COPYRIGHT NOTICE:

David F. Ruccio and Jack Amariglio:

Postmodern Moments in Modern Economics

is published by Princeton University Press and copyrighted, © 2003, by Princeton University Press. All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher, except for reading and browsing via the World Wide Web. Users are not permitted to mount this file on any network servers.

For COURSE PACK and other PERMISSIONS, refer to entry on previous page. For more information, send e-mail to permissions@pupress.princeton.edu

An Introduction to Postmodernism, for Economics

Funeral by funeral, economics does make progress.

—Paul A. Samuelson, "Credo of a Lucky
Textbook Author"

IN THIS CAUTIONARY epigraph—or epitaph, as the case may be—the doyen of modernist economics suggests how it becomes the queen of the social sciences, one shovelful of dirt on a coffin after another. For Samuelson, the "Darwinian impact of reality melts away even the prettiest of fanciful theories and the hottest of ideological frenzies" (1997, 159).¹ Modernism as dirge; economic knowledge as its fossil remains.

Samuelson is only the latest to conclude with morbid optimism that, in the end, the evolutionary nature of scientific practice amongst economists does lead to the growth of economic knowledge—even if it grows as an unintended consequence of practice. There is a utopia in this dystopic rendition; a faith in the idea that, as long as economists remain committed to the norms of scientific practice, the knowledge they produce will illuminate historical reality and enlighten future generations. This grizzled confidence is a hallmark of modernism itself, those discourses and practices

¹ Samuelson's reformulation of Planck's credo, substituting "economics" for "science," occurs in this 1997 essay paying tribute to his *Economics* textbook; it occurs as well in his (1998) fiftieth-anniversary paean to his "lucky" book (*Foundations of Economic Analysis*). This time, though, he not only credits Planck for the loan, but also proceeds in paraphrasing a different adage, as when he tells us that, in economics, "often the dance must proceed Two Steps Forward and One Step Back" (1998, 1379). Whether digging or dancing, though, Samuelson labors just the same in his confident assertion that "soft and hard sciences are cumulative disciplines" in which "we each bring our contributions of 'value added' to the pot of progress" (1378).

² It seems that there must be thousands (perhaps tens of thousands) of easily accessible statements by economists in which this optimism is a necessary component. One does wonder why it is necessary to keep incanting such confidence. One of these thousands is the following: talking about his own theory of "bounded rationality" and its relative neglect to date by practicing economists, Herbert Simon (1991) reflects that "science, viewed as competition among theories, has an unmatched advantage over all other forms of intellectual competition. In the long run (no more than centuries), the winner succeeds, not by superior rhetoric, not by the ability to convince or dazzle a lay audience, not by political influence, but by the support of data, facts as they are gradually and cumulatively revealed. As long as its factual veridicality is unchallenged, one can remain calm about the future of a theory" (364–65).

that have been associated with ideas such as "progress" and "knowledge" since the Western Enlightenment.³

Yet despite the prevalent optimism among economists and philosophers over the past one hundred and more years, many of them have nervously surveyed the standing of economic knowledge in modernist culture and science: "[C]laimed to be the most 'effective' or 'mature' of the social or human sciences, or described as the 'hardest' of the 'soft' sciences, economics seems destined for a somewhat ambiguous and problematic place in the spectrum of knowledge" (Hutchinson 1979, 1).

There is no need to lament this ambiguity, for it speaks to the effervescent vitality (and not Samuelson's recursive life through incessant death) of the different discourses that comprise economics. This vitality may be most attributable to the "undecidables" and "aporias" that characterize modern economics, the fact that pure scientificity always seems out of reach as the ostensible achievement of the discipline. In some versions of this ambiguity, the point is to clean up economics by removing the vestiges of past "errors" ("prettiest of fanciful theories") and opinion ("hottest of ideological frenzies") that still remain in the debates between various schools. Other versions have it that as long as economics remains a "human" science, it will be impossible to accurately model economic behavior since humans confound models in their resort to just plain inexplicable actions. And there are others who consider economists' attempts

³ In the course of his discussion of the citing of precursors for one's own authoritative stance, E. Roy Weintraub summarizes "Whig" histories of economic thought like this: "Science as the exemplar of the march of reason, and economics, as science, leads the Whiggish historian of economics and the typical economic scientist to think in terms of successes and failures, precursors and blind alleys, heroes sung and unsung, and all manner of retrospective gold medals and booby prizes" (1997, 186).

⁴ Compare the view that ambiguity means absence of scientific precision (and thereby progress) with Paul Feyerabend's emphasis on "the essential ambiguity of all concepts, images, and notions that presuppose change. Without ambiguity, no change, ever. The quantum theory, as interpreted by Niels Bohr, is a perfect example of that" (1999, viii).

⁵ Consider, for example, this blast at "neowalrasian theory" leveled by Robert Clower (1994). After declaring this theory "scientifically vacuous" and concluding that there "is no way to make progress in economic science except by first discarding neowalrasian analysis" (810), Clower really gets down to business: "in my opinion, what we presently possess by way of so-called pure economic theory is objectively indistinguishable from what the physicist Richard Feynman, in an unflattering sketch of nonsense 'science,' called 'cargo cult science'" (809). Clower, by the way, goes on to make a pitch for a reversion to "induction," as though this would indeed provide a straight shot to science.

⁶ This confounding of science due to human behavior includes, of course, the all-too-humanness of the economic scientists themselves. Or, at least this is the gentle conclusion of Tjalling Koopmans (1957), who sees in the supposed discrepancy between the logic of correct scientific procedures and the persistent departures from this norm by economists a kind of understandable human failing in wanting to cut to the chase, a failing that could be called uncharitably the "will to distort." In Koopmans' own (understated) words: "often

to model human behavior pure blasphemy, seeing such desire for mechanistic control as a violation of the basic freedom of human beings and of the dignity and meaning of human life.

We are not partial to any of these ways of thinking through the problematic of ambiguity that T. W. Hutchison announces. Instead, we take up the challenge of unearthing and engaging the "undecidables" and "aporias" of economic discourse, as part of a new phase of self-conscious thought, a new phase perhaps of society and history: that which has been labeled the postmodern.⁷

Categorizing the Postmodern

Postmodernism is a relatively new development within economics, but one that has promise in calling economists' attention not only to the epistemological conditions of existence for their theorizing, but also to the general cultural milieu within which modern economics has both expanded and contracted. Modern economics certainly has a right to claim, as Samuelson says, the growth of knowledge. But it has run up against anomalies and fragmentations that have proliferated diverse knowledges, in addition to putting on the agenda concepts and approaches that lead away from rather than toward a unified, universalist science. While some may regard current economic discourse as "converging," we argue that—more than a century after the marginalist revolution—economic discourse is more heterogeneous than one might expect a unified science to be. This heterogeneity is nothing to bemoan. It speaks instead to the limits of modernism in economics, and just as much to the emergence of "post-modern moments" within the discipline.

we are more preoccupied with arriving at what we deem to be true statements or best predictions, in the light of such knowledge as we have of the phenomena in question, than in exhibiting the postulational basis, and thereby the ultimate observational evidence, on which our statements rest" (143).

⁷ We have found the following surveys of postmodernism useful in our teaching and research: Sim 1999; Bertens 1995; Rosenau 1992; Best and Kellner 1991; Docherty 1993; Connor 1989; Rose 1991; and Nicholson 1990. Our depiction here of postmodernism thus draws on all of these, but also differs in important respects.

⁸ Of course, there are studies (e.g., Alston, Kearl, and Vaughan 1992) showing a great degree of "consensus" among a sample of economists on numerous theoretical issues. As Fuchs, Krueger, and Poterba (1998) argue, though, their own studies dealing with questions of policy based on parameter estimation techniques demonstrate considerable amounts of disagreement among economists within particular fields. This result is interesting since it suggests that the empirical and practical implications one draws from common theoretical outlooks (that is, even if one concedes this point) can vary widely among aspiring scientists because of differences in estimates, but even more so because of the economists' "values."

Many commentators have challenged the Samuelsonian vision by attacking the neoclassical orthodoxy with which progress in economic theory is most often associated. Yet these criticisms also treat economics as an autonomous field, unconnected to such trends as formalism, historicism, and scientism that have comprised the transdiscursive horizon of Western modernism during the past 125 years. Our own challenge to Samuelsonian progress starts from the premise that modernism is not only an exhausted project, but a destructive one. One form of damage is its silencing of theoretical disagreement under the rubric of the unity of science and "correct" scientific protocols. This has led to disdain for, neglect of, and hostility towards nonmainstream thought.

Additionally, the Samuelsonian vision has kept in place the fetishism of the unified rational subject, the bottom line of "prediction," the reliance on mathematical "rigor," and much else that has given economics its specifically "modern" character. An engagement with postmodernism implies giving up this ground. It means taking seriously the evanescent concepts and experiences of disunity and dispersion in everything from macroeconomic theorizing to economic actors, now devoid of central, organizing motivations. These concepts and experiences have shown up even in the modernism that dominates economics. However, the conceptual possibilities opened up by these postmodern irruptions have not been mined to much purpose. Our hope is that the postmodern can push economists and others to talk about the discipline and conduct their theoretical practices differently. Many lines of research are opened if postmodernism is taken seriously, as we show in subsequent chapters.

We will discuss postmodernism as historical phase, as existential "condition," as style, and as critique. Most of the debates surrounding the term *postmodern* can be rendered intelligible according to these four headings. Postmodernism has been seen, by some critics, as a particular stage in the life history of modern capitalist economies. It has been seen as a "condition," or state of existence, describing the cultural/social dominant within which we experience the contemporaneous. Some writers view postmodernism as a literary/rhetorical or practical style (especially in the arts and architecture), one that affects even the philosophical stances that characterize current discussion regarding the nature of knowledge and scientific method. Finally, postmodernism has been a critique, that is, an attempt

⁹ Stephen Brown (1995) speaks of the seven "key features" of postmodernism. He lists them as "fragmentation, de-differentiation, hyperreality, chronology, pastiche, anti-foundationalism, and pluralism" (106). As readers can ascertain, these features are dispersed throughout our treatment of the "four categories" that follow. For another list of distinguishing characteristics of postmodernism (or at least of poststructuralism), see Amariglio 1998.

to create thought and action "outside" of the constraints of modernism (and here, modernism ranges from modernization and economic development strategies in a postcolonial world to the "high modernism" of formalist literature and mathematics). In what follows, we elucidate each of these categories. This will set the stage for a brief synopsis of the postmodern moments that have arisen within economic discourse and provide a context for the chapters that comprise the remainder of our book.

Postmodernity: The Latest Phase of Capitalism?

It needs to be said straightaway that we do not pursue an approach that sees postmodernism as a particular world-historical phase. Nothing in our treatment invokes the "postmodern" as the latest stage in "late capitalist" (or "post-Fordist") economies, and especially the process of "globalization."

The main reason for our neglect of this approach is that we reject its basic premises, first, that capitalism has morphed within the past half century into a distinct socioeconomic phase captured by the concept of "late capitalism" and, second, that "postmodernism" as a *noneconomic* phenomenon illustrates the existence of such a phase, or that postmodernism refers to a historical rupture in the global economy. Since our main objective is to address the ways in which postmodernism currently appears, or could guide new developments, within the discipline of academic economics, we have chosen not to elaborate our objections to this line of thought.

Still, this work is ubiquitous in the fields "outside" of academic economics, and a few words on it will put the rest of our analysis into clearer relief. It is not our aim to disparage this literature or to dissuade economists from interacting with it. To the contrary, economists should read it, partly because its picture of present world economic circumstances is so far from the mainstream neoclassical orthodoxy (and so much closer to heterodox, especially Marxist, views) that it can be engaged productively as a bona fide challenge, not only to that orthodoxy, but to cross-disciplinary dialogue. Our own interests in postmodernism and its contributions to the field of economics, though, lie elsewhere.

The best-known advocate of the "late capitalist" approach is the literary and cultural theorist Fredric Jameson. Jameson (1991) captures the flavor of treating postmodernism as the cultural form of the latest phase of capitalist development in his frequent reference to three identifying aspects of "late capitalism": mass commodification, a shift in the location and conditions of global production, and the rise of new industries (mostly in information technologies) that allow for the unbroken world-

wide expansion of capitalist markets and, hence, profitability. ¹⁰ Jameson, it should be noted, is a devotee of the late Belgian Marxist economist Ernest Mandel (1975), whose book on "late capitalism" is the bible for those (cultural critics mostly on the left) who are looking to define capitalism's most recent trajectory. ¹¹ Following in the footsteps of both the Marxian-inspired Frankfurt School of sociocultural analysis (Theodor Adorno, Max Horkheimer, and Herbert Marcuse, among others) and the great Hungarian cultural theorist Georg Lukács, Jameson analyzes the forms of cultural expression that have aided this phase of capitalist development, partly by becoming commodities themselves. ¹² Hence, everything from the arts to philosophical thinking is seen to relate to this unyielding commodification and postindustrialization of the industrialized nations, paralleling the shift in economic production and ecological impact brought about by the globalization of capital. ¹³

It is the idea of commodification that connects postmodernism most intimately to late capitalism.¹⁴ Not only has capitalism inexorably ex-

¹⁰ Manuel Castells's monumental three-volume analysis (1996–98) of globalization, information, and identity foretells of a new global information age that might be understood as the phase of postmodernity par excellence.

¹¹ For a first-rate depiction of the way Jameson utilizes Mandel, see Norton 1995. Norton also argues that Jameson "contains postmodernism within a modernist narrative" (66) by invoking the unifying vision of a stage-theory of capitalism. The concept of post-Fordism (Amin 1994) rivals late capitalism within literary theory and cultural studies as a way of making sense (again, from a left-wing perspective) of the supposed economics of postmodernism. Gibson-Graham (1996) develops a critique on grounds similar to those of Norton. She notes, in particular, that "theories of post-Fordism, centered as they are on the conditions and consequences of the flexible industrial paradigm and stable capital accumulation, present a world in which capitalist development is the only road" (164).

¹² Culture here should be understood to include the forms of subjectivity that global capitalism is said to produce. Needless to say, in the Jamesonian vision, postcolonials seem increasingly to hold identical subject (or should we say, subjected) positions, including of course that of class. Kayatekin and Ruccio (1998) challenge the idea that processes of globalization create a single subjectivity and argue, instead, that it is both possible and desirable to locate/produce multiple social (including class) identities in the postcolonial world.

¹³ A similar frame of analysis marks David Harvey's *The Condition of Postmodernity* (1989). If not on a par with the influence of Jameson, then Harvey must be seen as not far behind in affecting investigations of postmodernism in terms of the latest phase of capitalism. For an alternative take on capitalism and globalization, one that challenges from a feminist, poststructuralist viewpoint the totalizing vision implicit in Jameson, Harvey, and others, see Gibson-Graham 1996.

¹⁴ Bruce Pietrykowski (1994) provides a different reading from Jameson and others who have argued for a one-to-one correspondence between consumer culture and postmodernism. Pietrykowski presents evidence that many of the elements of "fast capitalism" and "ephemerality, fragmentation, juxtaposition, surface, and depthlessness" that are currently attributed to post-Fordism and postmodernism can be seen clearly in the rise of consumer services and the particular aesthetics or designs of many commercial sites, from gas stations to department stores, during the heyday of Fordism in the early twentieth century in the

panded markets, both geographically and in quantity of objects marketed, but culture has lost its relative autonomy and become almost entirely oriented toward the sale of commodities. This is apparent, according to some critics, in the growth of markets for cultural artifacts and the shrinking number of them produced outside of an exchange economy. More importantly, it is apparent in the increasing shallowness and slickness of the arts, culture, and thought, as they uncritically mimic—as with pop art, such as Warhol's *Campbell's Soup*, 1—or propagate commercial images. Indeed, an emphasis on "image" or "surface" as opposed to "content" or "depth"—characteristic of previous artistic forms, such as van Gogh's *Still Life*—is said to mark art forms that express this postmodern shift.¹⁵

It is noteworthy that Jameson identifies Gary Becker (1991) as the quintessential postmodern economist. Becker represents, in Jameson's view, the recognition among economists that most if not all areas of contemporary life are now prone to the logic of capital, including the vagaries of market forces. According to Jameson, Becker captures the spirit of the age, as everything from marriage to drug addiction to death becomes fodder for market-inspired calculations. Jameson does not present Becker as the latest disciplinary "imperialist," seeking to displace other noneconomic approaches to culture by advocating economically rational principles, especially individual choice, as the foundation of all social life. Instead, Becker's theoretical oeuvre gives voice to that which has transpired "in reality": the unfettered spread in the last century of capitalist markets and the commodification of just about everything. In Jameson's eyes, Becker's postmodernism consists mainly in marking the extent to which market logics have seized any and all noncapitalist, nonmarket social domains.

This take on Becker contrasts with the interpretation of feminist economists and others who consider his work in the vein of "high modernism," ¹⁷ as representative of the neoclassical paradigm committed to for-

United States. Pietrykowski's main point is that there is no clear-cut division, when it comes to commodity culture, between modernity and postmodernity.

¹⁵ For an excellent overview of the many art forms that have characterized the postmodern during the last thirty years, from diverse postminimal styles to deconstruction and commodity art, see Sandler 1996.

¹⁶ For an excellent evaluation of Becker's notion of culture as it enters economic analysis, see Koritz and Koritz 1999. Amartya Sen names Becker as one example of economists whose understanding of establishing "close relations" with different disciplines takes an "imperialist" form. As Sen states more generally, "Sometimes the proposed relation has been given a rather 'imperialist' form, with economic theorists adhering strictly to their astonishingly narrow methodology and then applying, with remarkable confidence, that slim methodology to other disciplines as well" (1991, 76).

¹⁷ One exception is McCloskey, who, while critical of the strategies of formal modeling, or "blackboard economics" as she has called it elsewhere (1996), supports the neoclassical metaphor of the rational individual, at least in major part.



Figure 1.1. Andy Warhol, *Campbell's Soup*, 1 (1968). One from a portfolio of ten screenprints on paper, 35" x 23". (Credit: The Andy Warhol Foundation, Inc./ Art Resource, New York.)

mal modeling and the reduction of human motives to a single purpose: individual gain. Motivations such as "altruism," for example, produce "psychic gain." Be that as it may, we note again that for many literary and cultural theorists like Jameson, the postmodern denotes rampant commodification, unchecked by oppositional forces—avant-gardes, say—that find themselves subverted by the power and allure of the market. This world, structured according to the object-life of the commodity, has received an enormous boost by new information technologies, especially the Internet. Accordingly, computers have made commodity time and space ultimately traversable in ways unthinkable for past generations of producers and consumers. In addition to the use of computer technology in such "post-Fordist" production methods as "flexible specialization," one need not leave one's chair (in front of one's screen, of course) to be bombarded by commodity images and the cornucopia of goods in cyberspace. This obliteration of constraints of time and geographical location in buying and selling (lowering transactions costs and reducing to rubble other past barriers to the international flow of financial capital and goods) reconstructs all notions and experiences pertaining to community and nation—hence the rise of the "global economy" that is said to be the hallmark of the postmodern.



Figure 1.2. Vincent van Gogh, *Still Life with Apples*, *Meat, and Bread Roll* (1886). Oil on canvas, 46 x 55 cm. (Credit: Collection Kröller-Müller Museum, Otterlo, Netherlands.)

Opponents of this global spread of capitalist commodity production often counter by seeking spaces for economic life, if not for economic thought, in pre- or noncapitalist social processes, such as gift giving. ¹⁸ As capitalism seeps into every pore of the worldwide social skin, these critics hail the gift and any other realm of economic activity not reducible to market exchange. If in the postmodern age culture is merely an accompaniment to capitalist economic expansion, then it is legitimate to ask if it is possible to think about such issues as value and exchange in any register "outside" the regime of the commodity as "the general equivalent."

¹⁸ Or, consider, for example, this understanding of postmodernity as resistance to "economics," a resistance that is informed by the experience of postcolonial subjectivity: "Postmodernity already exists where people refuse to be seduced and controlled by economic laws. It exists for peoples rediscovering and reinventing their traditional commons by reembedding the economy (to use Polanyi's expression) into society and culture; subordinating it again to politics and ethics; marginalizing it—putting it at their margins: which is precisely what it means to be 'marginal' in modern times" (Esteva and Prakash 1998).

Postmodernism as the "Condition" of the Contemporary

The idea of the postmodern as a "condition" of life today is sometimes connected to the notion of postmodernism as a historical stage. Yet in the work of the best-known theorist of this "condition," Jean-François Lyotard (1984), most of the conceptual baggage of "late capitalist" discourse is discarded for a different emphasis, one that connects living in a postmodern world with changes in discourse itself, especially those that concern knowledge, technology, and science, and thus economics. Lyotard's focus on science and knowledge is matched by still others who describe the current state of social existence (mostly in developed Western capitalist nations) as characterized by the decentering of individual selves and society, a shift from "global" to "local" politics and ethics, the "saturation" of psyches and imaginations by an amazing array of discontinuous images and events, and much else. However, Lyotard in The Postmodern Condition describes a shift in the ways in which knowledge and science are both conceptualized and practiced—a shift, we note, that opens up a chasm between modernity and postmodernity.¹⁹

Lyotard's "report on knowledge," as he calls it, is concerned largely with two interrelated issues. One is rejection of what he terms the "grand metanarratives" that have structured much thought and practice since the Enlightenment. Hence, to the degree that modernity is contemporaneous with the rise and spread of Enlightenment thinking, Lyotard is offering a diagnosis of life after modernism. These metanarratives have ranged from the promise of political independence and human liberation through representative democracy or the victory of the masses to the claims for scientific knowledge as the harbinger of social progress through victory over nature and through social engineering. Lyotard calls particular attention to those metanarratives, like liberalism and Marxism, that have held out the hope for total change in society through advocacy of particular principles and perspectives. Both liberalism and Marxism, for example, have measured progress partly in terms of the ability to harness technology and science to human designs, most especially the end of political oppression and economic exploitation. Lyotard is hostile to such stories insofar as they themselves contribute to a "totalizing" vision of the world, one in which progress is in the nature of history, and in which social practices

¹⁹ Dow (2001) and Klamer (2001) both interrogate the tenuous links between modernity and postmodernity as it affects discourse. For Dow, the postmodern is the dialectical emergence of the antimodern, while for Klamer the turn of neoclassical economics to "high modernism" augurs its immanent/imminent implosion. Amariglio's (2001) commentary treats the ultimate success (or not) of Dow, Klamer, and also McCloskey in steering a path between or away from modernism and postmodernism.

are linked in a kind of reinforcing signifying chain in the name (or cause) of freedom, happiness, and autonomy. That is, Lyotard sees that much damage has been done in the advent of such grand causes, and he identifies them with the narratives, broadly held and interpreted, that give them their power. But Lyotard also sees the attempt to reduce the relative autonomy of science and culture in the service of these master narratives as illusory or dangerous or both.

Thus Lyotard eschews the story, so prevalent in the history and philosophy of economics, that greater knowledge has propelled social progress, as truth inevitably drives out error and knowledge replaces ideology. A distinguishing aspect of modernist thought is belief in narratives about the benefits of scientific knowledge. Lyotard argues that current scientific preoccupations and practices are no longer wedded to narratives about the ultimate knowability of the world and the beneficial dimension of such knowledge. The world of science that he describes is more taken with images, concepts, and activities of discontinuity. It is a world of nearly infinite and diverse information flows (abetted by the computer revolution) and is rife with scientific "games" in which meaning and consequence are always in play or at stake. This is a world, according to Lyotard, that is developing with a view to chaos and uncertainty, to indeterminacies and fracta, rather than presuming the unified structure of nature and the sanguine results of scientific knowledge. In this world the fundamental discursivity

- ²⁰ Cullenberg and Dasgupta (2001) show that the "high modernist" debate over capital theory between the two Cambridges was as much about a contestation of mythologies as it was about the logical correctness of various theoretical propositions put forth. McCloskey (2001) also challenges the view of the progressive and inevitable triumph of "better" theory.
- ²¹ A chemist who is a colleague declared recently in a public audience that the only thing in the entire past century he could identify as clearly contributing to a "better" world was science; all other spheres of human endeavor, from the arts through social and political movements for enfranchisement and sexual revolutions to the spread of the marketplace, have experienced mixed results, at best, and most probably social devolution!
- ²² If there is an icon of postmodernism, it is likely the computer. According to Wise (1995), computer science ironically holds much the same position in regard to high theoretical science as did mathematics before the last part of the nineteenth century. Wise states: "Not until the end of the nineteenth century did mathematical expression by itself attain high status among natural philosophers, ultimately as the very foundation of 'modern' physics. (Its formerly suspect boundary position has now been taken over by computer science, halfway between proper science and practical engineering, which in turn is rapidly becoming the foundation of 'postmodern' science)" (357).
- ²³ Paul Cilliers in Complexity and the Postmodern (1998) brings together developments in neurosciences, logic, linguistics, computer science, the philosophy of science, and deconstruction and poststructuralism to provide an interdisciplinary approach to questions of representation and organization in postmodernity. Building explicitly upon Lyotard, Cilliers argues that postmodern societies meet all of what he specifies as the main criteria for "complex systems."

of science is celebrated in a new narrative, as everything from biotechnology and human genome research to contemporary astrophysics may be seen as a "reading" or a Wittgensteinian game. Lyotard identifies these considerations and games as the postmodern condition, at least where production and dissemination of knowledge are concerned.

The postmodern condition Lyotard describes has its corollaries in a variety of human activities. Regardless of the originating causes of this condition (capitalism's most recent developments or the information revolution or the decline of community and the evaporation of universal moral norms or the effects of affluence for some and continued agony for others, etc.), many others have noted the changed conditions of life in more developed societies during the past forty or more years.²⁴ Lyotard's "report" highlights in many ways the central terms of this altered life experience (that is, compared to the modernism that is said to either precede or coexist with it).²⁵ These terms include a sense that individual lives and social entities have been "decentered"; that we live in a variety of psychological and social states/positions, each of which "overdetermines" our identities and subjectivities; that modern science and technology contribute possibly as much to "barbarism" and destruction (the atom bomb, pollution, germ warfare, etc.) as they do to the betterment of human life and the natural environment; that the metanarratives of progress and liberation have either failed or contributed to sociopolitical outcomes that are repulsive; that knowledge and ethics are context-specific and time-specific; that there are radical discontinuities in the way we experience most everything we encounter; that little in culture can or ought to be considered "original" or "authentic"; that power is dispersed rather than concentrated; that the search for unique meaning and transcendent truth is no longer meaningful or constructive; and that social inequalities continue, despite modernism's promises of freedom, justice, and equality for all.

This list speaks to modernism's putative exhaustion and anomie, but also to altered circumstances, some of which are happily embraced by

²⁴ In his 1986 book, *The Control Revolution*, which treats the rise of "the information society" during the past forty or so years, James Beniger produces a daunting list (on pages 4 and 5) of names given by a wide range of social theorists to the "major social transformations identified since 1950." This list, which stops at 1984, includes such labels as *postindustrial society*, *postliberal age*, the *age of discontinuity*, the *new service economy*, and much more, posited by such writers as Peter Drucker, Alvin Toffler, Daniel Bell, Michael Piore, and Charles Sabel. Of course, the past two decades have seen even more terms and many other authors who could easily be added to his list.

²⁵ In an earlier text, *Libidinal Economy*, Lyotard (1993, original French edition in 1974) ventures into discussions about the nature of economic crises during the past century (though, of course, this venture follows a different agenda of subjecting modernist economic discourses to poststructuralist interrogation). Brian Cooper and Margueritte Murphy (1999) conduct an insightful close reading of Lyotard's "libidinal economics."

theorists of postmodernism. These changed circumstances, expressed perhaps most fully in recent art and literature, signal the extent to which the touchstones of modernist culture and society are being decomposed, discarded, or "deconstructed." While the "postmodern condition," therefore, spans a wide spectrum of social, cultural, and economic currents, let us discuss three areas in particular that are of primary concern for the postmodern moments in modern economics: the nature of the contemporary "subject," the state of scientific knowledge, and the sense that we live in a world pervaded by uncertainty.

The Postmodern Subject

Much talk about postmodernism has commented on the increasingly fragmented human subject, on the dissolution of psychosocial unity.²⁶ In some postmodern strands, the subject is said to be overloaded, or "saturated," by images, identities, cultural events, and social relationships, force-fed by the increased volume and pace of market transactions, electronic mail, MTV, and so on. Changes in our experience of time and space have both expanded the social world and compressed it (because it is now "global"). Cultural psychologist Kenneth Gergen (1991) gives examples that depict this saturation of the prototypical postmodern subject through the "lengthening" of social experience and the shortening of time and space.

[A] call to a Philadelphia lawyer is answered by a message recorded in three languages. (2)

I gave a short speech at a birthday party in Heidelberg last year. When I returned to the United States three days later, a friend on the opposite coast called to tell me about the guests' reactions to the talk. He had gotten the gossip two days earlier via electronic mail. (2)

Fred is a neurologist who spends many of his spare hours working to aid families from El Salvador. Although he is married to Tina, on Tuesday and Thursday nights he lives with an Asian friend with whom he has a child. On weekends he drives his BMW to Atlantic City for gambling. (171)

Gergen claims to be describing a growing phenomenon. In his view, the compression of time and space accomplished by technological achievements like jet travel and the Internet, along with the possibility of crossing, or even living, in a variety of "cultures," has now pervaded the everyday

²⁶ The idea of the decentered or fragmented subject has certainly received much attention in feminist literature. We discuss the role of the feminist subject—fragmented or not—*in opposition to* neoclassical theory in chapter 4 below and the emergence of a decentered body *within* neoclassical economics in chapter 3.

lives of a vast worldwide populace. The assault on singular personality and focused rationality and the dispersion of the putative "unity" of the ego and the intentional subject are the consequence of the fragmenting of social life that is considered the hallmark of postmodernity.²⁷

For those who believe that the condition of existence for most people has changed in the direction of increased fragmentation but also increased "possibility," the passing of the unified subject and its replacement by the "decentered subject" constitutes a world-historical change. The emergence of the decentered subject has been hailed or reviled depending on whether one sees the resulting dispersion of self and society as an evil, brought about by the insidious commodification that Jameson describes, or a good, announcing the abandonment of the modernist, humanist metanarratives that Lyotard has elucidated. Be that as it may, the perception that the subject is not as unified and rational, as modernist science and literature had once supposed, marks one of the keys to tracing the postmodernist impact on economics and other fields of social theory.

For generations of mainstream economists, the rational subject capable of representing a consistent (at a moment in time) set of preferences is the starting point of economic theorizing. But the postmodern condition opens up a very different research agenda for economic scientists should they choose to disown (what many regard as a necessary fiction) the unified self and move, instead, to a fiction supposedly more in tune with contemporary reality, the decentered self. We return to these issues below. This psychic fragmentation—and here we are not describing a supposed "irrational pathology," as is said to be the case with schizophrenics—is one of the strongest challenges that the postmodern condition, if one accepts its reality, poses to the discipline.²⁹

²⁷ Simon (1991), no theorist of postmodernism, yet describes the situation of a less-thanunified, dispersed self (our words, not his) this way: each of us is "a committee of urges, wants, and needs, housed in body and mind" (362); "each of us 'time-shares,' alternating our many selves" (363).

²⁸ We have chosen to keep our comments about the rationality assumption, here and in the remainder of the book, to a minimum and instead focus attention on the presumption of a unified form of subjectivity for the economic agent. One reason for our choice is that there is a vast literature by now defending and contending against the notion of rationality as the starting point for economic analysis. This theme has been overworked to a degree that we feel confident that postmodernist approaches add little to what has already been said on one side or another of this debate. However, here is a smattering of references presenting different points of view for those who are looking for a place to start mulling over this issue: Arrow 1987; Sen 1977, 1987; Bausor 1985; Simon 1978; Sugden 1991; Sent 1997; Gerrard 1993; England 1993; and Hollis and Nell 1975. For some who explicitly consider postmodernism and rationality as it is used in economics, see Hargreaves Heap 1993, 2001; Varoufakis 1993; and Sofianou 1995.

²⁹ Louis Sass (1992) is a clinical psychologist who has years of experience working with schizophrenics in institutional settings. His book constitutes the most serious treatment of

The recognition that subjects may in fact be "decentered" in the contemporary world has spillover effects on the status of knowledge in the postmodern condition. On one hand, subjects may be thought to occupy so many different positions and hold such a bewildering variety of perspectives that stable and commensurable knowledge is seen as impossible. This view sees knowledge as local (not universal) and subject to persistent uncertainty. The fragmentation of subjects (within as well as among themselves) leads each and every one to hold mostly incommensurable concepts and notions, as universal truths retreat into the background or remain a thing of a supposed past, one in which homogenizing forces were presumed to be more decisive in constituting a horizon of transcendental intelligibility.

On the other hand, subjects may be seen to reflect the particular locations in which they find themselves, thus leading to the idea that the unique experiences either of individuals or of the groups to which they belong are productive of "situated" knowledges that, while not entirely translatable or transmittable, are at least stable enough to contribute to well-developed, "standpoint"-based understandings. This view relies on the idea that fragmentation or decenteredness is not pure solipsism. Instead, knowledge may be "relative" to the diversity of cultures and experiences that determine human consciousnesses. The plurality of such identity-based knowledge, often reflecting the particular experiences people may have because of race or gender or class or national distinction, makes it impossible for knowledge to pass itself off as "unsituated" and "uninterested." This view rejects the "god's eye perspective" that was thought to be the underlying premise of modernist notions of knowledge and science. In its place is substituted the notion that knowledge is always/already influenced by the "standpoints" that various and discrete subjects may hold.

The standpoint approach brings certain postmodern theorists close to feminists, multiculturalists, and those who stress the importance of post-coloniality for the "social construction" of knowledge and science. Thus, while one may argue that the postmodern condition is characterized by rampant globalization, caused primarily by multinational capital flows and the increased mobility of worldwide labor, subaltern voices have re-

the loose claim that schizophrenia is an apt trope for describing the general state of "postmodern" subjectivity and its manifestation in the arts. An example of the more casual (but not necessarily incorrect) use of this idea is the following discussion of channel surfing—a prototype for postmodern subjective activity—from the composition theorist, Lester Faigley (1992): "The experience of flipping across television programming approximates the consciousness of the schizophrenic living in the intense, eternal present. The viewer watches a series of spectacles from around the world—'smart' bombs exploding buildings, sports heroes in the elation of victory, royal marriages, plane crashes, assassinations, rock concerts, ranting dictators, shuttle launches, hurricanes, scandals, earthquakes, revolutions, eclipses, and international terrorism—all issued in an economy of images competing for attention" (13).

jected their own assimilation and the formation of a globally agreed-upon knowledge. The globalization that Jameson and others have described may be occurring apace, but this has only meant increased differentiation in the field of discourse and culture, as identities and standpoints turn out to be resistant to integration.³⁰

Hence, the postmodern condition not only calls attention to the race, gender, class, and national privilege that made possible the "scientific revolution" brought about by the Enlightenment. It may also keep in play irreducible differences as the bases for all contemporary knowledge, even in the "hard sciences." As subjects and societies are decentered by the proliferation of experiences and cultural identities, so too is knowledge and science. And the effects of such a decentering accompanied by a profusion of voices, in which one's standpoint matters, include the possible indeterminacy and/or multiplicity of knowledge(s) not only for the subjects described within any field of thought, but of course—and perhaps even more importantly—for the scientist/observers themselves.

Economic agents, living in a postmodern world, are thus considered to be both situated and saturated—giving voice to the confusion, but also the clarity, that results from an overload of possibilities, from being situated in the multiple positions and identities that globalization has enhanced. Agents are not irrational. They possess different, simultaneously experienced rationalities, expressing the cultural locations and histories whence they arise. Choice in this scenario often appears like a crapshoot (some Marxian theorists would call it an "overdetermined conjuncture"). Scientists, too, are confronted with a welter of choices. Theories contend and overlap, but they also are just plain different and not reducible by a transdiscursive Method. Theory choice may be a matter of aesthetic taste, as the playing field for knowledge games is a collage of relatively autonomous tactics and their outcomes. Thus, the postmodern condition for knowledge production is often represented as a kind of relativism, without ultimate appeal to a predetermined or attainable Truth. Instead, taste and power and interest explain why one theory flourishes while another dwells in the shadows (see Foucault 1980 on the relationship between power and knowledge).

The postmodern condition, as it is often described, evinces indeterminacy and uncertainty rather than limpidity and predictability. Agents and observers of their behavior constantly think and act in the face of "just not knowing." So as might be expected, the issues of how to behave or

³⁰ Arif Dirlik (2000), for example, argues that "any account of the emergence of globalization as paradigm needs to recognize an awareness of the simultaneous unification and fragmentation of the world" (18), including the "proliferation of alternatives to Eurocentrism" (16). Both Gibson-Graham (1996, chap. 6) and Bergeron (2001) introduce difference into existing—unified and totalizing—treatments of globalization.

how to theorize under conditions of uncertainty have risen to the top of the agenda for natural and social scientists, that is, if postmodern theorists like Lyotard are to be believed. Indeed, it is arguable that for the past seventy-five or more years the theme of uncertainty has been central to new developments in the arts and sciences, and this includes economics, of course. From the sheer randomness of dada poetry to the indeterminacy of quantum physics to the role of uncertain expectations in organizing behavior in a market economy, this theme emerged during the twentieth century as opening up a new range of creative possibilities for thought and action. Thus, some argue, postmodernism is simply the recognition of this reality, as theory brings up the rear in self-reflection on already changed world historical circumstances.

The Style of the Postmodern: Deconstructive and Self-Reflective

The preceding comments bring us to our third category for postmodernism, that is, postmodernism as a "style"—of writing, thinking, acting, creating, and so on. In this vein, postmodernism has been associated with a vast number of stances, genres, and movements, from self-reflexivity and bricolage to deconstruction and pastiche.³³

Postmodern styles in music, art, architecture, literature, philosophy, and culture have brought to the fore the undecidability of meaning, the textuality or discursivity of knowledge, the inconceivability of pure "presence,"

³¹ Sizing up the state of economic analysis in the mid-1950s, Koopmans concluded that "our economic knowledge has not yet been carried to the point where it sheds much light on the core problem of the economic organization of society: the problem of how to face and deal with uncertainty" (1957, 147). Writing thirty years later, Amartya Sen indicates that the issue of uncertainty had become the primary context for much economic analysis, such that the all-important notion of agent rationality had to be framed in terms of the general case of decision making in the face of uncertainty: "behaviour under certainty can be formally seen as an extreme case of behaviour under uncertainty... in this sense, rational behaviour under certainty must be subsumed by any theory that deals with rational behaviour in the presence of uncertainty" (1990, 199)

³² Some reading on the question of how uncertainty, "indeterminism," and disorder became central themes across the cultural and disciplinary landscape during the past two centuries includes Hacking 1990b; Stigler 1986; Plotnitsky 1994; Dupré 1993; Sass 1992; Kern 1983; Hayles 1991; Krüger, Daston, and Heidelberger 1987; Krüger, Gigerenzer, and Morgan 1987; and Krips 1987.

³³ Nigel Wheale (1995) attempts a summary of postmodern style in the arts like so: "A definable group of strategies and forms recur in the description of postmodern arts and this lexicon orders them into a hierarchy. An all purpose postmodern item might be constructed like this: it uses eclecticism to generate parody and irony; its style may owe something to schlock, kitsch or camp taste. It may be partly allegorical, certainly self-reflexive and contain some kind of list. It will not be realistic. Now construct your own program to meet these demands (42–43).

the irrelevance of intention, the insuperability of authenticity, the impossibility of representation, along with the celebration of play, difference, plurality, chance, inconsequence, and marginality. Such an agglomeration of styles contributes to the sense that there is indeed a postmodern condition to which all these styles refer. And, of course, some of these styles are presented as oppositional to—as critiques of—the prevailing sensibilities and formations that are thought to make up the various modernisms in these fields and disciplines. Whether or not these all speak to a set of changed historical and empirical circumstances, and indeed whether or not the emergence of these styles refers to some central historical cause, like the spread of global capitalist commodity culture, it remains the case that one can document the rise of the "postmodern" in aesthetics and ethics within the past forty or more years. That is, postmodernism as style affects the fundamental determinations of "value" and "meaning" as they are encountered throughout the social and cultural landscape.³⁴

It is impossible to render intelligible such diverse stylistic movements in the questions of value and meaning in a brief introduction. Since our investigation in the remaining chapters draws upon certain strands of postmodern styles of thought and presentation, we dwell upon just a few here. One, of course, goes under the name of deconstruction. This approach, sometimes converted into a method, was pioneered by the French philosopher Jacques Derrida (1976, 1978). Like everything else discussed under the rubric of postmodernism (and its close relation, poststructuralism), deconstruction as literary, philosophical, and artistic style has meant many different things to many different people. We encounter it most often, though, as a textual reading and composition in which the play of words and signs within a text is shown to undo such stable and intelligible meanings. For many who practice deconstruction, the goal is to demonstrate the impossibility of pure presence, that is, the inability of any sentence or text to stand for singular meanings and, hence, to eliminate contradiction, ambiguity, multiplicity, and so forth—which was precisely the goal of much modernist design, as in T. M. Cleland's layout for Fortune magazine.³⁵ In a Derridean approach, texts can be "deconstructed" by means of a close and careful analysis to reveal the "aporias" and the "undecidables" that are ever present. Hence, a text is always gesturing—

³⁴ For a recent collection of essays that interrogates the relationship among value, culture, meaning, and art, see Klamer 1996.

³⁵ According to Cleland (1930, 180, 181), writing in the first issue, "The design of *Fortune* is based upon its function of presenting a clear and readable text profusely illustrated with pictures, mostly photographic, in a form ample and agreeable to the eye. . . . The size and proportions of the magazine are designed to give scope to its illustrations and text without crowding and margins to its pages which shall be in accord with the best principles of fine bookmaking."

PUBLIC WORKS GOVERNMENT SALARIES PUBLIC DEBT INTEREST NATIONAL DEFENSE SINKING FUND VETERANS breaking months, U. S. business Revenue Act of 1932, an estimate diagramed below. The Budget For three long, heart-waited upon Congress for the of which is INCOME TAX OLD NEW EXCISES NEW MISCELLANEOUS MISCELLANEOUS REVENUE NEW POSTAL REVENUE INTERNAL REVENUE OLD EXCISES WAR DEBT RECEIPTS TARIFF NEW

LINETTRANS RUBGET

to thing the gas, ago) littled
to the count of year decode
the safe from the year decode
the safe from the year decode
the safe from the year decode
the rught were Spaceson and
the rul. Cambrid decide the rule
were trained to the undered
moved expenditure for vereran,
moved expenditure for vereran,
moved expenditure for vereran,
moved expenditure for vereran
for E. C., and public work, conde
Spaceson again at a combined
Spaceson again at a combined
decide on the Spaceson and the
Spaceson with Spaceson and the Spaceson
version unter Rus, was up
that the different or proposed to the
space of the carly
that of the rugs budget (to the
furth public and the year budget (to the
dright indirects may be an experi-

Figure 1.3. T. M. Cleland, Fortune magazine (1932). Photo: Preston Thomas for Visual Ear. (Permission: Fortune.)

. 32 .

. 33

Is Balanced

EXPENDITURES

RECEIPTS

PARTER DIFFER ANTERIOR DESIGNATION OF THE ANTERIOR DESIGNA

The feters case by fractive in pre-prince having a colour continue for some continue. The sound can set or certain selecter the U.S. 1933, banker will habiture in this amount of its chains, the Section Section of the approximate gropostories, with these an Gorgees world 3.U.S. balmer does into content and defined the government's format all departies for the continue and formatical deligibities for the continuery. Was Dari Richris-Bulgerel as recenue for 1933 is Sug-orozoo oronig as interest on the U.S. also noregy poeres on their Van dekel. This year in wand payment was much because next the CAS Administration of the CAS and Order next their AS Administration of Transparent of the entropy of the CAS and their properties of payments on this delia are used for U.S. current repenses, payments of principal are reserved for retirement of the Public Dekt).

mostly in spite of itself—to other texts and to other referents, as it is shown to be the site of *différance* (a mixed word that attempts to connote both "difference" and "deference"—the act of deferring).³⁶

Deconstruction as a style of textual analysis calls attention to the radical indeterminacy of meaning, the inability to reduce the incessant play between signifiers (such as words and symbols) that never settles down into univocality. Deconstruction as a style of writing and design is a deliberate attempt to bring forth all those things that can be said to undermine—deconstruct—the supposedly central and fixed meanings of textual compositions. So, for example, Derrida and others have often composed texts that are seemingly dialogic in nature, with simultaneous columns that in some way refer (or defer) to one another (if for no other reason that they occupy a privileged space on the same page). Likewise, these columns and other devices (marginal notes, cross-outs, and so forth) are utilized to show that there is something both arbitrary and even concealing about textual composition—as in David Carson's 1995 design for his own book, The End of Print. It is arbitrary since words and images produce random possibilities simply by occupying the same space. It is concealing because the eradication of erasures and the placing in margins of notes and other references hides the conditions of production of texts and the importance of marginalia in determining the range of possible meanings. That is, deconstruction as literary/philosophical style is often employed to show that what at first seems secondary to the main meanings turns out to displace those meanings in a reversal of signification.

A recent text by the economist Judith Mehta shows some of these elements at work in the composition of a piece of economics writing. In "A Disorderly Household" (2001), Mehta stages for readers the "noise" that she finds expressed in most experiments involving economic bargaining games. Rather than the formulaic representations that game theorists are used to in modeling such strategic situations, Mehta runs dual columns, one of which contains the "actual words" of participants in a bargaining game experiment, the other a neoclassical game theorist's abstract rendering of it. The point is to "voice the noise," and to show that these two columns are not reducible to one another and that they signify different things that are unrecoverable in acts of "translation" and synthesis. In opposition to the idea that there are few authorized and acceptable ways to "represent" such experiments, Mehta invokes a cacophony of voices

³⁶ Useful overviews of Derrida's work include Caputo 1997; Norris 1988, 1991; Norris and Benjamin 1989; Gasché 1986; and Culler 1983. See Ruccio 1998 for a discussion of the implications of deconstruction and *différance* for economics. Jane Rossetti must be named as among the first to declare a deliberately deconstructive reading of economics texts, as she does in her important 1990 essay on Robert Lucas; see also Rossetti 1992.



Figure 1.4. David Carson, *The End of Print* (1995). Photo: Preston Thomas for Visual Ear. (Permission: David Carson.)

in order to model in a different way, thus deconstructing a game theorist's modernist text.

It is possible to see this text as being concerned with several additional points. One is the idea that all texts achieve meaning by reference and deference to other texts (hence the deliberate quotation of other gametheoretic articles and books). Another is that knowledge production is a messy affair, one that has as a condition of existence a multiplicity of sources and strategies. There is no single or sure road to meaning. Finally, Mehta's text demonstrates that both participants and readers are active (rather than passive) in constructing meanings in and out of texts. This is achieved by reproducing the actual words of the participants in the origi-

nal experiment and by making the text unfamiliar in ways that challenge readers to be more engaged and conscious of their roles in "discovering" what a text is trying to say.³⁷

Indeed, more generally, deconstructive styles of writing give vent to discursive and semiotic play—a kind of play in which discursive layers are tossed down on top of other layers with no clear "reason" for doing so. Thus, while some deconstructionist texts deliberately embody indeterminacy, other texts are seemingly more slapdash and take the form of a bricolage, a mishmash of presumably unrelated elements and images. The "jokey," "ersatz," and even "nihilistic" quality of such writing and construction (as with postmodern architecture, such as Charles Moore's Piazza d'Italia, which is often linked to an excess of "quotation," ornament, and playfulness, in contrast to a primary concern with function, as in Mies van der Rohe's Lake Shore Drive buildings) unleashes a host of possible revaluations, or, if one is critical of these strategies, the very demise of value itself.³⁸ As opposed to the minimalism and parsimony characteristic of "high modernist" moments in culture and theory, postmodernist, deconstructionist style is overflowing with meanings, causes, and effects. The saturation we describe above is an effect of some postmodern creations, and this excess of everything is seen, alternatively, to signal a new age of possibility, a proliferation of meanings, a voicing of previously repressed desires, the cultural emergence of marginalized "others," or the destruction of intelligibility, knowledge, and community.

While deconstruction may be a preferred stylistic strategy within post-modernism, a similarly adopted stance has been called "self-reflexivity." One rendition of this idea is the practice of agents or authors "locating" themselves in the process of producing artifacts and actions. Agents and authors, then, seek to show not only that they are themselves "implicated" in their works and deeds, but also that these productions cannot be separated from such constituting aspects as one's histories, identities, interests, values, and so forth. Warren Samuels states that in matters of

³⁷ In another essay, "Look at Me Look at You" (1999), Mehta makes use of other familiar deconstructionist textual strategies of composition. She combines images with texts, and has fragments of text overlapping on the page. At times, there are multiple columns. She writes with a variety of typefaces and font sizes. She intersperses quotations that, at first, may seem to be tangential to some other parts of the text. The "voice" of the text toggles back and forth between more "personal" and more "objective" modes of presentation. There is little if any deference to disciplinary boundaries, as economic ideas freely mingle with discourse concerned mainly with photography, art history, and much else. And so forth. Indeed, looking over her text, it is hard to "center" it either on the page or even in terms of what constitutes a primary argument. (Thus, deconstruction as a style of literary or artistic creation deliberately conjures up the notion of "decentering" we discuss above.)

³⁸ The history, languages, and styles of postmodern architecture are explained and illustrated by Klotz (1988), Portoghesi (1983), and Jencks (1987).



Figure 1.5. Charles Moore, Piazza d'Italia (1975–80). (Credit: © Norman McGrath/Esto.)

knowledge, postmodernism "points out the fundamental assumptions of all claims to knowledge, including, in a self-reflexive manner, its own" (1996, 66).

Self-reflexivity may be something other than subjective self-awareness. It is more concerned with the argument that all things, from politics to philosophy, are intimately bound up with the situatedness of those en-



Figure 1.6. Mies van der Rohe, 860–880 Lake Shore Drive (1949–51). (Credit: Ezra Stoller © Esto.)

gaged in these activities. And identifying the locations from which people speak, write, and act matters for the kinds of meanings and values that can be produced. In our own field, E. Roy Weintraub argues, for example, that "all knowledge a fortiori economic knowledge, is local and contingent and connected to a community in which that knowledge was produced or interpreted or otherwise made significant." He goes on to state that it is "not useful to speak about economic knowledge without also speaking about economists and the communities in which economic knowledge was produced and communicated" (1992, 53–54).

In a different way, a self-reflexive style can be said to be at the heart of the "discursive turn" that commentators on postmodernism and poststructuralism have noted for the past twenty years. In this view, postmodern forms of theorizing and fictionalizing have in common an inward focus, a focus on the conditions of writing and discoursing, as opposed to the words just "revealing" the world in all its fullness and glory. Thus, postmodernism has been very closely associated with the self-conscious, incessant play with words and images that comprise an assault for some and a celebration for others of modes of discursive creation and representation. The "self-consciousness" of postmodern writers and thinkers that takes the form of showing the discursive conditions of a text's existence—and of showing that one is showing—has been seen either as a retreat of philosophy, art, and social theory away from the pressing issues of the day (presumed to exist "outside" of these realms) or, more benignly, as a new 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.

The inward focus also entails a refusal to "hide" the desires and wills of economic scientists that can be seen to determine their own "preferences" in theory, methodology, and so much else besides.³⁹ Thus, it is incumbent upon authors who write in a postmodern style to make clear the positions from which they believe they are writing, and what privilege or authority they seek, express, or are trying to subvert—and, along the way, to "out" all other economists, especially those who maintain that one's politics or morals or cultural identities should have no bearing on the kinds of economic analysis one disseminates.

One important way that postmodernist style has entered economics has been through exhortations or attempts to put language and sign systems in general (like mathematics) under scrutiny in the formation of economic analysis. Monographs and collections in economics with titles such as *Adam Smith's Discourse* (Brown 1994a), *Economics as Discourse* (Samuels 1990), *Economics as Literature* (Henderson 1995), *Economics and*

³⁹ One common criticism, which is not at all limited to those who pledge allegiance to postmodernism, is that the desires and wills of economists, like others, is largely a function of prestige, power, and even relative wealth. Donald Katzner (1991a), in his thoughtful defense of formalization within economics, admits the point that at least some of the obsession with formal modes of presentation in economics occurs because "that is where the rewards of publication, recognition, support money, promotion, and tenure are . . . [E]ven the selection of the problem to work on is subject to the same reward pressures. And the structure of these rewards tends to be set by the established standards of what constitutes relevant and significant questions, and what makes up the appropriate assumption-content of analyses which purport to provide answers. Clearly the existence of established standards provides a powerful rationalization for the continued use of formalization" (22). Bruno Frey (2001) echoes this view in arguing that "scholars in academia are strongly motivated by extrinsic incentives. Most of them seek to pursue a career leading them to the top—a full professorship at a good university—and a corresponding income. In addition they wish to enjoy a good reputation and fame with their colleagues" (42).

Language (Henderson, Dudley-Evans, and Backhouse 1993), Economics and Hermeneutics (Lavoie 1991), John Maynard Keynes: Language and Method (Marzola and Silva 1994), The New Economic Criticism (whose subtitle is Studies at the Intersection of Literature and Economics) (Woodmansee and Osteen 1999b), and of course The Rhetoric of Economics (McCloskey 1985a), The Consequences of Economic Rhetoric (Klamer, McCloskey, and Solow 1988), Knowledge and Persuasion in Economics (McCloskey 1994), and Conversations with Economists (Klamer 1983) have appeared in the past twenty years and mark this self-reflexive moment in economic thought. ⁴⁰ By showing that economists think and write according to well-known literary and semiotic devices, these texts give the lie to the claim that words, equations, models, and so on are simple transparencies—or, alternatively, privileged languages—allowing economic scientists to apprehend truths that are simply "out there."

Self-reflexivity is witnessed as well when the problem of knowledge is posed largely in non- or antiepistemological terms. Or rather, the problem of knowledge, for many postmodernists, is not an issue since they refuse the polar opposites that have structured most epistemological dissertations at least since the Enlightenment. The problem for many "modernist" philosophers of knowledge had been to specify how a knowing subject could apprehend a dumb and intractable world of objects. But postmodernists have often taken the view that this problem is a red herring. That is, they claim that the problem of knowledge in classical epistemology is built upon a misspecification of the nature of the subject and ignores the impossibility of ever pulling apart the knower from the known.

In this light, postmodernists have argued that knowledge production is not a matter of a subject or scientist finding the right "tools" to "penetrate" the world of objects, finding the nuggets of truth contained within the outer sheaths of extraneous dross. To the contrary, subjects are active in the construction of truths, and their very observations and perceptions structure those truths irresistibly.⁴¹ Subjects therefore can see themselves or their practices and their effects in the truths they produce (a classic

⁴⁰ Though the title may not be as suggestive as the others we cite, we should add Salanti and Screpanti's edited volume, *Pluralism in Economics*, in which some of the essays call for or employ self-reflexivity within economics. In addition to McCloskey 1983a, an important early article reflecting on language in economics that is cognizant of postmodernism and poststructuralist thought is Milberg 1988.

⁴¹ Cullenberg (1994) discusses this issue in more general terms as the "codetermination" of theoretical discourse and material reality. He concludes that this co- or overdetermination implies the impossibility of an independent standard of truth since "a standard of truth requires an independent or absolute point of reference. But in this case the independence has been corrupted by the mutual interaction between theoretical discourse and material reality" (13).

reference is to Heisenberg's uncertainty principle), and this gives rise to another moment of self-reflexivity.⁴² Unable to claim any disentanglement from other texts or the world under analysis, postmodernist practitioners give full voice to their own "presence" in their constructions.

Postmodernism as Critique: From Antimodernism to "Postmodern Moments"

Self-reflexive and deconstructive styles of writing are most often used in the service of critique. Modernism is the object of the critical stances and styles that comprise postmodernism. Now, of course, there are divergent understandings about what modernism means.⁴³ Here, we will specify those aspects insofar as they show up as the foil for our own work. First, however, we need to clarify exactly what it means to regard postmodernism as a critique of modernism and modernity.

For some postmodernists, the forms of social and cultural life that have been ushered in as part of the "modern age" are sufficiently debilitating and faulty as to warrant simple opposition. That is, postmodernism is sometimes encountered as an antimodernism. In this case, postmodernism often joins forces with neotraditionalists (neo-Aristotelians, for example see the discussion of this tendency in Klamer 2001) who see modernism as having brought about the demise in older values—some even promised as a feature of modernism—that stressed (local) community, moral goodness, tolerance, social justice, and individual freedom. Since modernism is seen to have failed in cultivating and upholding such values, postmodernism provides a perspective from which to critically evaluate and ultimately transcend modernity. The tendencies to be sensitive to difference and alterity; to question expertise and authority, especially in the name of the state or science; to value conversation and discourse; to desire ecological conservation rather than economic transformation; to refuse the prerogatives usually accorded to technological progress; to criticize the fiction of the self as an independent, unified entity; and to see the murderous flaws in global schemes for human liberation are dimensions of postmodernism in its criti-

⁴² Indeed, the very meaning of a "fact" has been shown in a number of instances to be socially constructed, thus imbricating the knowing subject/scientist in what modernist discourse considers the objective character of natural or social reality. See Latour and Woolgar 1986; Poovey 1998; and Porter 1995 for detailed studies of the construction of social and natural facts.

⁴³ We refer readers to texts that summarize aspects of modernism that are of most concern for postmodern theorists and practitioners: Toulmin 1990; Kern 1983; Gablik 1984; Sass 1992; Xenos 1989; and Berman 1982. Ross 1994 is one of the few volumes devoted to exploring modernism "as a critical category interpretation" in relation to the human sciences.

cal moments. As we say, often these moments amount to a hope of recovering elements of a premodern world of values and characters and community and sociality. At the very least, modernism is seen here as presenting the opportunity for a future, in suggesting exactly the points at which modernism can be opposed.⁴⁴ Postmodernism as antimodernism takes modernity as the negative blueprint for much of what it hopes to erect.

Yet, for other postmodernists, being simply "against" modernism is both impossible and beside the point. In this view, postmodernism's critical bearing leads towards a "nonmodernism," that is, an attempt to escape the oppositions that structure so much of modernist thought (subject/object, essence/appearance, and so forth). The pressure to be "either/ or" is taken to be precisely what modernism presents as the only option. Hence, postmodernism, to be truly "other," cannot be reduced to the play of modernism's oppositions, just the other side of the modernist coin. And, for many who write and create in this postmodern critical mode, the point is to be "truly other," to be so radically different as to suggest a sea change rather than a search-and-recovery mission (finding the remnants of a discarded premodernism at the bottom of the vast modernist ocean). The critical edge in this type of postmodern work consists of elisions, of escaping the snares presented by modernist ways of thinking and behaving, of being just out of reach of either/or couplets. This type of nonmodernism is often infuriating to modernist and other critics since postmodernists seem to avoid the kinds of battle that their critics desire. Hence, postmodernism as a nonmodernism often appears as avoidance behavior, a retreat into nonconfrontational stances distinguished by an emphasis on play, the relativity of perspectives, self-absorption, and the inconsequence of theory, interest, value, and meaning.

Elements of both these attitudes—postmodernism as an anti- and a nonmodernism—appear in the work of many scholars, inside and outside economics. There is, however, another possibility worth exploring. This is to view modernism and postmodernism as always "incomplete," unable to achieve the pure presence that we discuss above. That is, we take seriously the deconstructionist idea that it is impossible for various modernisms to totalize any field of discourse, art, or work because their meanings and effects are unequivocal and determinate. To the contrary, we prefer to think of modernism and postmodernism as constituting horizons or, better said, "moments" that are, themselves, transient and porous, lacking the ability to suture time and space—to create discernible boundary lines for historical ages or social terrains—in discursive and nondiscursive

⁴⁴ The sociologist Anthony Giddens is one who has argued that the modernist project (e.g., justifying a commitment to reason in the name of reason) fails to complete itself. Thus, "modernity turns out to be enigmatic at its core" (1990, 49).

realms. One critical component of such a view lies in the idea that one can show the tenuous, even if tenacious, hold on imaginations and institutions that attends the appearance of modernism (or postmodernism, for that matter) in any field of inquiry or action. Another critical element consists of demonstrating that, despite its best efforts, modernism is unable to close the circle, to completely hegemonize political, economic, and cultural spaces, and that crucial postmodern moments beckon us toward alternative ways of thinking "beyond" modernism. The postmodern moments that have emerged within fields dominated by modernism adumbrate the paths of its supersession. Thus, to the extent that modernism is seen to produce less than salutary effects, highlighting the postmodern moments within a field can be an immanent critique.

Two additional remarks: One is that our interest in exhibiting the postmodern moments within economics is not much directed to the obvious point that modernism and postmodernism coexist in the present. Nor, really, is it directed to the point that postmodernism might profitably be viewed as the latest stage of modernism, a continuation in some sense of many of the themes developed over the course of the past century in art, literature, philosophy, and so forth. Indeed, some cultural critics have belittled the overarching notion of modernism and postmodernism found in other, nonliterary fields (in economics, for instance) since, in their view, including such elements as indeterminacy, the critique of representation, and the decentered (if not the alienated) subject within the confines of postmodernism misses badly the emergence of these and other themes within what they regard as the "high modernism" of their own fields of work and study. In this view, postmodernism is a strengthening rather than a weakening of crucial components of modernism, that is, a moment in the continuous development of modernism. Or the term postmodern might be reserved to describe still other irruptions.

This brings us to the second remark. Our use of the term *postmodern moments* is also directed at the idea that there are "uneven developments" within and between fields of thought and practice. So, perhaps it makes more sense to label as postmodern the attack on such notions as the unified subject, the presumption of certain knowledge, a privileging of order over disorder within a field like economics, where modernism may appear as a dogged adherence by a majority of practitioners to these notions. Yet in other fields—literary studies, say—postmodernism may be more concerned with the process of interpretation, the openness of the text, and deconstructive techniques, as a way of critically engaging modernism's preoccupation with timeless meaning, aesthetic autonomy, and closed reading strategies. Hence, to bring forth the postmodern moments in any field or endeavor is to acknowledge that modernism may have many faces, with no single visage ever "full-blown" (whatever this fullness may con-

sist of). And, by extension, postmodernism is (or postmodernisms are) likewise dispersed and multiple, and follows no logic that mandates it appear everywhere in the same form at the same time.

Much of our interest in this book is discipline-specific. Therefore, we steer the remainder of our remarks toward the postmodern moments within economics, paying attention to postmodernism's critique directed at modernism within economic discourses.

The Objects of Postmodern Critique: Modernity's "Isms"

Whether anti- or nonmodernist, or dedicated to showing postmodern moments, what does it mean to treat postmodernism chiefly as a critique of modernism? What elements of modernism within economics are found by critics to warrant opposition or transcendence? What moments of postmodernism disturb the modernist waters of economics as a discipline?

First, we enumerate the primary objects of postmodern critique. These include essentialism, foundationalism, scientism, determinism, formalism, humanism, and the notion of the unified, intentional, rational agent. Postmodernism shares with other schools of thought (and here we include feminism, Marxism, institutionalism, and other "heterodox" approaches within economics) an attack on one or another of these objects. Yet there is also a connection between the critiques that are considered specifically postmodern, and so we attempt to show, for example, that the postmodern critique of the unified agent may weigh heavily in postmodern considerations of the process of producing knowledge.

Representation and Essentialism

Modernism is thought to be imbued with representational logics and forms of display. Here we mean that there are at least two levels of

⁴⁵ In what follows, we discuss formalism (or, rather, mathematical formalism) in passing. We note though that for many commentators and critics, the rise of modernity occurred hand in hand with a mathematized culture. And modernism in certain disciplines certainly has meant the move from prose to probability distributions. There are some excellent and diverse discussions, such as Mirowski 1989, Morgan 1990, Porter 1995, and Stigler 1986, of this and related theoretical moves and what they have meant within the discipline of economics and elsewhere; see also Ruccio 1998. In addition, we provide the following sentences from Katzner, the respected mathematical economist, who nicely links modernity and math: "we moderns, it seems, attempt to measure everything . . . [M[easurement is relatively easy and convenient. It has become natural for us. It makes us feel good because it imparts the (frequently illusory) impression that we know something. And it is often not difficult, and even tempting, to ignore what cannot be measured. We seem to be caught up in a culture of measurement which we are unable to let go" (1991b, 18).

thought or practice for every object. A shorthand way of looking at the relationship between these levels is to call them "appearance" and "essence." Now, it is possible to show that modernist notions of science and culture focus on this crucial distinction. In much modernist philosophy of science, for example, the world of appearances is incapable of yielding up the meaning or true nature of objects and their relationships. The role of the scientist is to perceive the patterns that reside within objects or the interactions between them or, alternatively, in the "deep" structures that give rise to the "surface" objects and relations. "Discovery" is all about finding the essential order that lies within or beneath a chaotic and even ornamental surface. Indeed, the scientific critique of common sense and other supposedly nonscientific thought consists of showing that, in these discourses, appearances are mistaken for essences (or, rather, that there is no discernible difference observed between them).

Representation structures as well the self-consciousness of scientific practice. The scientist's words are thought to correspond, in some important way, to the world they describe. That is, language is seen to be representational, at least in the hands of scientists who are trained not to let "mere words" obfuscate the truths that have been discovered. 46

Whether that language is professional prose or mathematics or formal logic, the modernist conceit is that language is capable of representing truths about the world in an undistorted fashion. There are two sides to this modernist coin. In some hands, particular forms of language are wielded as "special codes," qualified to depict the rational order that governs the objects under investigation or, alternatively, to separate rigorous knowledge from imprecise ideas.⁴⁷ In other hands, signs and linguistic

⁴⁶ Compare this view with that of the Physiocrat disciple and French state bureaucrat Turgot, who saw language as the essential ingredient, bar none, for the emergence of genius. Manuel and Manuel (1979) summarize Turgot's theory, which postulated that the progress of language would make it "destined to become an even better instrument; it would be stripped of its rhetoric, cleansed of its ambiguities, so that the only means of communication for true knowledge would be the mathematical symbol, verifiable, unchanging, eternal" (471). They proceed with this wonderful account of Turgot's view of what happened to scientific genius with the fall of the Roman Empire: "In the past one of the unfortunate consequences of the conquest of a decadent higher civilization by vigorous barbarisms had been the linguistic confusion which followed the disaster. A long period of time elapsed before the victors and the vanguished merged their different forms of speech and, during the interval, language, the only receptacle for the storing of scientific progress then available, was lacking. Geniuses continued to perceive new phenomena, but since they were deprived of a stable body of rational linguistic symbols their observations were stillborn.... The babel of languages resulted in a protracted period of intellectual sterility during which it was impossible for a creative genius to express himself because there was no settled linguistic medium for scientific thought" (471-72).

⁴⁷ In economics, it is commonly believed that practitioners who eschew mathematical forms of expression are engaged in, to use Samuelson's words, "the laborious working over

conventions are useful or necessary to communicate truths that have been discovered through other means and that require representation through language. The idea here is that language is a neutral medium that can be utilized when and where it does not "distort" the essential truths that science has unearthed.⁴⁸ Hence, language is either essence or appearance, but in both cases a necessary convention if the gems of truth excavated from the world are going to be put on display.⁴⁹

One form of this cult of representation, then, is what has been called essentialism. The idea is that there are essences to discover, that there are tried-and-true methods of uncovering these essences, and that appearances are to be probed for the truths hidden beneath their surface. Much postmodern critique has taken the form of a refusal of representational schemas and logics, and a rejection or subversion of essentialism.⁵⁰ In place of these schemas and logics is an aesthetic or ethic of "depthlessness." Postmodernism repudiates the search for and representation of essences, proclaiming in contrast notions of juxtaposition, simultaneity, and so forth. That is, for many postmodernists, there are no meanings hidden in texts or in the world, and therefore no hierarchies of elements, some living as appearances and others as essences, some as causes and others as effects. Nothing waits for just the right technique or act of genius or accident to be discovered in this nonrepresentational logic; there is instead an appreciation of the play of elements that comprise pure surface. Attention to the constructedness, arbitrariness, and contingency of meaning and value marks many postmodern approaches. The world is not necessarily meaningless or valueless. But meaning and value are not "essential" or at least implicit in objects and their relations. Looking at how knowledge is produced rather than how a subject/scientist extracts truth from glittery appearances is, once again, the postmodern turn.⁵¹

of essentially simple mathematical concepts" that is "not only unrewarding from the standpoint of advancing the science, but involves as well mental gymnastics of a particularly depraved type" (1983, 6).

⁴⁸ Robert Solo, in fact, criticizes the use of mathematics in economics and advocates the use of a "natural language" precisely because the latter "alone conveys an image in the mind that can be checked against the observed and experienced" (1991, 103).

⁴⁹ With evident approval, James Buchanan (2001) argues that the replacement of the language of calculus by that of game theory represents a fundamental shift in the definition of economics from a maximizing framework to that of a "science of exchanges."

⁵⁰ According to Jane Rossetti, in an essay explaining the relevance of deconstructive view of language for feminist economics, "without an essence, the words themselves have no fixed meaning. . . . Objects have no essence; language cannot convey them, but rather creates them through a series of specific and contingent categories" (2001, 308).

⁵¹ One good example is Andrew Pickering's "posthumanist" account of Rowan Hamilton's construction of the mathematical system of quarternions in which "the center of gravity . . . is positioned between Hamilton as a classical human agent, a locus of free moves, and

Much else is implied in this postmodern critique of representation and essentialism. For example, formalism as a preferred mode of presentation is based on the presumption that some languages are better suited than others for representing truths.⁵² The idea that there is, in fact, an important distinction between form and content belies the notion that form can be adequate to content if and when the appropriate linguistic or semiotic devices are employed. The defense of formal modeling and reliance on mathematics in economics depends on the view that such forms of presentation are better able to allow truths to shine through (or at least hypotheses to be tested for their potential veracity or acceptability) than nonformal devices.⁵³ If there are no truths waiting to be discovered and displayed by the right formal language, then the power and privilege ac-

the disciplines that carried him along" (1997, 63). There are, of course, many more examples, as during the past twenty years there has been much written about the "social construction" of knowledge, though not all of this discussion embraces postmodernism. For just two accounts with different foci, see Longino 1990 and the essays in Lynch and Woolgar 1990.

⁵² Formalism also connotes, for many, "rigor." And this attribute is often seen to comprise the acid test for deciding if a statement is possibly scientific or otherwise. It is interesting to note that in the same issue of Methodus, we get two different accounts of the place of the value of rigor for modern economic science. The first, by Sen (1991), amounts to the claim that furors about formalization sometimes are blown out of proportion since, by now, most economists have some formal training. And, "furthermore, the aura of glory that was associated once with being 'rigorous,' 'exact,' and 'modern'—available only to the chosen mathematical few-has rather dimmed in recent years" (73). The second, by Solow (1991), is directed to the confusion sometimes between abstraction and rigor. Losing patience (Solow's comments come as a response to a "debate" of sorts between McCloskey and Katzner over formalization in economics), Solow blares, "there is no excuse for lack of rigor. You can never have too much rigor. To make non-rigorous statements is to make false statements" (31). And finally, "there is not a category of non-rigorous truths, not in theory" (31). It seems Professor Sen hadn't yet spoken to Professor Solow. One more view on rigor will suffice. This is from Mark Blaug's recent salvo aimed at formalism in economics: "If there is such a thing as 'original sin' in economic methodology, it is the worship of the idol of mathematical rigor, more or less invented by Arrow and Debreu in 1954 and then canonized by Debreu in his Theory of Value five years later, probably the most arid and pointless book in the entire literature of economics" (1998, 17). Professors Sen and Solow, meet Professor Blaug.

⁵³ We have gotten used to the very familiar soliloquy in which famous economists, many of whom pioneered the use of these models and near-pyrotechnical mathematics, late in their careers wonder how in the world such "tools" ever got so out of hand in the training and consequent work of economists as to displace all other forms of argumentation, a concern for "reality," and discursive borrowings. One such example is the recent confession by the new economic historian Richard Easterlin (1997), in which he bemoans that "model building is the name of the game. Empirical reality enters, if at all, chiefly in the form of 'stylized fact.' Econometrics, though a formal course requirement everywhere, plays a surprisingly small part in economic research—showing up in perhaps one dissertation in five. There is no such thing as descriptive dissertations or theses devoted to the measurement of economic magnitudes. Although topics in disciplines other than economics are not uncommon, there is little or no use of the work done in the other disciplines" (15).

corded to mathematics are likely denied. Formal presentation and modeling become just another means of knowledge production, with no better access to underlying essential truths than any other such means. Formalism produces economic knowledge, but it is production once again (and not representation) that is in evidence.⁵⁴

The postmodern critique of essentialism resounds as well in thwarting attempts to escape some forms of representation, as can be seen in some versions of economic philosophy in which words and numbers are said not so much to represent or describe a real world outside of discourse as to present testable propositions for their ability to predict outcomes. The shift from the "realism" of assumptions to the "as if" hypotheses of Milton Friedman and his followers is often defended as an implicit critique of essentialism. This is because Friedman and others may claim not to have any particular notion of the correlation between words, numbers, and underlying truths but, instead, seek accuracy (or at least less falsehood) in prediction that follows from a causal hypothesis. Yet this response fails to eliminate the recourse to some notion that it is possible to discern transdiscursive truth via a method of ascertaining regularities through scientific observation. Such observation "reads" essences (now discussed in the form of abstractions) in the myriad perceptions that are picked over for what is necessary or useful in testing the proposition and what is not. Appearances still are suspect, and need to be arranged and interpreted properly in order for the scientist to verify or falsify the proposition in question.

Friedman's "as if" approach is only one of many such alternatives in the philosophy and methodology of economics, indeed, in all scientific disciplines. We are aware of the view that, at least since the advent of positivism, Humean skepticism about the notion of essence—where essence is equated with "necessity" thought to regulate the relations among and between events, captured in the language of cause and effect—has been the main advance in the philosophy of science. In this view, essentialism is understood mostly as a problem for rationalist epistemologies, or at least those for which causation exists as a necessary relation between events. It may also be a concern for those approaches to epistemology for which universality is less a matter of the conjunctural coincidence of a perceived sequential pattern in observations about those events and more a matter of what must logically be the "underlying cause" of that which

⁵⁴ On this point, postmodern approaches in economics have much in common with critical realists such as Tony Lawson, who emphasizes that "knowledge is a social product, actively produced by means of antecedent social products" (1997, 25). Indeed, while there are obvious disagreements between postmodernists and critical realists, we are moved here more by important similarities regarding the social production and distribution of economic knowledge, a commitment to (at least some forms of) nonreductionism, a dislike of scientism, and much else. For more on critical realism, see also Fleetwood 1999.

appears to follow. Although they do provide relief from some aspects of the assertion of necessity and the adequate representation of that necessity in a "correct" (read scientific or logical or mathematical) language, these approaches are themselves enmeshed within discursive structures in which essentialisms remain the norm.

In order to make our position clear, perhaps an example will help. Let us take the considerable efforts of the philosopher of science Rudolf Carnap. In An Introduction to the Philosophy of Science (1966), Carnap elaborates a position on facts, laws, causes, and determinisms that owes its impetus to Humean skepticism. Among Carnap's substantial contributions are his "perspectivist" view of observations (the fact that many different people will, rightly, advance different causal explanations based on their initial location and circumstances relative to an event), his consequent vision of causation as complex and multiplied (he rejects the notion, in most if not all cases, of single causes that lead to unique effects), and his view that "laws" are mostly the temporary acknowledgment of no disconfirming observations. Carnap is justified, in our view, in calling critical attention to the linguistic or semantic regime in both ordinary and scientific discourses that lend meaning to the ideas of cause and effect through such terms as leads to or follows. Of course, Carnap sees the problem of deterministic and essentialist versions of causation—those that attribute causation to an essence of the objects/events involved, or those that attribute a necessity of sequence because of a perceived logic of the universe—as a failure of linguistic effect. So in his distinction between facts (statements of singular occurrences) and laws (statements of universality that emerge from the comparison and perception of a regularity in observations dispersed over time and space) he laments the "ambiguity" of language that creates the "misunderstanding" in which factual statements are confused with universal laws. Carnap appeals to the notion that such ambiguities do not so much attend "symbolic logic"—the language of scientists—as they do "ordinary word language," so that there does thankfully exist some kind of linguistic convention that mirrors/represents more adequately the distinction between fact and law.

Much of Carnap's philosophy depends on the familiar resort to forms of prediction and disconfirmation—a testing of laws vis-à-vis careful and constant observations. There is much here that can be questioned regarding essentialism. First, there is the "cult of the fact" that prevails in the

⁵⁵ While this phrase may live in many different places and texts, we lifted it from an inviting book by Liam Hudson (1972), an experimental psychologist who, in the liberatory, humanist days of the early 1970s, subjected his own Cambridge-Oxford career and his consequent immersion within his becoming-scientized field to a soul-searching "self-criticism." The tenor of his "autobiography" is established in the first page of his "preamble": "This is a book about professional psychologists and the visions they pursue. It expresses a growing dissatis-

accumulation of scientific knowledge. It remains untheorized for Carnap, not to mention many other philosophers of science, how and why facts singular observations—are granted the privilege of being the arbiter of the "truth" value of perceived regularity. There is the faith—which takes the form of "obviousness"—that observation is the standard against which causal, possibly lawlike, statements may be judged to be appropriate (and therefore productive of knowledge). In Carnap's philosophy of science, factuality serves as the essence of truth value, that is, for all putatively empirical statements. Facts and observations are accorded the singular privilege of determining—"causing," keeping in mind all the Carnapian warnings about this term—the willingness to treat shared perceptions of a sequence of events as "true." They are, in any case, a "necessity." (Is there a way or even a will to test the hypothesis that testing predictions by reference to observations is the leading—if not exclusive means to establish veracity?) Facticity is given pride of place in the determination of truth value, and this reduction of scientific knowledge itself to a "necessary cause" or determination reveals one prevalent form of essentialism: the idea that "the essence" of truth value for lawlike statements with presumably empirical content is comparison with/by facts.

faction with the self-consciously scientific psychology in which I myself was trained—an activity that, increasingly over the last ten years, has taken on the air of a masquerade. It has been written in the hope that, somewhere behind the paraphernalia of false science and apparent objectivity, there lies the possibility of a more genuinely dispassionate study of human nature and human action" (11). Much of the charm of Hudson's book lies in his own psychologizing—gently but perhaps significantly—of the psychic processes that lead one to a "cult of the fact" (today, one could even call these processes "disorders" according to the current DSM, for which it seems there is a disorder that corresponds to nearly every imaginable human behavior and mood). Again, while empathically, Hudson narrates critically his own cultivation (he later terms it "indoctrination") in the philosophy of science at Oxford. "As a student, I was certainly left with the belief that all knowledge consisted of facts: hard little nuggets of reality that one could assemble like building blocks into patterns. . . . This 'building block view' in which all elements are inert and equal, is called, I have since learned, 'atomistic.' . . . Our preoccupation with evidence, similarly, made us unnecessarily clumsy . . . [I]t was on to 'the facts,' the evidence, that we homed. The impulse was healthy, in that it short-circuited discussion of woolly generalities. But it was also philistine, in that an appeal to the evidence can easily deteriorate from an attempt at dispassion—a noble venture—into a verbal destructiveness that is both cheap and facile. Only more recently have I realized that the appeal to 'the facts' can also herald an altogether less wholesome enterprise: that of rendering 'scientific' or legitimate a view that is at heart ideological" (38-39). Without commenting on the brave naïveté expressed here, or the "modernist" shibboleths that remain intact, we just want to note that Hudson goes on in his text to provide a welcome and open exploration into what kinds of psychological demeanors are inscribed within the modernist "will to facts" (our phrase). We implore the reader, though, not to see this exploration as a "bottom line" that mercilessly reveals the "real" modernist heart of darkness. It is one of many ways to show that what may seem evident and transcendent from a "no place because everyplace" point of view has, of course, its own overdetermination in and through very specific historical conjunctures and discourses (psychological processes included).

There are other such forms of reduction and essence in Carnap.⁵⁶ Another occurs in his discussion of what is meant by necessity and the problem that arises when a single observation or experience is used to dispute a metaphysical presentation of a law of nature. He writes: "Suppose that on visiting a city for the first time you use a street map to help you find your way about. Suddenly you find a clear discrepancy between the map and the city's streets. You do not say, 'The streets are disobeying the law of the map.' Instead you say, 'The map is wrong.' This is precisely the situation of the scientist with respect to what are called the laws of nature. The laws are a map of nature drawn by physicists. If a discrepancy is discovered, the question is never whether nature disobeyed: the only question is whether the physicists made an error" (207). Carnap goes on to say that "it should be clearly kept in mind that, when a scientist speaks of a law, he is simply referring to a description of an observed regularity. It may be accurate, it may be faulty. If it is not accurate, the scientist, not nature, is to blame" (207).

Let's consider this formulation. Leaving aside the assertion of the "bruteness" and opacity of nature, its relative "fixedness" insofar as only it can change its own laws (and of course, not human discourse), we are left with both an untested proposition—the fact that nature is not disobedient in respect to a description of it—as well as a notion that the scientist can either more or less "accurately" describe these laws, by which Carnap means universal statements that are based on the regularity of observation. The essential qualities and characteristics of nature are posited here without regard to testing the veracity of nature's agency in determining the "error" or discrepancy. Nature, we are told, is not capable of "disobeying" whenever an "error" or discrepancy exists between the representation of a law (a map, for example) and the behavior of nature that is signified and condensed in that representation. Hence nature's "naturalness"—which of course is its "essence"—is asserted in the fact that scientists, and never nature, may be "to blame" whenever descriptions are inaccurate. While it may seem absurd to readers to suggest anything different, what we are concerned about here is simply the habit of mind that essentializes nature and finds that language, in this case description, can either be accurate or faulty but, in any event, a secondary and reflective response to the primacy of nature itself.

⁵⁶ It is not feasible for us to elaborate here all of these essentialisms, at least as we see them. But among them would surely be the essentialism that is bound up with the scientific "problem of knowledge" itself and, of course, the fact that the knowledge is seen largely to be a matter of a cognitive relation between a thinking subject and an object that is subjected to scrutiny. For our money, Althusser (Althusser and Balibar 1970) provides the most telling critique of the essentialisms involved in "the problem of knowledge," scientific or otherwise.

But this example brings us to a more wide-ranging problem. And that is the problem in which scientific knowledge is seen primarily to be not only an accumulation of universal laws, but also only a moment in this accumulation process. This issue arises in the context of Carnap's helpful discussion (187–95) of the many-sided determinations of the "cause" of an event. There are at least two components here that bear on our discussion of essentialism.

In the first case, Carnap shows that it is impossible for mere mortals to capture all the "causes" of some events. The problem here is one of the limits to knowledge that result from no one's having the "view from everywhere." Nor is it possible to state the *definitive* composite—the ultimate totality—of all the different "right" observations that come from all the different perspectives. At any moment in time, the prevailing composite is all that can be said to be "the cause" of an event. But consider Carnap's move here. Carnap regards this prevailing totality as the best that can be done under the circumstances, implying, of course, the possibility or at least the norm of a complete set of observations that would finally comprise the real cause. (To ward off possible objections that we misconstrue Carnap here, let us make clear that we fully understand that "real cause" has only the meaning of that which is useful for prediction.)⁵⁷ The second component to which we want to call attention is the view that such observations are incomplete, and that science is always engaged in a process of adding to the laws of causation. This implies that the current state of knowledge is forever less than perfect.

While this may be helpful in establishing some relief from the arrogant stance that posits that some specific explanations of events are eternally necessary and exist for all times and places, it is also a modernist maneuver. Its modernism consists of the humble assertion of the mere factness of limitations, such that limits are seen as unyielding and as "given" in and through nature, or at least in and through the scientific endeavor itself. In this view, it is the essence of science not to be able to ever end discussion and investigation of any law because of the ever-present impos-

⁵⁷ This is how Carnap (1966) describes it: "Causal relation means predictability. This does not mean actual predictability, because no one could have known all the relevant facts and laws" (192). Why not, we ask? What is being asserted here as the necessary limit to knowledge? Is it, itself, a fact of nature? A law? Carnap goes on to say, "It means predictability in the sense that, if the total previous situation had been known, the event could have been predicted. For this reason, when I use the term 'predictability' I mean it in a somewhat metaphorical sense" (192). How could it have been otherwise? Carnap finishes by stating that "it does not imply the possibility of someone actually predicting the event, but rather a potential predictability. Given all the relevant facts and all the relevant laws of nature, it would have been possible to predict the event before it happened. This prediction is a logical consequence of the facts and the laws" (192–93).

sibility of having complete knowledge, since we can never know now what observations will come tomorrow that may disconfirm any universal statement today. In our reading of postmodernism, the possibility of "complete knowledge" in and for any discourse does in fact exist. And this is precisely because in postmodern approaches to science and epistemology, the universalism involved in the projection of this empiricist essentialism—ironically of the necessary "contingency" and presentness of universal laws—is of course *within* one or more scientific discourses, but perhaps not others. Complete or incomplete knowledge, for that matter, is intratheoretical, not something that simply exists by virtue of a transcendent fact of nature.

We can put this point differently. There are very well developed traditions in the philosophy of science—not, for the most part, Anglo-Germanic—that present more "internalist" or, to use Althusser's phrase, "relatively autonomous" notions of scientific discourse. Thomas Kuhn's work (1970), of course, is another example of such a tradition, as is that of Paul Feyerabend (1978). As Resnick and Wolff (1987) depict, in many of these alternative traditions to mainstream Anglo-Germanic philosophy of science (and building on the work of Gaston Bachelard and Georges Canguilhem), the epistemological norms, protocols, methods, and so on that establish the truth value of any proposition are contained, largely if not exclusively, within a particular discursive formation, scientific or otherwise. 58 The perceptions of the limits to knowledge—or rather, the fact of the contingency of universal causal laws stated by Carnap—are neither transdiscursive nor given "in nature." In contrast to Carnap's view, we are willing to propose that the combination of perspectives that go into the description of an event are, in fact, "total" and perfect, at least within some norm of thought in which knowledge has no "outside" or extension into the future, or in which the future is thought to be completely mapped in advance. In every conjuncture, for example, we can imagine some advocates of particular discourses arguing that their capturing of a causal law, through description or some other device, is complete. This contrasts with discourses that encourage their purveyors to long as lonely seekers who survey the long, arduous road ahead—for a day in which completion is promised, but alas for whom an arrival at a final resting place will never occur.

It is a form of essentialism to assert the irreducibility of *the* limits to knowledge, as though this assertion would necessarily hold in any en-

⁵⁸ For us, Dominique Lecourt's *Marxism and Epistemology* (1975) remains a groundbreaking text in elucidating the importance of Bachelard and Canguilhem for both contemporary philosophy of science and a distinctive Marxist epistemology. Of course, Lecourt is himself deeply indebted to the critique of both empiricist and rationalist epistemo-

deavor labeled scientific. It is at best a disputable claim to assert that the essence of scientific knowledge is for it to be forever incomplete and likewise essentially contingent because of the eternally repetitive inability to predict future observations. But such a claim requires a world picture in which uncertainty pertaining to a unknown (in advance) future is a natural fact and is not itself discursively produced and constituted, a point to which we return in chapter 2.

Foundations for Knowledge

Postmodern critique in areas dominated by ideas concerning scientific knowledge has concentrated largely on an assault on foundationalism, the notion that there is a transdiscursive basis upon which such knowledge can be erected.⁵⁹ The foundations in question usually range from certain modernist epistemological positions (which include empiricism and rationalism and their offshoots, like positivism) to "proper" experimental methods. What postmodern criticism amounts to, in light of the refusal of essentialism, includes an alternative view that there are multiple bases for the production of knowledge; that there can be no ultimate conceptual arbiter of different truth claims (though there may indeed be the perception that these claims have different effects, some of which can be preferred to others); that discourses concerned with knowledge production are often irreducible, largely nontranslatable, and therefore mostly incommensurate; and that settling the priority or hierarchy of different truth claims must always be connected to persuasiveness and power. Though relativist nihilism is certainly one possible outcome of this antifoundationalism, it is not the only one. 60 Postmodern critique calls attention not only to the play of power and persuasion in the current or past

logical essentialism that can be found in Althusser's great contribution to *Reading Capital* (Althusser and Balibar 1970).

⁵⁹ There is no question that a defense of foundations for knowledge consists largely of the view that establishing bases expands the realm of what can be considered worthy of scientific study. Yet postmodernists often follow the line of reasoning found in Rorty 1979, in which foundationalism is seen to be about constraint and exclusion. In Rorty's words, "the desire for a theory of knowledge is a desire for constraint—a desire to find 'foundations' to which one might cling, frameworks beyond which one must not stray, objects which impose themselves, representations which cannot be gainsaid" (315). We cannot overemphasize, by the way, the impact of Rorty's work on postmodern philosophies.

⁶⁰ Indeed, Bruna Ingrao charges E. Roy Weintraub with plunging into an "extreme relativism" because of his insistence that the "sequence of 'facts' in the history of the discipline is fluid and mutable, according to the contingent problems with which each community of scholars is concerned" (1997, 227). In our view, Weintraub's work does not lead to "extreme," "radical," or "nihilistic" relativism precisely because it involves the production of concrete stories about specific episodes in the history of economic thought.

status quo within scientific practice.⁶¹ It also calls attention to the fact that such forces are considered, in a sense, legitimate in the adjudication among and between discourses.⁶²

Rather than shying away from, or simply decrying, the way rhetoric, privilege, authority, and networks of power are entwined in knowledge production and especially in claims for any one discourse's superiority in constituting truth, an alternative position, one embraced by the French philosopher Michel Foucault (1972, 1980), is to acknowledge precisely that this is the way the world of knowing and convincing (and enforcing) works. The imbrications of power and knowledge, in fact, were the focus of much of Foucault's work, and postmodern critics have taken from him the view that there is nothing much to be ashamed of in the recognition that "wills" and "desires" to knowledge have as much to do with power as they do with anything else. 63 Power can be contended over; it can be the object of struggle over who gets to speak and produce authoritative knowledge and who doesn't. This, of course, is exactly what is at stake in the attempts to storm the citadels of knowledge production occupied and controlled by those (usually Western and white men) who disseminate their "normal sciences" in the form of canonical knowledge. That is, power to produce, speak, and disseminate, as well as to subvert and displace, traditional notions of knowledge and particular conceptual content are often the objectives of oppositional forces—in economics comprised of heterodox thinkers and doers, including Marxists, feminists, postcolonialists, and many others.⁶⁴ It is true that some of this opposition holds

⁶¹ The mathematical microeconomist David Kreps admits that "the rise of mathematics" in economics can be explained, at least in part, by the fact that "the use of a powerful and somewhat obscure tool confers power on the user. As economists became convinced of the value of mathematical rigor, the reward system (based on peer review) reinforced this tendency" (1997, 64).

⁶² Weintraub (1992) asserts that "power does matter" (55). Yet, of course, some like Roger Backhouse (1992) aren't persuaded. Though Backhouse admits that the dependence of knowledge on power may be a "fact of life," he concludes there is still "no place" (by which he means no legitimate place) for power in economic methodology (73).

⁶³ As Chris Weedon explains, "the theory that all discursive practices and all forms of subjectivity constitute and are constituted by relations of power is . . . only disabling if power is seen as always necessarily repressive" (1997, 175).

⁶⁴ Postcolonial theory has become an important literature over the last twenty years and shares in many ways concerns similar to those of some postmodernists, feminists, and Marxists, though, of course, there are important differences as well (for one comparative treatment, see Appiah 1992). Postcolonial theorists are concerned with the literary and cultural constructions of those in the former colonized nations as well as those diasporic locations outside these countries. Postcolonial theory often builds upon the idea of "subalternity," "otherness," and "resistance." The idea of the subaltern and the other refuses the binary of the postcolonial subject and experience in simple opposition or contrast to the West. Rather, otherness is often conceived in a nonessentialist and nontotalizing recognition of the myriad

precisely the same modernist view that scientific knowledge ought to be disinterested, unsusceptible to power, unmoved by rhetorical flourishes, unattached to other networks of power in society, and so forth. But, in effect, the postmodern position à la Foucault is that power and persuasion are *not* science's dirty little secret, and postmodern critique has attempted to bring them into the light (sort of like a previously perceived deviant behavior, which has now been shown to be undeserving of ostracism), not in the form of sensational revelation or staged revulsion, but as an assertion of the norms necessarily operating in the everyday life of scientific disciplines.

Science or Scientism?

What this postmodern critique makes possible, though, is a sweeping rejection of scientism, the view that scientific concepts, methods, protocols, and the like are exclusively entitled to the power and privilege they have achieved with modernization. If the growth of scientific knowledge is the key accomplishment of the past three centuries in the West, it has been accompanied by an elaborate philosophical defense of a variety of exclusionary practices by which those deemed to be untrained in or unreceptive to such science are shunted aside or even denied opportunities to speak (since they are considered to be the voice of unreason). We need not belabor this point here since so much of the controversy surrounding postmodernism—indeed, many of the visceral reactions it has provoked—has been in the challenges it has thrown up in contending over the exalted status of science within modernism. However, again it should be noted that the attack on scientific privilege does not necessarily imply a refusal of scientific practice.⁶⁵

differences between and among postcolonial people and groups and their colonial pasts and postcolonial presents. Resistance is often thought of as subversion or mimicry, often with the recognition that the act of resistance cannot be separated from what is being resisted. The idea of hybridity is an important conceptual marker signaling a recognition of the integration of cultures and practices and the impossibility of a fully self-referential or "authentic" postcolonial life. Postcolonial writers are also concerned with many of the other concepts that have occupied postmodern theory, such as identity and difference, subjectivity, fragmentation, and representation. For an excellent collection of essays dealing with many aspects of postcolonial theory, see McClintock, Mufti, and Shohat 1997. Gayatri Chakravorty Spivak (1999) provides a brilliant critique of postcolonial studies, and she pushes the field to consider seriously the conditions of transnational culture and globality. S. Charusheela (2001) explores the implications of postcolonial theory for feminist economics.

⁶⁵ David Hollinger (1994) is right in his claim that "scientism is sometimes taken to cover a range of ideas broader than either naturalism or positivism, but the common denominator of its many definitions is a highly censorious tone . . . [S]cientism is normally an opprobrious epithet directed at what the speaker regards as an arrogant or naive effort to extend the

Indeed, the postmodern critique has often focused on the self-congratulatory aspects of the philosophy of science and the attempts to insulate scientific practice from scrutiny of its own rules of discursive formation, its implicit epistemological norms, its own situatedness in contemporary culture and social life, and much else. Postmodernism as critique of scientism then connects up with other, perhaps nonpostmodern, critics of science and the philosophy of science, such as Thomas Kuhn (1970), Paul Feyerabend (1978), Bruno Latour (1993), Sandra Harding (1986), and Barry Barnes (1985), who can each be read to have promoted the idea that "agreement" in science needs to be investigated, and that those theories that shape a field of thought are bound to more general social institutions and patterns of status, wealth, and power, or are able to hegemonize the field by "normalizing" the conditions under which theory arises. The postmodern critique of scientism is close as well to the view of Feyerabend that there are no singularly exceptional methods that are productive of science, and even that scientific progress is the result of scientist's refusal to follow any prescribed road toward truth.⁶⁶ As we have said, when one empties the world of the distinction between appearance and essence, and any method that claims to uniquely bridge the gap, one gives vent to a plurality of approaches that are potentially productive of knowledge.

The critique of essentialism and foundations opens up the question, then, of the privileged status of scientific discourse. If science has no prior purchase on uncovering embedded and veiled truths, then it is not possible to sustain the hierarchy of discourses in which only science is productive of knowledge and all else—opinion, faith, ideology, art, and so on—is productive of, well, all else. If postmodernist critique is effective in the attack on essentialism, then one possible repercussion may be the leveling of the field of knowledge. Thus, as we argue in chapter 7, postmodern critique encourages one to start from the premise that what are today regarded as ersatz or commonsense or everyday—read, confused, aberrant, and irrational—understandings of economics can be shown to be likewise productive of knowledge worthy of analysis and consideration.⁶⁷

methods or authority of science into a field of experience where it does not belong" (34). Hollinger, in his defense of some variant of modernism in the human sciences, is also correct in stating that not all "aspirations toward a scientific culture" have been scientistic. But, again, we argue that the negative connotation in the term *scientism* is precisely oriented toward defenses of science that, when faced with people who do not buy into this form or thinking or its presumed results, lead either to a sneer or the advice (often followed by an enforcement) to "shut up."

⁶⁶ Of course, one does not have to buy into postmodernist critique to hold a pluralist methodological position. For a spirited defense of methodological pluralism in economics, see Caldwell 1982.

⁶⁷ In his interesting and valuable collection of Austrian, neo-Austrian, and libertarian essays about the possible and actual contributions of economists to public discourse, Daniel

In other words, the trappings of science do not amount to a protective shield, and much of importance would be achieved, we think, if all would-be knowers treated seriously the possibility that truth and useful knowledge can come from these "other" discursive formations and locations.

We note that this leveling of the field of knowledge makes it also impossible to sustain a meaningful distinction between metadiscourse and discourse. To take just one example, there exists a hierarchy that is well established and respected within academic economics such that talk about economic discourse (which includes such specializations as the history of economic thought and the philosophy and methodology of economics) is seen as "second order," while "doing" economics (which involves mostly formulating and testing economic models) is seen as primary, the stuff the discipline is essentially made of.

Now, one presumption here is that economic model building and even "high theory" (which often has no particular testable model as its consequence) have a priority in defining professional economic discourse since they are not commentary on texts but, in contrast, have direct access in some way, shape, or form to the "content" of economics (either the "real world" or mathematically derived abstract truths). Here we see that if we conjoin the critique of essentialism with other poststructuralist tenets regarding the textuality of any world "read" by a scientist/observer, then we can appreciate the impossibility of maintaining the "meta" distinction that accords, once again, so much power and privilege to those thought capable of doing economics as opposed to merely talking about it. If doing economics is just one other means of "reading" the world, and consists of no more nor less than "commentary" on it, then one can at least challenge the first-order, epistemological privilege that is accorded to high economic theory and/or econometric analysis. Admittedly, the objects of

Klein (1999) describes the practitioner of economics as "Everyman." Now, this label is a tip-off for what is to follow: "the practitioner of political economy is typically highly ignorant of basic economic ideas" (2). This diagnosis leads surely to a prescription. Klein quotes Adam Wildavsky: "It is up to the wise to undo the damage done by the merely good" (7). We hope that readers will forgive us for wincing when we read Klein's follow-up: "The economist's good works rarely bear fruit in any direct way. The economist's advice seems to fall on deaf ears. When good advice is rejected, the rejection is brusque and ignorant. Even in the rare case when the advice takes root, the sage's influence is long lost and he receives no credit. For the most part, participation in public discourse is like tutoring an ornery and spoiled child. The economist must plead to get attention; once he has attention, his appeals consist of elementary ideas, rehearsed earnestly and painstakingly, and illustrated by imaginative stories and examples. Just when he thinks the public and policymakers are taking his precepts to heart, they suddenly abandon his instruction and for no good reason. His only recourse is to keep on hoping and pleading" (8). For a different story about the possible ways economists might interact with "everymen" (and women), see the essays in Garnett 1999b and chapter 7 below.

such discourse may be different from the objects of the history of economic thought, but perhaps that is all that can be said. Neither tells the truth better or worse, and neither is closer to (or further from) the supposedly primordial "real" with its hidden meanings.

Determinism

Modernism is accused by postmodern critics for its persistent recourse to deterministic arguments where questions of cause and effect are concerned. In some versions of this critique, modernist explanation consists mostly of establishing the necessary or, less strongly, probabilistic patterns that link particular events as causes with other events as effects. Indeed, theory is the realm in which such explanations reign, and the absence of causal explanations is often viewed as the absence of theoretical activity. Now, while it is by no means necessary for causal explanation to be consistent, unilinear, and determinate, postmodern critics see the reduction of causation to these elements in most of what they observe in modernist discourses and disciplines. Determinism is a way of summing up these elements, as deterministic arguments are characterized by the search for principal causes that are said to have the largest weight (sometimes the only weight) in consistently bringing about a particular cause. In the idealized world of the "marketplace of ideas," causal explanations are preferred if they either identify an essential, underlying, and necessary cause (hence, determinism can be another form of essentialism) or capture a statistically predictable correlation between two distinct events, where one event is seen to nearly almost always follow in time and perhaps in space from the other. Postmodernist thinkers, though, have proposed alternative ways of conceiving of causation that avoid, in their view, the destructive consequences of determinism (and these range from the intolerant fanaticism of those who feel that they have found the one and only explanation for events to the passivity produced in human agency and social action when deterministic understandings posit the impossibility of alternative courses of behavior).

Determinism comes in many shapes and sizes. Within modernist social and natural sciences, everything from biology to culture to the economy to subjectivity has been pronounced, often simultaneously, to be the first, last, and perhaps efficient cause of many different events and human actions. In economics, of course, determinism has a variety of familiar forms, the most common being economic determinism, in which the economy or some subparticle of it is seen to structure an array of predictable effects. Hence, "It's the economy, stupid" is not just taken by many economists as an adage of what should count in the political opinions of social

agents. It is put forward to describe a grand chain of social causation, in which "the economy" (here including alternative entry points as labor, utility, rational choice, and so forth) is seen as the motivating agency behind all consequent social outcomes. ⁶⁸ Indeed, as we discussed above, the extension by Becker, Richard Posner (1992), and others of economic reasoning into cultural and social spheres is based on a type of privilege economists think redounds to economic explanation, since, by this logic, most human activity can be reduced in explanation to a matter of economizing, maximizing choices. ⁶⁹

The attack on determinisms of all sorts has been among the main contributions of postmodern critique. Alternative, specifically postmodern interrogations have emphasized the randomness of causation and the effectivity of chance, the indeterminacy of events, the multiplicity of possible causes, the fluidity of the relationship between seeming causes and their effects, and the reversibility of positions between putative causes and effects. Such interrogations have proceeded through the use of such notions as overdetermination, juxtaposition, synchronic simultaneity, fundamental uncertainty, and so forth. But, rather than surrender to the claim that theory is all but impossible if causation is not rendered in some form of determinism, postmodern nondeterminists have answered by stressing the role of theory in positing rich conjunctural analyses, limited, of course, to more "local" and specific occurrences. Some, for example the Marxist economists Resnick and Wolff (1987), have argued further that the rejection of determinism does not require even a different "entry point" into analysis. What it does require, though, is the idea that this entry point—which is a discursive "choice," often connected to a multitude of other values and desires—not be presented as favored cause in the world one is describing. Borrowing the term overdetermination from the French Marxist philosopher Louis Althusser, Resnick and Wolff show that entering a discourse with any privileged concept such as class does not mandate causal explanations in which class then is said to determine

⁶⁸ In a recent survey, Gary Miller (1997) argues that the "effect of economics has been felt more strongly in political science that any other social science," a move that has involved "the creation of a sub-discipline—denoted 'positive political theory,' to distinguish it from the more traditional political theory—that is grounded in rational choice modeling and uses analytical techniques from economics" (1173–74).

⁶⁹ The latest variant of this extension, of course, is the claim that all human behavior worth studying can be crammed into game theory. As the Nobel Prize winner John Harsanyi (1995) states, "in principle, *every* social situation involves strategic interaction among the participants" (293). In fact, Harsanyi argues that, paradoxically, the assumption of perfect competition in markets was one of the chief obstacles to the ascendance of game theory since it implied the inability of any particular agent to effect much in the way of change in market price.

(either directly or even in a mediated but distinguishable form) other social processes and events.⁷⁰

In economics, of course, economic determinism is less a function of the reduction of the social world to effects of class and much more a similar reduction to the effects of individual economic agency. Postmodern critique adds one more voice to an already noisy chorus of objections to the idea of *homo economicus*. The notion of subjectivity that founds much economic (particularly neoclassical) theorizing has been railed against and dissected for its faultiness by dissenting voices for most of the past century. Postmodern critique, though, identifies the rational, maximizing agent as only one element within the context of a broader theoretical humanism, another distinguishing aspect (according to postmodernists) of the rise and dominance of modernist modes of thinking and being.

Theoretical Humanism

Much of the postmodern critique of theoretical humanism has been closely connected to the writings of Foucault, Althusser, Lyotard, Derrida, and other "poststructuralist" analysts. Perhaps Foucault, though, is best known for his thoroughgoing offensive against humanism, or rather, his claim that recent writing and philosophizing (in the postmodern vein) has shown glimmers, blessedly, of the "death of Man." Foucault (1973) outlines what he terms "epistemes" that he believes have structured Western thought since the Middle Ages, and when he gets to the Enlightenment and thereafter, he sees many roads in thought and practice leading to representational modes in which what is represented and/or signified is most often humanity as the originating subject of all knowledge and consequent history. Placing humanity, rather than God, say, at the center of a discursive universe is, in Foucault's writings, one noticeable characteris-

⁷⁰ According to Gibson-Graham, Resnick, and Wolff (2001a), "the question of the choice between different theories or entry points involves not which is more accurate or true, but the consequences of choosing one rather than another" (5). Thus, "Marx's language of class highlights certain processes and obscures others, potentiates certain identities and suppresses others, and has the capacity to energize certain kinds of activities and actors while leaving others unmoved" (9).

⁷¹ Among more recent critics, feminist economists have been prominent. Some readings include Feiner 1999; Grapard 1995; Strassmann 1993; Nelson 1996; and Hewitson 1999. Hewitson's book, especially, is written from a self-consciously poststructuralist point of view. See our extended discussion of feminist criticisms of homo economicus in chapter 4 below.

⁷² There is an enormous literature that treats Foucault's work. We recommend the following as an introduction to this commentary: Rabinow 1984; Dreyfus and Rabinow 1983; Smart 1993; and Shumway 1992.

tic of post-Enlightenment thinking (that is, perhaps until the middle of the twentieth century). Foucault argues that much social thinking and cultural activity is directed to knowledge of and control over human subjectivity (and here, subjectivity becomes again the motivating agency in tracing all historical movement). Foucault (1979) identifies the human body as the site of much surveillance and discipline, and he sees this desire to "know Man" and his or her body as behind projects of knowledge and social ordering—the exercise of power—varying in subject matter from utilitarianism to existentialism.⁷³

The idea that the human subject is the sine qua non for all thought and practice in the modern era is taken up as well by Althusser (1970; Althusser and Balibar 1970), who concentrates some of his own critique on the idea that history is most frequently understood within modern thought as a process with a subject (usually, but not exclusively, a human subjectivity, like individuals seeking progressive freedom from natural or social constraint, or classes seeking the overthrow of exploitation and oppression). Placing humans at the center of schemas of progress and history and meaning is what distinguishes theoretical humanism, as the human subject is thus the beginning and ending point of all movement from the growth of knowledge (which is now understood as undertaken by, for, and through human subjectivity) to the transformation of the natural world (through science and technology oriented to human desires and ends, such as happiness).

Poststructuralist feminism contributes another major voice to this critique of humanism. While of course not all feminisms have been interested in challenging the presumptions of the essential commonality of humans or the notion that progress must be human-centered, quite a few strands of contemporary feminist thought move beyond expanded enfranchisement and "equal rights" (battles still mandatory to fight) to interrogations of the humanist (read masculinist) assumptions and practices in the wake of the Enlightenment. One group most committed to rethinking issues of subjectivity and identity through a focus on the ambiguous meanings of sex and gender has been poststructuralist feminists. Here we have in mind such writers as Judith Butler (1990, 1993), Jane Flax (1990, 1993), and Elizabeth Grosz (1994).⁷⁴ While differing in important ways, each of these thinkers rejects the assumption that progress for women is a matter of establishing a stable subjective identity of their own—looking a lot like the

⁷³ For one discussion within economics that evaluates the Foucauldian themes of power/knowledge and their effects on the human body, see Amariglio 1988.

⁷⁴ Readers can also evaluate arguments for and against poststructuralist feminism and postmodernism more broadly in Nicholson 1990. Carole Biewener (1999) offers a valuable assessment of the hoped-for effects of poststructuralist feminism on a decentered Marxism (and vice versa).

model of the human subject that was formulated with modernity, or based on the modernist assumption of irreducible biological difference. Butler and the others trouble the notion that subject positions and identities can be stable, and thereby challenge the essentialism (either in the form of cultural determinism or biological destiny) that sometimes accompanies the claim that gender produces clearly distinguishable subjects. Not only do poststructuralist feminists call attention to the masculinism (or "phallocentrism") that one can "read" in the notion of the human subject and the cult of Reason as they have evolved over the past three hundred years in the West. They go on to question the possibility of finding an alternative construct of the human, and certainly one that fixes sexual and gender identity in a bipolar fashion, that can be utilized strategically or not for struggles against sexism, discrimination, and the oppression of women. As Gillian Hewitson (1999) has described it, stressing "performed" as opposed to inherited or natural gender difference (and actually placing greater emphasis on the body than on "consciousness" in the determination of performed identity), poststructuralist feminists have refused the "add women and stir" conception of expanding the modernist notion of humanity as a way to remedy sex and gender affliction. Thus, such feminists "view the ideal of equality, which involves reducing difference to sameness, and the ideal of difference, when reduced to biological difference, as problematic, since both replicate phallocentrism" (128).

If nothing else, postmodern critique has identified the ubiquity of theoretical humanism in characterizing the modern age, but it goes on to propose a much-needed decentering in which the human subject is not only displaced from its structuring role as entry and exit point, but also in which human subjectivity is shown to be capable of deconstruction and fragmentation. Not only, then, are "forces," "processes," and "wills" (along the lines specified by Nietzsche) disembodied in some postmodern thought—going even beyond "structuralism"—and shown to construct subjects rather than being "emissions" or manifestations of subjectivity. Subjectivity itself is seen to be indeterminate and unstable, in an incessant process of decomposition and recomposition. The decentered subject, found in Foucault, Althusser, Butler, and others, and the decentered social totality (with the subject no longer that which seeks its own representation in and through art, philosophy, technology, etc.) are unsuitable because troubling essences for much existing modernist social thought, and this is why for some critics of postmodernism, the assault on theoretical humanism makes theorizing itself impossible.

Yet, of course, postmodern critique shows precisely how one can incorporate the ideas that human subjectivity is complex, uncertain, and irreducible and that this same subjectivity is as much effect as it is cause in scenarios of historical movement. We note, by the way, that the attack on

humanism implicates many critics of the notion of homo economicus along with its mostly neoclassical purveyors. So, for example, complaints that neoclassicals and others haven't captured the "real" human subject in championing homo economicus starts from similar premises that there is some such previously unrepresented, unified, and distinguishable human subjectivity that can be properly specified. Postmodern critique, then, should be distinguished from those forms of humanism (found in all sorts of heterodox schools of economic thought, including Marxism, feminism, and institutionalism) that seek to reinstall rather than end the primacy of human subjectivity in economic discourse. One can see in our discussion in chapter 4 below, for example, the tensions felt by those unhappy with neoclassical (and often masculinist and Western) notions of economic agency, but hesitant to go the way of a thoroughgoing antihumanism. We expect these tensions to persist into the foreseeable future.

Postmodernism and Economics: A Stylized Genealogy

Most surveys of postmodernism in the contemporary scholarly landscape say little about the discipline of economics, though as we have stated, there are lots of attempts in cultural fields to talk about a postmodern economy. In her 1991 article, Sheila Dow in fact asked whether there were signs of postmodernism within economics. More than a decade later, we can answer vigorously in the affirmative. For not only have there been important essays, like McCloskey's article on the "rhetoric of economics" (1983a), that have set off a wave of discussions about modernism within economics, but as our previously edited volume (Cullenberg, Amariglio, and Ruccio 2001) attests, there are by now a significant number of different scholars within the field of economics who are either writing about postmodernism or who employ postmodern approaches. For some of these economists, postmodernism enters in its critical guise, as they roundly censure the modernism of mainstream economics.

While not all those who are attracted to postmodern critique are outside of the mainstream of the profession, it has been the case that postmodernism has been useful for those who seek more visibility for their approaches or who wish to displace entirely the long tradition of neoclas-

⁷⁵ While Rosenau observes that "even in psychology and economics post-modernism is making enormous gains that will be reflected in publications appearing throughout the next few years" (1992, 4), more recent multidisciplinary surveys, such as the *Routledge Critical Dictionary of Postmodern Thought* (Sim 1999), which covers areas of thought that run from philosophy to popular culture, still fail to mention (let alone treat at any length) economic discourse.

sical economic theory as dominant within the field.⁷⁶ Much is at stake, some of the critics feel, in the struggle to obviate the centrality of homo economicus, to decenter notions of economic totalities, to revive interest in morality and values and power as determinants in economic discourse, to scale down the pretensions of economics as a "science," to open up spaces for plural perspectives, and to resist the "imperialism" of economics as a master discourse capable of shaping cultural fields.⁷⁷ These are often, and rightly we feel, linked to other struggles, such as those dedicated to breaking down barriers to entry of women and minorities into the economics profession, or those that attempt to redress the excessive exercise of expertise and authority, with their pervasive exclusionary effects, that can be found within pecking orders of universities, journals, and so forth.⁷⁸

Parts of what we describe here as postmodern critique can be traced to different movements within economics over the past twenty-five years. Certainly, if one is looking for progenitors, then one must mention at the very least Keith Tribe's often overlooked 1978 treatise on Smithian and

⁷⁶ This is true of most of the essays that composed the special symposium entitled "Postmodernism, Economics, and Canon Creation" that appeared in the *Journal of Post Keynesian Economics* in 1991 (see Beed et al. 1991). Post-Keynesianism has turned out to be a welcome ground (relatively speaking) on which to raise issues of postmodernism. The influence of Keynes (especially his 1937 article) and Shackle (1961, 1966, 1990) in particular on questions of uncertainty and the indeterminacy of agent choice, not to mention ideas stemming from Keynes on persistent tendencies toward disequilibria, have been felt within some branches of this school.

⁷⁷ In an unpublished paper, Uskali Mäki defines the disciplinary imperialism of economics as "a form of economics expansionism where the new types of phenomena are located in territories that are occupied by disciplines other than economics, and where economics presents itself hegemonically as being in possession of the right theories and methods, thereby excluding rival theories and approaches from consideration" (n.d., 18), for which Jack Hirshleifer (1985) provides the warrant: "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" (53).

⁷⁸ Easterlin (1997) captures again nicely some of the arrogance and exclusions, supposedly in the name of science, practiced by economists in this summary of what he terms his own "indoctrination" to the economics profession in graduate school: "And then there was my education in the values of the economics profession. I learned that economics is the queen of the social sciences. I learned that theory is the capstone of the status hierarchy in economics. I learned the brand names whose research I was to revere and respect. I learned that tastes are unobservable and never change. I learned that subjective testimony and survey research responses are not admissible evidence in economic research. I learned that what was then called 'institutional economics' (Commons, Veblen, etc.) was beyond the pale, as were other social sciences more generally. I learned that there is a mere handful of economics journals really worth publishing in, and that articles in inter- or extra-disciplinary journals count for naught. I learned that economic measurement as then practiced by the National Bureau of Economic Research was to be denigrated as 'measurement without theory' " (13).

pre-Smithian economic discourse. In this book, Tribe employed specifically poststructuralist critiques of humanism and other forms of essentialism in modernist histories of economic thought (shaped by the idea, which we saw in Samuelson, of the inexorable growth of knowledge, funeral by funeral) to rethink the claim that Smith was the initiator of a new, modernist economics. And, one can look at the entire body of work of Resnick and Wolff over the past twenty-five years as well, as they have advocated, with others, everything from the critique of classical epistemology to economic determinism in their attempt to refound a postmodern Marxian theory as something distinct from neoclassical and other mainstream economic thought, as well as distinct from Marxism's own inscription within its past modernist projects. And, of course, for many McCloskey's (1983a) article on the rhetoric of economics pointedly criticized at least the official methodologists and epistemologists among economic philosophers for their modernism, even if it did not make the concepts and constructs of neoclassical economics its primary object of scorn.

There may be other progenitors as well, and in fact the onset of post-modernism has led some historians of economics to find similar critiques of the tenets of modernism in a wide variety of writers and thinkers, often, however, out of the mainstream.⁷⁹ And, of course, there is fertile ground in economics to find such critiques since, in fact, the braggadocio that has accompanied "advances" made possible by formalism and other supposedly "scientific" methods of analysis and proof has often been met with annoyance and resistance by those left out of the resulting conversations. Perhaps the next few decades of work in the history and philosophy of economics will be dedicated at least in part to "unearthing" the anti- or nonmodernist sympathies of past and present economists and others who are made to live in the margins of the official discipline.⁸⁰

While postmodernism has been mainly available to economists as antior nonmodernist critique of the modernist mainstream, the "postmodern moments" approach has a somewhat different emphasis. Here, the point is to show those elements of postmodernism that have arisen in the midst

⁷⁹ This, for example, is what Ulla Grapard (2001) does by locating Charlotte Perkins Gilman's "social constructivism" as an early expression of this more or less postmodern element.

⁸⁰ In addition to our prior citations, such work includes Hands's (1997) rediscovery of Frank Knight's contextualist pluralism and Burczak's (1994) focus on the postmodern moments in Friedrich von Hayek's work. In a similar way, Cullenberg (1999) points to the postmodern moments and similarities in certain traditions within Marxism and institutionalism by emphasizing their decentered affinities, and Garnett (1999a) takes this Marxist-institutionalist dialogue about postmodernity a step further in his consideration of heterogeneous approaches to nonneoclassical value theory.

of economics as a modernist enterprise. That is, in addition to evaluating and criticizing neoclassical and other schools for their pervasive adherence to modernism, "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.

Or, differently, discussing postmodern moments is likewise aimed at depicting even mainstream economic discourse as, perhaps unwittingly, increasingly preoccupied with postmodern themes and ideas despite the claims that fundamental uncertainty, decentered subjects, and so forth are either negligible or manageable within existing theoretical approaches. There are now numerous articles, for example—three that immediately come to mind are by, respectively, Varoufakis (1993), Mehta (1993), and Hargreaves Heap (1993)—that attempt to show the lacunae pertaining to problems of assuming stable, directed, contained, and unfragmented rationalities that become evident in economic game-theoretical approaches. Varoufakis, in particular, argues that anxiety about modernist rationality assumptions are pervading the field, and that in their wake postmodernist approaches to subjectivity have been considered, even if they are still underrepresented.

In the remainder of the present book, we identify and investigate the postmodern moments evident not only in heterodox schools of economic thought but perhaps just as much within neoclassical and Keynesian orthodoxy. Our approach focuses on key concepts and issues within economic thought, locating the "disruptions" that have emerged within and that point beyond the economic modernism that has characterized diverse theoretical traditions in economics. Thus, without claim to exhaustive or final treatment, we discuss, in successive chapters

The role of uncertainty with respect to the work of Keynes and numerous post-Keynesians

The human body as a site of decentering and dispersal within neoclassical theory

The fragmentation of knowing and acting subjects in recent feminist economics The problem of values as understood by institutionalist economists

The interplay between order and disorder within Marxian conceptions of capitalism and socialism

The differences between academic and everyday economic discourses

Our purpose is to call attention to these elements both as a recognition of modernist economics' inability to exclude or address its own aporias and undecidables, and as the prolegomenon to a research program, in which these postmodern moments are embraced as worthy of direct consideration.

We realize, of course, the "threat" that such a reception represents. The historian of economic thought Mark Blaug puts it succinctly: "in one way or another, postmodern arguments always amount to 'anything goes' " (1998, 29). But, from our perspective, the dissolving effects of uncertainty, decentering, fragmentation, epistemological relativism, and the like on well-formulated economic models are already in process, for better or worse, and are just as much the unintended consequences of modernist formalism, essentialism, scientism, and so forth as they are "imports" from postmodern critics. Though we are not interested in prognostication (our postmodern training, perhaps), we do propose at least one improbable hypothesis: modernist economic discourse, so intent on maintaining its scientific identity, may be seen through the perspective of postmodern moments to be in the process of becoming "other."

Perhaps, then, postmodernism in economics allows for a paraphrased restatement of Samuelson's maxim: funeral by funeral, economics does become other. While modernism still has a death grip on the imaginations of many in the profession, postmodernism beckons those with breath left in them to another site—another graveyard, possibly. Be that as it may, we are willing at least for now to pick up our shovels and relocate, if only as gravediggers, to this other site. Postmodernism cannot, and will not, promise "progress" in economic knowledge as a result of all that repositioned digging. All it can do is show that, even if the quest for progress is dead and buried, still the excavation goes on, and transformations of this different terrain present—funeral by funeral—new opportunities and new discourses for economic knowledge.