An Economic Sociological Look at Economics

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Introduction

New economic sociology can be viewed as an answer to economic imperialism (Beckert 2007:6). In the early phase of new economic sociology, it was common to compare or debate the difference between economics and sociology. The first edition of the Handbook of Economic Sociology (Smelser/Swedberg 1994:4) included a table which compared "economic sociology" and "main-stream economics," which is not to be found in the second edition (Smelser/Swedberg 2005). Though the deletion of this table was due to limited space, one can also see it as an indication of a gradual shift within economic sociology over this period.2

That economic sociology, as economic anthropology, was defined in relation to economics is perhaps natural since economists conduct the bulk of academic work on the economy. The relation to economics is also natural since sociologists have turned their attention to the same object, namely the economy. Economics, to economic sociologists, was, and still largely is, what we see as the heritage of researchers like Walras, Menger, Knight and Samuelson. This stream of thought is also what still constitutes the core of textbooks of economics, though they of course have been modified over time (e.g., Klamer 1990). To this one may add the period of "cold war" between economics and sociology, which from a sociological perspective must be understood in relation to the formation of economic sociology (Swedberg 1990). The economic ideas of, above all, Gary Becker, were often labeled "economic imperialism" by its opponents, and were seen as a real threat to many sociologists. But does the perception that most sociologists seem to have reflect the current situation in contemporary economics?

Our short answer is "no"; economic sociology in general does not seem updated with what is going on in economics. The focus on "classics" and "textbook economics" may in part explain why the early distinctions between economic sociology and "main stream economics" came to emphasize the (neo)classical assumptions. Sociologists have, for example not noticed that game theory has had

an impact on essentially all strands of economics over the past decades. The fact that game theory is not (only) a subfield but a basis for studying strategic interaction in general – where 'strategic' does not always imply full rationality – has made it an integral part of most subfields in economics. This does not mean that all fields explicitly use game theory, but that there is a different appreciation of the importance of the effects (strategically, socially or otherwise) that actors have on one another in most fields of economics and this, together with other developments, has brought economics closer to economic sociology.

Another point, which is often missed, is the impact of the increase in computational power that the introduction of computers has had on everyday economic research. The ease by which very large data materials can be analyzed has definitely shifted mainstream economics away from "pure theory" toward testing of theories with more of a premium being placed on unique data sets, often collected by the analyst. To some, part of this development is surely linked to "economic imperialism," but it can just as well be seen as another way in which economists are moving closer to traditionally sociological questions as quantitative analyses become easier.3 In terms of the comparison made in Smelser and Swedberg (1994:4), this means a movement away from the "clean models" of traditional economics toward "the dirty hands" approach with real data that is more typical for economic sociology.

Sociologists' perception of an existing mainstream economics was maybe more realistic in the 1980s before many of the advances in game theory and the increased possibilities to do quantitative analysis made their way into the mainstream (though there are, with hindsight, many changes that can be seen before that). However, over the past decades the perception of economics as only being concerned with fully rational, perfectly informed agents acting in settings with perfect information has become increasingly false. In fact, one could say that, parallel to the development of new economic sociology, a number of new subfields in economics have emerged. This has caused a disintegration within economics, so that over the last decades the field has become more heterogeneous, while general equilibrium theory "has reached a serious impass[e]" (Hodgson 1996:3ff).

Our intention in this article is to offer a brief overview of some developments in modern Economics, focusing on how it has moved beyond the neoclassical approach. In many instances these changes can be seen as responding to problems that sociologists and other social scientists have pointed out. It is, however, beyond the scope of the article to provide a complete survey of all relevant fields. The subsequent discussion should be seen as a plea for further explorations across traditional field boundaries, and hopefully more collaborative work between economists and sociologists, rather than as a comprehensive overview of economics. For example, we will neither survey fields such as "Asian studies" or "taxation", nor will we cover subfields that we believe are fairly well-known to sociologists, e.g. institutional economics, public choice, Austrian economics or Marxist approaches.4 Instead we will briefly discuss the general impact of game theory on economics, focusing on how we see this as being an important step in bringing sociology and economics closer together. In addition to that, we will offer brief overviews of subfields in economics that are supposedly less well-known to sociologists, but which move away from the assumptions sociologists typically associate with economics. Finally, we will delineate some central themes in economic research thereby aiming to locate areas of study where economists and sociologists might meet.

Ideas in the History of Economics

It is clear that economic sociology has taken up quite a lot, not only from classical sociology, but also from classical economics. Older economists had often a much broader view on their field of study, which then included topics like demography, geography and so on. In the last issue of the Newsletter we stressed that it is wise to go back to classical anthropology to get a better understanding of this discipline. We think that one good way to understand economic reasoning, as well as the economy, is by studying economics, economic history and the history of economic ideas.

We begin by studying the development of the doctrines of economics from a sociological perspective, i.e. to see how they are embedded in the social context of their time. Though one can identify the roots of economics in ancient Greek thoughts in Aristotle's' exposition of the "oikos" (household), it is perhaps first with Adam Smith that one can talk of a more coherent presentation of economic ideas. Nevertheless, ideas of division of labor, private property and cooperation and trade are already present in

Greek writings. Yet, neither the Greeks nor the Romans or the Scholastic philosophers saw economics as a separate discipline; it was instead a branch of moral philosophy. Before Smith, "economics" was legalistic and essentialistic (Pribram 1951), with a strong focus on the idea of rights, and economic "theory" was then deeply embedded in the real economy. Nonetheless, the central ideas of supply and demand were formulated in the 16th century (Roover 1968).

Later, with the so-called mercantilist school, which stressed the importance of trade to the benefit of the nation, the state became central. The value of a nation was measured in terms of national surplus of precious metals. Mercantilism must be seen as a practical and highly political-normative doctrine, and not an elaborated theory of how the economy operates. In the late 18th century in France, the so-called physiocrats stressed the national production and especially agriculture as means to increase wealth had much influence. In their view, only land generated a surplus. They also argued in favor of state-regulations to create self-sustainability. It is possible to see the development of capitalism in relation to the development of nations (Greenfeld 2001) and both these developments have affected economic reasoning (Pribram 1951).

Collectivistic doctrines, which means that all individuals must succumb to the interest of the whole, were criticized by liberal and individualistic thinkers such as Adam Smith (Viner 1968:443), though Hume, Mandeville and others had already made similar arguments. Classical economists, as is known, argued that Free Trade, also across borders, was of mutual benefit to all. It was also argued that the economy should not be regulated by a central planner; instead it was best to let people pursue their own interest. These ideas are of course echoed in Austrian economics as well as among neo-liberal thinkers. The market is a social coordination mechanism that generates not only economic prosperity, but also social order, as discussed by Albert Hirschman (1977; 1986). Not only the Austrian school but also the so-called Chicago school of economics, with Friedman and Becker as leading proponents, must be seen as heirs of this way of thinking.

The labor theory of value that sociologists know from Marx is simply an idea that he took over from his contemporary economic colleagues. Ricardo, Marx and others were influenced by the physiocrats and argued that the creation of wealth was only due to one cause, namely labor. The marginal utility "revolution", initiated Carl Menger and William

Jevons implied a shift from absolute to relative value, as well as a greater focus on utility. It also furthered analyses of symbolic values, reflected by the works of Veblen ([1899] 1953), since value can be endowed to objects by the social context.5

An alternative view of the history of economic thought and one which some economists may find more familiar is to see the development in terms of the scope of the subject, the "tools" used for study and, importantly, the interaction between the two. According to such a view, Economics, or Political Economy as it was then, started off being concerned with "whatever appertains to the organization of society" (Cournot [1838] 1927 section 5) but gradually became increasingly restricted to dealing with production and allocation of material goods.6 This shift becomes clear when, for example, comparing Cournot's definition to the well known definition of Samuelson ([1947] 1983) "Economics is the study of how societies use scarce resources to produce valuable commodities and distribute them among different people". This development, during what Niehans (1990) calls the Marginalist Era stretching from 1830-1930, was characterized by a development of a deeper theory of supply and demand in markets, based on models of rational competitive decision making but also by an "increasing fixation of neoclassical economic theory on equilibrium conditions and the mathematical formulation of that theory (Nelson/Winter 2002a; Hicks/Allen 1934; Samuelson [1947] 1983)". What most observers seem to see in terms of the development of "mainstream economics" after 1930, during what Niehans (1990) calls the Era of Economic Models, is an increased mathematical sophistication. But what is less often understood is the fundamental change in equilibrium concept(s) that occurred with game theory. As we will discuss in some more detail below, this shift introduces a number of aspects not typically present in neoclassical analysis such as the role of limited or asymmetric information, habit or custom (focal points), institutions (the rules of the game) etc., to understand situations with multiple equilibria. With an obvious risk of oversimplifying one could say that, viewed through the lens of game theory, economics was initially concerned with the organization of society in a broad sense. But lacking the tools to analyze interaction, economists focused on developing a more sophisticated analytical methodology for a more limited set of questions concerned primarily with material goods and incentives. Only with the introduction of game theory has it been able to return to dealing with the broader questions.

There are of course additional ideas in economics, some of which have been especially well received in sociology. Veblen, together with John Commons, can be seen as the founder of the old institutionalism school, which stresses the role of shared social constructs as conditions of the economy. Some separate this school from the New Institutional Economics, but already Commons defined "transaction" as the unit of analysis (Commons 1931). The notion of transaction was also taken up by Ronald Coase (1937), though he used it to discuss the costs of transaction, and identified high transaction costs in markets as a reason for the firm to be the coordination unit, rather than individuals signing contracts. This idea that "institutions matter" (e.g., North 1990; Weingast 2002) is, on the one hand, directed against economic theories in which uncertainty and transaction costs are anomalies. But institutional economists, on the other hand, have also moved into new fields of study that previously were populated by historical or sociological new institutionalisms, which mostly considered institutions as given prerequisites (see Hall/Taylor 1996). The new economic institutionalism argues that institutions functionally emerge to solve coordination problems in markets that arise due to actors' bounded rationality. Institutions then enter into a problem-solving competition with the result that only the most efficient ones sustain (Williamson 1975). The history is thus a process of ever increasing institutional efficiency.

The institutional approach within economics has often focused on legal rights, and especially property rights (Coase 1988). There are some interrelated economic schools of research that can be seen as offsprings of institutional theory, such as Public Choice (e.g., Olson [1965] 1971), Law and Economics (Korobkin/Ulen 2000; Jolls/Sunstein/Thaler 1998), and Constitutional Economics (e.g., Buchanan/Tollison/Tullock 1980). There is also a correlation with the neoliberal ideas that restrict the state and the formal institutional framework, represented by the night-watcher state (Nozick 1974).

Concerning the origin of ideas, in particular French and British economists have, partly independently, made substantial contribution to the development of modern economics. From the 1850s one can also talk of the German historical school. The school, with Schmoller as a leading proponent, stresses the importance of broader questions. This school had a normative and national view on the economy, and the notion "Sozialökonomie" (Social economics) was sometimes used. It stressed that knowledge, in the form of laws, could be developed by historical and

thereby inductive studies. With the development of the more abstract, theoretical and mathematical approach of Austrian economics under the leadership of Menger, stressing the laws based on premises and deductive reasoning, the historical school faced a German-speaking opposing school. What is known as the battle of methods (Swedberg 1990), which took place at the time sociology was formed as a discipline, resembles the debate that was discussed in the last issue when we focused on anthropology. The epistemic differences that the Austrians and the Germans represent are also reflected in the debate between formalists and substantivists.

While economics as a subject certainly shows heterogeneity, it is still the case that some key assumptions seem to be present across most of the field (Erlei/Leschke/Sauerland 2007:51). The first is methodological individualism: all phenomena are supposed to be explainable by recurring to the behavior of individuals in contrast to collectives. The second is the acceptance of at least some kind of rationality: this assumption refers to the well-known homo oeconomicus, who hypothetically maximizes his utility considering all restrictions. Finally, economists assume stability of preferences: changes in economic outcomes are not to be explained tautologically by a change of individual preferences, but by the influence of exogenous shocks on a given set of preferences.

However, even these core assumptions are apparently not prerequisites for publication in top economics journals. A closer look at the contents of journals such as the American Economic Review, Econometrica, Journal of Political Economy, and Quarterly Journal of Economics, shows publications of papers using assumptions of limited rationality, learning, evolutionary theory, showing violations of (standard) rationality, herd behavior, social norms etcetera. It therefore seems justified to say that the closer we look at economics, and if one actually starts to read the texts that economists publish, the harder it gets to find hard core economists, which thus is becoming more and more a straw-man created within sociology. Though economic textbooks might give a comprehensible introduction into the more classical themes, we concentrate on presenting the development of some ideas that might be useful to sociologists. We begin by discussing Game Theory which we see as one important idea that has had repercussions both inside and outside of economics. Then, we move to a few other strands of economic reasoning which are of interest for the present discussion.

The Game Theory Revolution in Economics

Despite some earlier work on games as a representation of strategic interaction (e.g., Von Neumann [1928] 1959), Game Theory is commonly regarded as being founded, in connection with expected utility theory, in 1944 when John von Neumann and Oskar Morgenstern published their seminal book Theory of Games and Economic Behavior. Back then, the hope was to establish a theory that allowed for a rigorous mathematical analysis of human decision making. And indeed, today game theoretical tools are omnipresent in economics and their merits are also acknowledged by sociologists; in fact, there is even a sociological "game theory" (Swedberg 2001). What is not acknowledged, however, is that the development of Game Theory in economics has brought it closer to sociologists, who always have been interested in strategic interaction. We claim that Game Theory has generated a more fundamental change of the formal analysis of strategic interaction in economics than sociologists have recognized.

To make the argument for why the introduction of Game Theory is such an important shift in the simplest possible way let us consider a competitive situation in terms of the number of actors competing. When there is only one individual actor, it is not really a competitive situation but rather a case of the individual understanding how to best achieve some objective - an individual optimization or decision problem. This type of problem is comparably easy to analyze mathematically. However, as soon as there are two individuals, the problem becomes much more difficult because what is now optimal (without having to be specific about what the objective of action may be), depends on what the other individual does. As the number of actors increases, so does complexity. But - and this is the key assumption in the Walrasian general equilibrium framework – as the number of actors grow, the impact of each individual on the whole diminishes, and when the number of actors becomes very large one may even disregard the impact of each individual on the aggregate outcome. This means that there are two cases where "strategic interaction" can be ignored, namely when an individual acts alone and in a setting together with very many others, such as in a "perfectly competitive market".

This view on strategic interaction has important implications for several of the differences between economics and sociology. For example, when considering the actions taken by individuals, it is often claimed that in economic theory everyone acts in isolation to achieve a goal (usually maximization of utility) while in economic sociology everyone considers other actors. To quote Smelser and Swedberg: "[microeconomics] assumes that actors are not connected to one another; [economic sociology] assume that actors are linked and influenced by others" (1994:5). This distinction is clearly true when referring to individual optimization and to models of perfect competition, but not when studying game theory. Here the whole point is to act so as to achieve a goal taking the actions of others into account. The main difference between the two disciplines seems to lie in the fact that in economic sociology the others are not just seen as competitors, but (perhaps mainly) as "influencers of the perceived utility" to talk in economic terms, which is to say that actors care about what others think about our actions. It is true that most economic analysis primarily views others as competitors, but it is important to recognize that the step from studying interactive competition to interactive social competition is much smaller than it would be if the starting point is assuming actors in isolation. Indeed, there are examples of economic articles in recent decades that introduce social norms into the analysis (see, for example, Gui/Sugden 2005).

Another fundamental way in which game theory has contributed to changing much of economics is by reintroducing the institutional aspects of economic problems. In its most famous definition, institutions can indeed be seen as the "rules of the game" (North 1990:3). Once it is acknowledged that individuals are constrained in their actions by far more than their "budget constraint" a number of traditionally sociological aspects come into play (e.g., Basu 2000).

Overall, it is fair to say that game theory has enabled economics to shift back to being concerned with analysis of incentives in any social institution. At the same time as this has shifted economics back to the broader social science it was before the *Marginalist Era*. This has also brought economics and economic sociology closer together.

Evolutionary Economics

Evolutionary ideas have a long history in economics (Nelson/Winter 2002b). In fact, the idea of evolution was a natural point of departure, for example, for both Marshall and Schumpeter, whose work represents an affiliation to early economic sociological work (Swedberg 2003: 23-26).8 Though dynamic evolutionary analysis was common,

especially among early British economists about hundred years ago, economic analysis became more static after World War II, focusing on conditions of equilibrium. And it was first in the 1980s that economics witnessed a return of evolutionary thinking as a response to the shortcomings of "standard neoclassical theory" (Nelson/Winter 2002b: 24). This return also was facilitated by a formalization of evolutionary ideas in biology that established a link to *Game Theory*, which then had become increasingly popular in economics.

The core intuition behind the application of evolutionary models in economics is that most economic phenomena are not inherently static but the results of dynamic processes and accordingly require a full dynamic analysis. In particular, firms' and actors' reasoning is based on experience as well as on the historical evolution of norms and "knowledge" that is passed on over time. Naturally, such evolutionary ideas often stand in contrast to the notion of the rational actor who optimally responds to the currently available information. Accordingly, increased reliance on evolutionary models has consequences for the analysis, for example, of competitive markets where it enables a different perspective on selection and specialization, essentially via the market as the "selection mechanism".

Winter and Nelson (1982), to give an example, substitute orthodox profit-maximizing behavior in firms with routine behavior. Different routines of everyday decisions, longterm investment strategies and decisions about the organizational structure function as genes of the firm's organism. The firm's search for new routines is then modeled via mutations while the acquired experience, which is inheritable in a Lamarckian sense, and the industry environment also play a role in that process. Which firm is to survive, thus, depends on both the ongoing search for more adaptive routines and the profitability serving of the firm. While short run temporary equilibriums might be achieved, the authors, in line with the arguments of Marshall and Schumpeter, emphatically refuse the idea of a final equilibrium as focal point from which a model is to solve. Nor do they assume that a clear assertion about the blindness or directedness of the evolutionary process of routine-search and profit-selection can be made ex ante.9

The different lines of thought reflected in evolutionary arguments are variegated. One can discern a Schumpeterian tradition investigating phenomena of innovation, industrial development and business cycles on a macro-level, then an Austrian tradition focusing more on the subjective

knowledge as explanation for innovation, and finally, a rather mathematical division using for example the theory of non-linear dynamics to explain diffusion processes or selection effects (Witt 1993: 2). Moreover, some economists, such as Hirshleifer or Wilson, even "seem to accept the idea that social phenomena are determined by [...] the DNA" (Hodgson 1996: 42), whereas another line of thought beginning with Veblen considers social institutions or habits in analogy to genes.

Behavioral Economics

Since Adam Smith economists have dealt with psychological assumptions. Yet, it was not until the 1960s that an experimentally orientated branch of economic psychology, with psychologists like Amos Tversky and Daniel Kahneman, began to deal with the anomalies in connections with the orthodox assumptions made in economics' that could be observed in experiments. Somewhat simplified, one might say that behavioral economists essentially try to reconcile empirical evidence about people's judgments and choices, which often is at odds with common "rational" predictions, with economic modeling albeit commonly without making any fundamental methodological changes of the theory. Although the integration of phenomena related to, e.g., limited rationality and emotions into standard models often might seem to call for a rejection of the rational framework, most of the studies in behavioral economics avoid such far-reaching solutions and are better viewed as complementary to or enriching previous models (Camerer/Loewenstein 2004).

In order to further clarify the distinction, we briefly mention two applications. For example, in common macroeconomic models of saving it is often assumed that individuals at one point in time estimate their lifetime income in order to determine their optimal saving rate. Shefrin and Thaler (2004) made this demanding model more realistic by introducing costs for the self-control of investments, the possibility to be tempted to immediately consume rather than save, and by dividing the overall wealth into several mental accounts, each involving different propensities of marginal consumption. Some preliminary surveys, made with students as partakers, support this approach. Similarly, high unemployment rates are occasionally explained by a reference to the high wages set by employers that cannot otherwise control their possibly shirking employees. In this case, Akerlof and Yellen (1990) offer a different interpretation for the observed high wages: Workers generally have a sense of equity so that they make an effort

only if the perceived wage is relatively fair and employers respond to the general sentiment of fairness when setting the wages. If these are too high, they prevent a greater number of workers to be employed. To support their thesis, the authors refer to such sociological concepts as the theory of relative deprivation and Blau's model of social exchange within organizations.

Identity and Economics

A further theme that we would like to highlight, though it is still small within economics, is identity. The concept of identity was first introduced into economic analysis by Akerlof and Kranton (2000). Over the last couple of years the notion has become a bit more common (Nekby/Rödin 2007: 7-8), and it still appears to be growing.

Adding to an increasing literature considering the interplay between psychological and economic incentives (reviewed for example in Rabin 1998), identity arguments focus on the importance of social categories and behavioral stereotypes for individual economic decision making. Having highlighted consistent identity related behavioral patterns, Akerlof and Kranton (2005:12), for example, refer to a person's identity as the gains and losses in utility from behavior that conforms or departs from the norms for particular social categories in particular situations. It is not the emphasis on the importance of social categories alone that is central here, but the suggestion to incorporate these aspects into the utility function.

However, concerning utility, the situation specific qualification in the above statement is important because identity related incentives are most relevant in economic decision making when social considerations and conditions come into play. Akerlof and Kranton (2000), in the discussion of the labor market, point out that many jobs are gendered. A woman who accepts a "male job" arguably creates a disutility, in terms of her identity, since this is not "what women commonly do," if one assumes the "traditional" identity of women to be preferable. Accordingly, and in spite of having the appropriate skills and qualifications, women may refrain from taking such jobs, which is a finding at odds with what the "standard" economic analysis might suggest will happen. Thus, identity may affect labor supply when there are observable and clear associations between a choice, such as taking a job, and a certain identity, i.e. if an occupation is gendered. The identity dimension, however, is not relevant, one may presume, when actors, for example, are bidding in auctions, though different identities may bid for different things.

Of course, labor supply is but one of the many examples for the often intriguing interplay between economic and identity related incentives. Yet, it is a field for which the idea has a particular intuitive appeal and has also been put into practice (Nekby/Rödin 2007). However, similar effects have been observed, for example, in connection with education and schooling (Akerlof/Kranton 2002) or with intrinsic motivation of a firm's workforce (Akerlof/Kranton 2005). In the latter case, it has been argued that identification with a certain institution, e.g. a firm, increases cooperation with that institution; although the strength of the effect is likely to depend on the perceived situation specific relevance of the respective institution for the respective decision maker's identity (Wichardt, forthcoming). Thus, while certain means to monitor the workforce may be indicated by a purely economic analysis of standard moral hazard problems, their implementation may contribute to an alienation of the workers, which in turn would obliterate positive identity effects on the workers' effort.

Given the intuitive character of many of the arguments, it is perhaps no surprise that identity related effects have also been taken up in more technical economic research. For example, in more recent studies, it has been shown how contributions to social goods are affected if social signaling effects are combined with an individual concern for prosocial behavior, i.e. a general appreciation of good deeds, which may be interpreted in terms of identity (Benabou/ Tirole 2006b). Moreover, it has been argued that various economic as well as social phenomena (e.g. taboos) can be rationalized under the assumption that decision makers tend to infer past motivations, i.e. information about their identity, from past choices (Benabou/Tirole

2006a). Thus, research connected to the notion of identity, which has been big within sociology for almost two decades, now also seems to be on its way to grow also in economics.

What can Sociologists and Economists Learn from Each Other?

It is obvious that a short article like this cannot give details about the development within economics. A critical reader can of course debate our way of presenting ideas and structuring the enormous field of economics, but this should not obscure our main idea that economics and sociology, in fact, are standing closer to each other than they have done since World War II. This is not to deny that there are still large differences.

What have we learned from this brief overview of contemporary economics? The first thing we would like to mention is that neoclassical economics as it is presented in textbooks, and as it still is perceived by many sociologists, has over the last decades become more sociological. The hard core assumptions of the Walrasian analysis have had many supporters, for example Gary Becker (Stigler/Becker 1977), despite the critique from, for example, sociologists and anthropologists. However, there are many contributions, which may be seen as common knowledge in disciplines such as sociology, that have penetrated the field of economics. Assumptions of institutions, of preferences that depend on context, identity, class and history, imperfect information, trust as preceding contract, markets as processes and much more have to a large extent become, or are about to become, part of "main stream economics". One may talk of a movement within economics from assumptions of perfect information and full rationality, as illustrated in Figure 1.

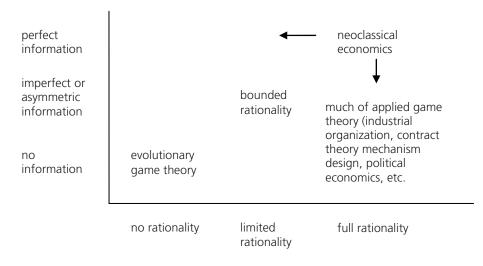


Figure 1: Movement of "mainstream economics" in recent decades

What does this mean? We do not think, as some economists have at least mentioned, that economists "should pack up and become sociologists" (Bowles/Gintis 2000: 1433). We should, nonetheless, notice how economists have become more flexible regarding many central assumptions and ideas.

There are many things that economists can teach economic sociologists, though we do not primarily think of "advanced" modeling; we rather have in mind discussions of basic questions and the general ideas. Economics provides a general theory of the economy, and economic sociology has so far not presented a rival theory that would have to combine the interplay of economy and society on a macro-level (Berger 1986). Sociologists have written on money, markets and commodities – all being central institutions of the economy, but how these "hang together" is unclear, regardless of whether one reads economic sociology textbooks, articles or books. This is also one reason why economic sociologists are less able to generate theoretically founded policy recommendations (Fligstein 2001).

An important reason for the situation in economic sociology is the lack of knowledge sociologists have about what goes on in the field of economics. There is an explicit shortcoming in knowledge due to the lack of training in mathematical and formal reasoning, but also due to an "information problem." It is our hope that this text will help to rectify the latter problem.

Economic reasoning, and above all, sociologists ideas of what economic reasoning is, has had a strong impact on

how sociologists think about the economy. Notions like the market, inflation and money - to take a few examples - might be investigated by economic sociologists from a sociological point of view, while their basic economic understanding is drawn from the prescientific lifeworld to which even some vulgar notion from professional economics trickled down. If this usage is not acknowledged one could even speak of a pervasion of economic sociology from within. This may be a reason why economic sociology has never been radical in the sense that it has deconstructed the notions used in

economics with the ambition to develop its own terms. Harrison White's (1981; 2002) market theory is the most salient and perhaps the only example of an attempt to develop a rivaling theory of markets – the most central economic institution. It is in this light obvious that economists have developed sophisticated theories of how economic actors interact, what the role of contract is and about many more things, which sociologists tend tacitly to lean on when doing analyses that sometimes only furnish an economic phenomenon with a bit of flesh and some blood.

Though this is not the main theme of this text, it is clear that also economics would benefit from looking closer at what economic sociologists are doing. This is especially the case now when, as we have argued, economist are about to leave their tool shop. Yet, attempting to obtain a more comprehensive understanding of individual interaction may force economists to abandon, or at least modify their toolbox, unless they want to be caught in it.

Suggested Readings

The field of economics is large, and populated by so many different schools, that it is wrong to single out a few texts that we suggest sociologists or anyone who is not an economist by training to read. We have deliberately tried to stay out of the more technical and mathematical discussions.

A few sociologists have approached the field of economics to study it more carefully, some of which are included in a

recently published volume (MacKenzie/Muniesa/Siu 2007). What we would like to suggest, however, is to read some classical texts. To approach the field of economics we suggest that those with little background in economics do not start with the textbooks of economics; instead Alfred Marshall's Principles of Economics ([1920] 1961) may be a good starting point to understand the economy as a "science of man". But to understand neoclassical economics one may also prefer to go back to texts that were written in the period of formation of the ideas or schools, such as Frank Knights book (1921). One may also, if one has more background in economics, go directly to some of the texts that we referred to, such as the one by Bowles and Gintis (2000). The New Palgrave Dictionary of Economics, is a useful source of information on economics and economic topics. A very good non-technical introduction to how game theoretic reasoning can be applied to economics viewed as embedded in politics and society is Basu (2000). Another highly recommended slightly more technical introduction to Microeconomics when taking behavior, institutions and evolution into account is Bowles (2004).

Leading Journals:

The first economic journal, *Zeitschrift für die gesamte Staatswissenschaft*, was published in 1844 in Tübingen. In 2001, 610 economic journals were published, almost half of them in the US, printing around 350.000 pages a year. Below we list a few top journals, based on economists' views as well as the impact factor.

American Economic Review

Econometrica

Journal of Political Economy

Quarterly Journal of Economics

Review of Economic Studies

Where can one find articles that cross the disciplinary boundary between economics and sociology? There are of course different strategies, but if one searches for economics and sociology within the abstracts, keywords, and titles of those articles (2000-07) within the Web of Social Science database one obtains the following results for journals within the "economics" category: American Journal of Economics and Sociology, Journal of Economic Behavior &

Organization, Ecological Economics, Economy and Society, European Journal of the History of Economic Thought, Journal of Public Economics. Moreover, one finds also economic journals as Health Economics or Applied Economics, which publish sociological articles that seem to deal with quite practical fields.

Endnotes

1Patrik Aspers is research fellow and Sebastian Kohl is research assistant at the Max-Planck Institute for the Study of Societies in Cologne. Aspers focuses on markets, and Kohl is interested in philosophical and theoretical issues in the intersection of economics and sociology. Jesper Roine is Assistant Professor at SITE, Stockholm School of Economics in Sweden. His main fields of interest are political economy, inequality, and economic development. His e-mail is: jesper.roine@hhs.se. Philipp Wichardt is post-doctoral researcher at the Department of Economics, Economical Theory 3, University of Bonn, Germany. His research mainly centers around questions related to psychology and economics, and bounded rationality; e-mail: philipp.wichardt@uni-bonn.de.

2E-mail conversation with Richard Swedberg, September 13, 2007.

3A prime example of this is the work by Steven Levitt, winner of the 2003 John Bates Clark Medal, and author of the bestselling *Freakonomics* which – despite claiming to be a "rouge economist's" observations – illustrates how innovative use of data is highly appreciated in today's economics profession.

4There are bibliographies of the history of economics, for example Köllner (1990).

5Veblen's analysis, of course, is quite different, and profoundly sociological, since he stresses how one person's "utility" depends on his interpretation of other peoples' perceptions.

6This view and account is based on Myerson (1999) and also relies heavily on notes by Roger Myerson for an inaugural lecture on May 23, 2002, in the Social Sciences division of the University of Chicago.

7The property-rights-theory considers a legal structure with regard to its ability to make economic transactions possible. Typical questions concern the introduction of property rights in areas of modern commons like the virtual space, the most efficient costs of maintenance of a legal system, or the efficient degree of punishment.

8See the theme issue on *Evolutionary Economics* in *Journal of Economics* (2002, volume 16, number 2).

9This contrasts with much of evolutionary game theory where a key issue has been to explore whether or not evolutionary dynamics converge to outcomes which are Nash equilibria in perfectly informed and rational settings (Weibull 1995).

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