

## “Dirty hands” versus “clean models”

### *Is sociology in danger of being seduced by economics?*

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When you dig deep down, economists are scared to death of being sociologists. The one great thing we have going for us is the premise that individuals act rationally in trying to satisfy their preferences. That is an incredibly powerful tool, because you can model it.<sup>1</sup>

The problem is that the assumptions underlying the economic model are not only very simple, they are also very strong and wildly unrealistic. . . . The cost is that economic policy premised on [such] simple assumptions often leads to unintended – and dysfunctional – consequences.<sup>2</sup>

Those who prefer to conduct inquiry into the relationships among classes, states, and other organizations as such, and without attempts to *reduce analysis to the individuals* who participate, do not, in my view, pass muster as social scientists in any useful sense of the term.<sup>3</sup>

During the last decade, sociologists and economists have both shown increasing interest in substantive and methodological problems that, until recently, were recognized as each other’s intellectual territory. Population ecology, as developed by sociologists<sup>4</sup> is a perspective with marked similarities to economic models; human capital theory, as developed by Gary Becker,<sup>5</sup> treats issues long examined in sociological studies of status attainment, stratification, and the family. Similarly, sociologists concerned with issues in ownership and control<sup>6</sup> have begun to examine economic work in agency theory, incentives, and transaction costs.<sup>7</sup> Sociologist James Coleman was invited to address the 1984 meeting of the American Economic Association. Harrison White has written about the sociology of economic markets.<sup>8</sup> And Herbert Simon (a political scientist by training) has been awarded a Nobel Prize in Economics.

In this article we propose that these movements toward a convergence of interests between the “sister disciplines” may be more apparent than

real; that the commonality of interests shown so far is largely substantive, rather than an indication of growth in shared analytic perspectives, theory and concepts, first principles and paradigms. We argue that a serious convergence of perspectives will (and should) be restrained by each discipline's fundamentally different world-views and intellectual traditions. Our analysis will focus on methodological and meta-theoretical differences between the disciplines.

Economics has a more unified core model and approach than sociology. The marginalist revolution allowed economics to redefine itself on a much more streamlined basis. Microeconomics became the paradigm for the discipline as a whole. Thus, contemporary economics exemplifies a highly abstract, deductive approach to social science. Its style is characterized by the development of models based on deliberately, vigorously, and rigidly simplified assumptions. The *elegance* of the models, their "parsimony" is prized and the intent is that they be predictive. The individual level of analysis is taken to be real and higher (macro) levels of analysis are derived and built from the individual level via aggregation. A series of heuristic assumptions about human nature, taking the existence and preeminence of markets as a given, and other related principles such as fixed preferences are assumed and generally unquestioned. The claim that these are all exogenously determined factors lying outside the realm of economics has a certain disingenuous quality.

Sociology on the other hand tends to value description or explanation over prediction. That is, the *realism* of the concepts and propositions used, their resemblance to the perceptions and meanings of the participants, is highly valued. There are few if any fundamental notions, such as rational action, that cut across and deeply into the discipline. Indeed, sociology often takes these very assumptions as problematic.

Because there is no single widely accepted paradigm in sociology either theoretically or methodologically, there is much fiercer debate about conceptual frameworks, theories, and concepts. Sociology tends to be much more "data driven." Although there are traditions and schools of "grand theory," most sociologists spend their time developing original data and interpretations of data. They tend to be more involved in the complexities of the phenomenon under scrutiny, instead of with neat theory. Even grand theory itself tends to be more closely "grounded" by empirical phenomena, whether or not the data were generated by the theorist.

A critical question at this point is: *Given such differences, what are the limits to fruitful dialogue and collaboration between the two fields?* The concept of rational action and a related set of assumptions about human nature, the acceptance of the individual level as the “real” level of analysis, and the deductive (and often highly mathematical) style of theorizing based on the operation of these rational atoms under conditions of scarcity, are currently influencing a substantial body of work in sociology. Sociologists seem increasingly enamored of economic theory and methods. Economics is being taken as the model for what a science or social science is supposed to be in a way that certain natural sciences – such as physics and biology – were in the past.

This is occurring at a number of levels: theoretical, methodological, and in terms of fundamental assumptions. Besides the continuing and increasing emphasis on quantification and mathematical models in sociology, several of the hottest new methodological developments – structural equations and longitudinal data analysis – are derived from economics. More generally, economics (econometrics) has replaced psychology as the main influence on sociological statistical methodology. This is most clearly evidenced by the decline and practical disappearance of the Analysis of Variance paradigm and its replacement by the multiple regression approach to the General Linear Model. Charles Schultze need no longer fear being a sociologist as much, especially to the extent that more and more sociological concepts and methods are being derived from economics.

Ironically, even as many sociologists are turning to economics as a guide, there is much fundamental questioning and soul-searching within our sister discipline, so much so that it appears to be undergoing a crisis of its own.<sup>9</sup> In particular the keystone of rationality is being questioned within economics itself.<sup>10</sup> Economists’ modeling of human behavior, deduced from that core assumption about human nature, is elegant, thoroughly consistent, and recently and increasingly claims universal applicability. But, *despite the stability and power of economists’ core assumptions and the logical consistency they allow, there is a fatal flaw for sociologists in their deductive modeling: it leads them to ignore the empirical world around them.*

Before swallowing whole these assumptions, we should first seriously consider economists’ own advice to consumers: *caveat emptor* (let the buyer beware). Even in the study of economic exchange, there are many factors of great importance that lie outside the realm of economists’

strictly “rational” action. By precluding attention to non-rational elements of human behavior, economists leave themselves no mechanism for *learning* about the crude and messy empirical world that so defies their models. Economists pay a heavy price for the very simplicity and elegance of their models: empirical ignorance, misunderstanding, and, relatedly, unrealistic and bizarre policy recommendations.

*Sociologists need to be reminded of these costs, lest we succeed in turning ourselves into second-rate versions of what economists already do so well!* The discipline, it is true, has a long and hallowed tradition that argues effectively against leaving the study of economic phenomena solely to economists. But the issue now is much more fundamental. Sociologists must be cautious not to let the attraction of elegant models lead us into the thicket of economists’ overly rationalistic world view, especially in our research into non-economic aspects of human experience, but also in our studies of the economic domain. Sociologists should not deny the possibility of rational action nor preclude its study, but our “comparative advantage” – an openness to culture and an interest in values and social structure – must not be traded in for a simple rational-action theory. Our penchant for and emphasis on empirical research also must not be abandoned for deductive modeling.

### **“Dirty hands” vs. “clean models”: A roadmap comparison of the two disciplines**

Table 1 contrasts the fundamentally different intellectual bases and traditions of economics and sociology, and shows how these two disciplines embody such opposing perspectives and world-views. Any comparison of sociology and economics is bound to oversimplify. Neither field is unitary. In each there are a variety of styles and schools; mainstream scholars and mavericks. Economics is the older of the two disciplines. Max Weber himself, perhaps the preeminent sociological theorist of the twentieth century, held academic positions as an economist. It is also the more developed, more mature of the two disciplines, especially “scientifically.” In comparison, sociology appears proudly diverse, even if almost adolescent and continually suffering mini-identity crises. At the risk of overemphasizing their differences, we now compare both disciplines’ essential characteristics

Economics and sociology, in broad brushstrokes, differ fundamentally at each of three distinct levels: assumptions, theory and research, and

Table 1. Economics and sociology: ideal type contrasts.

	Economics	Sociology
<i>Assumptions</i>		
Assumptions about human nature	Rational Greedy (Maximizers) Self-interested Instrumental Fixed preferences	Complex Variable Cultural Expressive Fluid preferences
Main unit of analysis	Individual	Collectivities
Concept of society	Nominal Aggregates of individuals Hobbesian	Real Sui generis Rousseau
Philosophical stance	Behaviorist Materialist	Interpretive (verstehen) Idealist
<i>Theory and research</i>		
Mode of theorizing	Deductive Axiomatic	Inductive Data-driven
Method	Analytic theoretical modeling Quantitative mathematical Abstracted Secondary data	Inductive, grounded theory-building Qualitative and quantitative Ask people (surveys) Primary data-collection
Model characteristics	Few variables Elegant	Many variables Messy
Criteria for validity	Predictive	Realistic Explanatory
<i>Policy implications</i>		
Orientation to market	Pro Independent variable Market > Firm	Neutral Intervening or dependent variable Firm > Market
Policy stance	Normative Solution-oriented Treatment Status quo Free market	Value neutral Problem-defining Diagnosis Debunking Regulation
<i>In summary</i>	Clean models	Dirty hands

policy implications. We will discuss each of these in turn.

### *Assumptions*

The most basic difference between economics and sociology concerns their assumptions about human nature. The famous homo economicus is a rational, self-interested, instrumental maximizer with fixed preferences. Homo sociologicus, by contrast, is much harder to define. Closer to a tabula rasa upon which historically developed institutions, societies, and cultures write, the sociological “model of man,” rather than assuming fixed preferences, treats values, attitudes, and behavior as fluid and changeable. Actions follow from culturally given values, not just some pure (culture-free) calculation of individual self-interest. And actions may be expressive rather than purely instrumental. This distinction is not new. It underlies one of the standard sociological criticisms of economics and constitutes one basis for sociology’s claims as a contributor to the larger social scientific enterprise.

Sociology also diverges from economics by taking collectivities seriously. It is, after all, society that defines values, and collectivities that influence preferences. This assumption of societal influence on values and preferences permeates the entire discipline – Weber’s “Protestant Ethic,” Durkheim’s “*conscience collective*,” Marx’s “class consciousness,” Goffman’s “interaction rituals,” Gramsci’s “hegemony,” Merton’s “reference groups.” Society is not derived de novo each day from individual choice, à la Hobbes; rather, individual choice presumes the prior existence of society for sociologists. While economists build up to higher levels of analysis by aggregating individual-level rational decisions, Parsons and Smelser, expressing a general sociological perspective, argued “The basic structures of institutionalized motivation are *learned* in the course of social experience”<sup>11</sup> not given a priori; and that norms, by definition, are social conventions. Applying this perspective to their consideration of economics they argued that

The central fallacy in much of economic thought is to postulate some single motivational entity as an explanation of all economic behavior . . . The meaning of “rationality” is . . . limited to the orientation of action toward maximal conformity with a norm.<sup>12</sup>

Thus, strictly materialist behavior is not the sole force motivating human behavior for sociologists. Rather, they see whatever motivations are in place as socially learned and changeable, not atomistically and perma-

nently chosen by individuals. Preferences and actions are influenced by the ways people come to understand and value – through socialization and enculturation – different aspects of their world. Therefore, action is understood by looking at the institutional structures, social norms, and cultural values that determine preferences.

Sociologists consider it a valid project to *interpret* others' understanding of their world. They are concerned that their concepts and propositions be consistent with the perceptions and meanings of the participants; perceptions and meanings are taken to influence action, and inconsistencies between the two are therefore problematic. Thus, the question is not – “*given* the utility function we assume, what can we predict,” but rather “how can we *locate and interpret* people's utility functions, and how do we track their formation and measure their change over time.”

### *Theory and research*

Moving to the next level of analysis, theory and research, we find economists deducing axioms from their assumptions, while sociologists (having minimal assumptions to begin with), must investigate, empirically, the nature of preferences, values, behavior, and motivation. This need for grounded empirical research is obviated for economists. Rather, highly abstracted secondary data are used along with elegant models to predict, demonstrate, and “explain” human behavior. Until recently this research was deliberately restricted to economic areas that can be so analyzed.

But *sociology takes economics' rationality assumptions themselves as problematic*. Rather than any widespread agreement on human nature within sociology it is likely to be either investigated or defined anew in every research undertaking. Indeed, since Weber, rationalization itself has been a major subject of theory and research for sociology, both as an orientation of individuals and as a historic process in the development of organizations and institutions.

For most sociologists, research even more than theory is where the action is. They are most likely to gather data first and then to build their theories from the data. Often the results are too contingent to fit into neat formulas. They are also messy and tentative. But *many sociologists genuinely revel in the intellectual ferment this produces*; for where the answers are not assumed already, there are always more questions to be

asked. Methodological issues also become crucial here for sociologists, since *the truth-value of these theories depends on empirical support, not logical connections* with core assumptions.

For example, an economist, extrapolating from the rationality assumption might flatly *predict* that, if legal abortions paid for by welfare were not available, the aggregate-level teenage pregnancies would decrease. But most sociologists would be more concerned with explaining why teenage pregnancies occur so frequently among lower-income women, and why they so often prefer (as a result of their presumably rational decision-making) delivering illegitimate children to having abortions.

### *Policy*

Sociologists seek to be realistic; economists seek to be predictive, above and even in spite of reality, when necessary. *To be “right for the wrong reasons” is of little concern to the economist, whereas for sociologists it is terribly embarrassing and often would not even be considered correct.* At the policy level, economics, with its assumptions about individual choice and free-market options, can always provide an answer. Sociologists are ambivalent about the free market (their judgments are based more on how they value the policy implications than on ideology about free market versus regulatory choices). They are more likely to hedge about answers and less likely to offer with confidence predictions based on simplified assumptions, few variables, and elegant models. Sociologists often are policy outsiders, preferring to define the problems and debunk nearly all solutions!<sup>13</sup>

*In the end what we have is a contrast between unrealistic but clean models in economics, and “verstehen”-oriented dirty hands in sociology.*

### **Economic imperialism**

Too many scholars prefer clean models to dirty hands. There is certainly an attraction to elegant models, and some discomfort with sloppy reality. We strongly caution against imposing surgical elegance on messy problems for the illusory value of clean but unrealistic (even sociologically boring) models. Such moves require abandoning assumptions that have been basic to the discipline, and turn out to involve no reciprocity from economics. In fact, as Gary Becker tells us:



the economic approach is not restricted to material goods and wants or to markets with monetary transactions, and *conceptually* does not distinguish between major and minor decisions or between “emotional” or other decisions. Indeed . . . the economic approach provides a framework applicable to all human behavior — to all types of decisions and to persons from all walks of life.<sup>14</sup>

Economics is a well-elaborated and established perspective, with its assumptions embodied at its very core. It is

*basically a way of thinking.* The theories of economists, with surprisingly few exceptions, are simply extensions of the assumption that individuals choose those options which seem to them most likely to secure their largest net advantage. Everyone, it is assumed, acts in accordance with that rule: miser or spendthrift, saint or sinner, consumer or seller, politician or business executive, cautious calculator or spontaneous improviser.<sup>15</sup>

From such a perspective we are denied the possibility of asking many sociologically important questions such as “why do preferences *change*?” and are forced to ignore important “sociological” problems.

When notable economists such as Becker, Stigler, and Williamson present economic formulations of “sociological” problems,<sup>16</sup> they impose the definitional assumptions noted above about instrumental motivation and self-interested rational actors, along with the methodological preference for aggregated data and deductive modeling. These moves do not represent humble contributions by outsiders, to add a new perspective on familiar sociological questions. Rather, they effectively redefine a whole field and supplant previous work with economists’ articulate and well-developed theoretical apparatus.<sup>17</sup> In sociology, these same characteristics are seconded and reinforced (non-sociologically) by many studies in the subfields of population ecology, labor markets, and collective action. In terms of Parsons’s distinctions, these studies focus on his A and G cells and essentially ignore or assume away integration and pattern-maintenance (i.e., questions about meaning, perception, legitimacy, influence, and subjective interpretation by participants).

What implications would the unqualified adoption of economists’ assumptions have for sociology, and what dangers do they entail? We next propose that moves that uncritically imitate economics risk making sociologists too far removed from the empirical world we want to know about, incompetent to address the cultural side of life in society, and too limited to take account of the richness and variety of social life — all factors that are clearly strengths of our discipline that should not be abandoned for fool’s gold.

*A cautionary tale*

Economics does not question whether its assumptions fit reality in different historical, cultural, or institutional circumstances. It defines these as external to its models and deliberately avoids asking questions crucial to sociologists. Instead, economists seek to derive “universally applicable hypotheses . . . which transcend institutional, systematic, and historical variations.”<sup>18</sup> Economists treat such variations as “noise” to be eliminated by theoretical generalization or filtered out in empirical work. To the degree sociologists take up the assumptions and methods of the economic perspective, we too will be unable to see historical and cultural variations when they occur. An interesting illustration of the type of problems this over-economizing of the world creates can be seen in the debate surrounding the “moral economy” view of peasant politics.

In 1976 James Scott published *The Moral Economy of the Peasant*. It created quite a stir by arguing that, for peasants who live close to the level of subsistence, there is “little scope for the profit maximizing calculus of neo-classical economics.”<sup>19</sup> Concerned with survival, not profits, peasants, say Scott, must forego risky experiments with new technologies even though they could increase crop yields; they operate according to a “safety-first principle.” Also, knowing that help from neighbors is likely to be needed at any time, even poor peasants will share their resources with others as needed; this type of behavior is enforced through socially institutionalized “norms of reciprocity” and social sanctions. Finally, high tax rates are accepted so long as they are structured to allow peasants to survive in bad years; it is within the framework of such a “subsistence ethic” that peasants evaluate the legitimacy of claims upon their resources. Thus Scott argues that particular “non-maximizing” patterns of action in poor peasant communities are reinforced by diffuse social sanctions, norms of behavior, and concepts of legitimacy.

In response to Scott’s analysis, Samuel Popkin wrote *The Rational Peasant*,<sup>20</sup> arguing that such “irrational” behavior could not exist. Beginning from the assumption that peasants, *like everybody else*, act to maximize profits, Popkin argued that peasants would chafe under the pressure of collective restraints, and social norms would be of little use given free rider problems and the lure of profits. “Rational” peasants will ensure their security through personal savings and farming innovations, giving little to their less well-off counterparts and preferring tax structures that enhance their ability to hold on to extra profits.

Although the arguments on both sides are complex, the crux of the debate centers around the issue: Is a universal notion of individual self-interest sufficient for understanding political behavior? Both Scott and Popkin recognize that peasants have interests, but Scott allows that these interests can become institutionalized as a set of ethical norms and values, that the content of the interests they represent is affected by structural conditions, and that these norms and values serve as a guide for social action. People protect their interests, but not only in the form of short-term, individual income maximization.

What is interesting about this debate is the various levels at which economic rationality is purported to show up and what room is left (or not left) for values depending on where rationality is placed. Scott's explanation of peasant culture is, in fact, also based on a theory of individual rational calculations. These values developed, he suggested, because poor peasants realized that their situation was so precarious that it was essential that they cooperate: thus the norm of reciprocity. The odds were that if they did not help each other out, there would be no long run. Likewise, they believed the most important thing about taxes was not how much was taken but how much was left: thus the "subsistence ethic." Individual calculations would, in terms very similar to Hobbes, lead any rational peasant to submit to these shared cultural norms rather than always look out for "number one." This view is essentially sociological in that (in Parsonian terms) values and norms exist to help support goal attainment and adaptation.

Popkin, by contrast, contends that peasant behavior can be fully understood in terms of "universal" standards of economic rationality, i.e., individual profit maximization. Beginning with an "economic" assumption about human nature, normative, cultural, and structural factors of the type analyzed by Scott are precluded. To claim that alternative "rationalities" or non-individualistic forces may be at play, as Scott does, is equivalent to calling people "irrational" from Popkin's perspective. Economically speaking, only peasants who are individual profit maximizers are "rational."

What is distinctive about this "economic" reaction to Scott's book is its unwillingness to consider "non-rational" behavior, the importance of social relations, the influence of another culture's norms and values, or the influence of particular historical circumstances. Popkin's approach is typical of analyses based on the economic paradigm. In like fashion sociologist Alejandro Portes, in his article on slum dwellers, reduces

non-rational theories of slum behavior to the claim that slum radicalism is “a simplistic emotional response to irrational psychological needs.”<sup>21</sup> Too whole-hearted an incorporation of such an elegant and “universal” theory of human action (i.e., economics) can blind sociology to important historical, cultural, and institutional variations in social organization: were Graham Allison bound to economic modeling he could not have incorporated political and bureaucratic models into his famous analysis of the Cuban missile crisis; were we held to economists’ utility-maximizing logic the existence of voting is made inexplicable (the costs outweigh the benefits<sup>23</sup>) – only by developing alternative explanations based on socialization or self-expression could scholars make sense out of voting<sup>24</sup>; and, if Hochschild’s<sup>25</sup> study of family life had to be modeled à la Becker,<sup>26</sup> she would have been constrained from looking at the contradiction between some people’s expressed ideology concerning the familial sexual division-of-labor and their deeper feelings and “emotional anchors” – preferences about family role structure are not ordered and consistent.

### **Trade-offs between economic theorizing and sociological research**

Economic theory, with its foundation in an unquestioned (and in some forms tautological) proposition that humans act as rational, individual utility maximizers, is comprehensive, all inclusive, and powerful. But the very *strength* of that theory is also the source of its major weaknesses. For example, economics increasingly claims universality, but it remains static and unable to incorporate major social changes into its models. Two serious problems discussed up to now only in passing are: (1) the lack of diversity in its approach to problems; and, (2) economics’ ignoring or discounting of data.

#### *Lack of diversity*

The Scott-Popkin debate points to economics’ narrow and self-imposed rejection of alternatives, to its studied incapacity to see more than a single dimension of most phenomena. In contrast, sociology is a multi-paradigmed field that affords its practitioners more conceptual freedom but at the cost of less aggregated data and therefore lower R<sup>2</sup>s. Sociology attends to many more dimensions of complex realities, whereas economics generally restricts itself to only one way of approaching problems. A good example is the study of corporate directors, and theories

of agency, ownership, and control – all substantive topics of recent and overlapping concern in both disciplines.

Although sociology and economics have long held a common interest in these topics, there has been little convergence, historically, because the core problems posed by each discipline were either of little interest to the other, or based on entirely different assumptions. For example, whereas economic models take the market as an unchallengeable independent force beyond the control of individual investors and corporate actors, sociology has been very receptive to conceiving the market as easily manipulated by corporations and commercial banks. More recently, the two fields have drawn closer together: economists have expanded agency theory and the theory of the firm to pose questions about organizations and managers; sociologists, extending the study of organizations, have focused increasingly on environments and markets. Substantive topics like executive compensation, managerial incentives, and inter- and intra-organizational problems like transfer pricing are being examined by both fields now, but through their respective disciplinary lenses.<sup>27</sup>

These substantive areas show some movement towards convergence, but here too there remain respective core assumptions separating the disciplines. In its interpretation of interlocking directorate data, for example, economics is, once again, more homogeneous than sociology. Its general conclusion is that interlocking directorates are a non-issue. But Table 2, summarizing four possible approaches to the study of corporate directors, includes three *additional* interpretations commonly found in the literatures of sociology and organization theory.

Table 2. Alternative theories of power and influence over corporate policy exercised by individual board members.<sup>28</sup> Degree of control by top management's inside directors.

		Degree of control by top management's inside directors.	
		High	Low
Degree of control by outside directors	High	“Hegemonists” (e.g., Domhoff) (1)	“External control theory” (e.g., Zeitlin; U.S. House, Patman Committee) (2)
	Low	“Organization theory” (e.g., Pfeffer; Gordon) (3)	“Corporate actor” and “Population Ecology” theories (e.g., Coleman; Manne; Hannan and Freeman) (4)

The two columns in this table dichotomize the amount of power each theory sees exercised by “inside” directors (i.e., management). The two rows similarly dichotomize the degree of control exercised by “outside” board members. Despite the broad range of possibilities this yields, we see economic theory begins and ends with Cell 4. In that cell *both* inside and outside directors are seen to exert low levels of control because they, in turn, are controlled by the discipline of the marketplace. These actors are merely epiphenomenal agents of market forces. The same view is congruent with population ecology in sociology, i.e., functional organizations are merely selected out (rewarded) by the (all-knowing) “environment.” Executives and board members, therefore, have little if any power to exert. For Cell 4, accordingly, the composition of corporate boards is irrelevant.

Although there certainly is empirical support for this view some of the time, it hardly presents a complete or accurate picture of reality. In fact it represents an idealized image of market (or environmental) forces that is questionable at best. Indeed, in other historical periods, it is the reality idealized in Cell 1 – in which the large corporation and its directors jointly dominate the market – that is just as real as in Cell 4’s. Alternatively, where conflict, rather than cooperation or conspiracy, *within* the director elite, is adduced (Cells 2 and 3), it is sociology and organization theory that generate models of which sub-group dominates the other.

If we view all of these perspectives as partially correct – usually at different points in time or in varying circumstances – we see that, taken as a whole, sociology’s multiple paradigms are better able to interpret and explain these multiple realities. Although economists could criticize the discipline for being undirected because it accommodates each of these multiple perspectives, *we believe this is a strength of sociology that should be nurtured and maintained.* Sociology is more attentive to the empirical variety of conditions in the real world. In contrast, economics presents the more unified and simpler model, which can be relied upon always to predict the same results.

### *Ignore data*

For the most part the clean models of economics are deductive and do not even rely on data. A study by Nobel Prize winning economist Wassily Leontief,<sup>30</sup> of the articles in *The American Economic Review* from 1977 to 1981 found that 54 percent of the articles used mathematical

models without data; only one half of one percent of the articles were empirical analyses of original data generated by their authors. In describing subsequent issues of the journal, Leontief is quoted as saying he “found exactly one piece of empirical research, and it was about the utility maximization of pigeons.”<sup>31</sup> However, even in cases where data are generated to test economic models they are usually ignored when they run counter to economists’ assumptions. The question becomes not *whether* the data fit their assumptions, but how they can be *made* to fit the model.

This is not to say there is no empirical work in and around economics. There is another side to the empirically based debate of the fundamental tenets and assumptions of economics. In fact, the rationalistic assumptions of microeconomics have been attacked head-on by empirical research in cognitive psychology. Tversky and Kahneman showed that if choice situations are “framed” differently, then preferences differ; Svenson showed most decision-making problems are solved without a complete search of information; Einhorn and Hogarth have shown that ambiguity and attitudes toward ambiguity affect the differential weighing of imagined probabilities; and Kahneman, Knetsch, and Thaler have shown that consumers’ concern for “fairness” may slow down the process of reaching equilibrium, or prevent the market from clearing.<sup>32</sup> Economists’ rationalistic assumptions, including those of continuity, transitivity, and independence in decision-making, are challenged by these and other authors.

In response to the work just cited, economists can respond that parameters were improperly set in these experiments, that other rationalistic factors can explain these results, or that economic models should only be tested in “real” economic settings, not experimental ones. Indeed, when queried by reporters, several economists explained:

Having a consistent and well-reasoned point of view is more important than being right all of the time. “Both your successes and your failures” have to be explicable, says [economist] Kudlow. “People have to know where you stand and what you believe in.”<sup>33</sup>

When the data do not fit, many economists too often and too easily revert to what empirical researchers often see as the security of tautology and the reassertion of core assumptions. On the micro level, economists’ assumption of rationality can be restated as psychological hedonism, at which point the proposition becomes irrefutable. If a person chooses a job with lower pay, the economist will add that his or her utility function

must include variables besides pay – you just have to include them in the formulas to show that utility was maximized. If a samurai in feudal Japan commits hara-kiri, the economist can argue that if you add the cost of shame to the man's utility function it is obvious that this choice maximized his utility. Made irrefutable in this way, economists' proposition of utility maximization is at the same time rendered useless for non-believers. On the macro level, Wilbur and Jameson suggest another example of this problem:

The structure of laissez faire theory makes it particularly difficult to verify any of its constituent propositions. Its survival and attractiveness derive from the theory's tendency to shift from interesting empirical, though false or misleading, propositions to true, though empty, tautologies. For example, from the *truism* that people seek their economic advantage, [economists] deduce the *empirical proposition* that productive investment and work effort are reduced by taxes and similar government measures that reduce the rate of return. However, when confronted with evidence that investment rates over the period 1948 to 1980 *actually* were stable or even increased slightly in the face of escalating tax rates and government regulations, they retreat to a comparison of *potential* effects: in the long run if tax rates and other burdens were increased enough, eventually productive investment and work effort should fall.<sup>34</sup>

Such arguments remind us of the religious doomsday movement's reinterpretation of their situation after the world did not end on the day they had proclaimed it would, in Festinger et al.'s study *When Prophecy Fails*.<sup>35</sup>

### **Conclusion: On bridging the gap between sociology and economics**

In contrast to economics, the discipline of sociology seems a tower of Babel. Each substantive area has its own traditions of theory and research. Attempts at unification are mainly the specialty of a minority of theorists ("grand theorists" as they are derisively known to most of the rest of the discipline) and at their best provide fodder for graduate courses and other grand theorists, but in practice are ignored by most sociologists. It is therefore not surprising that sociologists are prone to periodic infatuations with external models of scientific rigor and grace and that economics should serve as such a model.

The contrast we have drawn between the disciplines is dramatic. We have argued that many characteristics of sociology that make its own practitioners uncomfortable are in fact strengths rather than weaknesses; assets to be cherished and developed. Sociology's very lack of definition,



its broad substantive claims, its theoretical cacophony, its strong empirical bent, its perennial identity crisis can be viewed as selective *advantages*. Economics, which is continuously being narrowed and refined theoretically (while making exaggerated claims empirically), is a specialist style of adaptation; sociology is ever the generalist.

The question of the respective scientific achievement and perhaps even nature of the two disciplines is not to be dismissed lightly. On the one hand, science is the broader ground and set of values on which any sort of joint appeal or venture is likely to be based. The commitment to the norms of science is the value most widely shared by sociologists and economists. However, on the other hand, it may well be argued that it is exactly on the very definition of the nature of the social scientific enterprise that sociology and economics part company.

*What this means for productive dialogue and collaboration between the two fields is that it cannot be managed via a simple transformation of one or another aspect of one field or the other.* To be sure, it is useful to imagine (if not try out) economic models in which the assumption of fixed preferences for consumers is relaxed, or to conceive of sociological studies in which the number of variables is halved. For the already ongoing dialogue between fields either to continue expanding, or to stop, however, it is equally, if not more, important for each to develop greater understanding of how differently the other poses questions, defines problems, evaluates results, and designs research. Each field may learn from the other, but progress cannot occur through simple imitation. There is too much to be lost in each field.

Sociology and economics tend, at least in their cores, to be extremist. True scientific progress may in fact be based on a combination of, or dialectic between “clean models” and “dirty hands,” not solely one or the other. *Pure elegance of models leads to sterility; unwillingness to abstract from and go beyond one’s data leads to pure narrative. Our bias, if forced to choose, however, is that we already have too much of the former, and not enough “dirty hands.”*

Given the losses inherent in any efforts to appear more like economists, why, we may ask, are sociologists in such hot pursuit of the magic of economics and the economists’ grail? One answer may be that it is the economic framework that has the larger impact on social policy. Government officials are truly taken by “clean models.” As we noted earlier, “having a clear argument” is often more important than being “right.”

Consistency, purity, and elegance are themselves of high value. To have a “complete” explanation and a core theory is very convincing, rhetorically.

More important, perhaps, is the comfortable fit between economic theory and American culture. To trace all action back to individual rational behavior is to make it understandable within our peculiarly individualistic and rationalistic culture. The individual rationality assumption has its basis in Locke and Hobbes and the very idea of a social “contract.” The culture project of economists is to interpret the world in such a way that even the grandest of phenomena – e.g. the existence of society – can be traced back to free individual choice and utility maximization.

Economics also succeeds, even more deliberately and effectively than sociology, in avoiding all consideration of ethical claims by the very groups and individuals whose behavior it claims to predict and explain. Instead, economics upholds its *own* implicit moral order, or ideology, while it eschews cultural and historical variation and claims universal validity for its axioms. That moral order is, naturally, an elegant restatement of utilitarianism. In economists’ language, this means moving to the Pareto frontier. This, of course, fits very well with the folklore and rhetoric of American capitalism and its current incarnation in conservative government and policy circles.

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### Notes

1. Charles Schultze, former president of the American Economic Association, quoted in Robert Kuttner, “The Poverty of Economics,” *Atlantic Monthly*, (February 1985): 74–84.
2. Joseph Bower, *The Two Faces of Management* (Boston: Houghton Mifflin, 1983), 181.
3. James Buchanan, from remarks made at the conference “Symposium on Social Science Paradigms,” The University of Chicago, November 15, 1985, emphasis added.
4. M. T. Hannan and J. H. Freeman, “The Population Ecology of Organizations,” *American Journal of Sociology* 88 (1983): 1116–1145; H. Aldrich, *Organizations and Environments* (Englewood Cliffs, N.J.: Prentice Hall, 1979).

5. Gary Becker, *Human Capital* (New York: National Bureau of Economic Research, 1975).
6. Charles Perrow, *Complex Organizations: A Critical Essay*, 3rd ed. (New York: Random House, 1986), and "Markets, Hierarchies, and Hegemony," in *Perspectives on Organization Design and Behavior*, ed. A. Van de Ven and W. F. Joyce (New York: Wiley, 1981).
7. Michael C. Jensen and William H. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure," *Journal of Financial Economics*, 3 (1976): 306–360; Oliver E. Williamson, *Markets and Hierarchies* (New York: Free Press, 1975).
8. Harrison C. White, "Where Do Markets Come From?" *American Journal of Sociology* 87 (1981): 517–547.
9. See, e.g., Charles K. Wilbur and Kenneth P. Jameson, *An Inquiry into the Poverty of Economics* (Notre Dame, Indiana: Univ. of Notre Dame Press, 1983); and Kuttner.
10. See, e.g., Alexander J. Field, "The Problem with Neoclassical Institutional Economics: A Critique with Special Reference to North/Thomas Model of Pre-1500 Europe," *Explorations in Economic History* 18 (1981): 174–198, and "On the Explanation of Rules Using Rational Choice Models," *Journal of Economic Issues* 8: (1979).
11. Talcott Parsons and Niel J. Smelser, *Economy and Society* (New York: The Free Press, 1965), 182.
12. *Ibid.*, 1976.
13. For two excellent examples concerning the rhetoric of research design and drunk [or "drinking"] driving, see Joseph R. Gusfield, *The Culture of Public Problems: Drinking-Driving and the Symbolic Order* (University of Chicago Press, Chicago, 1981), and "The Literary Rhetoric of Science: Comedy and Pathos in Drinking Driving Research," *American Sociological Review* 41 (1976): 16–34.
14. Gary Becker, *A Treatise on the Family* (Cambridge: Harvard University Press, 1981), iv. For an even stronger statement of this imperialistic stance, see also Gary Becker and George Stigler, "De Gustibus Non Est Disputandum," *American Economic Review*, March (1977): 76–90.
15. Paul Heyne, *The Economic Way of Thinking*, 2nd ed. (Chicago: Science Research Associates, 1976), 2.
16. Becker and Stigler; Oliver E. Williamson, "The Economics of Organization: The Transaction Cost Approach," *American Journal of Sociology* 87 (1981): 548–577.
17. Mark Granovetter, "Economic Action and Social Structure: The Problem of Embeddedness," *American Journal of Sociology* 91 (1985): 481–510; I. Maitland, J. Bryson, and A. Van de Ven, "Sociologists, Economists, and Opportunism," *Academy of Management Review* 20 (1985): 59–65.
18. Wilbur and Jameson, 32.
19. James Scott, *The Moral Economy of the Peasant* (New Haven: Yale University Press, 1976), 4.
20. Samuel Popkin, *The Rational Peasant* (Berkeley: University of California Press, 1979).
21. Alejandro Portes, "Rationality in the Slum: An Essay on Interpretive Sociology," *Comparative Studies in Society and History* 14 (1972), 269.
22. Graham Allison, *The Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown, 1971).
23. Anthony Downs, *An Economic Theory of Democracy* (New York: Harper and Row, 1957).
24. Brian Barry, "A Theory of Groups and Organizations," in *Sociologists, Economists, and Democracy*, ed. Brian Barry (Collier-Macmillan, 1970); Stanley Benn, "The

- Problematic Rationality of Political Participation,” in *Philosophy, Politics, and Society*, 5th Series, ed. Laslett and Fishkin (New Haven: Yale University Press, 1979).
25. Arlie Hochschild, *The Second Shift*, forthcoming.
  26. Becker, *Treatise*.
  27. cf. Van de Ven and Joyce.
  28. William G. Domhoff, *The Powers That Be: Processes of Ruling Class Domination in America* (New York: Vintage Press, 1978); Maurice Zeitlin, “Corporate Ownership and Control: The Large Corporation and the Capitalist Class,” *American Journal of Sociology* 79 (1974): 1073–1119; U.S. Congress, House, Committee on Banking and Currency, Domestic Finance Subcommittee. “Commercial Banks and Their Trust Activities: Emerging Influence on the American Economy.” 90th Congress, 2nd Session (Washington, D.C.: U.S. Government Printing Office, 1968); Jeffrey Pfeffer, “Size and Composition of Corporate Boards of Directors: The Organization and Its Environment,” *Administrative Science Quarterly* 17 (1972): 218–228; Robert Gordon, *Business Leadership in the Large Corporation* (New York: Harper, 1945); James S. Coleman, *Power and Structure of Society* (New York: Norton, 1974). Henry Manne, “Mergers and the Market for Corporate Control,” *Journal of Political Economy* 73 (April, 1965): 110–120; Hannan and Freeman.
  29. Perrow, *Complex Organizations*.
  30. Reported in Kuttner.
  31. Kuttner, 78.
  32. Amos Tversky and David Kahneman, “The Framing of Decisions and the Psychology of Choice,” *Science* 211 (1981): 453–458; Ola Svenson, “Process Descriptions of Decision Making,” *Organizational Behavior and Human Performance* 23 (1979): 86–112; Hillel J. Einhorn and Robin M. Hogarth, “Ambiguity and Uncertainty in Probabilistic Inference,” *Psychological Review* 92 (1985): 433–461; David Kahneman, Jack Knetsch, and Richard Thaler, “Perceptions of Unfairness: Constraints on Wealth Seeking,” presented at “Behavioral Foundations of Economic Theory,” University of Chicago Graduate School of Business, October 1985.
  33. *Newsweek*, “What Good Are Economists?” February 4, 1985.
  34. Wilbur and Jameson, 85.
  35. L. Festinger, H. W. Riecken, and S. Schachter, *When Prophecy Fails* (Minneapolis: University of Minnesota Press, 1956).