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The Whole Is Greater than the Sum of the Parts: Analyzing Legal Problems in an Endogenous World

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THE WHOLE IS GREATER THAN THE SUM OF THE PARTS: ANALYZING LEGAL PROBLEMS IN AN ENDOGENOUS WORLD

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INTRODUCTION

In his article, *Beyond Individualism in Law and Economics*,¹ Professor Robert Ahdieh examines the limitations of the economic analysis of legal problems arising from one of the core assumptions of the neoclassical economic model – the assumption of “methodological individualism.” Under this assumption, the individual is the primary unit of analysis and the influence of groups of people is assumed to be either exogenous, contributing to the past formation of the individual’s existing preferences, or the simple linear aggregation of individual acts.² Ahdieh quotes Ludwig von Mises for this point: “If we scrutinize the meaning of the various actions performed by individuals we must necessarily learn everything about the actions of collective wholes.”³ Under the assumption of methodological individualism, “analysis of the social must occur by way of the individual,”⁴ with the social phenomenon being the simple addition of the individual actions of the affected individuals. There is no endogenous social effect on the legal problem that needs to be examined, and there is no “gestalt” in the problem because the aggregation of the individual acts is neither greater nor less than the sum of the parts.⁵

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¹ Robert B. Ahdieh, *Beyond Individualism in Law and Economics*, 91 B.U. L. REV. 43 (2011).

² *Id.* at 53-54.

³ *Id.* at 50 (quoting LUDWIG VON MISES, *HUMAN ACTION: A TREATISE ON ECONOMICS* 42 (2d ed. 1963)).

⁴ *Id.* at 51.

⁵ Max Wertheimer, *Gestalt Theory*, in *A SOURCE BOOK OF GESTALT PSYCHOLOGY* 1, 2

Professor Ahdieh argues that, by making this assumption, neoclassical economic analysis inevitably minimizes the role of larger social phenomena, rendering many legal analyses incomplete.⁶ In particular, he argues that this simple analysis misses important aspects of legal problems involving social norms, network externalities, coordination games, and information, because these phenomena are inherently social and would be better analyzed using larger social groupings as the basis of analysis.⁷ Professor Ahdieh gives some specific examples of legal doctrines, the economic analysis of which might be affected by relaxing the assumption of methodological individualism and directly analyzing the effects of groups of people, or at least the possibility that the impact of the group might be different than the additive impact of its individual members. These examples include condemnation power, the constitutional takings doctrine, and regulation of the financial markets.⁸ He also points to some larger implications of his critique for the economic analysis of law – that economists seem too much interested in dilemma games that do not directly engage a social solution, too little interested in larger social institutions and their impact on legal problems, and too taken with the positive and normative implications of individual consent which are inherently made in the context of social norms and coercion.⁹

Professor Ahdieh’s article makes a valuable contribution to the law and economics literature. Although in the past some scholars, including myself,¹⁰ have pointed out the potential limitations of the individual as the unit of analysis for the economic analysis of legal problems, Professor Ahdieh undertakes a much more disciplined and systematic analysis of the theoretical problem. As Professor Ahdieh points out, there has been much more examination of the potential limitations of the neoclassical economic assumption of rationality in the law and economics literature than there has been of the implications of the unit of analysis.¹¹ Professor Ahdieh’s work is an excellent start on the theoretical implications for the economic analysis of legal problems of relaxing the assumption that the individual is always the relevant unit of analysis and that group dynamics add little or nothing to the analysis of the problem. Upon taking this first step, it would now be useful for

(Willis D. Ellis ed., 2d prtg. 1950) (“There are wholes, the behaviour of which is not determined by that of their individual elements, but where the part-processes are themselves determined by the intrinsic nature of the whole.”); *see also* ARISTOTLE, METAPHYSICA, *in* VIII THE WORKS OF ARISTOTLE Book H, 1045a, at 8-10 (W.D. Ross & J.A. Smith eds., Clarendon Press 1928) (c. 350) (“[T]he totality is not, as it were, a mere heap, but the whole is something besides the parts.”).

⁶ Ahdieh, *supra* note 1, at 57.

⁷ *Id.* at 58-67.

⁸ *Id.* at 82.

⁹ *Id.* at 68.

¹⁰ Kenneth G. Dau-Schmidt, *Economics and Sociology: The Prospects for an Interdisciplinary Discourse on Law*, 1997 WIS. L. REV. 389, 408-10.

¹¹ Ahdieh, *supra* note 1, at 48-49.

Professor Ahdieh and other scholars to tie his critique into the analysis of specific problems and doctrines and demonstrate the different analyses and policy implications that result when one takes into account the importance of groups in the analysis of legal problems. By generating specific policy implications and conclusions that differ from the traditional economic analysis, we can better judge the importance of Professor Ahdieh's theoretical work to the real world.

I. THE ART OF ECONOMIC ANALYSIS

For the better part of the last century, economists have endeavored to conduct economic analysis as a "positive science," analogous to the physical sciences. The objective of this effort is to develop hypotheses that yield accurate predictions about phenomena in the real world.¹² The process of developing and testing hypotheses is fairly straightforward. Once the scholar selects the subject of analysis, he or she makes simplifying assumptions about the relevant actors and states of the world. As Professor Ahdieh points out, two of the core assumptions of the neoclassical economic model are that individuals are rational, and that the individual is the relevant unit for analysis, i.e. methodological individualism.¹³ Next, the economist applies the logic of mathematics to the selected assumptions to derive the implications of the model. If the assumptions are tractable, this step may take the form of equations and the application of optimization theory complete with first- and second-order conditions for an optimum.¹⁴ If the assumptions are less tractable or the author or intended audience is not familiar with higher mathematics, this step can take the form of optimization arguments on the balancing of costs and benefits. Finally, the economist uses the implications he or she derives to make either a positive statement about how the world is or a normative statement about how the world ought to be. In evaluating the efficacy of a public policy for the purposes of making a positive or normative statement, economists use a variety of criteria including Pareto efficiency, Kaldor-Hicks

¹² MILTON FRIEDMAN, *The Methodology of Positive Economics*, in *ESSAYS IN POSITIVE ECONOMICS* 3, 7 (1953).

¹³ Ahdieh, *supra* note 1, at 48. The "neoclassical model" consists of a common set of assumptions that have proven useful in analyzing a broad array of problems and which produce mathematically tractable models. These assumptions include that: the individual is the appropriate unit for primary analysis (methodological individualism), people act rationally to maximize their utility according to their preferences (individual rationality), preferences are exogenous, information and transactions are costless, and markets work perfectly. HAL VARIAN, *MICROECONOMIC ANALYSIS* 111-15 (2d ed. 1984).

¹⁴ See, e.g., ALPHA CHAING, *FUNDAMENTAL METHODS OF MATHEMATICAL ECONOMICS* 3-5 (3d ed. 1984).

efficiency, and social-welfare maximization.¹⁵ Economists evaluate positive statements by reference to empirical data.¹⁶

Although methodical, there is an art to economic analysis, as there is to all analysis. That art is divining which simplifying assumptions one can make to clarify the analysis, while still capturing the important aspects of the examined phenomenon.¹⁷ Although critics sometimes characterize economic analysis as “reductivist,”¹⁸ all methods of analysis inevitably make simplifying assumptions. Life is simply too complex to reproduce accurately in social science models, or any other system of analysis or representation, without making simplifying assumptions and omitting some details. Besides, including details that are not important to the examined problem only serves to complicate or even obscure the implications of the analysis. However, if one makes simplifying assumptions that omit important aspects of the examined problem, the theory derived from these assumptions will not adequately represent or explain reality. Indeed it is an important part of economic analysis to complete the process by performing an empirical test to ensure that the model and its assumptions are adequately grounded to reality to be useful. Based on unrealistic assumptions, one can derive some very elegant and logical theories that do not accurately describe the problem, or, worse yet, mislead people as to the true nature of the problem.

II. PROFESSOR AHDIEH’S ARTISTRY

Viewed within this context, Professor Ahdieh’s article is itself an excellent example of the art of economic analysis, despite his challenges to the law and economics orthodoxy. Professor Ahdieh is pointing out that, although it may be an adequate assumption for analyzing many problems, the traditional economic assumption of methodological individualism is simply not accurate enough to yield the best economic models with respect to many legal problems in which there is an important larger social element.¹⁹ In any legal problem in which individual interdependence is an important element of the problem, Professor Ahdieh argues that economists would be well served to take this dimension into account in building their models, or in other words to adopt an assumption of “methodological holism.”²⁰

¹⁵ VARIAN, *supra* note 13, at 198, 206-07.

¹⁶ *Id.*

¹⁷ Dau-Schmidt, *supra* note 10, at 397-98.

¹⁸ Charles D. Watts, Jr., *In Critique of a Reductivist Conception and Examination of “The Just Organization”*, 50 WASH. & LEE L. REV. 1515, 1516 (1993); see also Kenneth G. Dau-Schmidt, *Family Gatherings and a Dirty Little Secret of the Law and Society Association*, 33 LAW & SOC’Y REV. 1081, 1083 (1999) (describing a response to the reductivist critique).

¹⁹ Ahdieh, *supra* note 1, at 52-56.

²⁰ *Id.* at 46.

It is perhaps not surprising that economists need some prodding in this regard. Interdependence among individuals in preferences, or almost anything else, horribly complicates the mathematical models which are the hallmark of the discipline. Endogeneity between the people as actors under the law, and the law as a social statement by the people complicates not only the theoretical analysis, but also any empirical test. Nevertheless, if Professor Ahdieh is right that, with respect to some legal problems, better models and theories can be developed by taking account of the interdependence of individuals and the endogenous nature of the world, and I think he is, then there is no point in sticking with the traditional neoclassical models just because they are simple. Indeed, if better explanatory and predictive models of legal problems can be constructed by relaxing the assumption of methodological individualism, economists are obliged to develop such models to further their social science.²¹

The remaining question is an empirical question: for which legal problems does a model based on methodological holism yield better explanatory and predictive results? Professor Ahdieh provides some very plausible examples. As previously mentioned, he argues that legal problems involving social norms, network externalities, coordination games and information, would probably be better modeled by taking account of the interdependence of the individual actors and the endogeneity of the social and legal aspects of the legal problem.²² Professor Ahdieh argues that analyzing social norms within the context of methodological individualism ignores the inherently *social* nature of this phenomenon and the extent to which people's preferences and constraints are endogenously shaped by their interactions with others.²³ He argues that network externalities, so common in legal problems involving new information technology, raise issues of interdependent utility that the neoclassical economic model does not take into account. The extent to which I enjoy text messaging, or even my community, depends on whether there are other people who can receive my texts, or share in my community.²⁴ Professor Ahdieh also argues that although economists have modeled many legal problems as dilemma games, coordination games in which the parties have to agree on a common solution are also common in the law and inevitably involve a social determination of the solution.²⁵ Finally, Professor Ahdieh argues that,

²¹ As I have told my son Nathan, who is studying to be an economist and currently working at the Federal Reserve, models are just models; they are *not* the truth, but rather merely a tool for extending our reasoning ability and gaining insight into the truth. If you can derive a better model by changing your assumptions, this is all part of the progress of the social sciences. A social scientist should never be wedded to a model as an ideology or, worse yet, as a religion. Like science, social science (and especially empirical work) is best practiced divorced from ideology. See also the speech by Polonius to Laertes in WILLIAM SHAKESPEARE, *HAMLET* act 1, sc. 3, lines 55-81 (Constance Jordan ed., 2004).

²² See *supra* note 7 and accompanying text.

²³ Ahdieh, *supra* note 1, at 59.

²⁴ See *id.* at 61.

²⁵ *Id.* at 63.

in areas in which uncertainty and information are important, social interconnectedness will also be important because the accumulation and dissemination of knowledge is a social activity. Professor Ahdieh uses this insight to discuss the recent breakdown of our financial markets.²⁶

Professor Ahdieh has done a good job of beginning to tie his theoretical arguments to the real world and demonstrate that they have important implications for the analysis of legal problems, but much more needs to be done. The criminal law would seem a prime candidate for Professor Ahdieh's project, since criminal law doctrine is heavily imbued with social norms, and the theories of particular rehabilitation and particular deterrence would seem to have as their purpose the shaping of individual preferences to conform to community norms.²⁷ Family law seems another prime candidate that Professor Ahdieh has not yet explored, since family members experience strong interdependencies in their preferences.

Although Professor Ahdieh discusses some specific legal problems in detail, in particular the recent financial crisis, the applications of his analysis to these problems still need further elaboration. Most economists would analyze the recent problems of the financial market as a problem of expectations rather than knowledge or information – but expectations exhibit the problem of interconnectedness of individual decision making that Professor Ahdieh wants to explore.²⁸ What are the implications of his analysis for the regulation of financial markets, and why is this analysis preferable to the traditional neoclassical analysis? The best way to make the case that the economic analysis of legal problems will benefit from more complex models that take account of the interconnectedness of individuals is to build those models and apply them to specific legal problems.

CONCLUSION

Professor Ahdieh has produced a very useful theoretical article. He has convincingly argued that the traditional economic assumption of methodological individuality misses important aspects of some legal problems that involve social norms, network externalities, coordination games, or

²⁶ *Id.* at 79-82.

²⁷ Kenneth G. Dau-Schmidt, *An Economic Analysis of the Criminal Law as a Preference-Shaping Policy*, 1990 DUKE L.J. 1, 1.

²⁸ John Maynard Keynes discussed the problem that has since come to be called a “Keynesian beauty contest,” in which investors make money not by picking the investments they think best, but by picking the investments they think most people will choose:

It is not a case of choosing those [faces] which, to the best of one's judgment, are really the prettiest, nor even those that average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practice the fourth, fifth and higher degrees.

JOHN MAYNARD KEYNES, *THE GENERAL THEORY OF EMPLOYMENT INTEREST AND MONEY* 156 (1936).

expectations because each of these phenomena are inherently social in nature. Although his argument is convincing, more work needs to be done to tie his analysis to real legal problems and demonstrate the superior results that can be obtained by accounting for social relationships. If you like, Professor Ahdieh needs to add some color to the very fine etching he has produced.

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