Marxist theory, feminist theory, post-Keynesian theory, etc.) and the kinds of data currently absent in micro principles texts that could support heterodox analysis (e.g., data relating to corporate power, non-market household production, etc.).

The next six workshop sessions dissected approximately one-sixth of a standard neoclassical principles text. There were eight formal participants in the workshop: seven graduate students (receiving honorariums) and a paid workshop director. For each

session the formal participants read: (1) the relevant portion of a popular neoclassical textbook (e.g. Makiw, Samuelson and Nordhaus, McConnell and Brue, etc.); (2) comparable material in a heterodox alternative textbook (e.g., Bowles and Edwards, Riddell et al., Robinson and Eatwell, etc.); and (3) comparable material in *Microeconomics in Context*. To jump-start the workshop discussions, the formal participants were asked to post two- to three-page reactions to their reading on an e-mail discussion list prior to workshop sessions. This e-mail list ultimately grew to over 50 participants in several countries and generated lively on-line discussion. Minutes from workshop meetings were also posted on the discussion list.

Another seven to ten people also participated informally (without reading responsibilities) in the "live" workshop discussions. In addition, several authors of alternative materials for principles classes gave presentations at the workshop.

For the eighth and final session of the workshop, the formal participants were asked to prepare a short summary of what they thought were the most important things to include in an alternative micro principles textbook or critical commentary and to write a short review of *Microeconomics in Context*.

While each session's discussion inevitably ended with a feeling that we needed much more time to address adequately the issues on the table, the energy level remained high and there was enthusiasm at the end for future workshops.

If you are interested in organizing similar workshops or would like additional information about the U Mass project, please contact Neva Goodwin (ngoodwin@emerald.tufts.edu) or Steve Cohn (scohn@knox.edu).

The Global Development And Environment Institute (G-DAE) is a research institute at Tufts University dedicated to promoting a better understanding of how societies can pursue their economic goals in an environmentally and socially sustainable manner. G-DAE pursues its mission through original research, policy work, publication projects, curriculum development, conferences, and other activities. The "G-DAE Working Papers" series presents substantive work-in-progress by G-DAE-affiliated researchers. We welcome your comments, either by e-mail directly to the author or to G-DAE, Cabot Center, Fletcher School, Tufts University, Medford, MA 02155 USA; tel: 617-627-3530; fax: 617-627-2409; e-mail: gdae@tufts.edu; web: <http://ase.tufts.edu/gdae>.

Papers in this Series:

00-01 Still Dead After All These Years: Interpreting the Failure of General Equilibrium Theory (Frank Ackerman, November 1999)

00-02 Economics in Context: The Need for a New Textbook (Neva R. Goodwin, Oleg I. Ananyin, Frank Ackerman and Thomas E. Weisskopf, February 1997)

00-03 Trade Liberalization and Pollution Intensive Industries in Developing Countries: A Partial Equilibrium Approach (Kevin Gallagher and Frank Ackerman, January 2000)

00-04 Basic Principles of Sustainable Development (Jonathan M. Harris, June 2000)

00-05 Getting the Prices Wrong: The Limits of Market-Based Environmental Policy (Frank Ackerman and Kevin Gallagher, September 2000)

00-06 Telling Other Stories: Heterodox Critiques of Neoclassical Micro Principles Texts (Steve Cohn, August 2000)