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WHAT IS WRONG WITH NEOCLASSICAL ECONOMICS

(And What is Still Wrong With Austrian Economics)

by

Peter J. Boettke, *New York University*

> A discipline, a region of the world of thought, should seek to *know itself*. Like an individual human being, it has received from its origins a stamp of character, a native mode of response to the situtations confronting it. Right responses, 'responsibility', will require of the profession as of the individual an insight into the powers and defects of the tool which history has bequeathed to it.
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> G. L. S. Shackle (1972, p. 24)

I. INTRODUCTION

In the late 1970s early 1980s video recorders burst on the scene of home entertainment. It is a now familiar story how the Sony Beta machine was out competed in the market by the VHS format despite apparent technological superiority. Both machines provided the same service, but due to a network externality Beta was eliminated from the market. This elimination from the market was due to a poor management decision of refusing to share technology. Apple Computer's supposedly made a similar mistake with its operating software and has lost valuable market share to the less user friendly DOS operating system of Microsoft. Such is the stuff that explains the rough and tumble of the dynamic market competition we have seen in the last decade as the Information Age has engulfed us all. Faster, better, lower-cost machines run on smaller and smaller chips dominate our lives. But the notions of path dependency, technological lock-in, network externality, etc., cast doubt on the ideal efficiency of all the changes we are living through. Perhaps there would be an even more efficient path, but once derailed the cost of getting back on that path are prohibitive.

My purpose in relaying these oft-repeated stories is not to debunk them, but rather to borrow from them to explain developments in modern intellectual history. My hypothesis is that economics made a fateful choice in the 1930s and 1940s and chose an intellectual development path which has generated a bi-furcation in economic thinking between theoretical systems and the real world these systems are

supposed to represent that is not easily repaired. Formalistic precision was (and is) followed and the cost was (and is) a loss of relevance of the discipline of economics for the messy world in which we live. Even on the empirical front, fine estimation techniques were developed but the richness of the empirical world remains hidden from scientific view. Theoretically and empirically, I assert, the technology chosen for the task at hand led (ex post) to an intellectual dead-end.

The task at hand -- as I see it -- was a neoclassical one: that is to explain market regularities as the outcome of the rational choices of individuals subject to constraints. In this sense, I am not challenging the marginalist revolution of the 1870s. Nor, would I challenge the universalistic project of rational choice theory. The problem is not in the aspirations of these inter-related projects, but in the way the project proceeded and was thus transformed. (Just as in the Sony-Beta story nobody contends that the market for VCR's was wrong-headed in general, though the choice of VHS was "wrong" from a technological perspective).

In comparing Neoclassical economics with Austrian economics it is important to recognize first and foremost that Austrian economics *is* historically a school within the broader tradition of neoclassical economics. Austrian economics, unlike Institutionalism or Marxism or Post-Keynesianism, is not heterodox in certain fundamental respects. On the other hand, with regard to what neoclassical economics has become and the way that the original marginalist project is now understood within the mainstream, Austrian economics is every bit as heterodox as any of the alternative schools of thought mentioned above. This two-sided aspect of Austrian economics leads to many tensions within the school (on an intellectual level [both theoretical and empirical], strategic level [which professional alliances to pursue], and institutional [in terms of departmental location and in terms of funding support]). I will limit myself here, however, to a discussion of those tensions felt on an intellectual level leaving for more appropriate venues discussions of a strategic or institutional concern. In doing so I hope to not only present what are the limitations to mainstream neoclassical economics, but also to suggest what are some of the lingering problems which haunt Austrian economics and prevent the school from developing its potential as a framework for the theoretical and empirical examination of the world.

II. WHAT IS WRONG WITH NEOCLASSICAL ECONOMICS

The answer to the question "what is wrong with neoclassical economics?" can be summed up in a few words: It is precisely irrelevant. But that answer takes some explaining. The neoclassical project that was begun in the 1870s sought to derive economic laws from the foundational proposition that economic agents base their decisions on their subjective evaluation of the situation. Choice is never about absolutes, but always choices on the margin. Individuals strive to obtain ends and in doing so they arrange (and rearrange) the means available to them to achieve those ends. Economic agents learn how best to arrange their means to obtain ends based on the incentives they face in their decisions.

As this program was translated into mathematical form certain simplifying assumptions were made to ease the translation of essentially a philosophical/logical set of propositions about human choice and social interaction into a determinate system of equations. Neoclassical economics evolved to the point

where it could be defined by the following research strategy: (a) maximizing behavior, (b) stable preferences, and (c) market equilibrium (Becker 1976, p. 5). This evolution of the scientific program of neoclassical economics progressed slowly but steadily over a one-hundred year period, with each successive generation weeding out the use of natural language (just as VHS format did not immediately out compete BETA). The younger practioners within the discipline found that to pursue this research program "relentlessly and unflinchingly" and in order to "talk" with their colleagues, they had to "speak" the language of mathematical models. Unless their ideas could be stated in formal proof, then it was understood that the idea remained simply an interesting idea and not a contribution to science. This was a marked departure from the earlier view of economic reasoning one found in say, Alfred Marshall. As A. C. Pigou wrote about Marshall:

> Though a skilled mathematician, he used mathematics sparingly. He saw that excessive reliance on this instrument might lead us astray in pursuit of intellectual toys, imaginary problems not conforming to the conditions of real life: and further, might distort our sense of proportion by causing us to neglect factors that could not easily be worked up in the mathematical machine (Pigou 1925, p. 84).

Marshall himself followed the rule that (1) one should use mathematics as a shorthand and not as an engine of inquiry, (2) one should keep to the mathematics until it is done, (3) then translate the mathematics into English, (4) then provide an illustration of the point with an important real world example, (5) then burn the mathematics, and (6) if you cannot succeed at (4) then burn (3).[1]

I do not wish to stress the Mengerian essentialist critique of mathematical reasoning for economics, but rather the consequentialist critique. Marshall limited mathematics to the footnotes, by the time Milton Friedman published his provisional text in price theory, the footnotes in Marshall had become the text and the text in Marshall had become the footnotes, so to speak. Still Friedman's price theory was connected to the real world in a fundamental sense and was a powerful engine of inquiry into economic life. One could, at that time, still study for an economics exam by taking a trip to the local grocery store to examine inventory policies or ponder the 99¢ pricing rule.[2] The same is true for the economic teaching of neoclassical economics that took place at UCLA, Washington University and the University of Virginia (the birthplaces of property rights economics, new economic history, and public choice theory in the 1950s and 1960s). By the time we get to the next generation of text-books on price theory, however, the footnotes containing Marshall's text are gone and all we have is an instructional book on the mathematical techniques and models which economists use to speak to one another. This of course is not literally true, but it is true that the trip to the grocery store would now be a waste of time for a student preparing for an exam. Gone from the economists view is the concern with the everyday business of living that Marshall sought to understand. Instead, successive generations of our brightest students are taught to play with their intellectual toys and solve imaginary problems not conforming to the conditions of real life as Marshall had warned. And, with that comes a distorting of our professional sense of proportions by turning a cold shoulder to any problem that cannot be presented in mathematical form.

In other words, as mathematics became the standard language of economic science there was a

network externality effect on the entire profession. Due to this externality effect, the profession became "technologically" locked-in. The fateful moment of decision, I would argue, was with Paul Samuelson's *Foundations* (1947). Samuelson's obvious intellectual brilliance and his strategic astuteness (within a decade Samuelson came to dominant both the undergraduate education with his *Principles* and graduate education with his *Foundations* -- and his dominance in this regard lasted at least two decades) led to a convergence of professional opinion on how economic *science* was to be done even if differences on a policy level remained. Science was Samuelson, not Galbraith, not Hayek. Galbraith (in books such as *The Affluent Society*) or Hayek (in books such as *The Road to Serfdom*) might be entertaining and provide food for thought, but one wasn't supposed to confuse this exercise with science -- we had moved beyond that. The concerns of scholars such as Kenneth Boulding that "Conventions of generality and mathematical elegance may be just as much barriers to the attainment and diffusion of knowledge as may contentment with particularity and literary vagueness.... It may be that the slovenly and literary borderland between economics and sociology will be the most fruitful building ground during the years to come and that mathematical economics will remain too flawless in its perfection to be very fruitful" were dismissed (1948, p. 247).

The problem was that economists had forgotten that what mathematical modelling promised was fairly limited. Stating arguments in mathematical form does ensure syntactic clarity, but it does not guarantee semantic clarity -- the very thing that Marshall was concerned about.[3] The meaning of the exercise for addressing real world problems cannot be guaranteed. If one combines the philosophy of science arguments for a positivistic image of science that were circulating in mid-century, with the formalistic demand for mathematical representation (which had caught the imagination of economists since the late nineteenth century), then the shift to instrumentalism as the dominant practice among economists is readily explained.[4] The only way to operationalize positivism in economics was to shift to "as-if"ism and indirect testability. But once permission was granted to abandoned all concern with realism of assumptions, theoretical thought experiments could (and did) run wild and scientific exercises can as easily be seen as peculiar forms of escapism as they are viewed as contributions to knowledge.[5]

The evolution of the profession in this direction has not gone unnoticed. The expos, of graduate education in economics by Arjo Klamer and David Colander (1990) brought to attention what many believed. Graduate training in economics had lost sight of educating new economists in the substantive logic and "art" of economics. As the **Report of the Commission on Graduate Education** states it, the general concern is that with each successive generation "We might teach the language of mathematics but not the logic of economics, and end up valuing the grammar of the discipline, rather than its substance" (Krueger, et. al., 1991, p. 1041). The **Report**, as would be expected from an American Economic Association Commission, is too conservative and guarded in its statement because the future is already upon us. The grammar has, for at least a decade, been more important that the substance of economics as Klamer and Colander documented with their interviews with students at the leading graduate institutions. Even the authors of the **Report** had to admit that "It appears that mastery of technique has supplanted mastery of the kind of intuitive economic analysis that was once called 'Chicago-style micro'." And, the AEA Commission -- in an unguarded moment -- even stated that their "fear is that graduate programs may be turning out a generation with too many *idiots savants*, skilled in technique but innocent of real economic issues" (ibid., pp. 1044-45).

On consequentialist grounds we should be concerned. There are many different ways to pursue economics, and there are a variety of skills that different scholars possess. Economics would be far poorer as an intellectual discipline if it erects permanent barriers to practitioners who possess the skills of an historian or philosopher, but do not possess either the background, inclination, or aptitude in mathematical analysis necessarily to master the modern menu of models that currently represents the discipline of economics. Economics has historically been much broader in scope than what is currently fashionable in terms of formal technique and it has in its history attracted brilliant individuals that were neither mathematically gifted nor statistically enamored.[6]

Since economics is what economists do, as Frank Knight said, the systematic weeding out of a certain type of scholar transforms the discipline. It is not just a question of science progressing one gravestone at a time. The question that concerns us is what is the payoff of the transformation in terms of our understanding of the central questions which have occupied the discipline of economics since its founding. And, the problem is that the obsession with the language of mathematics has divorced the discipline from the world of everyday life. Ronald Coase, for example, has argued forcefully against the misuse of formalism in economics.[7] The formal structure of an argument, Coase warned, can mask underlying contradictions in the project. The Coasian critique of the Pigovian analysis, for example, really was directed to pointing out that economists pursuing this type of analysis were "engaged in an attempt to explain why there were divergences between private and social costs and what should be done about it, using a theory in which private and social costs were necessarily always equal" (1988, p. 175). The assumptions required to make the analysis tractable formally precluded the necessity of analysis. In other words, the policy recommendation that emerged out of the Pigovian framework required a level of detailed knowledge of the circumstances that were it to exist would render the policy recommendation redundant because agents within that economy would already have acted upon the knowledge to eliminate the said problem. Moreover, if we grant that the logic of the analysis is impeccable, but admit we do not know how to calculate the required taxes and subsidies, or approximate them through a process of trial and error, then we must admit that our formal tax analysis is nothing more than the "stuff that dreams are made of". The frustration with the twisting of the concept of theoretical economics to justify whatever mental experiment one can think up led Coase to state: "In my youth it was said that what was too silly to be said may be sung. In modern economics it may be put into mathematics" (1988, p. 185).

What these criticisms are getting at is not a preoccupation with abstraction and theory. The critics I've cited would defend the importance of abstraction and theory in economic analysis. What is wrong with modern economics is an issue of judgement and research direction, not the desire to theorize. No doubt the skills required to survive PhD training and advance up the academic ladder ensure that those that survive are quick of mind, analytically astute, in a word -- smart. But there are no guarantees that "smart" translates into "good" when it comes to the art of economics.[8]

My point is simply to suggest that the "medium is the message" so to speak. The language of modern economics, due to the demands for determinacy, crowds out questions of subjective assessment,

institutional context, social embeddedness, knowledge (as opposed to information), judgement, entrepreneurship, creativity, process, history, etc. (see Samuels 1989). Some may be attempting to employ the tools of modern economics to analyze these questions, but in the process the questions are transformed. Institutions, for example, can be treated as formers of preferences, or as constraints. Maximizing models inevitably transform the treatment of institutions into constraints only and questions about institutions as formers of preferences are pushed aside as intractable. The same can be said for the various other conceptual issues listed above. Of course, mathematical models of learning, creativity, information acquisition, etc. can be built, but do they really connect to the problems which gave rise to our concern with these concepts in the first place?

III. AUSTRIAN ECONOMICS AS A GENERAL THEORY

Austrian economics promises a way out of the problems with neoclassical economics.[9] Not by jettisoning the neoclassical project, but instead by pursuing it in an alternative language -- that of natural language -- that affords us the possibility to explore social processes that defy determinate solutions. Natural language allows us to deal with the imprecise world of real time and ignorance, yet not have to either (1) abandon the aspiration of universal theory, or (2) define the problem away in the search for determinacy. The Austrian project has always been one of attempting to explain the undesigned regularities of the market order as the outcome of the meaningful choices of individuals. Moreover, this problem was a central mystery of economic life precisely because the individual's problem situation was one which admitted to the potential trap of solipsism that could engulf the individual as a subjective perceiver of the world. What *must* be explained is how institutions and various habits of living emerge that allow the individuals to transcend the confines of his own mind and interact with others.[10]

One way to answer the problem is to deny it, that is treat the individual's problem situation in a simpler manner. That is the way modern economists have gone. In the modern text-book, the individual is assumed to possess all the relevant information necessary to maximize his utility subject to given constraints, the prices observed in the market are assumed to contain all the relevant information about relative scarcities, and reflect equilibrium values, and through price mediation profit maximizing producers perfectly coordinate their decisions with utility maximizing consumers to generate an optimal allocation of resources. The logic of this approach is sound, but it answers the question posed only by trivializing it. Theory in this fashion can proceed without concern for any particularity of the situation.

Another way to approach the problem is to deny its solution. Allow the problem of subjective perception to engulf economic actors and deny that they could ever coordinate their plans. Economic life, the stuff of subjective expectations and unique historical contingencies, defies solution. Sure consumers have a bewildering array of choices, but many are left at the bottom of the economic ladder (or even unable to get on the ladder but instead are "free" to wallow in the streets aimlessly and without hope). Solutions to the social dilemma are not to be found, from this perspective, in the "invisible hand" of market processes. This does not automatically translate into confidence for the "visible hand" of government because recognition of the "hidden hands" of interest groups and problems with democratic governance may undermine the policy solutions proposed. But the normative issue is not what I want to

stress. By denying the solution, social science proceeding this way will not pursue the analytical project of unlocking the mystery of economic order because the idea of ordered regularity is denied. Instead, the focus will be on the historically contingent.

Instead of either trivializing the problem or denying its solution, there is an alternative program of research that has motivated social scientists for centuries. The classical approach, especially in its mature Ricardian manifestation (with its focus on the objective long-run conditions), came close to steering the analytical exploration of the invisible hand in the direction of triviality. German Historicists, especially of the Younger School, denied the solution. The Austrian program -- immersed as it was in the continental philosophical and scientific debates -- promised to deal with the problem of unplanned order in its full mysteriousness. The German sociologists Georg Simmel (1908), influenced by similar intellectual trends, raised the question: "How is society possible?", once the problem situation of the individuals is complexified, the Austrian economists, from Menger on, focused on a subset of that question, namely "How is market coordination possible?" Menger argued that perhaps the most noteworthy problem in the social sciences was:

> How can it be that institutions which serve the common welfare and are extremely significant for its development come into being without a common will directed toward establishing them? (Menger 1883, p. 146)

In fact, Menger argued that "The solution of the most important problems of the theoretical social sciences in general and of theoretical economics in particular is thus, closely connected with the question of theoretically understanding the origin and change of 'organically' created social structures" (ibid., p. 147).

Without denying the potential trap of solipsism and the imperfections of our human existence, the question was to illuminate how the institutions and various habits of living evolved to escape the traps of subjective valuation, the passage of time, and the limitations of our knowledge.[11] Money, within the Austrian analytical framework, represents both the exemplar of the compositive methodology they sought to pursue and the key social institution of coordination that allows us to bridge the gap between solipsism and social order.[12] Menger's depiction of the evolution of a medium of exchange out of the barter exchange situation shows how individuals pursuing their own (and only their own) interest can generate an outcome that serves the common welfare even though that was no part of their intention.[13] In addition, recognizing the centrality of money (being one half of all exchanges) to the system of production and the functions which money came to serve within economic life (the facilitator of exchange and economizer of information) led to an analysis of the social dilemma that differed from either the classical or historicist forerunners to Austrian economics.

As is familiar to historians of economics, the Austrians rejected the historicist challenge by asserting the epistemological necessity of theory in social analysis. There was, according the Austrians, no choice. There was either analysis in which theory was made explicit and defended or there was inarticulate theory -- there was no such thing as theory-free social science. One could not possibly engage in social

science without a theory to guide you -- the world was too complex (see Böhm-Bawerk 1891). But why not, then, simply stick with the classical economic theory of Ricardo? Why muddy the analytical waters with concerns of the subjective nature of individual decision making and the particularity of the context of choice? The issue here, as we have seen, was one of the problem situation in which the individual was placed -- and it is this issue which today still separates Austrian economists from their neoclassical brethren.[14] In this regard, the Austrians would join Keynes in claiming that classical and the other traditions of neoclassical economics (Marshallian and Walrasian) represent at best a special theory as opposed to a general theory (1936, p. 3).

The reason for the special nature of neoclassical theory is the problem situation so conceived. If we lived in a world of perfect information, zero transaction costs, infinite number of buyers and sellers, then perhaps the core model of neoclassical economics would depict our social plight.[15] But we obviously do not live in that world, our general situation is one filled with imperfections, misperceptions, costly transactions, and utter ignorance of lurking opportunities. Where Austrians differ from Keynes (and other heterodox writers) is in the implications for economic science of the problem situation once appropriately complexified. Keynes sought some form of aggregate analysis, but Austrians denied that aggregate techniques of analysis would permit an examination of the underlying forces at work.[16] Austrians sound a bit like neoclassical economists when it comes to issues of microfoundations of macroeconomics, though they also sound a little like Keynes and many other heterodox scholars when it comes to the problem situation that must be studied.

Neoclassical writers would agree that the world is not like the core model, but they insist that the model is useful and that abstraction is necessary in science. I am not denying the necessity of abstraction, nor do I deny that the economic project must begin with a firm microeconomic foundation. The question is whether parsimony favors the neoclassical model. I am willing to admit that if Austrian analysis ended with the same analytical propositions about human interaction as neoclassical analysis does, then the scientific burden of proof would have to be on the Austrians. Why worry about such issues as time and ignorance if in the end we can get the same result with a much simpler (and more elegant) model? Maybe some realist philosophical argument could be made, but good old American pragmatism would compel us to side with the neoclassical project. But the Austrian claim was not limited to Menger's essentialistic critique (though that is what has been stressed) as it included a consequentialist claim that the analysis of the simplified situation does damage to our understanding of the complex situation and turns our intellectual efforts in the wrong direction on both a theoretical and empirical level. It just isn't scientifically pragmatic to focus on the simplified situational logic of neoclassicism. Even an Austrian economists as weeded to the neoclassical mainstream as Oskar Morgenstern commented that:

> The abstraction made would be faulty if it bypasses a fundamental feature of economic reality and if the analysis of the radically simplified situation will never point towards its own modification in such a manner that eventually the true problem can be tackled. ... Radical simplifications are allowable in science so long as they do not go against the essence of the given problem (1964, p. 255).

If we admit that the tools of neoclassical theory have been developed with the aid of radical simplifications of the problem situation, then the questions that remain are whether these simplifications can be relaxed and what remains of neoclassical theory if they are.[17] And, what I mean by remains is not simply that the formal language of neoclassical economics is retained, but that the theoretical propositions about the world are retained. That is precisely where the difficulty lies. The modern research strategy of information economics and/or New Keynesian economics is one which retains the formal language of neoclassical economics, but introduces *selective realism* into the analysis. The conclusion of this sort of analysis overturns many of the core propositions of standard neoclassical analysis (such as market clearing) and the two fundamental welfare theorems associated with the concept of Pareto Optimality (see Stiglitz 1994). Generalized market failure theory (with missing markets and suboptimal allocations) substitutes for the theory of general equilibrium and the efficient market hypothesis.

The Austrian claim is not against abstraction, but it does challenge the *selective realism*[18] of modern information economics and moreover it questions whether the techniques employed in modern information economics undermine the analyst's ability to deal with questions of knowledge and the informational role of the price system (see Thomsen 1991). As such, modern Austrian economic theory offers an alternative theory of economic life; one significantly more general in terms of applicability to the world as we know it. The neoclassical mainstream of microeconomics (of both the perfect and imperfect market sense) are limited in scope precisely because they violate the principle of adequate abstraction in science. Furthermore, instrumentalist appeals cannot salvage the theoretical system given the lack of empirical findings to support the models of utility maximization and profit-maximizing as these models are understood in the standard text-book. Modern models may be logically coherent and formally elegant, but they *do not work* in terms of illuminating basic questions of economics, such as the formation of price, the path toward equilibrium (or between equilibrium positions), and the nature of innovation. This failure is generally recognized across the various subschools of mainstream neoclassical economics, but the general retort is two-fold: (a) so what?; and (b) what is the alternative? The alternative question presupposes that an acceptable alternative must be couched in the same form as existing theory. This, however, is precisely where the two questions link up and get at the basic non-neutrality of the choice of language in the science of economics. For example, the prime mover of economic progress -- the entrepreneur -- has been systematically weeded out of formal economic theory, as Machovec (1995) and others have persuasively documented. If the meaning of "theory" in economics has been so transformed as to tolerate any and all free floating abstractions, then there is no compelling reason why the lack of a prime mover should be mourned. But failure to mourn the loss of the prime mover in economic activity should be understood as an abandonment of the main intellectual quests of economic science since Adam Smith: the explanation of how individual behavior influencing price adjustments generates an overall order that tends to coordinate the decisions of the most willing suppliers with that those of the most willing demanders in the market. Equilibrium theories (independent of whether they describe an optimal or suboptimal situation) do not explain the activity that brings the situation about, but rather simply postulate the point so derived.[19]

Austrian economics focuses on those questions which neoclassical models do not formally allow -- in this regard Austrian economics often appears to be nothing more than the appreciative theory underpinnings of the formal theory of the mainstream.[20] But what if appreciative theory outdistances

formal theory in dealing with issues that matter for understanding market processes and the social structures that sustain or thwart the operation of these processes? This question does not occur to a formalist because the span of vision of the scientific enterprise is restricted by the language of analysis, but to the Austrian (and various other heterodox schools of thought) the question represents the reason for dissent from the conventional scientific wisdom of the day in economics.

If what we demand out of an economic theory is realism, then Austrian economics strives to deal seriously with the real social conundrum in which human actors are placed. If economic theory is also supposed to strive for universality, then Austrian economics claims to offer logical derivations of analytical propositions that meet that aspiration to universal principle of human action and interaction. By consistently and unflinchingly pursuing methodological individualism (understood in its phenomenological as opposed to atomistic sense), methodological subjectivism (or intersubjectivism), and process analysis, Austrian economists have developed a general theory of human action, of market processes, and of institutional evolution. By recognizing the complex problem situation which is our social world, the individual and collective coping mechanisms that allow us to live with one another are highlighted and explored.

It may be, as some assert, that all the talk of schools of thought is counter-productive to an extent because what really matters is whether someone is pursuing good economic or bad economic analysis of the situation under investigation. Putting aside the obvious fact that the definition of "good" or "bad" is a function of the school of thought which one is privileging at the moment of assessment, it does seem plausible to argue that *if* one is to deal with the everyday world in which human beings live, then one must not distort their situational environment beyond recognition simply for formal tractability.[21] If the tools are not flexible enough to deal with the problem, then rather than turning away from the problem perhaps it is time to choose new tools of analysis. Seriously grappling with the implications of time and ignorance, rather than ever more refined exercises in constrained optimization, may provide the foundation for a humanistic (yet logically sound) and policy-relevant economics.[22]

IV. WHAT IS STILL WRONG WITH AUSTRIAN ECONOMICS

Those committed to the Austrian paradigm do firmly believe that the analysis offered is both more realistic and more relevant than any of the alternative theoretical systems of inquiry in economics. As such, the claim is that on a positive level Austrian theory provides a more accurate description of the social world and, thus, a better understanding of the forces at work in that world. On a normative level, combined with some moral philosophical statements, the Austrian positive analysis can generate a deep appreciation for certain institutional configurations and how these configurations generate prosperity, peace, and liberty.[23]

Nevertheless, it must be admitted that Austrian economics is plagued with many thorny issues of an epistemological, theoretical, empirical, and political nature. Disagreement within the ranks of Austrian economists still persists over such issues as the role of equilibrium within the theory of the market process, the treatment of expectations from a subjectivist perspective, the incorporation of cultural

factors (and social embeddedness) in the analysis of choice and preference formation, and the how and why of knowledge (its conveyance and use). Moreover, within the literature of contemporary Austrian economics questions of the standard of refutation, the issue of empirical subsidiary assumptions, the recognition of empirical magnitudes still have not been dealt with in the sophisticated manner required. In fact, the entire relationships between theory (conception) and history (understanding) must be rethought in the wake of modern philosophical developments. The philosophical debates of the 1920s and 1930s that so influenced Mises and Hayek in their methodological pronouncements have progressed, and this progression in the argument for a non-positivistic and non-mechanistic social science must be incorporated -- and, in my opinion, the effect of this incorporation will not be benign in terms of the self-understanding of the Austrian social-scientific project.

Analytically, Austrians must develop a more subtle understanding of the social infrastructure within which market processes operate. A clearer understanding of how institutions not only emerge as the unintended outcome of individual efforts to improve their lot in the world, but also how institutions shape the individual's perception of what improving their lot in the world means. The institutionally contingent domain of theoretical economics must be developed more clearly in the Austrian theory. Too much rhetoric in the history of the tradition has been on the exact or pure theory level -- even when dealing with the empirically contingent area of applied theory. The pure logic of choice may be a necessary component of any successful research program in economics, but it is not sufficient. The logic of choice must be supplemented with a richer understanding of the epistemic properties of alternative institutional arrangements. This would also include an explicit treatment within the Austrian literature of alternative political institutions and their epistemological and motivational impact on human behavior and interaction.

Unlike the problems I have stressed concerning the neoclassical project, the lingering problems with Austrian economics are signs of a progressive research program capable of growth.[24] Neoclassical economics, by artificially restricting the problem situation, has become a stagnant research program. The mainstream has been able to escape the implications of stagnation by substituting the language of the discipline as opposed to the substance of the discipline as the main research area. New applications of refined tools (either in terms of building theoretical systems or of generating empirical estimations) defines the fast track in the profession more than solving a problem in the economy. Whereas the neoclassical project began as an attempt to develop a general theoretical framework which would illuminate the human condition, it has become an intellectual enterprise preoccupied with free floating abstractions and the techniques developed to aid these flights of mental imagination. In contrast, if the Austrians can come to terms with tension between their aspiration for universal application and the necessity to recognize the contingent and the unique in human affairs if the problem situation of time and ignorance is to be seriously dealt with, then perhaps it is not too late for the original neoclassical project to become a more viable and relevant discipline and fulfill its promise as an engine for inquiry into social world.

V. CONCLUSION

The formal theory of mainstream economics, no doubt, possess syntactic clarity. Unfortunately, much

of what passes for "theory" lacks semantic clarity. Theory in the social sciences does not need to reject rigor in argumentative standards to ensure both syntactic and semantic clarity, but the language of mathematics is not designed to deal with issues of semantic meaning. The network externality produced by the substitution of mathematical language for natural language within the economic profession resulted in an simplification of the problem situation analyzed, which in turn transformed the discipline of economics. A lack of relevance to solving real world problems was one of the most obvious consequences, but less obvious results include the progressive elimination from the economic discourse of scholars who possessed a philosophical mind or a historians penchant and patience. Case study methodology, archival history, as well as more sociological types of knowledge derived from interviews and surveys has been pushed aside as lacking in formal rigor. Ronald Coase prepared his study of the firm by visiting various industrial practices, and interviewing company officials from the accounting office to the factory floor, and later in his career his insights on the problems of social cost and difficulties in standard public good theory emerged in detailed case studies and archival history. The modern student of these issues would pursue such real world explorations only as a hobby (or after thought) not as a vehicle for understanding.

What economics needs today is an anchor in the world. The educational proposal that I would suggest would be a re-evaluation of the history of economic thought (as theory) and economic history (as empirical touchstone) in our curriculum. Both of these courses have been eliminated from most graduate and undergraduate courses of study. But by introducing students to the history of the discipline and the motivating questions of the discipline (on a theoretical and empirical level) it is hoped that something would touch an intellectual cord within the next generation.[25] Formal models as heuristic devices are fine, provided they are constrained by an *understandability* criterion.[26] Improved statistical techniques are also desired, but again they must be constrained by the goal of achieving a better understanding of the historical situation under investigation. Return graduate students to the library to read the old books, and to the archives to sort through the old records, and our knowledge of both the universal and particular will improve.

Austrians can join with the heterodoxy in challenging the methodological premises of the mainstream and the characteristic assumptions of the basic model of text-book neoclassicism. But, the Austrians are part of a neoclassical heritage and as such their research program is closely wedded to one of instrumental rationality models of human agency, an appreciation of systematic market forces, and a project designed to explain the social processes that emerge as the unintended by-product of the rational choices of individuals. Many of the heterodox criticisms of the analytical project of neoclassicism, therefore, cannot be accepted. Sure the problems situation within neoclassical economic is unduly restricted, but individuals do pursue their interests; society cannot choose, only individuals do; markets do tend to clear when left free to their own devices; and wishing it so doesn't make it so in public policy.[27]

So, what is wrong with neoclassical economics? The problem situation to which the mainstream restricts its analysis. What is still wrong with Austrian economics? We have failed to fully come to terms with our neoclassical heritage and our heterodox critique. And, perhaps, when contemporary Austrians

do come to grips with these currently uncomfortable aspects of their thought, the promise of Hans Mayer (1932, p. 149) that the way to scientific enlightenment in economics is along "the road on which the great system-builders of the 'older' German historical school meet up with the founders of the 'Austrian School'" will be fulfilled and a new political economy will be forged that simultaneously satisfies our humanistic desire to *understand* ourselves, our scientific impulse to *know* the underlying forces at work, and our humanitarian *belief* that philosophical understanding and scientific knowledge can be employed in concert with one another to improve the human condition.

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ENDNOTES

1. This methodological prescription comes from a letter to his former student Bowley dates 27.ii06 and was reprinted in Pigou, ed. (1925, p. 427).

2. The story of studying for a Ph.D. qualifying exam in industrial organization by visiting the local grocery stores in Chicago was told to me by Mario Rizzo, who studied with Stigler in the early to mid-1970s. Friedman also taught his price theory course at the time with ample reference to daily affairs reported in the newspaper, and Becker challenged students with reports of seemingly irrational behavior in the daily market (such as lines for Broadway shows or quality restaurants when the line could be eliminated by raising the price) and demanding a rational-agent explanation of the continued existence of these and other practices which on the face of it seem to violate the maxims of economic behavior.

3. The language of "syntactic" and "semantic" clarity simply refers to the difference between he grammatical form of a statement as compared with the meaning of a statement. With regard to economic models, this distinction comes from Coddington (1975, p. 159).

4. The Austrian economists, Fritz Machlup (1955; 1967) has often been seen as defending the "as if" turn in economics in his methodological discussions of verifiability and the critique of behaviorist theories of the firm, such as that offered by Lester. But Machlup was explicit that the one criterion that separated his position from that of Milton Friedman was the core "test" of *understandability*. On the importance of this and how the standard literature mischaracterized Machlup's position see Langlois and Koppl (1991). Also see Lavoie (1990) for a re-examination of the Lester/Machlup debate.

5. This is where the Mengerian essentialistic critique of mathematical economics meets the consequentialist critique of a marshall or (as we will see) Coase. It is precisely because mathematical economics cannot capture the essence of the economic problem individuals confront in the world that its consistent use leads to the elimination from the field of study of the very questions which the real world of economic life demands that we, as a profession, ask.

6. One of the great *classical* economists, Jean-Baptist Say, argued that the philosophical/moral dimension of political

economy "does not admit of mathematical estimation" and that "The forms of algebra are therefore inapplicable to this science, and serve only to introduce unnecessary perplexity." "Smith," he added, "has not once had recourse to them" (Say 1821, p. 327, fn). Also see p. 188 where Say states: "Some writers maintain arithmetic to be the only sure guide in political economy; for my part I see so many detestable systems built upon arithmetical statements, that I am rather inclined to regard that science as the instrument of national calamity." Even Keynes, certainly no enemy of mathematical analysis, raised his concern of the misuse which mathematical models could be put in economics. "Too large a proportion of recent 'mathematical' economics are mere concoctions, as imprecise as the initial assumptions they rest on, which allow the author to lose sight of the complexities and interdependencies of the real world in a maze of pretentious and unhelpful symbols" (1936, p. 298). In our own day, one of the main contributors to social choice theory, Amartya Sen (1987) has argued that our discipline has both an engineering component and a moral-philosophic component to it, and that unfortunately the past few decades have witnessed an overemphasis on the engineering side to the exclusion of the moral-philosophical.

7. An important survey of Coase's work is provided by Medema (1994).

8. On the problems with the use of "smart" as a criterion in scholarship see McCloskey (1995).

9. For an overview of the contemporary Austrian research project see Boettke, ed. (1994). Also see Rizzo 91995) for a discussion of the changing agenda within Austrian economics due to focus on the problem situation of time and ignorance.

10. This is why the problem of economic calculation became central became central to Austrian economics as a *positive* analytical contribution as opposed to the obvious *normative* implication of the argument. In a world not only of scarce capital goods, but also heterogenous capital goods that must be joined in combination with other capital goods in order to coordinate production decisions to match with consumer demands the problem of economic calculation can never be treated as a simple imputation (as Schumpeter asserted). Socialism, by denying in principle, the institutions and practices which afforded economic calculation within a private property economy, denied the very possibility of rational economic calculation. As a result, the Austrian claim went, socialist policies would generate results which would be viewed as undesirable from the perspective of those desiring the policies in the first place, and in the extreme, would prove impossible to implement in practice.

11. Hayek, for example, argued that "rational economic behavior" was a habit of learning inculcated by the institutional environment and prodded by competition rather than a core assumption of analysis. Man, independent of the competitive environment, while purposive, would lean toward laziness and would not be particularly alert to opportunities for economic gain.

12. See Horwitz (1992) for a contemporary Austrian discussion of the social significance of money beyond its transaction economizing role.

13. Mises claimed that Menger's theory of money was not only "an irrefutable praxeological theory of the origin of money" but also that it demonstrated the "fundamental principles of praxeology and its method of research" (Mises 1949, p. 405).

14. There were, of course, logical flaws in the classical system of price determination which led to the neoclassical revolution in which the Austrian were crucial figures in the 1870s. In addition, the Austrians stressed the subjective nature of choice as much as the marginal nature of decisions in their explanation of economic phenomena. Ricardian analysis (then and now) masks the essence of economic phenomena by focusing on the objective conditions rather than the subjective evaluation of decision makers on the margin.

15. Again note that Austrians do not reject the neoclassical project of rational choice explanations that strive for universality. Israel Kirzner has criticized my depiction of the basic gulf between Austrian economics and neoclassical economics. It is not the problem situation, Kirzner suggests, but the lack of a theory of process that

separates the two projects. But, unless the problem situation of the individual is recognized as one entraped in the flux of time and imperfect knowledge, then I do not see that there would be much of a need for a theory of process. The Walrasian theory of pre-reconcilation of plans flows from the problem situation, just as the Austrian theory of the market process is an implication of the problem situation as postulated by Menger, Mises, Hayek and Kirzner.

16. See, for example, Hayke (1952, pp. 108-109).

17. The fact that this question is also being raised by New Institutional economists reflects that in terms of the modern intellectual landscape in economics New Institutionalism is the closest analytical ally to Austrian economics, though perhaps not so with regard to methodological concerns (in which case Austrians are more allied with other non-positivistic heterodox writers). For a fascinating discussion of the problems that New Institutional Economics that parallels many of the points I've raised in this chapter see Furubotn (1994).

18. Of course, as pointed out to me by Mario Rizzo, it cannot be otherwise. One cannot include every empirical detail in a model. But, what I want to suggest by the term *selective realism* is that some parameters of the basic model are adjusted to represent the new problem situation, but the basic parameters of the model are left unadjusted so that what results is not really a change in the problem situation but a restricted ability of the agents in the model to cope (because they are precluded by assumption from possessing the ability to cope).

19. Hans Mayer (1932) provides a detailed critique of functional theories of price in contrast with genetic-causal theories of price. Mayer's essay demonstrates the extent to which many of the same critical themes that modern Austrian economics raises against the neoclassical mainstream were evident from the beginning of the Austrian tradition. On importance of genetic-causal theories in economics see Cowan and Rizzo (1995).

20. The distinction between appreciative theory and formal theory in economics can be found in Nelson and Winter (1982, pp. 46-47). Karen Vaughn (1994) has persuasively argued that such a limited view of Austrian economics as that of it as a footnote to standard neoclassical analysis cannot be seriously entertained by Austrian economists. While I have stressed that Austrian economics must be understood as a variant of the neoclassical project, I completely endorse Vaughn's claim. The point I am seeking to stress is that Austrian economics is an alternative conception of the entire neoclassical project and as such promises a more general theory of economic processes (perhaps with standard theory found in the footnotes of such a reconstructed neoclassical economics).

21. I want to make it clear that I am not suggesting that Austrian economics lies somewhere between the neoclassical mainstream and heterodox critics and that this middle-ground position somehow privileges Austrian theory. My point is to locate the Austrians on a different spectrum, one that begins with a shared understanding of the problem situation with the heterodox critics (a problem situation of social embeddedness, imperfect knowledge, the passage of time, the error prone nature of human decisions, etc.), yet strives to establish a general theory of universal applicability out of that problem situation using a basic model of instrumental rationality. Austrians like general equilibrium theorists are deductive theorist committed to deriving principles of economics through exercises in logic, but the basic core assumptions within the deductions are given to them by the problem situation of the heterodoxy.

22. Alan Coddington summed up the general position I am holding out for the Austrians nicely in his discussion of Shackle's contributions to economics. "If this account is sound, it leads to the seemingly paradoxical (but in fact straightforward) idea that carefully imprecise concepts can give a more *accurate* expression of the economic world than precise ones. On these grounds, the kind of precision aimed at by the axiomatisers can be seen to be quite artificial in that to increase the precision of formalisms in no way contributes to a clarification of the mode of correspondence between the formalism and the economic world it is supposed to represent; and it is on the robustness of this correspondence that understanding (as opposed to the manipulation of symbols) ultimately rests" (Coddington 1975, pp. 158-159, emphasis in original).

23. I have sought to sort out the issues of positive and normative analysis in Austrian economics in the wake of the post modernist critique of objective knowledge, see Boettke (1995).

24. On the theme of the new challenges that confront Austrian economics and how these challenges can be turned into opportunities for growth see Rizzo (1995).

25. Kenneth Boulding, in classic contra-Whig fashion, has argued that the key issue is the evolutionary potential of a system of ideas. To the extent a set of ideas still possesses evolutionary potential, then it must be part of our extended present. The Whigish notion that all that was good in the ancients must already be contained in the moderns fails to appreciate the evolutionary potential of debates and ideas found in the distant past for solving current problems in the discipline today. See Boulding (1971).

26. As I alluded to in the discussion of Machlup's methodology, it has been argued that this criterion was the dividing line between Machlup's and Friedman's position on the scientific testability of economic propositions. But, Machlup did not introduce this common-sense test of theory within the Austrian tradition. Rather, Machlup inherited the test from the founders of the school. Wieser, for example, economics was applied common sense and that any laymen knows the whole substance of the theory of value from their own experience -- they just haven't studied the matter theoretically. "If this be true, how else shall we better prove our scientific statements than by appealing to the recollections which every one must have of his own economics actions and behavior?" (Wieser 1893, p. 5). This appeal to the intersubjective experience of the man on the street has always been the meaning of the Austrian appeal to intuition as a source of knowledge in economics (not the private intuitions of the analyst, but the intersubjective intuition of our shared social space). Since we are what we study we have access to information that is denied the physical sciences and a major error is committed if we deny ourselves this knowledge.

27. This doesn't mean that economic liberalism necessarily flows from economic science and therefore one cannot be an economic scientist and deviate from laissez-faire. It does mean, however, that economics as a tool of critical appraisal does place certain parameters on various utopias, and is capable of informing us on the costs and benefits of various institutional arrangements. Economics, for example cannot determine whether profits are deserved or not, but it can yield insights into the consequences for the patterns of exchange and production of the different answers to that question.

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