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SYMPOSIUM: POSTMODERNISM, THE SUBJECT, AND CONTEMPORARY ECONOMIC DISCOURSE

The Shifting and Allegorical Rhetoric of "Neoclassical" Economics

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***Postmodern Moments in Modern Economics*. By David F. Ruccio and Jack Amariglio. Princeton, NJ and Oxford: Princeton University Press, 2003.**

AXE-GRINDING POSTMODERNISM

A Lakatosian protective belt in economics has kept the cultural critics at bay and encouraged a deep modernist sensibility and ultimately arrogance on the part of mainstream economists. Consider Jack Hirshleifer's claim for economics as a universal social science:

> There is only one social science... What gives economics its imperialist invasive power is that our analytical categories—scarcity, cost, preferences, opportunities, etc.—are truly universal in applicability... Thus economics really does constitute the universal grammar of social science. (Hirshleifer 1985:53, cited in Ruccio and Amariglio 2003:51)

For well over a century, critics have protested this claim for the universal relevance of mainstream economics. The latest are the postmodernists. The problem with most postmodern analysis in economics over the past 20 years has been its explicit or implicit claim to have access to a "better" economics.

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In retrospect, the work of McCloskey and the many Marxist, Keynesian, feminist, realist, and institutionalist economists (including this author) who followed in McCloskey's path had too much of an ulterior motive—the overthrow of orthodox economics—to be taken seriously as methodological critics. Even McCloskey, the lone neoclassical among them, sought to reform the profession by overcoming its "vices"—eliminating useless mathematics in theory ("blackboard economics") and the abuse of the notion of "significance" in empirical analysis, and generally abandoning an objective theory of truth in favor of consensus. Often the case for the "better" economics fell back on claims of greater realism. This claim, however, contradicted the postmodern epistemology—that knowing is possible only in a relative or discursive sense.

In *Postmodern Moments in Modern Economics*, David Ruccio and Jack Amariglio (2003) have reconfigured how postmodern theory can be used to understand economics, and the result is the first rigorous treatment of postmodernism in economics to appear to date. For them, postmodernism is not a time period that follows modernism, nor is it a stage of particularly competitive and global capitalism. Postmodernism is a characterization of discourse, an "appreciation for the way rhetoric, metaphor, speech acts, and other figures of writing and speech shape the ideas and events of both the discursive and the nondiscursive dimensions of the world." (Ruccio and Amariglio 2003: 25). For Ruccio and Amariglio, postmodern discourse might be characterized by a "decentering of the subject", a skepticism of the "privileging of order over disorder," and a "self-reflexivity" involving an acknowledgment of the position of the writer vis-à-vis the written, and thus an insistence on the contingent and local nature of knowledge. The authors go to great lengths to establish that postmodern moments in economics are not better than the presumably more extended moments of modern economics—a delicate point since it begs the question of why we should then care about such postmodern moments. For Ruccio and Amariglio, a postmodern analysis of modern economics does not serve primarily as an attack aimed at undermining orthodoxy with some heterodox alternative. The goal instead is to show that, even at their proudest moments of modernist achievements, economists exhibit postmodern tendencies, implying that the core of ideas around which theoretical consensus was built is unstable, that is, not as polished and complete as is so often expressed. As Ruccio and Amariglio (2003) write:

> "finding" the postmodern moments with these schools of thought is tantamount to deconstructing economic discourse to demonstrate, in the end, troublesome

> anomalies that pertain to uncertainty, the instability of subjectivity, the possibility of various rationalities, simultaneous multicausality, persistent and irreducible disequilibrium, and still more. The intention of calling attention to these postmodern moments is to show that, despite proclamations to the contrary, economic discourse in much of the past half century has not been able to build a stable consensus around a "core" of ideas and approaches. (p. 53)

This is a worthy goal of analysis, and to a great extent the authors have accomplished it. My criticism of *Postmodern Moments* will focus entirely on their treatment of "neoclassical economics", which takes up only about 50 of the book's 300 pages. And it is less a critique, and more like the cry my young children make when a book or movie ends and they say: "I wish it would go on. I want to know what happens." In this case, an expansion of the analysis of neoclassicism across both space and time would have significantly strengthened the authors' case that economics is a cultural form like many others and can be usefully subjected to postmodern analysis. In time, neoclassical economics became more postmodern. But the authors are stuck on 1959 neoclassicism and must strain to find postmodernism in its representation of the body. They treat "neoclassical economics" as unchanging when in fact it has gone through considerable methodological transformations since the Arrow-Debreu era that leave mainstream economics considerably more postmodern than the "fragmented body" of 1959 economics would have ever hinted—with multiple equilibria, path dependencies, instabilities, and pervasive market failures.[1] Colander (2000) argues that the New Economics (what he calls the era of "applied policy models") breaks so completely from the concern with general equilibrium that it should not even be characterized as "neoclassical economics." From the early marginalists' disparate representations, through Marshall's sociological and partial solutions, to the pinnacle of mathematical elegance and the failure to prove stability of equilibrium and subsequently with the rise of multiple equilibria and path dependence—the grand narrative of neoclassical economics was never complete. But today it is in tatters, and a postmodern perspective on these recent developments would be a great contribution.

In space, I would like to have seen a more expansive treatment of the culture of the golden age of American neoclassicism, from the mid-1930s to the early 1960s. The authors see *high culture*—abstract expressionist painting and late modern architecture—as the touchstones of comparison for

1 In this essay I will use instead the term "mainstream" economics, defines as the economics writings published in the most widely recognized academic journals.

neoclassical thought. In my view economic theory in this era is best compared with forms of *low art* at the time—in particular Hollywood movies and superhero comics. These popular art forms have a similar sociology to economics in the early 20th century, reflecting obstacles to, and ideals of, a fully assimilated society in which race and ethnic difference disappear for the better. Ignoring the sociological dimension of the modernism of economics is to risk putting theory precisely on the type of pedestal the postmodernists seek to avoid. Economics as high art leads to an overly rarified treatment of theory, approaching the essentialism that postmodernism typically resists.

POSTMODERNISM IN "NEOCLASSICAL" THOUGHT

It is perhaps not surprising that Ruccio and Amariglio find hints of postmodernism in post Keynesian, institutionalist, feminist, and even Marxian economics. The most shocking claim of the book, however, is that neoclassical general equilibrium theory *at its height* also exhibited postmodern characteristics. This is a gutsy undertaking, a little like trying to steal the Mona Lisa from the Louvre—no one would ever expect it. Ruccio and Amariglio laud as postmodern the competitive general equilibrium theorists' treatment of the subject not as a single entity, but as an agent with many distinct parts—as consumer of goods, as consumer of leisure and as provider of labor. In their postmodern view, Ruccio and Amariglio propose that there is no real or objective human body, just representations of it. They reject the common lament among heterodox economists over the disappearance of the classical conception of the body as whole and the source of economic value as merely "nostalgia for the true humanist beginnings of economics." While the authors claim that no particular representation is truer or more realistic than another, in the end they endorse the Debreu conception over others, since the dispersed body in the work of Debreu as "distinctly nonessentialist" (p. 110) compared to the essentialist classical and early neoclassical representations. This is as far as the authors go toward endorsing one theory over another: While nonessentialist representations have no special claim over the truth, essentialist ones are certainly, and by definition, false.

The point is interesting but strained. Debreu may not represent the individual as "pain avoiding" (p. 114) as explicitly as does Jevons, but such pain avoidance would seem to be implied by utility maximization and is understood by all economists. Labor supply curves, reflecting income and substitution effects, bending forward and backward, abound in the neoclassical literature of this period.

The New Economics

An easier case for postmodernism in neoclassical economics comes out of the developments in mainstream theory since the mid-1970s. The axiomatic method followed a narrowly construed, hypothetico-deductive approach to knowledge. The demise of competitive general equilibrium analysis as the dominant modeling methodology resulted not directly from its failure to empirically test its implications, but from its aridity, that is its insulation from institutional and historical detail. As early as 1975, Alan Coddington compared the contribution of general equilibrium theory to the understanding of actual economies to "the contribution of flatness to mountaineering."

Largely as a response to the inapplicability of the competitive general equilibrium models to economic policy concerns of the day, a new form of neoclassicism emerged. In my own field of research, international trade, traditional general equilibrium models simply could not explain, for example, intra-industry trade between France and Germany in automobiles, or why Korean subsidies and protectionism were successfully generating an export boom in that country, or why industrialized countries' state subsidies to R&D (research and development) were paying off in terms of profits and export market growth. Some saw the inability of the neoclassical theory even to ask the research question on these issues as the reason for its rejection. Colander (2000:139), for example, writes:

> In the 1950s and 1960s, it was hoped that practical models would be guided by general equilibrium theory. Thus, when Arrow/Debreu proved the existence of a general equilibrium in 1957, there was hope that the pure science of economics would progress in tandem with the practical application of that science. By the 1970s economists recognized that the Arrow/Debreu general equilibrium work was not going to get to the promised land.

Blaug (2001: 160) makes a similar comment, but also notes the internal limitations of the competitive model:

> [T]he most rigorous solution of the existence problem by Arrow and Debreu turns general equilibrium theory into a mathematical puzzle, applied to a virtual economy that can be imagined but could not possibly exist, while the extremely relevant "stability problem" has never been solved either rigorously or sloppily. General equilibrium theory is simply a research program that has run into the sands.

A "New Economics" arose in a series of sub-fields in the profession, including international economics, labor economics, industrial organization,

and macroeconomics. In this New Economics, general equilibrium was not the core, guiding principle, the robustness criterion for progress of knowledge was largely abandoned and a creeping inductivism entered into mainstream economics. Colander notes that this new generation of economic models "freed economists to deal with practical policy models that were inconsistent with general equilibrium theory" (Colander 2000).[2]

These new approaches all sought greater relevance, and had some common features across sub-fields, including an emphasis on imperfect market competition (rather than perfect competition), asymmetric information (rather than symmetric information), on increasing returns to scale technology (rather than constant returns to scale), on strategic behavior by firms and governments (as opposed to optimization independent of rival behavior). While these new sets of assumptions are typically identified as the chief characteristics of the New Economics, methodologically speaking the important shift was the move away from the strict hypothetico-deductivism of general equilibrium analysis and toward a vaguely construed inductivism. The New Economics did not cause an abandonment of rational choice mathematical modeling (and in the case of New Keynesianism actually increased it—see footnote 2), but it constituted the beginning of a reversal of the direction of the relation between observation and hypothesis, that is in the accepted conventions for producing economic knowledge. In the New Economics theories are derived in an *ad hoc* way in order to give a particular result or they are constructed in a way that leads to instability, path dependence or gives multiple equilibria. Results are not only not unique or unstable, they are not robust, which in postmodern terms means they are local.

The New Economics constitutes the end of the meta-narrative in economics. Even the concern with Pareto optimality and market clearing were often abandoned. The New Economics shifted the focus away from competitive general equilibrium and toward the provision of a rational choice foundation to otherwise *ad hoc* hypotheses. But the results were certainly more varied, *ad hoc*, contingent, explosive, and path dependent — local, postmodern—than those produced in the era of competitive general equilibrium. In some cases, the models generated policy conclusions that

2 On the New International Economics, see below. Industrial organization transformed itself more narrowly along the lines of game theory although it has also been influenced by the "complexity" school. And labor economics already had a strong inductivist tradition, although even its mainstream now has moved in this direction. The New Keynesian macroeconomics is typically understood as a response not to the failure of general equilibrium theory but to the lack of rational choice microfoundations in Keynesianism. I would argue that while this interpretation is valid, the New Keynesian economics fits the methodological pattern of the other sub-fields in terms of the shift in the context of discovery.

were unacceptable to the economists who generated them, creating a kind of schizophrenia (see Milberg 1996).

The New Economics has received inadequate analysis from methodologists in general, but its absence from the pages of *Postmodern Moments* constitutes an opportunity lost. These new developments in economics constitute the burial of the grand narrative of economics.

The Empirical Turn

But the New Economics is not the end of the story either. In the era of general equilibrium analysis, an economic model was understood to generate new knowledge if it provided a proof of a known result, but required weaker, that is more general, assumptions than did existing proofs of that same result. For example, if the current proof of the existence of general equilibrium relied on concave utility functions, then a proof that assumed preferences to be quasi-concave constituted progress in knowledge. The great strength of this methodology was the clarity of its criterion for establishing the progress of knowledge—increased mathematical generality, or robustness, of its proofs.

Robustness was inadvertently abandoned as a methodological principle in the era of New Economics. The lack of robustness posed a problem for identifying progress of knowledge. It was also an obstacle for those interested in drawing policy recommendations based on the theory. There was a feeling that the models were *ad hoc* and could be used to model *any* pre-determined outcome. Moreover, the models were difficult to operationalize.

The response to the weaknesses of the New Economics in the late 1990s was an empirical turn. In this era, hypotheses are often rooted in simple economic logic, intuition, or even as a response to current events, and emphasis is placed instead on the sophistication of the measurement of variables and correlations among them. I am thinking, for example, of Rodrik's (1999) study of the relation between wages and democracy, Krueger and Whitmore's (2000) analysis of the relation between class size and student performance, or Edmonds and Pavcnik (2005) study of the effect of trade liberalization on child labor. None of these papers contains a formal mathematical model and thus does not hinge in a significant way on the assumption of utility or profit maximization. The gradual erosion of the narrow deductivist criterion for the generation of hypotheses has created a broadening of the acceptable criteria for hypothesis generation in mainstream economics. Of course there has historically been a tension between "pure theory" and "applied analysis" in

economics, but in past cases it was the theory group that won over. In this case, not only does it appear that the applied group may win out, it is also the case that many of the same economists involved with the New Economics have switched over to the New Empiricism.

Figure 1 depicts the three methodologies applied to the study of international trade in mainstream American economics beginning with competitive

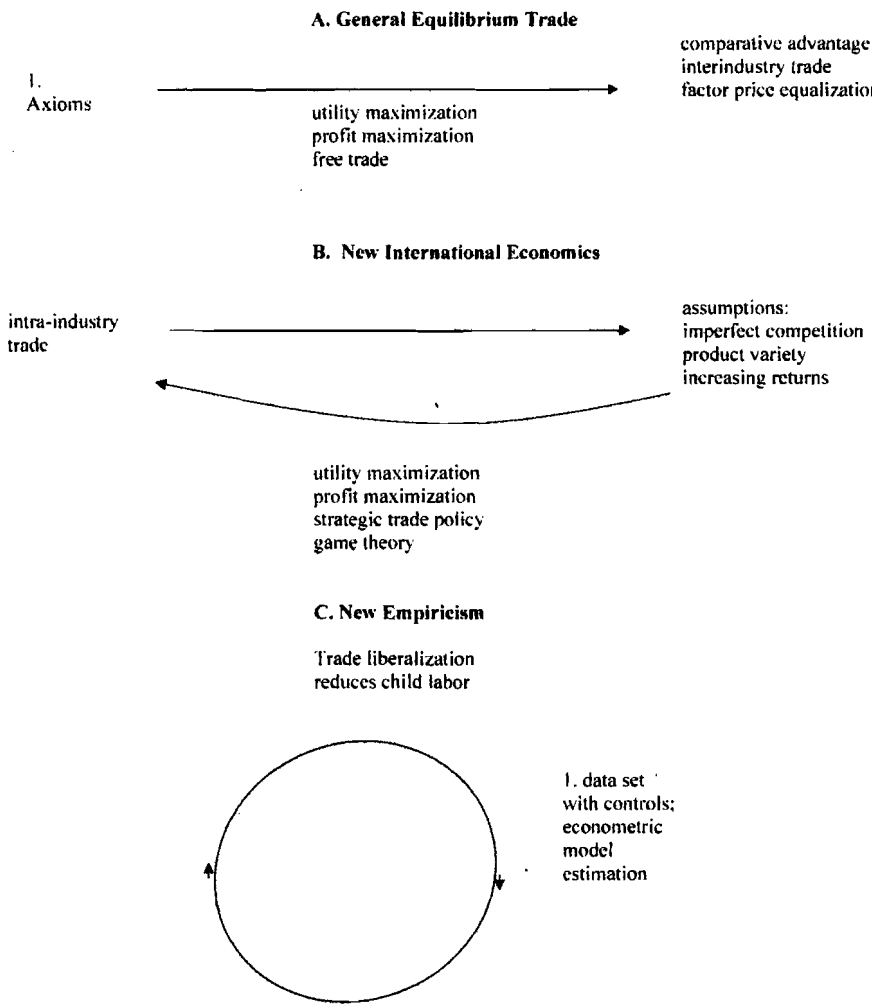

Figure 1: Three Methods of Knowledge Creation: The Case of International Trade. Based on Milberg (2004)

general equilibrium analysis in the early part of the 20th century. General equilibrium trade theory was built on axioms which generate hypotheses about the direction and welfare effects of trade with liberalization. The New International Economics begins by positing a phenomenon to be explained and proceeds to establish the functional forms and assumptions on agency that, with rational behavior, will produce the posited outcome. In the new empiricism there is even less stringency over the choice of hypotheses and the emphasis is on the empirical test of the hypothesis. In sum, a creeping inductivism replaced the strict hypothetico-deductivisim of competitive general equilibrium analysis. What constitutes economics, that is, what questions mainstream economists can pursue, is no longer clear and certainly not predetermined by formal methodology or conceptions of the body, centered, decentered, unified or dispersed.

The irony of the move from competitive general equilibrium to the new economics to the new empiricism is that it was the paradigm of individual rational choice that was said to elevate economics to be "social science imperialist", allowing economics to address almost all social questions irrespective of traditional disciplinary boundaries. Becker's work on marriage and the family is the most commonly cited in this regard. Thus, political science and sociology have embraced rational choice theory, and look to economics for advancing the use of this method. Although rational choice has been increasingly absent as a necessary foundation for mainstream economics, economics has continued its imperialistic way in the social sciences, but that imperialism stems from its statistical techniques, data crunching, empirical experimentation, not from rational choice theory.

This is not the place to analyze the limits of this recent empirical turn. My point is that methodological developments in mainstream economics in the past 25 years or so have revealed some glaring moments of postmodernism. By leaving aside developments in mainstream economics since the 1970s, the authors have missed the most postmodern moments of all.

The Culture of Modern Economics

Postmodern Moments is filled with reproductions of modern art and architecture. The chapter on neoclassical economics alone includes art work by Barnet Newman, Giorgio de Chirico, Francis Bacon, Thomas Frye, and Kiki Smith. It also includes a reproduction of a page from Gerard Debreu's *Theory of Value*. Elsewhere in the book is a photograph of a Mies van de Rohe building on Lake Shore Drive in Chicago. The message is that economics,

despite its claim as scientific and thus objective and removed from outside cultural influences, can be understood as one would understand these works of fine art produced during the same time period. This is a very important point, so avoided by the economics profession itself. Cultural product, yes (positivist, rationality-based, progressive, mirror of nature, universalist).

But Ruccio and Amariglio do not make the cultural connections explicit. The reproductions receive no discussion at all in the chapters in which they appear. This silence is unfortunate, as these authors are as well-situated as anyone to make these cultural connections. More importantly, the choice of art used for comparative purposes gives, I believe, the wrong interpretation of economics as a cultural form. Let me explain.

General equilibrium theory has been traced back at least to the Physiocrats in the mid-18th century, but was born in the modern sense with the work of Jevons and Walras in the marginalist revolution of 1871. Curiously, general equilibrium theory did not catch on as a dominant form of economic analysis until after World War II and in a particular place—the USA. Marshall's influence over economic thinking lasted well into the 20th century. Marshall's tome was a very British combination of partial equilibrium and Victorian era sociology. The entire 923-page tome contains only two references to Walras, Jevons, or competitive general equilibrium analysis, and these are in footnotes. So when competitive general equilibrium theory emerges in the US in the post-World War II era, it emerges as a distinctly American form.

Historians of economic thought have recently turned in earnest to the question of why American economics became dominated by mathematical neoclassicism after World War II. Three recent works contend that the main cause was the massive Defense Department funding for neoclassical economic research motivated by the cold war. Morgan and Rutherford (1998) emphasize the ideological affinity of cold warriors for the pro-free-market conclusion of the neoclassical models. Bernstein (2001) focuses on the RAND corporation in the 1950s and 1960s and shows how the successful wartime techniques of operations research were melded into the economic modeling strategies of the post-War period. Mirowski (2002) emphasizes how this funding channel encouraged a particular, computer intensive, form of analysis, both as a tool for calculation and as a prototype for rational choice. Mirowski adds the additional complication that neoclassicism was never in fact monolithic, and thus an explanation of its dominance requires considerable work of explaining its internal tensions and inconsistencies. These valuable works each contribute to the debunking of the two popular theories of the rise of American neoclassicism after the War, one being that it

constituted "better science" than the institutionalism that dominated in the interwar period and the other being the view that it was the result of some natural progress of scientific knowledge. An important commonality in these new works of intellectual history is their insistence on the broader cultural and political context in which the developments occurred.

Elsewhere (Milberg 2005) I have argued that American economics in this period—led by Arrow, Samuelson, and Solow, among others—can be read as an allegory of the assimilationist ideal of second-generation US immigrants. The theoretical rationalization of private (and public) production and consumption had an emancipatory role for those who saw their nation as offering the possibility of both freedom and democracy. *Homo economicus* represents the "fully- assimilated man," the center of a theoretical economy that reflects the ideal of an ethnically integrated, democratic society. General equilibrium theory reinforces the view that an unfettered market economy is technically efficient and socially optimal, but neoclassical economics in this era did not stop there. Arrow, Samuelson, and Solow were all second-generation Jewish immigrants, and the first generation to either attend college or graduate school. There is a utopianism that pervades the work of all these economists, a vision of a social ideal in which difference does not preclude optimization, individually and collectively.

Certainly this period of emergence and dominance of general equilibrium theory coincides with some pathbreaking movements in the world of high art, for example abstract expressionism at the beginning and pop art at the end. Pop art could be said to be linked to the rise of consumer culture in that period. But Warhol's "Campbell's Soup" can or "Marylin Monroe" portrait are ultimately condescending towards popular culture, a sarcastic glorification as critique. Warhol's radicalism is more in his role as spoof on high art, not his celebration of the low. The better cultural comparison for post-war US economic thought would be the art forms that also came into their own in this period and that reflect similar allegorical fantasies, in particular Hollywood movies and superhero comics. These industries were energized by first-generation immigrants from Europe, mostly Jewish, who were excluded from many professions and who found in these outlets a forum for the expression of fears and hopes about the prospects for good over evil and assimilation over exclusion.

If the early competitive general equilibrium analysis reflected an assimilationist ideal for many immigrant American economists, then it might not be surprising to find this allegory contained in much of the lower, immigrant-led, art forms of the day. Arie Kaplan, a long-time writer for *Mad Magazine* and author of a popular history of American comics, writes that "Superman

actualized the adolescent power fantasies of its creators—two Jewish Depression kids craving a muscle-bound redeemer to liberate them from the social and economic impoverishment of their lives." What Kaplan (2003) describes as the golden age of comics from 1933 to 1955, is very similar to the golden age of general equilibrium theory—from the publication of Samuelson's *Foundations of Economic Analysis* (1947) to Debreu's *Theory of Value* (1959).

Will Eisner, another comic-strip creator, has compared Superman to the Golem ("the legendary creature magically conceived by the rabbi of medieval Prague to defend the community from an invasion by its antiSemitic enemies") Eisner writes: "[Jews needed] a hero who could protect us against an almost invincible force, so Siegel and Shuster created an invincible hero" (cited in Kaplan 2003). For Arrow, Debreu, and Samuelson, and others, the competitive market was such a protector because it hid ethnic, racial, and linguistic differences behind the veil of decentralized, "free" competition and utility maximization through commodity consumption.

The Hollywood movie industry promoted similar stories of alienation and salvation. In a recent review of a biography of Louis B. Mayer, the Hollywood mogul of MGM fame, the house that produced, among others, "The Wizard of Oz," "Singin' in the Rain," and "A Night at the Opera", writes that "The first- and second-generation East European Jews who built Hollywood created an idealized world where all differences were cast aside in favor of a dream in which everything was beautiful." (Dargis 2005). The view is reminiscent of Samuelson's first fundamental theorem of welfare economics which shows the competitive equilibrium is Pareto optimal. Samuelson's own comment is revealing:

> If ever a person becomes sick of faculty intrigue and professional infighting, if ever one sees democracy and civilization crumbling around one, always one can retreat to that objective study of reality... The late Hans Neisser, a refugee economist who graced the New School for Social Research, once told me what a relief it was in those grim days of Hitler's march toward power to grapple with the problem of the determining of Walrasian competitive equilibrium. I understood perfectly and agreed completely. (Samuelson 1986: 74)

My point is not that economic theory is the same as a comic-strip or a Hollywood movie. I am arguing simply that the sociology of modernism in economics should explore that allegorical dimension of the competitive general equilibrium model in the context no only of developments in high art but perhaps more fruitfully to cultural forms which are driven by a similar sociology. Thus in searching for the cultural forces that produced modernism

in the US, it might have been better to consider those that share the same allegory as that found in neoclassicism, those dealing with the imagination of what society could be, the fantastic dimension of cultural imagination. Such a consideration might have pushed the authors to problematize the notion of "high modernism" they associate with Arrow and Debreu.

The Neoliberal Fantasy

In *Postmodern Moments*, Ruccio and Amariglio have built a solid bridge for connecting economics to culture more broadly, and for applying the critical edge of postmodernism to a field that has resisted it so successfully ("kicking and screaming," writes Deirdre McCloskey the book jacket.) For an economics book that resists making policy recommendation and even avoids (for the most part) claims on a "better" economics, this is a highly provocative book. Ruccio and Amariglio have succeeded in doing what others were never able to do—get us to take cultural critique seriously as it applies to economics. The result is a new kind of book about economics.

I have taken issue with Ruccio and Amariglio's analysis of modernism and postmodernism in economics. By ignoring the methodological developments in neoclassicism since 1960, Ruccio and Amariglio may have missed the theory's most postmodern moments. And by incompletely developing the cultural comparisons to neoclassical economics from 1937 to 1960, Ruccio and Amariglio have missed the allegorical thrust of economics in this period. Because of these lapses, the authors may have missed why even an incomplete (and in places postmodern) paradigm formed and continues to feed the popular fantasy (both right-wing and left, academic and non-academic) that a fully-decentralized, competitive market system is socially optimal.

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