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The Expansion and Reorientation of Economics

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Academia can be thought of as a group of neighboring tribes, each occupying a particular territory, which it cultivates with tools that seemed appropriate for that terrain and climate. Most of the time, members of tribes remain in their home areas, with amicable but not intimate relations with their neighbors. There is often some cultivation in border areas, with occasional collaboration across tribal lines. However, during some periods, perhaps because of technological developments, tribes invade one another's territories, and tribal members raised in one territory begin cultivation in another. Relationships may become hostile, but there may also be trade and cooperation. With apologies to Axel Leijonhufvud (1981), we will use this parable to discuss the relationships between economics and other social sciences. Our focus is on the expansion and reorientation of economics in the last forty years. However, to better understand these trends, we start with a brief overview of the first sixty years of the 20th Century. Even though we primarily review the evolution of economics in the U.S., we mention some of the differences between social science in the U.K. and the U.S. (the Anglo-Saxon experience) and that of continental Europe.

After this historical overview we describe the expansion of economics into new subject areas, areas that had for many decades been considered the exclusive provinces of political science and sociology. The impact of this expansion on these disciplines is also sketched. Next, we describe what we call the reorientation of economics: the modification of some of its basic assumptions and techniques of analysis. This reorientation may be related to the need to modify the neoclassical tools of economics as the discipline is increasingly researching non-market interactions. Subsequently, we explain the organization of the book and present a brief description of each of the chapters. Concluding comments on the future of economics and its relationship to the other social sciences can be found at the end of this book.

Economics Before 1960

In Britain and the U.S., social science entered the 20th Century as a tribal society, with various tribes or fiefdoms each taking claim over a separate territory. Table 1.1 provides a map of the three major social sciences in the U.S. in the first half of the 20th Century. The disciplines were distinguished according to the subject matter on which they focused, their principal tools of analysis, and the principal assumptions they made about individuals. Each discipline was like a tribe responsible for the cultivation of a particular area of research. Research territory was defined primarily according to subject matter: economics studied the economy, defined as the production and consumption of marketed goods and services; political science studied the government and the legal system, and sociology and its sister disciplines (social anthropology and social psychology) studied families and voluntary associations such as churches.

Table 1.1. The Social Sciences around 1960

	Discipline		
	Economics	Political Science	Sociology
Principal Organization or Subject Matter	Firm, Economy (including effects of government actions)	Government, Law	Family and voluntary associations; aspects of polity not covered by political science; aspects of economy not covered by economics.
Principal tools of analysis	<ul style="list-style-type: none"> • Market analysis • Quantitative 	<ul style="list-style-type: none"> • Institutional • Descriptive • Qualitative 	<ul style="list-style-type: none"> • Institutional • Descriptive • Qualitative
Principal Assumptions about individuals	<ul style="list-style-type: none"> • Rational voluntary choice • Selfish, non-aggressive, not altruistic • Perfect information 	<ul style="list-style-type: none"> • Not necessarily rational • Possibly aggressive • Various cognitive assumptions • Follows orders 	<ul style="list-style-type: none"> • Not necessarily rational • Possibly altruistic • Various cognitive assumptions • Follows norms

There was some overlap between the subject matters of the various disciplines. Economists studied government to the extent that it affects economic policy. Economics analyzed government actions, such as taxation, government expenditure, and monetary policy, with the goal of maximizing social welfare. Government agencies, like business firms, were treated as black boxes. Economics assumed that businesses knew how to maximize profits, and that government agencies could effectively implement the policies recommended by economists. There was also some overlap between sociology, political science, and economics, leading to the sub-fields of political sociology and economic sociology. In these sub-fields, sociologists mostly studied those aspects of the economy and the polity that were not addressed by economics and political science.

In addition to the fields listed in Table 1.1, researchers in business schools studied business organizations and those in schools of public administration studied government agencies. Some of these organizational specialists were trained in psychology and sociology. Psychology, apart from social psychology and the study of organizations, is a discipline focused primarily on understanding individual brains, emotions, and behavior, rather than social organizations, and in this sense it is not really a social science.

The various social sciences were also clearly distinguished by the tools they applied to the cultivation of their territory, economics standing out from other social sciences in its more mathematical and quantitative tools and its more restrictive assumptions about human behavior. The principal tools underlying economic theory were rational choice analysis and market analysis. Most economic models assumed that individual households and firms act rationally, voluntarily and not from coercion. Implicitly or explicitly, economists generally assumed that individuals are selfish, not aggressive, and not altruistic. At the level of cognition, it was assumed that economic agents had no difficulty receiving, processing and storing information.

As is also summarized in Table 1.1, other social sciences have tended to be less quantitative and less abstract, thus requiring fewer mathematical skills. Relative to economics, the comparative advantage of sociology and political science has been in the identification of factors relevant to their subject matter, in the description of such factors, and in the development of ideas connecting various aspects of human behavior and institutions.

The subject matter of the different disciplines was influenced by the emergence of academic departments in universities and colleges. Political science and economics had no difficulty establishing themselves as separate departments, as each field had a long history of serious inquiry and a well-defined subject matter. In continental Europe, sociology was not clearly distinguished from economics in university studies. Thanks to figures such as Max Weber, Werner Sombart, Emile Durkheim, and Vilfredo Pareto, who simultaneously studied the economy, the state, religion, and culture, economics and sociology remained linked to each other, as well as to political science and law. In Germany, Weber, his brother, and many others had training in economics and taught in schools of public policy welcoming all the disciplines that could possibly help policy makers in the design of better laws and policies (see Jurgen Backhaus 2001). It is in one of the best known of these schools, the University of Heidelberg, that prominent American sociologist Talcott Parsons got his Ph.D. in economics in the 1920s. Pareto, whose name appears on every economist's lips, was a sociologist in addition to being an economist. He inspired American sociologist George Homans, an important contributor to social exchange theories in the mid-century (see Chapter 9).¹

In the United States, however, sociology was not considered part of economics and sociologists had to struggle for acceptance in the universities. Most American universities did not have sociology departments until relatively recently. Not wanting to perform research about forms of exchanges and social relations that lay outside their concept of the economy, economists made room for sociology, social psychology, and social anthropology (in short, sociology). For instance, Harvard did not have a sociology department until 1931. Partly to gain acceptance in American universities, sociology left the study of the economy to economics and confined itself to subject areas that economics did not aspire to handle (Richard Swedberg 1990, pp. 10-14). The study of production handled by households and not by firms was relegated to home economics departments (see Yun-Ae Yi 1996 and Andrea Beller and Elizabeth Kiss 1999). Home economics often also included consumer studies, an area also mostly a function of decision-making within households. As a result of economists preferring not to analyze these topics, in the early twentieth century many U.S. universities created home economics departments.

In the first six decades of the 20th century economics, especially in the Anglo-Saxon countries, devoted most of its energies to refining its techniques of analysis of the production and market exchange of material goods and services. During this period economic theory became increasingly formalized. (Institutional economics, which was prominently represented in American universities before World War II, took a broader view of economics' subject matter and vigorously resisted the formalism and methodological individualism of the mainstream, but it lost influence after the war (Hodgson 1994, 1998).) The resulting edifice of economic theory was an impressive intellectual accomplishment, in comparison with what the other social sciences had to

offer. Among the achievements were neoclassical micro-economic theory (or price theory, as it was then called), classical monetary theory (the quantity theory of money and inflation), the Heckscher-Ohlin theory of international trade, and the theory of externalities and public goods. These theories offered many insights about how the economy functioned and about the effects of government policies on the economy.

The Expansion of Economics after 1960.

After the rise of Hitler and World War II, continental universities lost their prominence. Since World War II, most new developments in economics and many innovations in other social sciences occurred primarily in the United States. Starting approximately in the 1960s, U.S. economists began to invade other social sciences, especially political science and sociology. Political science witnessed the penetration of economists Anthony Downs (1957), James Buchanan and Gordon Tullock (1962) and Mancur Olson (1965), who applied economic models to politics and launched the new field of public choice. Buchanan eventually received the Nobel prize, largely in recognition for this line of work. Economists who received the Nobel prize in part for their contributions to the economic analysis of politics and law include Ronald Coase who wrote on property rights (Coase 1960), Douglass North who wrote on property and contract rights (e.g. North and Thomas 1971; see also Harold Demsetz 1964, 1967), Gary Becker who wrote on democracy², discrimination (Becker 1957), and crime deterrents (Becker 1968), and George Stigler (1971) who contributed an economic theory of regulation.³

Together with Jacob Mincer, his colleague at Columbia University in the 1960s, Becker also at the forefront of economics' penetration into some of the territory traditionally cultivated by sociology. Becker (1960) contributed to the earlier literature on economics of fertility (see Chapter 9). A breaking point was the onset of the *New Home Economics*, which originated when Mincer (1962, 1963; reproduced in Mincer 1993) and Becker (1965) placed firms and households on an equal footing as far as the applicability of economic analysis is concerned (see Grossbard-Shechtman forthcoming). They thereby erased borders that previous generations of American economists had erected between economics, sociology, and home economics. This return of economics into the territory of home economics and family production was strengthened after Becker published his theory of marriage and divorce (Becker 1973, 1974) and his *Treatise on the Family* (Becker 1981). More recently, economists have started researching other voluntary organizations such as churches and social movements. Most prominent in that area is the work of Lawrence Iannaccone, who was a student of Becker at Chicago (see Chapter 10).

The invasion of economics since the 1960s benefited from the marginalist revolution that gained momentum in the U.K. in the latter part of the 19th Century and early part of the 20th Century, and the mathematical revolution that originated in the U.S. after WW II and owes much to the influence of Paul Samuelson.⁴ As a result, economists had become very effective at the use of economic analysis defined as the use of rational choice and market analysis. In a broader perspective, taking account of the history of the social sciences, economists' recent invasions into fields traditionally tended by sociologists can be seen as a return to an earlier academic structure from which sociology was virtually absent. The expansion of economics after 1960 can be understood as a

correction for the narrowing of the scope of economics that took place in the U.K. and the U.S. in earlier decades of the 20th Century. In contrast, during most of this time, some Continental European economists took a broader view of the subject matter of economics (see Swedberg 1990, Junghaus 2001).

These forays of economists into neighboring territories disturbed the established order there and generated two kinds of reactions. One reaction was to deny the applicability of the economists' framework and to try to push back the invaders by either attacking them verbally or by producing alternative research replacing economic analyses. Examples of sociologists attacking economists verbally include Judith Blake's (196) attack on the economics of fertility, Remi Clignet and Joyce Sween's (1977) critique of an economic analysis of polygamy (Amyra Grossbard 1976), and Steve Bruce's (1993) attack on economic theories of religion such as Lawrence Iannaccone's (see Chapter 10). Home economists have not shown much resistance to the invasion from economics, in part the result of the gradual cutbacks of home economics departments in U.S. academia.

Another reaction from other social sciences was to take the new ideas seriously and to incorporate them into their research. Business researchers, who have always been familiar with economics, have continued to follow the new developments in the field, especially the dramatic innovations in industrial organization. Although initially there was a lot of resistance within political science to the rational choice approach, some political scientists (e.g. William Riker 1962) were among the pioneers in the new field that has come to be called political economy (Peter Ordeshook 1990). The Public Choice Society, founded in the 1960s, has always enlisted substantial numbers from both political science and economics. A buzzword in political science today is institutionalism, which comes in three forms: historical, rational choice, and sociological (Peter Hall and Rosemary Taylor 1998). These grow out of different intellectual traditions, but they do communicate with each other and with economics. In his survey of the impact of economics on political science, Gary Miller (1997, p. 1200) writes

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The rediscovery of institutions is an intellectual accomplishment of economists and political scientists together – and it is potentially the most important way that the confrontation of economic tools with political reality can change economics itself. In the near future, the channeling of preference and information flows through institutional channels will be the growth field in political science.

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Economics appears to have had less impact on sociology than on political science. However, given the wide subject matter of sociology, and economics' separate impact on many of the unrelated topics studied by sociologists, it is possible that the total contribution of economics to sociology over the last forty years has been substantial. These are some of the separate contributions of economics to sociology that we are aware of:

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- The field of rational choice sociology (Michael Hechter 1987, James Coleman 1990, 1994) was clearly influenced by economics. Many, including Coleman, have explicitly recognized that influence.
- More specifically, sociologists have applied rational choice analysis and other techniques developed in economics to study marriage and the family (see Chapter 8).
- Sociologists have also applied insights from economics to the study of religion (see Chapter 10).
- Economic sociology was influenced by ideas from information economics. In particular, Harrison White, one of the founders of modern economic sociology, drew on Michael Spence's (1974) concept of signaling in his own work (see Swedberg 1990 p. 83).

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The Reorientation of Economics after 1960

In the 1960s and 1970s, as economics was invading other fields using the traditional tool kit of the discipline, the tool kit itself was being modified, even in the home area of economics. We call this the reorientation of economics. As mentioned above, prior to 1960 neoclassical economic models were principally populated by selfish, rational individuals, who had access to abundant information and had the ability to process it. In the late 1960s, the relaxation of the traditional assumptions of economic models had become a widespread phenomenon. One modification was the recognition that information is costly and that self-interested individuals will use it to their own advantage. This modification was quite readily accepted in the discipline, for two reasons: it was very consistent with economists' conception of people as self-interested utility maximizers, and the new field of information economics yielded important insights into such topics as adverse selection and moral hazard (George Akerlof 1970), screening and discrimination (Thomas Schelling 1972, Michael Spence 1974), sharecropping (Joseph Stiglitz 1974), and principal-agent theory (Michael Jensen and William Meckling 1976).

Prior to 1970 economists did little to enrich their conceptions of human motivation; psychology remained for them a largely unvisited territory. Already in the 1950s and 1960s Herbert Simon and others at Carnegie University (Simon 1957, James March and Simon 1958, Richard Cyert and March 1963)) had developed the concept of bounded rationality and the behavioral theory of the firm (see also Harvey Leibenstein 1960, 1966), but these did not have much impact on standard economic analysis. However, in the 1970s, Oliver Williamson, addressing a long-neglected question originally posed by Ronald Coase (1937), incorporated bounded rationality into his analysis of the relative strengths of markets and hierarchies (Williamson 1975). He and other researchers opened the black box of the firm and revolutionized industrial organization. Williamson was unusual in that his assumptions included not only bounded rationality and opportunism, but also the capacity of people to develop bonds of trust and loyalty.

In the 1980s economists and political scientists were studying economic institutions, using the new tools of information economics and game theory. By the mid-1980s the term "New Institutional Economics" was being applied to the literature in

economic history on property rights and contract enforcement (North 1981) and to Williamson's transaction cost economics (Williamson 1985). The term "new" was added to distinguish the school from the "old" institutional economics, which was regarded as descriptive and not theoretical (but see Geoffrey Hodgson 1998 for a critique). Economists also began studying social norms (Jon Elster 1989). In studying these non-market interactions, some economists began to incorporate a richer psychology of human motivation (e.g. compare North 1990 with North 1981; see also Christopher Clague (1993) for an example of how institutions mold preferences).

Over the last couple of decades, psychologists and economists have accumulated experimental evidence that people's behavior does not conform to the neoclassical economics' model of self-oriented expected utility maximization (e.g. Richard Thaler 1996). Some of the experimental evidence comes from the new field of experimental economics, which has provided an opportunity to test the new theories of cooperation and market behavior developed by game theorists (Colin Camerer 1995). Economists had of course long been aware that their model human motivation was not realistic in all situations, but the profession had resisted psychological enrichment on the grounds that no alternative model was suitable for economic analysis.⁵ This resistance is diminishing, as can be seen from recent prominent review articles on psychology and economics (Matthew Rabin 1998, John Conlisk 1996), emotions and economic theory (Elster 1998), and endogenous preferences (Samuel Bowles 1998).

In the last forty years there has been an expansion and reorientation of economics, resulting in much crossing and re-crossing of disciplinary borders. Quite a bit of trade has occurred. The expansion of economics brought economists into sociology and political science. In turn, once they got there, economists learned from other disciplines and started importing ideas into economics. Gary Becker, for instance, has recognized his debt to sociologists. As a result of his extensive research in the domain of sociology, in 1983 Becker became a professor of sociology in addition to being a professor of economics. His frequent interactions with sociologists, especially with Chicago colleague James Coleman, led him to abandon the assumption of stable preferences (forcefully espoused in Becker (1976)), replacing it with that of endogenous preferences (see Becker and Kevin Murphy 2000).

Some border areas that were previously left barren or that were sparsely populated are now jointly colonized by members of neighboring tribes. Some of this movement is peaceful. The growth of psychological economics, economic psychology, and the subfield of networks and markets are examples of successful joint colonization of border areas. As mentioned earlier, there have also been invasions and counterattacks.

This volume intends to help readers decide what in their opinion should be the relation between economics and other disciplines. We present a sample of chapters that connect to either the reorientation of economics, or the expansion of economics. These chapters deal with various subject matters and various disciplines. In every instance, the authors are familiar not only with the economic approach to their topic, but also with much of the literature in other disciplines.

Organization of the Book

The present volume is divided into five parts. The first part contains comparisons between economics and two other disciplines defined around the analytical skills that

they provide: statistics and system dynamics. The first of these (Chapter 2) is by Clive Granger, an eminent econometrician. All econometricians operate at the border between economics and statistics, and Granger is no exception. He draws on his immense experience with the two disciplines to derive a number of points that distinguish economists from their colleagues in statistics. At times, reading Granger's paper makes one proud to be an economist. It is nice to know that we approach data with a better sense of what to look for. But Granger also warns us against some undesirable traits often fostered by economics departments: a tendency to believe that there is an absolute truth out there, a conviction that one theory is clearly superior to any other, and then a proclivity to milk the data until they corroborate this truth. Statisticians may not have a good enough idea of what they are looking for in the data, but at least they respect the data and have less of a tendency to overlook features that do not suit them.

Chapter 3, by Shlomo Maital, is a manifesto for System Dynamics (SD) and a plea for economists to collaborate with SD instead of ignoring it, as they have been doing for the last 30 years. SD is a method of modeling complex systems through computer simulation. The chapter sketches several examples of SD modeling by pioneer Jay Forrester, including *Industrial Dynamics* (a model of markets and industries), *Urban Dynamics* (a model of the city of Boston, showing how public housing exacerbated, rather than solved, the basic problem of inner cities), and *The Limits to Growth* (a model of the world economy containing dire predictions of the future). In contrast to economics, SD focuses not on equilibrium outcomes, but on the dynamics of disequilibrium processes. Maital thinks that SD is potentially very useful for understanding phenomena such as the global financial crisis of 1997-98 and R&D-driven cyclicity in technology industries.

The rest of the book is organized by subject matter: Part II to V compare economics with at least one discipline that deals with similar subject matter. Part II contains two chapters on aspects of economic development. Vernon Ruttan, the author of Chapter 4, is a well-known specialist in development economics and agricultural economics. Ruttan draws on his extensive experience with technical change in agriculture, especially with the 'green revolution,' which produced tremendous gains in rice yields in Asia in the 1970s. Over his long career, he has interacted with many specialists trained in other disciplines and has read related work by non-economists. His paper presents interesting comparisons between economics, anthropology, sociology, and political science. It is an important testimony to the importance of cooperation between the disciplines. While participating in the research that led to the green revolution, he learned that the goal of making a practical difference--in this case raising rice yields--overrides any partisan interests. Questions such as 'who is a better scientist' or 'which discipline is the better one' matter little when the goal is to eradicate hunger and reduce mortality. That experience transformed Ruttan, who has maintained a remarkably cooperative perspective towards other disciplines. There are some outstanding lessons that we can learn from what Ruttan distilled from extensive readings in some of our sister disciplines. These lessons should not be only of interest to economists, but also to anthropologists, sociologists, and political scientists. For instance, Ruttan encourages us to pay more attention to the sociology of science and technology, and to wonder why underdevelopment theories developed by economists attract so many more followers among sociologists than among economists.

In Chapter 5 Christopher Clague looks at the recent wave of economic liberalization in less-developed countries and examines the explanations for this phenomenon offered by economists and political scientists. After reviewing some 30 examples of economic liberalization, he discusses three approaches to understanding them: the comparative politics approach, economic models based on economic interests, and approaches based on information and learning. The discussion illustrates both the rapprochement of economics and political science that has occurred in the last few decades, and their continuing differences in styles of research. As mentioned earlier, the two disciplines have jointly developed the fields of public choice, political economy, and the New Institutional Economics, and they share a common vocabulary of discourse. Nevertheless, economists tend to be more interested in abstract models, while political scientists tend to build up generalizations from careful study of cases. With regard to the explanation of the wave of liberalizations, Clague gives higher marks to studies in the comparative politics tradition than to a prominent stream of economics articles based on a very simplistic model of the political process, and on assumptions clearly inconsistent with what we know about human behavior. He argues in favor of a view of these liberalizations that emphasizes the role of ignorance, uncertainty, and changed perceptions of how the world works.

Part III consists of two chapters dealing with firms and their workers. Chapter 6, by Michael Gibbs and Alec Levenson, considers how the economic approach to organizations and personnel management can benefit from closer collaboration with the behavioral approach. They describe one type of behavioral research, which is to take a systems view of the business organization. In brief, in the systems view the firm's strategy and environment strongly influence the organizational design, which consists of job design, internal labor markets, performance evaluation, and implicit contracting. The organizational design leads to the intermediate outcomes: skills of recruits; the firm's human capital; organizational culture; matching of skills, tasks, and decision rights; and worker involvement. These intermediate outcomes then lead to business outcomes: profit, market share, growth, product quality, service quality, innovation, and adaptability. Finally, these business outcomes feed back to the firm's strategy. There are a number of topics treated extensively in the behavioral literature and largely ignored by economists; some of these, the authors argue, lend themselves to productive theorizing and empirical investigation by economists. For the most part, economic theories of organizations do not specify the type of products the firm is producing, nor the type of work that employees actually do. The systems view suggests that organizational design and personnel practices should correspond in various ways to the firm's business strategy and external environment (this is called external fit), and the different components of organizational design should complement one another (this is called internal fit). The authors suggest that economic theorists might provide a deeper understanding of external and internal fit, but only if they are more specific about what is being produced and what the productive tasks are. A potentially fascinating area largely neglected by economists is job design. Which tasks should be bundled together? How can jobs be designed to be interesting and fulfilling, so as to elicit intrinsic motivation? Since Adam Smith, economists have extolled specialization and the division of labor, while behavioral researchers have called for job enrichment, in order to elicit intrinsic motivation. Gibbs and Levenson suggest a way of modeling intrinsic motivation, by relating the worker's

human capital to the challenge of the job; in their formulation, it may be optimal to assign workers to tasks they have not fully mastered, and to rotate workers through jobs, in order to make the work more interesting. The chapter offers many other suggestions of how economics could illuminate organizational design and personnel practices.

In Chapter 7 Rick Audas and John Treble contrast research by psychologists and economists on absenteeism and present the outlines of a new model of absenteeism. Psychologists naturally take the work environment as exogenous to their analysis of absenteeism and they focus on characteristics of individual workers. Much of the early psychological research was based on the conception that absenteeism was one manifestation of a more general phenomenon of worker withdrawal from the workplace. In the 1970s two psychologists, Steers and Rhodes, presented a rather comprehensive model that included the job situation, employee values and expectations, personal characteristics, job satisfaction, pressure to attend, attendance motivation, and ability to attend. This model denies the previous conception that absence, lateness, and turnover are all manifestations of the single phenomenon of withdrawal. The Steers-Rhodes model, and its descendants are quite interesting for their comprehensive view of the phenomenon, taking into account both the job situation and worker characteristics, but economics can bring a different perspective: There is an employment market in which employers offer job packages, including rewards and penalties associated with attendance and absenteeism, and workers sort themselves among the available jobs. Employers' offers are conditioned by technological and organizational requirements, and workers' choices are conditioned by, among other things, the demands of household production functions.

Part IV deals with applications of economics to some traditional topics in sociology: marriage, fertility, and religion. These are topics related to institutions that until recently economists preferred not to study: voluntary associations. Two chapters deal with marriage and family, and one chapter deals with religious institutions. In Chapter 8 Shoshana Grossbard-Shechtman examines the evolution of economic analyses of marriage pioneered by Gary Becker. The chapter then makes some comparisons between the economics of marriage and the economics of fertility, and between the economics and sociology of marriage. Particular differences between a sociological and economic approach to marriage are emphasized via the example of two theories of division of labor within marriage: the dependency model developed by sociologists and an economic model of WIM markets that is in the New Home Economics tradition. The chapter also looks at reactions of sociologists to economic models of marriage. Overall, the study of marriage remains overwhelmingly under the control of sociologists, and that is one reason why economic models—including models based on demand and supply—are not very commonly used in the study of marriage formation and decision-making within marriages. Another reason is that marriage is not considered to be an issue of major policy importance, and interdisciplinary cooperation tends to develop first on topics considered sufficiently important to justify the extra effort of looking into the work of scholars trained outside one's discipline.

The policy importance of fertility was at the origin of the Population Association of America (PAA), the professional organization that brings together demographers trained in various disciplines. In her interview with sociologist/demographer David Heer (Chapter 9), Grossbard-Shechtman inquires into the history of demography. According

to Heer, many of the demographers who founded that association in the early 1930s were sympathetic to eugenics, and were interested in studying fertility due to their preference for slower global population growth. Some other early demographers were interested in promoting birth control in the United States. To avoid potential conflict among demographers with different policy goals, it was agreed to minimize political discussions at PAA meetings. Given that scholars trained in different disciplines often tend to differ in their political preferences, this strategy helped promote understanding among scholars trained in various disciplines including economics, sociology, and biology. Heer has other interesting insights on the history of demography, including his analysis of the effect of World War II on the nature of demography as an academic discipline. Chapter 9 also deals with the relationship between economics and sociology. Heer studied at Harvard not long after Harvard started its sociology department. He studied with George Homans and Talcott Parsons, crucial contributors to sociology who both had extensive training in economics. The second part of this interview reveals very interesting and little known insights on the connection between the two social sciences.

Laurence Iannacone in Chapter 10 makes a compelling case for the application of economic theory to the study of religion. It is quite remarkable that economists had neglected the systematic study of religious behavior until the 1970s, for, as his chapter demonstrates, there was an enormous amount of low-lying fruit waiting to be gathered by a member of the economist tribe. Prior to this invasion, leading sociologists acknowledged that the field of religious studies was very descriptive and lacked unifying concepts around which focused debate could take place. The theory of utility maximization offers a conceptual framework that explains a wide variety of phenomena at the level of individual behavior, such as patterns of intermarriage and divorce, church attendance, conversion ages, and financial contributions to religious entities. The theory of market competition similarly provides many insights into the structure, doctrines, and proselytizing strategies of religious organizations. Not surprisingly, the economics invasion has drawn severe criticism from sociologists, and Iannacone considers their objections and finds them largely unconvincing. This chapter provides a beautiful illustration of a Becker-type economics invasion into a new territory, by the most prominent pioneer in the field.

Finally, Part V consists of two chapters addressing topics in the psychology of individual and collective behavior. Louis Levy-Garboua and Serge Blondel in Chapter 11 present a brief exposition of a theory of decision making that reconciles cognitive dissonance with rationality. In the proposed theory, the individual does not know her true preferences, but has temporary preferences that depend on the information perceived at each moment. As she thinks about different aspects of the choices, her temporary preferences change as her cognitions change. These cognitions each represent a random draw from a stable distribution. This conception of the decision-making process as sequential process draws on recent neuroscience research, which shows activity occurring over time at different points in the brain. Past decisions contain information about the distribution of cognitions, and thus can influence perceived information and current preferences. The authors use their model to show how Kahneman and Tversky's "certainty effect," which is an example of behavior inconsistent with a strong conception of rationality, can be reconciled with their concept of cognitive consistency, and they draw further implications for the behavior of a person displaying the certainty effect.

Their chapter offers a framework for integrating cognitive dissonance and a type of rationality that they call cognitive consistency.

In Chapter 12 Dipak Gupta examines the inability of standard economic theory to explain the phenomenon of collective action. As Mancur Olson argued back in 1965, under ordinary conditions rational, self-interested members of a large group will not act to achieve their common group interests. This argument was a startling revelation to the field of political science, which devoted substantial effort to examining it. By and large, Olson's argument has received a great deal of empirical confirmation, and it illuminates a wide variety of political behavior, but there remains much behavior that contradicts Olson's conclusion. Gupta scrutinizes the attempts of political scientists and economists to reconcile the phenomenon of collective action with their theories of individual behavior, and he finds that all these attempts come up short. Gupta then describes some research in social psychology on the formation of group identity, the role of authority figures, and framing effects. Drawing on this research, he proposes a generalized framework in which the individual maximizes utility by consuming optimal amounts of private goods and collective goods. This parsimonious framework readily admits some commonly observed characteristics of collective action, such as its volatility and its manipulability by political entrepreneurs. This chapter provides an excellent example of the advantages of incorporating social psychology into an expanded economics.

We hope that the juxtaposition of all these materials will be thought-provoking and helpful for readers wondering about the definition of economics in the twenty-first century. Some of our own thoughts on this issue can be found in this book's conclusion.

¹ Homans' theory is part of the rational choice tradition that later became popularized by James Coleman after he moved to the University of Chicago. Coleman was a student of Homans.

² Becker reports that his 1958 article was ignored at the time of publication (see interview with Becker in Swedberg 1990).

³ Other Nobel prize winners around this time applied economics to topics that had been treated by other disciplines: Theodore Schultz on education (Schultz 1963) and Robert Fogel on slavery (Fogel and Engerman 1974).

⁴ It has been argued, e.g. by Mark Blaug 2001, that the marginalist theories originated in France and Germany in the mid 19th Century. However, these theories did not gain influence until they were adopted and spread by English economists.

⁵ For an amusing description of this resistance, see the introduction to Thaler (1996).