Austrian economics at the cutting edge*

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Abstract Austrian economists today have a valuable opportunity to rejoin the mainstream of the economics profession. As Colander, Holt, and Rosser have argued, neoclassical orthodoxy is no long mainstream. What I call the "heterodox mainstream" is an emerging new orthodoxy. The five leading characteristics of the emerging new orthodoxy are bounded rationality, rule following, institutions, cognition, and evolution. When listed in this order, they suggest the acronym BRICE. The Austrian school is also an example of BRICE economics. The shared themes of BRICE economics create an opportunity for intellectual exchange between Austrians and other elements of the heterodox mainstream. Although Austrians should engage the heterodox mainstream energetically, they should also defend the essential elements of an early version of neoclassical economics, elements at risk of becoming half-forgotten themes of an earlier era. These elements are supply and demand, marginalist logic, opportunity-cost reasoning, and the elementary theory of markets.

Keywords Austrian school \cdot BRICE \cdot Heterodox mainstream \cdot Neoclassical economics

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1. Introduction

I am honored to speak at the tenth annual dinner of the SDAE. We are at the end of our ninth year as a society and this is our tenth dinner. I am proud to be on the same list with such past speakers, to list only the first three, as Israel Kirzner, Karen Vaughn, and Mario Rizzo. My talk tonight is given in the same spirit as the Presidential addresses before this society given by Peter Lewin and Charles Baird, who expressed a desire for intellectual exchange with non-Austrians. Peter Lewin noted that our statement of purposes includes a call for cooperation with other heterodox schools of economic thought, including New Institutional Economics, Evolutionary Economics, Radical Subjectivism, Public Choice Theory, and Constitutional Economics (Lewin, 2000). I wish the list had included "old" institutional economics, complexity economics, and Post Keynesian economics. Lewin notes "that in the last few years intellectual alliances and joint products involving Austrians and other modern heterodox schools of thought have been forged" (2000, p. 241). Charles Baird expressed the conviction that "Austrians can learn much of value from some non-Austrians" (Baird, 2000, p. 115). Indeed, I believe that because of recent changes in the profession, there are now a great many non-Austrians from whom we can learn and who, in turn, may be open to our ideas. In my opinion, the economics profession is changing in ways that could be very hospitable to Austrian economists, if we know how to seize our opportunities.

The economics profession is changing. The old orthodoxy of "neoclassical" economics is fading rapidly. The bad old views are still "orthodox," but they are no longer "mainstream." This important fact marks a change in economics, and I believe this change represents an opportunity for the Austrian school. It also represents an obligation of Austrian economists to defend the elementary theory of markets, which is the stuff we used to call "neoclassical" before that term took on its current "orthodox" meaning. Without a stalwart defender, such as the Austrian school, the elementary theory of markets may be half washed out of the profession along with neoclassical orthodoxy.

Certain currents in today's heterodox mainstream represent an emerging new orthodoxy in which Austrian economists will participate, but only if we seize our opportunities. Before describing this emerging new orthodoxy, I had better explain the paradoxical phrase "heterodox mainstream."

In an important new book on *The Changing Face of Economics*, Colander, Holt, and Rosser (2004, 2005) distinguish "orthodoxy" from "mainstream." They describe "orthodoxy" as an "intellectual category" (2005, p. 7). It is the set of default or status quo views of the profession, especially as represented in the textbooks. By contrast, "mainstream economics" is a "sociologically defined category" (2005, p. 6). The "mainstream" is the elite of the profession and "mainstream economics" is the set of idea considered respectable and in play by this group. The "edge" of economics is to be found in what I shall call the "heterodox mainstream."¹ These are the heterodox views, models, theories, and techniques, that the mainstream finds interesting

¹ I use the term "heterodox" mainstream to mean what Colander, Holt, and Rosser call the "non-orthodox mainstream." They view "heterodox" as simultaneously an intellectual and a sociological concept. I prefer to use "heterodox" as an intellectual category meaning "not orthodox." I thank Barkley Rosser for help on these terminological issues.

and worth pursuing. The edge is where the action is. As Colander, Holt, and Rosser claim, orthodoxy today is probably best described by the "holy trinity" of "rationality, selfishness, and equilibrium" (2004, p. 485). Nowhere along the edge, however, are all three adhered to, and at many points along the edge all three are rejected.

As the title of my talk reveals, I believe Austrian economics can find a place at the edge of economics. As Karen Vaughn (1994) has argued, Austrian economics has become, as the title of the seminal book of O'Driscoll and Rizzo (1985) expresses it, The Economics of Time and Ignorance. This is an economics that may find a place at the banquet at edge of economics. Thanks to the work of figures such as Vaughn, O'Driscoll, and Rizzo, Austrian economics now has an important opportunity to return to the mainstream, and to do so in time for the heterodox mainstream to become the new orthodoxy. Indeed, as I have argued in the past, we are in a position to enter the "emerging new orthodoxy" of the mainstream of the economics profession. As I will now argue, the emerging new orthodoxy is, on the one hand, fully compatible with modern Austrian economics. On the other hand, there are developments within the modern Austrian school that have not vet received adequate attention or understanding within the emerging new orthodoxy. We are in a position, therefore, to retain our distinct identity as a separate school of economics, add value to the scholarly labors of our siblings in the emerging new orthodoxy, and borrow insights and tools of analysis from them in return. In other words the barriers to intellectual exchange erected by past prejudices have fallen away, and we may now hope for gains from trade with the heterodox mainstream of the economics profession.

2. The emerging new orthodoxy in economics

I think the emerging new orthodoxy in economics has five defining characteristics, which I will list presently. I will not follow Colander, Holt, and Rosser in describing the edge of economics as dominated by complexity theory. I do not disagree with their claim; complexity theory does predominate at the edge of economics. The term "complexity theory," however, is too ambiguous to be of much use to me this evening. I would express agreement with Karen Vaughn (1999), that Hayek's theory of complex phenomena is very similar to the complexity theory of the Santa Fe Institute (Koppl, 2000). To the extent that it has a clear meaning, however, the term "complexity theory" may suggest a tendency to suppress or ignore any argument that cannot be squeezed into certain favored mathematical boxes. Although I believe Austrian economists would do well to imitate Robert Mulligan (Mulligan, 2004; Mulligan and Lombardo, 2004) by using some of the mathematical tools of complexity theory, I do not believe method worship produces either truth or reputation. Instead of celebrating complexity economics, I will identify five leading characteristics of work at the edge of economics. I think these characteristics are descriptive of complexity theory, but they do not require any particular mathematical tools or exclude so-called literary economics.

The five leading characteristics of the emerging new orthodoxy are bounded rationality, rule following, institutions, cognition, and evolution. When listed in this order, they suggest the acronym BRICE. We may, when convenient, speak of "BRICE economics" and "BRICE economists." Important examples or precursors of the emerging new orthodoxy are New Institutional Economics, Old Institutional Economics, Post Walrasian Economics, Constitutional Political Economy, Complexity Economics, and of course Austrian economics. As I have said on other occasions, it might be better to refer to the *converging* new orthodoxy. The ideas of the new orthodoxy were never fully banished from the old orthodoxy. But developments over the past twenty-five years or so have led many heterodox economists, especially those in the mainstream, to converge on BRICE. They are not converging on one uniform theory shared by all, but on a broad theoretical framework within which narrower theoretical, empirical, and policy disputes will continue. I will take up each of the five characteristics in sequence.

First, **bounded rationality**. In the emerging new orthodoxy, people are assumed to have only "bounded rationality." The term was coined by Herbert Simon, who is probably viewed by most observers as the one great pioneer of bounded rationality in economics. And he was indeed a great pioneer. Austrians, however, recognize that both Mises and Hayek assumed bounded rationality and derived many consequences from it, especially in the debate over socialist calculation. Adam Smith assumed bounded rationality as well. Indeed, the assumption of unbounded rationality is a peculiarity of certain strands of neoclassical economics, namely, the strands that entered the "neoclassical synthesis" of post-war Anglo-American economics. Today, the great majority of economists agree that agents should be modeled as having, in some sense, only "bounded rationality." William Butos (2003) has explored Hayek's cognitive theory and drawn implications for an Austrian economics of bounded rationality.

Hayek's *The Sensory Order* (1952) includes a theory of bounded rationality. In Hayek's theory, the bounds to human rationality have a logical and meta-mathematical dimension, and are not merely a contingent empirical fact about limited powers of cognition. The mind would have to be more complex than itself to fully explain itself to itself (Hayek, 1952, pp. 186–190). As Hayek notes, this is a Gödelian and Cantorian point (Hayek, 1967a, p. 61, note 49). Austrian economists would do well, I think, to review not only Hayek's arguments on this theme, but also those of Oskar Morgenstern, especially from the time before his collaboration with John von Neumann.

Recently, a literature on "computable economics" has emerged in which it is shown that many results of standard theory depend on the implicit assumption that agents can rapidly compute functions that cannot be computed at all by the mathematicians' ideal type of a computer, a universal Turing machine (Velupillai, 2005). Hayek fully anticipated computable economics, as Markose seems to recognize when she correctly notes that Hayek "was one of the first economists who explicitly espoused the Gödelian formalist incompleteness and impossibility limits on calculation which he referred to as the limits of constructivist reason" (Markose, 2005, p. F165). Barkley Rosser and I have attempted to relate this sort of reasoning to arguments made by Morgenstern, Hayek, and Keynes (Koppl and Rosser, 2002). Our paper also serves as an introduction to computable economics.

Second, **rule following**. In the emerging new orthodoxy, people are modeled as rule followers. The appeal of rule following is less universal than that of bounded rationality. Nevertheless, a rule-following framework has been suggested by many economists including Ronald Heiner, James Buchanan, Viktor Vanberg, Richard Nelson & Sidney Winter, Robert Frank, Reinhart Selten, and Herbert Simon. Hayek viewed action as rule following, saying, "Man is as much a rule-following animal as a purpose-seeking one" (Hayek, 1973, p. 11). I believe Victor Vanberg drew the right inference from this $\bigotimes Springer$

remark. We need a theory of action that "would allow us systematically to account for both features of human behaviour, its responsiveness to incentives and its rulefollowing nature" (1994, p. 16). Indeed, one of the central difficulties of implementing a rule-following framework is squaring it with the economic principle that individuals tend to seek out their interests cunningly. I have argued that rule following can be defined "objectively" with the aid of information theory, in particular the concept of mutual information (Koppl, 2002b).

The notion of rule following has another dimension, one that may not be adequately appreciated at the edge of economics. Institutions generally work best when they are governed by relatively simple rules rather than discretion. This is why classical liberals favor the "rule of law." There is a long tradition of arguing for rules and against discretion in monetary policy. Steven Horwitz has brought these traditional arguments to the Austrian theory of the trade cycle in his important book, *Microfoundations and Macroeconomics* (2000). Elsewhere, I address this issue in a somewhat larger context (Koppl, 2002a).

Third, institutions. Mainstream economists who have emphasized institutions include Douglass North, Ronald Coase, Oliver Williamson, Axel Leijonhufvud, Robert Clower, and Brian Loasby. On the microeconomic side, New Institutional Economists want theory with institutions and a theory of institutions. On the macroeconomic side, Post Walrasian economists such as David Colander want theory with institutions and macroeconomic foundations of microeconomics. From the beginning, Austrian economists recognized that institutions matter and included close institutional analysis in their work. Carl Menger's theory of the evolution of money is the standard example of an Austrian theory of institutions. Menger, by the way, traces the theory back through Mill and Smith to John Law (1705). The importance of institutional analysis in the Austrian theory led Mises and Hayek to a position in the socialist calculation debate quite different from that of scholars who adopted a more narrowly Walrasian framework of analysis. Mises did more than theorize on the importance of institutions. He was an important figure shaping some of the basic institutions of the new Austrian state after the collapse of the Hapsburg Empire. And Austrians have always understood the importance of institutional details. Hayek, for example, objected to the legal rules allowing one corporation to own another. Because a large minority shareholder may exercise effective control over a corporation, this legal rule permits a kind of telescoping action that puts power in the hands of a managerial elite, which comes to acquire a high degree of autonomy (Hayek, 1967b). Peter Boettke has always stressed the role of institutions in Austrian economics. Good results depend on good institutions (Boettke, 1989; Boettke and Anderson, 2004). Emily Chamlee-Wright (1997) has shown the importance of cultural institutions in an exemplary study of female entrepreneurship in Ghana. In a paper on "Epistemic Systems" (Koppl, 2005), I have attempted to provide comparative institutional analysis with models of what Butos and I have called the "epistemic consequences of the choice of regime" (1993, p. 307). Roger Garrison's brilliant analysis of "The Costs of the Gold Standard" exemplifies the comparative institutional analysis generally followed by Austrian economists (Garrison, 1985).

McCabe et al., 2001; McCabe, 2005; McCabe, 2003.) Like floodwaters, the level of interest in cognitive psychology is high and rising. Hayek's *The Sensory Order* is a still-neglected source that should be of special interest to economists. Economists should construe "cognition" broadly so that Schutz's phenomenological psychology would fit under this heading. Indeed, an understanding of understanding is salient among all that we have to offer in exchange to the emerging new orthodoxy in economics. We should represent and defend the *Verstehen* tradition of Dilthey, Weber, Mises, and Schutz. On another occasion I have briefly indicated how this tradition relates the biological concept of a "theory of mind module" recognized in both neuroeconomcis and evolutionary psychology. (See Appendix 1 of Koppl, 2002a.)

Two recent issues of *Advances in Austrian Economics* have been devoted to cognition. Volume 7 addresses "Evolutionary Psychology and Economic Theory." Austrian contributors include Viktor Vanberg, Glen Whitman, and Todd Zywicki. A forthcoming volume devoted to "The Cognitive Revolution in the Social Sciences" includes Austrian contributions from Carine and Elisabeth Krecke, William Butos and myself, and Thomas McQuade. Ulrich Witt has emphasized the importance of "cognitive leadership" in organizations. Stavros Ionnides has emphasized the similar notion of "entrepreneurial leadership." David Harper and Benny Gilad have brought the psychological notion of "locus of control" to bear on the theory of entrepreneurship (Gilad, 1982; Harper, 1996, 1998).

Ludwig Lachmann's subjectivism of expectations should be viewed as a species of cognitive economics. In *Big Players and the Economic Theory of Expectations* I identify the "Lachmann problem" as "the need to have a theory of expectations that builds on the idea that each person's actions are animated by the spontaneous activity of a free human mind" (Koppl, 2002a, p. 13). The activity of the mind is cognition. Thus, BRICE economics takes expectations seriously.

Hayek's view of cognition is strikingly similar to views expressed by two important complexity theorists, namely John Holland and by Stuart Kauffman. For Kauffman, "adaptive systems" make piecemeal adjustments to their environments. To do so successfully, they must respond to their environments; they must engage in "computation and adaptation" (1993, p. 232). Adaptive systems must "interact with and represent other entities of their environment" (p. 232, emphasis in original).

In other words, complex living systems must "know" their worlds. Whether we consider E. coli swimming upstream in a glucose gradient, a tree manufacturing a toxin against a herbivore insect, or a hawk diving to catch a chick, organisms sense, classify, and act upon their worlds. In a phrase, organisms have internal models of their worlds which compress information and allow action. (Kauffman, 1993, p. 232).

This view of cognition as classification is close to that of Hayek and might be identical. Like Hayek, Kauffman find the classification in the response patterns of the organism. In the case of E. coli, for example, Kauffman says, "I permit myself the word 'classified' because we may imagine that the bacterium responds more or less identically to any ligand binding the receptor, be it glucose or some other molecule" (p. 233).

Holland (1992) too, uses the example of bacteria. A "bacterium moves in the direction of a chemical gradient, implicitly predicting that food lies in that direction" \bigotimes Springer

(p. 197). He also uses Hebb's connectionist model to describe the central nervous system (pp. 58–65). Hebb's model is very close to that of Hayek, as Hayek himself noted. Like Hayek, Holland notes that the operations of the central nervous system are too complex to be captured in a simple stimulus-response framework.

Relying on a notion of "adaptive classifier systems" which derives in part from the complexity theory of Holland and others, William Butos and Thomas McQuade have studied similarities between minds and markets. Both are classifier systems that embody knowledge and generate new knowledge (Butos and McQuade, forthcoming).

Fifth, and finally, evolution. Heterodox mainstream defenders of evolution include Richard Nelson & Sidney Winter, James Buchanan, Armen Alchian, the late Jack Hirschleifer, Geoffrey Hodgson, and Samuel Bowles. One of the standard defenses of rational maximizing, Milton Friedman's essay on positive economics, relies on evolution (Friedman, 1953). The solution of the maximization model, Friedman says, describes what the agent must do if it is to survive market competition. This defense is widely recognized to have merit. But it leaves unexamined the evolutionary mechanisms at work in economic life (Nelson and Winter, 1982, pp. 139–141, Langlois, 1986a, pp. 241-247). Besides, although evolution sometimes approximates an optimal solution, it does not always do so as Glen Whitman has explained in an important defense of Hayek against the spurious charge of Panglossianism (Whitman, 1998). The Austrian school is notable for its evolutionary theory of institutions, which I have already mentioned. It hardly needs saying that Adam Smith was an evolutionary theorist. Among more recent Austrian work on social evolution, that of Ulrich Witt stands out. Michael Wohlgemuth (2002) makes an innovative application of Austrian evolutionary reasoning to politics. The engine of change in an Austrian theory of evolving institutions is, of course, the Kirznerian entrepreneur (Kirzner, 1973).

This account of BRICE economics describes the edge of economics. The economics of bounded rationality, rule following, institutions, cognition, and evolution is, I believe, the emerging new orthodoxy of tomorrow and today's heterodox mainstream. Today's heterodox mainstream will become tomorrow's new orthodoxy. The "economists at the edge" interviewed by Colander, Holt, and Rosser seem to agree. Deirdre McCloskey expects the profession to give up existence theorems and narrow notions of econometrics (p. 45). Matthew Rabin expects us to abandon homo economicus in favor of homo sapiens (p. 152). William "Buz" Brock thinks we are headed in a more computational direction as a result of the falling costs of computation (p. 180). Robert Axtell expects "low rationality game theory" to emerge as an important tool of economics (p. 288). Peyton Young expects an increasing attention to institutions. He sees this work dividing into two complementary pieces. First, studies of the evolution of institutions will "blend historical analysis with elements of game theory and dynamical systems theory" (p. 286). Second, institutional design using game theory will use "experiments, simulations, and institutional knowledge" (p. 286). Young's example of the electric utility industry suggests that he is thinking of what Vernon Smith calls "economic systems design" (2003, p. 473). The changes these scholars expect may be imminent. Robert Frank thinks so, saying the economics profession is "poised for a seismic shift" (p. 134).

We are poised for a seismic shift. It is important for the future of the Austrian school that we do not end up on the wrong side of the rift. We have, as I have said, an opportunity to contribute to the heterodox mainstream of today and join, thereby,

the emerging new orthodoxy of tomorrow. We have two paths before us. First, we can read the works of the heterodox mainstream; we can learn what heterodox mainstream economists view as puzzles and open problems; and we can speak to those problems in a language understandable to the heterodox mainstream. This is the path of engagement. Second, we can ignore the heterodox mainstream, declaring it taboo for ideological or methodological reasons; we can cleave to our old language and methods; we can write books and papers meant only for one another. This is the path of disengagement. If we choose the path of disengagement, the Austrian school will sink into obscurity and irrelevance. If we choose the path of engagement we can continue to exist as a school *and* we will have a constructive role to play in the emerging new orthodoxy in economics.

3. The trouble with earthquakes

I have quoted Robert Frank saying the economics profession is "poised for a seismic shift" (p. 134). A great change is coming in economics and we should view it as an opportunity. While this is my optimistic opinion, I would like to issue a warning, too.

A seismic shift is an earthquake. The trouble with earthquakes is that they destroy things you value. A comment of Duncan Foley suggests the problem I see. "The study of economic data surely has a future, but the question is whether it will be recognizable as economics in today's terms and whether it will exhibit any real unity of subject matter and method" (p. 212). He notes that "A physicist trying to explain fluctuations of financial prices with a stochastic process model doesn't fit Robbins's definition of economics as the allocation of scarce resources among competing ends" (p. 211). He imagines a sociologist who "looks at migration in labor markets by doing some regressions of immigration on wage levels and employment opportunities, without specifying preferences or the supply and demand of labor." He asks "is that economics?" (pp. 211–212).

Foley sees an external threat coming from physics, sociology, and psychology. He cites the claim made, apparently, by Doyne Farmer that "30 percent of all physics dissertations have chapters on economic or financial topics" (p. 211). Without denying Foley's concern, I see an internal threat from the very edge of economics that I have been celebrating this evening. When we abandon the holy trinity of rationality, selfishness, and equilibrium we abandon constraints that ensured orthodox economics was economics. Perhaps it was bad economics, but it was economics. The edge of economics is open and inductive. The heterodox mainstream is producing many models specific to particular phenomena, but not many general propositions of broad applicability. In other words, the edge of economics is producing more models and less theory. This situation creates the danger that economic theory will fade away under the glare of a thousand brilliant models contrived for a thousand different problems and data sets. I do not fear that economic theory will disappear altogether. But I do fear that it may come to live a meager existence as a set of half-recalled lessons occasionally applied in a haphazard manner. I fear that economists will come to know more about genetic algorithms or prospect theory than supply and demand.

We do not yet know whether the emerging new orthodoxy of BRICE economics will, in Foley's words, "exhibit any real unity." Will it be economics? To be recognizably Springer "economics," the emerging new orthodoxy will have to be "neoclassical" in an old fashioned sense of the word. This may seem a contradiction, because we have identified the bad old orthodoxy as "neoclassical." A few words on the term "neoclassical" may resolve the paradox.

In his recent intellectual biography of Hayek, Bruce Caldwell has defended "basic economic reasoning," which he defines as "the sort of reasoning that economists utilize all the time in the classroom" (Caldwell, 2004, pp. 382–388 & p. 384). His examples and his reference to Robbins remove all doubt. Caldwell is talking is about the old time religion of "neoclassical" economics. He is not talking about the Debreu's *Theory of Value* or its textbook avatar, Hal Varian's *Microeconomic Analysis*. He is talking about supply and demand, marginalist logic, opportunity cost reasoning, and the elementary theory of markets. He is talking about the sort of thing we try to convey to our undergraduates by having them read Bastiat, Menger, and the principles text of Heyne, Boettke, and Prychitko.

Now, there was a time when this sort of thing was called "neoclassical economics." Menger, of course, is generally classed among the founders of neoclassical economics. Mises, Hayek, and Machlup thought of themselves as neoclassicals. Robbins' famous essay is universally recognized as a high statement of the theoretical vision of neoclassical economics. At the time it was also recognized by its reviewers as an expression of the Austrian school (Souter, 1933, p. 377; Fraser, 1932, p. 556; Parsons, 1934, p. 545).

My copy of *Shorter Classics of Eugen von Böhm-Bawerk, volume I* (edited, apparently, by Hans Sennholz and published in 1962) contains an ad for other books by Böhm-Bawerk, Menger, and Mises. The advertised books are touted as representing the exalted "neoclassical" school of economics. Presumably the "neoclassical" school of Austrian economics contrasts with the "new economics" (as it once was) of the Keynesian school.

Thus, although subjectivism and the Austrian school were cast out in their nakedness from the garden of neoclassical orthodoxy, there is a sense in which the Austrian school is deeply neoclassical. The Austrian school has never departed from supply and demand, marginalism, opportunity cost reasoning, and the basic theory of markets. The Austrian school has never departed from Caldwell's "basic economic reasoning." Austrians should continue to practice basic economic reasoning and to defend basic economic reasoning.

Indeed, the importance of defending basic economic reasoning gives us another reason to seek out and join the heterodox mainstream. It gives us another reason to engage. It would be a loss, I think, if the Austrian tradition were to fade and disappear into the twilight of an episode in the history of economic thought. It would be a calamity of a higher order if basic economic reasoning were to fade into a similar twilight of half-recalled lessons occasionally applied in a haphazard manner.

4. Closing remark

I believe Austrian economists have an important opportunity to rejoin the mainstream. We should grab tightly onto this opportunity with both hands. We also have, I believe, an important role to play in the mainstream defending basic economic reasoning. We have much more to offer the emerging new orthodoxy than a defense of basic economic reasoning. Salient among our offerings, I believe, is an understanding of understanding. We should represent, as I have said, the *Verstehen* tradition of Dilthey, Weber, Mises, and Schutz. Finally, we should recognize how much we may take away from the heterodox mainstream. I note by way of example Robert Frank's insights on positional goods, Douglass North's work on the importance of ideology, and Brian Arthur's models of stock markets and technological change.

We have our choice before us. We can choose the path of engagement and ensure a future for Austrian economics or we can choose the path of disengagement and sink into a well-deserved oblivion. The path of engagement is outward looking and constructive. The path of disengagement is inward looking and is, if not downright destructive, carping and unhelpful. Let us choose intellectual exchange. Let us choose the path of engagement. Let us join the emerging new orthodoxy in economic theory.

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