From Bounded Rationality to Behavioral Economics: Comment on Amitai Etzioni Statement on Behavioral Economics, SASE, July, 2009

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Amitai Etzioni's short statement opens a very wide range of issues that I think cannot be adequately addressed in a panel of this kind. But it seems to me that the main question posed in the context of the Annual Meetings of SASE is that of how we should understand socio-economics as an intellectual endeavor and where we should look for help and support. For me, speaking here as an economist, what is interesting about the endeavor is that it represents an attempt to temper the almost exclusive emphasis in the discipline of economics upon the individual – an emphasis which is moreover both analytical and normative – with a recognition of and concern for the role of the society in which the individual is embedded. From this point of view, I think the emphasis on Herbert Simon's notion of bounded rationality is misdirected. The issues once addressed in economics under this heading have since been reinterpreted, partly in response to the kinds of criticisms which Etzioni makes in his statement. They are now being explored in two research programs.

One of these, which Etzioni does not mention, is economic institutionalism (a term which I use to distinguish the concern with institutions in economics from institutional concerns in other social science fields). The basic "assumption" here is that much of what Simon calls "rules of thumb," which overcome the limits of rationality (or more exactly, the limits of our <u>models</u> of rationality), are actually legal rules and social norms. The discipline has come to make a distinction, following Douglass North (North, 1990), between formal rules and informal rules. The former are subject to overt contestation by the economic actors. North, and most economists as well, would have us model the behavior of the actors in that contest in terms of rational choice. But the

creation of a formal theoretical category for rules of this kind opens the door to the models of how these rules emerge in other social sciences.

Thus far, the most direct attempt to offer an alternative model is the literature on institutional isomorphism in economic sociology (DiMaggio and Powell, 1983; 1991). But other institutional theories could obviously be made to speak to the relevance of the rational choice model (Wolfgang Streeck's comments on this panel are to the point here). Economics as a discipline has not been interested at all in the question of from where informal norms come. The discipline has focused instead on how they affect outcomes as the people who share them interact in a market setting. I think this is unfortunate, in that an exploration of the origins and evolutions of these norms would bring economics closer to sociology and anthropology, a subject to which I return shortly below. But the fact that informal norms are recognized as an analytical category distinct from formal rules is nonetheless a considerable advance. It is a recognition that rational choice models do not apply to all rules, and that some other theory is required to explain them. It also enables us to address in a more sophisticated way the question that Etzioni raises about how individual behavior affects the operation of the economic system. It enables us to distinguish cases in which the system is driven (as Becker asserts) by deviant actors operating at the margins (i.e., those cases where behavior is unconstrained by informal rules) and cases where the system is driven by the inertia of the vast majority of intramarginal players (cases where it is tightly constrained by informal rules). In this, formal rules, which the actors can potentially shape in their own interests, constitute an intermediate case.

The second research program that is focused on the issues once explored under the rubric of limited rationality is, of course, behavioral economics (DellaVigna, 2009). Behavioral economics has opened up a whole new realm of empirical investigation and theoretical development in a field which previously operated in very circumscribed intellectual terrain, and it is hard as an intellectual and a scholar not to be intrigued and excited by these developments (especially if one is oneself an economist). But in terms of the endeavor of socio-economics – or at least in terms of what attracts me to the organization which operates under this banner – it is not a particularly welcome

development, and I do not see its political and moral implications in the age of neoliberalism as especially promising or attractive.

Standard economics is built around three key ideas: 1) rational individuals; 2) motivated by narrow self interest; 3) interacting in a competitive market. Most of the work in the discipline, especially in the post World War II period, has explored the implication of these ideas, and they provide the intellectual underpinnings of the neoliberal economic program which has dominated economic policy over the last thirty years in most countries of the world. The focus of behavioral economics has been the empirical investigation, largely through laboratory experiments, of the assumption of rationality. What have been uncovered in the process are not rules of thumb which substitute for full rationality but rather systematic deviations from rationality. This has led to a variety of behavioral models incorporating alterative assumptions suggested by the experiments and exploring their implications for the interaction of individuals in the market. More recent work has also identified systematic deviations from the assumption of narrow, self-interested behavior and has begun to explore the theoretical implications of these deviations as well. It is primarily this last development which seems attractive to socio-economics because it implies that people recognize and are concerned about the adverse impact of their behavior on others. The pioneer in this research program is Ernst Fehr, and while Fehr's work on socially oriented behavior fits well with the rest of behavioral economics, it leads to very different behavioral models and understandings than either "bounded rationality" or the irrational patterns upon which behavioral economics previously focused, and distinguishes the new research program fundamentally from the old (Fehr, 2003).

The problem with behavior economics, as I see it, is basically that it is committed to rooting economic behavior in individual psychology and ultimately tracing that psychology to the biological construction of the human brain. It thus leads directly to what is rapidly becoming a distinct branch, neuro-economics.

In the extreme, this leads to a willingness to improve economic outcomes through biological intervention. It need not, of course, be carried to this extreme. But it does pick up a strand of thought in American economics in particular which led the discipline in the late nineteenth and early twentieth centuries to become closely associated with

Social Darwinism. One of the most highly rated American economists even today, Irving Fisher, was an outspoken proponent of eugenics and wrote extensively on this subject (Allen, 1993; Thaler, 1997; and Tobin, 2009).

There is no question that, in some way and at some level, human behavior is rooted in our biological construction. But there are at least two distinct ways in which human beings are distinguished from other biological species. One is in terms of our capacity for rational action. But the second is our capacity for speech and the development of language. The two undoubtedly interact, and there is no reason why they could not be explored together. Modern linguistics as a discipline, moreover, has tended to emphasize the biological underpinnings of speech and the universalistic characteristics of language. But an exploration of the way in which language, as opposed to speech, develops and evolves through use would appear to provide a very different path toward understanding human interaction, and one which was much more inherently social in nature. This theme lies in many ways at the heart of Friedrich Hayek's research program, where it is linked to the origin and evolution of institutions (Hayek, 1973). But there is virtually no contemporary research in economics of which I am aware which pursues this theme.

The most active alternative paths represented under the umbrella of socioeconomics for addressing the intellectual challenges of standard economics and the limits of public policies toward which it points are drawn from sociology and political science. This would imply exploring other motivations for human behavior besides self-interest, even broadly conceived to include altruistic concerns and other mechanisms of social cohesion besides the market. It would, moreover, emphasize the substantive differences among societies. It is a path which would bring economics much closer to historical institutionalism as it is developing in political science and to economic sociology. The one school of economics which appears to be exploring this path most systematically is the Conventionalist School of economics in France (Piore, 2003). But as suggested above, the new emphasis on institutions in economics, which Etzioni does not mention, but which is at least as active an area of research as behavioral economics, points in that direction as well, although economics has certainly not followed it there, at least not yet.

References

- Allen, Robert Loring. <u>Irving Fisher: A Biography</u>. Cambridge, Mass: Blackwell Publishers, 1993.
- DellaVigna, Stefano (2009) "Psychology and Economics: Evidence from the Field," *Journal of Economic Literature*, 47 (2): 315-372.
- DiMaggio, Paul and Walter Powell (1983) "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality," *American Sociological Review*, Vol. 48, pp. 147-60.
- DiMaggio, Paul, and Walter Powell (1991) "The New Institutionalism in Organizational Analysis: Introduction," in Walter W. Powell, Paul J. DiMaggio (Eds.) <u>The New</u> <u>Institutionalism in Organizational Analysis</u>. Chicago and London: University of Chicago Press, pp. 1-38.
- Fehr, Ernst (2003) "The Power and Limits of Human Altruism," presentation at the 15th Annual Meeting of the Society for the Advancement of Socio-Economics, Aixen-Provence, France, June 21, 2003.
- Hayek, Friedrich. <u>Law, Legislation and Liberty: A New Statement of the Liberal</u> <u>Principles of Justice and Political Economy. Volume 1: Rules and Order</u>. Chicago: University of Chicago Press, 1973.
- North, Douglass. <u>Institutions, Institutional Change and Economic Performance</u> New York, Cambridge University Press, 1990.
- Piore, Michael J. (2003) "Stability and Flexibility in the Economy: Reason and Interpretation in Economic Behavior," mimeo, MIT (published in French as "Stabilité et flexibilité dans l'économie: le comportment économique entre rationalité et interprétation," in Francoise Eymard-Duveray (Ed.) <u>L'économie des</u> <u>conventions méthods et résultats. Tome 1: Débats</u>. Paris: La Découverte, 2006, pp. 117-127).
- Thaler, Richard H. (1997) "Irving Fisher: Modern Behavioral Economist," *American Economic Review*, 87 (2): 439-441.
- Tobin, James (2008) "Fisher, Irving (1867–1947)," in Steven N. Durlauf and Lawrence E. Blume (Eds.) <u>The New Palgrave Dictionary of Economics, Second Edition</u>. London: Palgrave Macmillan, pp. 369-76.