

# SOCIAL STRUCTURE AND THE PHENOMENOLOGY OF ATTAINMENT

*Ronald L. Breiger*

Department of Sociology, Cornell University, Ithaca, New York 14853

**KEYWORDS:** careers, political economy, socioeconomic attainment, social networks,  
structural holes

---

## ABSTRACT

Reviews of recent research on the transmission of socioeconomic advantage have decried the increasing "narrowness" of the field. This chapter focuses on an alternative proposition, namely, that there is now a large enough body of work seeking fundamentally to reorient the field of social attainment studies that it is useful to identify commonalities as well as distinctive features. Conceptualization and operationalization of "social structure" in recent stratification research is the point of departure. Special attention is given to contemporary efforts to formulate a new phenomenology of attainment. In light of the many connections that are illuminated when these diverse strands are brought together, it is worthwhile to review them within the same scope and to discuss the prospect that they will form into a single specialty area within sociology.

## INTRODUCTION

During the past two decades several varieties of "structural" research and criticism of the status attainment paradigm have flourished within sociology. Reviews and appraisals of the seminal 1967 monograph of Blau & Duncan include those by Horan (1978), Bielby (1981), Haller (1982), Knottnerus (1987), Blau (1992), Nakao (1992), and Sewell & Hauser (1992). Beginning in the mid-1970s many investigators maintained that structures of positional inequality such as class, job authority in the workplace, industrial and labor

market sectors, and relative organizational size are both more important than and logically prior to individual attainment. By 1980 Baron & Bielby had applied the term "new structuralists" to these researchers, noting their general lack of explicit conceptualization of structure and the absence of a sustained focus on stratification mechanisms at the firm level. Reviews of subsequent work include Baron (1984, 1994), AB Sørensen (1986, 1991), Althauser (1989), Breiger (1990a), Rosenbaum (1990), Averitt (1992), Bielby (1992), and Abbott (1993).

Despite the increased realism in our understanding of individuals' achievements that has resulted from these lines of structural work, Burton & Grusky (1992:623) point out that the "new structuralist" critics of Blau & Duncan favor comparison of attainment parameters across subpopulations defined by industrial or organizational variables, whereas Blau & Duncan in fact carried out many comparisons, but of different kinds: across regions, nation-states, and historical time. Given its prominent emphasis on cohort comparisons and its somewhat less prominent attention to societal comparisons, status-attainment research cannot fairly be said to ignore changing structures entirely (AB Sørensen 1986:84). Nonetheless, many criticisms from the early 1980s of how "structure" should shape the study of individual attainment are still valid.

This chapter reviews and assesses ways in which "social structure" has been conceptualized and operationalized in recent stratification research. The centrality of this topic to sociological inquiry is reflected in the large number of recent reviews of overlapping problems: the changing structure of modern stratification and mobility (Erikson & Goldthorpe 1992a:1-27, Grusky 1994a, Kerckhoff 1995), class mobility and structure (Kurz & Müller 1987, Myles & Turegun 1994), sex differences in earnings (Marini 1989), women's labor force participation, attainment, and class distribution (Treas 1987, A Sørensen 1994), sex segregation in the workplace (Reskin 1993), internal labor markets (Althauser 1989), ethnicity and entrepreneurship (Aldrich & Waldinger 1990), ethnic inequality (Waters 1995), concepts and measurement of prestige (Wegener 1992), models and methods (see Chase 1991 on vacancy chains, Goodman & Clogg 1992 on mobility tables, and Petersen 1992, 1993 on longitudinal processes), implications of life course transitions for stratification (O'Rand & Kreckler 1990, Elder 1992, Moen & Wethington 1992, Entwisle & Alexander 1993), job mobility and career processes (Rosenfeld 1992), and the past 40 years of comparative research on intergenerational transmission of socioeconomic advantage (Ganzeboom et al 1991, Burton & Grusky 1992).

In light of the sustained treatment of many aspects of my topic provided by the above-cited reviews, I begin with a conclusion of Ganzeboom et al (1991: 278): that "with respect to problem development and theory formulation the field has become excessively narrow" (see also Rosenfeld 1992:57). My emphasis, therefore, is on contemporary analyses from several different perspec-

tives that have, in important respects, converged in efforts to replace the conventional study of attainment with inquiry centered around the formulation of a new phenomenology of attainment.

**CONTRASTS IN IMAGERY** Phenomenology may be defined as investigation of the ways in which common-sense knowledge about society feeds back, through social action, into the molding of society itself, including the fashioning of concepts for social analysis (Schütz 1967). Phenomenology concerns the degree of "fit" between the world and our concepts about the world. Sociology today is engaged in a period of fundamental phenomenological debate, controversy, and reorientation, the relevance of which for social attainment studies deserves both exposition and critique. Contemporary social analysts are struggling to articulate apt metaphors, appropriate images for the social and societal transformations of the present, and to incorporate these images within rigorous analytical schemes. Examples include: "constructed social organization" and the rise of corporate actors (Coleman 1990, 1991, 1993), modernity as a set of culturally theorized notions that help explain homogeneity of stratification regimes across nations and time (Meyer 1994), moebius-strip organizations (Sabel 1991), structural holes (Burt 1992a), recombinant property (Stark 1994), robust action (Padgett & Ansell 1993), the fuzzy logic of practical sense (Wacquant 1992), ambiguity vs ambage (White 1992a), the reflexive relation of social structure and interaction (Wilson 1991), relative prices and theories of social production functions and non-given alternatives (Lindenberg & Frey 1993), interdependent networks of work organizations (Namboodiri & Corwin 1993), and the network organization (Baker 1992). Indeed, on the issue of phenomenology, White (1992a:98) recommends that "rationality and identity are so much about perception and intention that we can turn for additional help to interpretive techniques such as discourse analysis." And Meyer (1994: 732) emphasizes that it is the cultures of modern societies that tend to make stratification theories important, rather than the theorists simply having "some sort of mysterious dominance" over the culture; carriers of theories include ordinary members as well as political elites and specialized intellectuals.

There is now a large enough body of work seeking fundamentally to reorient the field of social attainment studies that it is useful to search for commonalities as well as distinctive features. Each of the two major sections of this chapter is framed by a contrast in imagery.

## SYSTEMS OF ACTION AND STRUCTURES OF ATTAINMENT

An important juxtaposition of images underlies recent work of Coleman (1990, 1991): that of "structure" *in opposition to* "individual attainment." Coleman

(e.g. 1991:3–4) contrasts recent nationally representative studies of individual attainment with an earlier tradition of stratification research based on community probes such as Lynd & Lynd's 1929 study of Middletown. In the earlier studies, analysis of community structure was synthetic, qualitative, concerned with the subjective views of persons located at different points in the structure, and regarded persons within the system as acting purposively to make use of their resources. In sharp contrast, the more recent national studies of attainment take individual persons as the fundamental units; these studies are analytical and quantitative, provide no subjective views, and regard persons not as purposeful actors but as intersections of variables linked together in causal relations.

Movement from the first set of attributes to the second set captures for Coleman some aspects of the transformation of social research in general over the past half century and points to two sources of distress. One of these is "a loss of capacity to study a social system as a system, and a fallback to a much simpler task that is less central to the discipline: the task of characterizing the trajectories of individuals who are within the system." The other is "loss of the capacity to see actions as they are seen by the actors themselves, leaving our view limited to that of the outside observer" (Coleman 1991:4).

### *Rational Choice*

As an example of the new kinds of research specifically focused on social attainment that become possible within Coleman's rational choice approach, consider representative national data from the General Social Survey on certain characteristics of jobs (the wages and occupational prestige of the job held by each employed member of the sample) and certain attributes of workers (education, experience, marital status, gender, race). Assume that in the US labor market workers have an interest in only the above-mentioned attributes of a job, and that employers have an interest in the workers' attributes listed above. Assume that the labor market is in equilibrium, in that the value of a worker's resources in the labor market equals the value of the resources of that worker's job. Then, using survey data on existing wage differentials, it is possible to calculate the value of each of these attributes of workers and jobs, as Coleman (1991) does. These estimates appear no different in kind from the sort of information obtained in typical status attainment studies. However, it is also possible to use this framework to study the effect of a demographic change on the distribution of workers in jobs (as, for example, when new entrants are more highly educated than those who retire), or the effect of a change in the occupational structure on the distribution of workers in jobs (as, for example, when unionized craft jobs decline in the labor market relative to the growth of low-paying white collar clerical positions).

The heart of the data analysis procedure is the equilibrium assumption,

which allows the analyst to begin with the set of matches of workers to jobs that is actually found, and "to work backwards toward the set of preferences on both sides that could have resulted in this set of matches" on the basis of a matching algorithm that minimizes some function of the difference between the value of a worker's resources and the value of the resources of the job that the person holds (Coleman 1991:6; see also Coleman & Hao 1989, Burgess 1994, Hersch & Davis 1994). Thus, Coleman (1991:12) argues that, unlike the typical status attainment studies, the rational choice approach "opens out into an analysis of the labor market as a full-blown system of action in which the value of a given worker in the labor market does not depend only on the resources that that worker alone brings to the market, but upon the resources of other workers in the market, their interests in particular job resources, and the distribution of job resources" (see also Coleman 1990:713-17). A newly emergent area of research has been the mutual articulation of approaches that are usually termed "structuralist" and "rational choice." Coleman (e.g. 1990:300-21) has contributed to this research, and Scharpf (1993) is a useful collection of papers, especially the study of Pappi et al (1993). More general implications of rational choice assumptions for the study of attainment include investigation of the production of macrolevel social order from the local dynamics of competition among groups for resources and members (Hechter et al 1992) and studies of the effects of transaction costs and the structuring of property rights on market forces (Williamson 1991, Nee 1992) and on the financial organization of married life (Treas 1993).

### *Organizational Ecology*

In contrast to the position usually adopted by rational choice theorists that natural persons are the relevant "lower" or "ultimate" units of analysis, organizational ecology is an approach to the macrosociology of organizations that builds on general ecological and evolutionary models of change in populations and communities of organizations (Hannan & Freeman 1989, Hannan 1992). Organizational ecology is relevant for the study of attainment not only in providing linkages between firm-level labor practices, industry effects, mobility as turnover, and individual-level career dynamics (Brittain & Wholey 1990; see also Blossfeld 1986, Carroll & Mayer 1986), but also in establishing a framework for analyzing systems of organizations that provide the arenas within which individuals strive to get ahead. A key concept for the latter set of activities is that of "cross effects" (Hannan & Freeman 1989:220-24, Hannan & Carroll 1992:98-101), a network of coefficients measuring competition for resources among bounded organizations. Hannan and collaborators have dynamically modeled competition between American craft and industrial unions over a 150-year period (e.g. Hannan & Carroll 1992:99-115).

It seems likely (Hannan & Carroll 1992:202) that analyses of interrelations

among subpopulations within an organizational-ecology context, with a focus on competitive and legitimizing processes, will be relevant for images such as Abbott's (1988) of professions as a system of interdependent occupations contending for status and control, rather than as isolated social entities. Havenman & Cohen (1994) seek to reframe research on career mobility by explaining changes in opportunity structures by means of vital events of populations of organizations (foundings, dissolutions, mergers); their study of career dynamics in the California savings and loan industry demonstrates strong effects of industry structure on career processes. Furthermore, it is now possible to relate patterns of contention within social movements to the dynamics of organizational populations and to the differential impact of the economy on ethnic groups (Olzak 1992, Olzak et al 1994). A main task of contemporary research within organizational ecology is to develop "explicit links to the rapidly growing corpus of methods for analyzing data on social networks" (Hannan & Freeman 1989:340), including, presumably, the distinct theories of McPherson et al (1992) and of Burt (1992a:208-25) on social networks and organizational dynamics.

### *Work, Cultures, and Careers*

Kalleberg & Stark (1993) argue that, in both the United States and Hungary, individuals' career strategies and attainments are shaped by their nation's structures of employment relations. (Trends in occupational mobility in Hungary under socialism are analyzed in Wong & Hauser 1992. A comparison of firms in the United States and Hungary, based on case studies of two comparable firms, is the subject of Burawoy & Lukács 1985.) For example, the worth of capitalist managers is measured by profits earned, whereas the value of socialist directors is assessed by the size of their budget (the magnitude of resources under the redistributive authority of the manager). Analysis of comparative data from the 1989 International Social Survey Program indicates that Hungarians place greater importance on economic incentives and on having more "leisure" time from their main jobs, time which they can then presumably use to maximize their earnings in second-economy jobs. Workers in the United States are more concerned with promotion and advancement opportunities. Careers in internal labor markets in capitalist societies feature bureaucratized job categories and routinized promotions, while workers' careers in bureaucratic socialism are structured far less along the lines of routine promotion and more around "the circles of affiliated networks" (Kalleberg & Stark 1993:185). Implications for career strategies may also be found in the comparative study of Lincoln & Kalleberg (1990) of factories and workers in a region of the United States and a region of Japan, though the emphasis in the earlier study is on work attitudes and worker commitment to firms.

### *The Political Economy Thesis*

Within the set of contributions of North American social scientists formulated from the 1960s through the 1980s that Erikson & Goldthorpe (1992a:3-9, 366-69) discuss under the general rubric of "the liberal theory of industrialism," Treiman's (1970) is particularly prominent. His thesis is that the criteria for status attainment tend to shift from ascribed to achieved factors as a society becomes more industrialized. Hout (1989:7-8) reviews the general lack of empirical support for this thesis (see also Fukumoto & Grusky 1993).

In a major reconceptualization and new challenge mounted at the "industrialization-attainment thesis," Lin & Bian (1991) argue that political economy determines the stratification system of any society. In particular, segmentation of economic and labor structures is not unique to societies with market economies. For China and Eastern Europe, Lin & Bian review evidence of lessening effects of parental status on attainments, while data from industrialized nations (e.g. Blau & Duncan 1967, Treiman & Yip 1989) show that the direct effects of parental status on respondents' job status are at least as strong as those found in China, Hungary, and Poland, in contradiction to the anticipation of the industrialization-attainment thesis (Lin & Bian 1991:660).

Lin & Bian argue that reduction of the parental status effects in China is a consequence of political economy and state policies rather than an outcome of industrialization. In analysis of a representative urban sample from Tianjin, Lin & Bian find that entrance into core sectors (state agencies and enterprises), rather than the specific job itself, constitutes the primary goal of status attainment. They formulate and test models of status attainment that include work-unit sector as well as occupation, in order to examine the relative contributions of these status criteria and to assess the influence of ascribed and achieved characteristics (cf Lin & Xie 1988). They argue that segmentation phenomena, which take a variety of forms across a wide range of societies, are more than macrostructural features; they provide important sources of identification for the individual workers striving for attainment. Within this basic context of cross-societal variation, Lin & Bian suspect that two features may nonetheless be present in all societies: gender differences (for which the industrialization thesis has no explicit provision) and the use of social networks and social resources (see also Lin 1990). Personal choices and relations in China seem remarkably similar to those in the United States, quite possibly because particularism governs personal relations regardless of cultural, political, or economic differences (Blau et al 1991).

In societies with market economies and capitalist states, the attributes of an individual such as detailed occupation title and income will no doubt remain significant in understanding status attainment. "It, nevertheless, becomes critical that segmentation identification, meaningfully constructed according to

the political economy associated with each society, be adopted as a status variable" in order properly to assess the relative effects across societies of ascribed versus achieved characteristics in the status attainment process (Lin & Bian 1991:683).

**POLITICAL ECONOMY AT THE STATE LEVEL** Recent years have seen an expansion of research on the rise and fall of political alliances that contend over state policies that affect socioeconomic attainment (e.g. Skocpol 1992, 1993). "New institutional" analysts of organizations accord sustained attention to the shaping of organizations and the workplace by means of state regulation (for example, Sutton et al 1994). Research of Lin & Bian expands the repertoire of "new structuralist" approaches by opening them to consideration of political economy at the state level. Related work in the area of political economy, state policies, and attainment includes Nee's market transition theory and research in rural China (1989, 1991), establishing that the shift from hierarchies to markets in a socialist economy involves changes in the determinants of socioeconomic attainment and therefore in sources of power and privilege (Nee 1989:679). Peng (1992) compares public and private industrial sectors with respect to wage determination in both rural and urban China. Róna-Tas (1994) concludes from analysis of panel survey data that during the transition from socialism in Hungary ex-communist cadres maintained their advantageous position, in part by converting past political power into economic advantage. Pong (1993) examines the effects of Malaysia's preferential educational policies on secondary school attainment for the country's three main ethnic groups. Dronkers (1993) examines two cohorts of Dutch male pupils in an investigation of the consequences of an educational reform policy in the Netherlands for the effect of parental occupation on attained education. Raftery & Hout (1993) study consequences of a reform in Irish education (the ending of tuition charges for secondary education in 1967) for equality of educational opportunity, focusing on imputedly rational decisions of individual students and their families as providing an explanation for persisting aggregate inequality.

There is a contemporary resurgence of research on state structures and patterns of mobility. In contrast to usual models of state formation, which assume that the main pressures for state building come from the center, Bearman's (1993) study of one English county from 1550 to 1640 documents how breakdown of local elite kinship networks provided mechanisms for the formation of new relations and rhetorics consistent with the creation of a central state and increased court control over the careers of local county elites. DiPrete (1993) demonstrates the illumination of mobility opportunities that results from taking rigorous account of organizational, industry, macroeconomic, and worker effects. Western (1994) incorporates national differences in public policy and differential position in the world economy into analysis of intergenera-



tional class mobility in five nations. The extremely influential, 12-nation study of Erikson & Goldthorpe (1992a) devotes considerable attention to possible effects of state policies on patterns of mobility. Hout & Hauser (1992:262) provide alternative specification and analysis, finding that "the patterns of structural mobility in Europe differ more by occupation than by nation." In response, Erikson & Goldthorpe (1992b:295-97) endeavor to maintain a contrast between two images, the "mobility" and "achievement" points of view, the former connoting their own emphasis on models of the class structuring of national-level mobility patterns and the latter—which they label "the American Dream"—evoking the image of a hierarchy of status attainment as applied in models of the mobility table. As to the phenomenology of attainment, "we think that debate in the field of stratification and mobility research would be ... made more productive if those pursuing the 'American Dream' were to recognize that ... it is not in itself a fault for other investigators to have ... different conceptions of what macro-sociology can and should aim to achieve" (Erikson & Goldthorpe 1992b:298).

## INSTITUTIONS AND ATTAINMENTS OF PRACTICAL ACTORS

DiMaggio (1992) formulates a contrast in imagery between "rational-actor" and "practical-actor" models (compare Powell & DiMaggio 1991:1-38). The latter models, which bear an affinity to the framework of action that may be said to underlie the network blockmodels of White et al (1976; Breiger 1991), derive from a mix of cognitive psychology, ethnomethodology, social constructivism, and a concept of practical reason akin to Bourdieu's (DiMaggio 1992:121-22). DiMaggio (p. 138) proposes to treat these contrasting images of rational and practical action "not as analytic alternatives between which researchers may choose, but as disjunctive aspects of actors' social and cognitive environments." DiMaggio calls for increased attention to the interplay of practical strategies with institutional and cultural embeddings of relational structures. Recent efforts in this direction are reviewed here with reference to their implications for social attainment.

### *Economic Institutions as Social Constructions*

Renewed interest in economic sociology has been a major development within the field during the past decade (Friedland & Robertson 1990, Zukin & DiMaggio 1990). Granovetter (1992a) discerns two trends that have strongly affected the discipline of economics during the past two decades: a return to dominance of the pure neoclassical tradition, and an attempt by economists to broaden substantially the domains of applicability of their subject matter. ["Economics really does constitute the universal grammar of social science,"

proclaims Hirshleifer (1985:53), quoted by Granovetter (1992a:4).] Much recent work generated by economists is in fact of direct relevance to sociologists interested in careers, industrial incentives, the attainment of executives, and—more generally—theory and research on the interface of the supply and demand “sides” of labor markets (see, e.g. Gibbons & Murphy 1990, 1992, Montgomery 1994, Farkas et al 1994, Hartog & van Ophem 1994).

Granovetter (e.g. 1985, 1990, 1992a,b) identifies the emergence of a “New Economic Sociology” that focuses on the “social construction” (Berger & Luckmann 1966) of core economic institutions. Thus, economic actions are socially situated and embedded in ongoing networks of personal relations rather than carried out by atomized actors, and the pursuit of economic goals is usually accompanied by non-economic ones such as sociability, approval, status, and power (Granovetter 1992a:4).

**IMPLICATIONS FOR ATTAINMENT STUDIES** The implications for the study of attainment of this emphasis on the social construction of economic institutions are the following. First, research on at least some forms of attainment needs to focus on the embedding of economic activity in networks of personal, organizational, and institutional relations. Analysts as diverse as Coleman (1990:304) and Bourdieu (Bourdieu & Wacquant 1992:119) put forward virtually identical definitions of “social capital” as denoting the resources for social attainment that individuals acquire through networks of mutual acquaintance, obligation, and information channeling. Relevant here is the considerable body of cross-national research on the impact of social networks and the transmission of job information on income and occupational attainment (reviewed in Coleman 1990:302, Lin 1990:250–52, Burt 1992b:58–61) and on the organizational side of job searches (Marsden & Campbell 1990). This research illuminates concrete mechanisms by which individuals are linked to larger structures through organizations and labor markets.

Second, much new research on the social construction of economic institutions focuses on networks of relations among governmental and economic actors at the level of entire economies. Examples include Gerlach’s (1992b) blockmodel network analysis of Japanese firms (see also Gerlach 1992a, Gerlach & Lincoln 1992); elaboration by several researchers (Burawoy & Krotov 1992; Stark 1989, 1992a, 1992b; Bruszt & Stark 1991) of how routine social practices, existing organizational forms, and network ties are transformed into assets and resources in post-communist East European societies; and Biggart & Hamilton’s (1992) critique of the relevance of firm-based theory for study of East Asian economies. Rather than focusing societal studies of economic action on “the individual’s aspiration for entrepreneurship,” Stark (1992a:303) urges a reorientation that would recognize that “entrepreneurs are produced

and reproduced in networks of affiliation; these networks are the proper object of study."

Third, "the rise of market culture" (Reddy 1984) is a promising arena in which to study the interaction of official and informal encoding of attainment processes. [Reddy's study of eighteenth-century French textile mills, as Granovetter (1992b:51) points out, analyzed the disjunction according to which official record-keeping was based on an assumption of market principles, despite the actual continued influence of traditional non-economic motives on both workers and owners.] The constructionist project mandates a concern with how economic forms including particular organizations, markets, and professions are constituted and carry out their affairs. In this regard Warner & Molotch (1993) analyze how explanations offered by the financial press of the stock market crash of October 1987 rely on socially embedded conceptions of markets, rather than on prevailing doctrines of economic or financial theory. In a sense developed by the authors, media coverage constitutes the market through its accounts of it. Recent work on talk and institutions is collected in Boden & Zimmerman 1991:93-192; see also Molotch & Boden 1985. Studies such as these making use of conversation analysis, and others from a seemingly quite different tradition that focus on the "theorization" of institutional practices (Strang & Meyer 1993) on the part of organizational members and publics, seem at present to be illogically remote from one another.

A fourth implication for attainment studies of this emphasis on social construction is to open up to conceptualization and inquiry the topic of the fairness and legitimacy of attained income as these are influenced by the embedding of economic actors within interpersonal networks. Embedding of illegal economic action in on-going social networks is the problem taken up in Baker & Faulkner (1993). Their study of three well-known price-fixing conspiracies in the heavy electrical equipment industry, on the basis of reconstructions of the conspirators' communications networks from archival data, suggests that the structure of illegal networks is driven primarily by the need to maximize concealment, rather than the need to maximize efficiency (cf Wiegand 1994 on the role of ethnic trading networks in "black markets"). In general, following from ideas of Doeringer & Piore and other writers on internal labor markets (see Gartrell 1987:53), wage comparisons and justice evaluations among workers in the same unit exhibit many interdependencies such that a wage change in one position may create ripple effects throughout the system. Gartrell (1985) analyzes a network of sentiments of collective justice in his study of workers in a municipal public works department. Gartrell's "relational" model complements non-network approaches, including Jasso's (1980) theory of justice and related research (Jencks et al 1988, Jencks 1990) on how people assess their own jobs.

### *Strategic Action*

An important constellation of problems that the new phenomenologists are attempting to chart arises at the intersection of strategy, structure, and attainment.

**MANAGING ATTAINMENT STRUCTURES** Individuals attempt to manipulate structures and to increase their resources given their structural locations. Burt (1992a:186) emphasizes that the individual as "player" is at once a physical and legal entity and an amalgam of social structural units; Burt, as well as Wilson (1991), postulates that the connection between player and structure is more like a symmetric duality than a series of asymmetric levels. In sharp contrast to the status attainment literature, in which family and education background variables account for a proportion of variation in attainment outcomes (Knottnerus 1987), Burt postulates that higher income returns to education are generated by structural position. Because the positions that players occupy are often correlated with attributes (age, sex, race, and so on), the correlation between attributes and position in social structure creates a correlation between attributes and those outcomes that Burt believes to be generated by the structure. The correlation between outcomes and player attributes is spurious. "It would disappear if the social structural condition responsible for the outcome were held constant" (Burt 1992a:186; on networks and attributes, see also Padgett & Ansell 1993: 1285–86, n. 38). In White's (1992b:95) view, "Much of the literature on problems of management can be reframed as networking puzzles of agency and thereby boiled down and made more tangible."

The paradox of agency and structure (White 1993:115) is that agency, which is conceived and reported as a matter of coupling—for example, connecting actresses with theatre producers—in fact easily becomes a primary source of "decoupling"—as in separating actresses from the shaping of a play as artwork. Separation of the business and artistic domains in the Hollywood film industry arose as filmmakers adapted to the early blockbusters (Baker & Faulkner 1991). White (1992a:257) argues that general theories in the social sciences have "gone at the study of stratification wrongly." Rather than seeing "classes cleanly differentiated by relations to the means of production," or "strata rationally arrayed according to worth of their occupations," White looks in the opposite direction. In White's reading of Eccles & Crane's (1988) study of the agency relationship between investment bankers and issuers of equity, the key lies not in institutional sectors but in structural equivalence as a principle guiding new alliances resulting from erratic searches for takeover targets and cutting across industry and market boundaries. White emphasizes the manipulation or disjunction of structures of careers as a managerial prerogative. Thus, Glasnost in the former USSR entailed disrupting the expectations of routine career advancement held by the relatively small number of social engineers who had been the agents of centralized control (White 1992a:259; and see

White 1993:75-77 on the emergence in nineteenth-century France of the "dealer-critic" system).

These and similar examples of "getting action" by reaching "through" existing social structures illustrate what White (p. 257) takes to be "the central point about inequality," which is that inequality is the by-product of attempts to get action and gain control. The vast range and large number of ways of "getting action" catalogued by White (1992a) reflect the fact that his is in the first instance a work whose own purpose is to offer a new phenomenology to the field of attainment studies and to social science more generally. White's thesis on getting action seems the converse of that of Hechter et al (1992) to the effect that that global order results (in part) from freedom of association and from the deviance generated at the margins of society.

**GETTING AHEAD THROUGH STRUCTURAL HOLES** In what appears to be a remarkable convergence, both Burt (1992a) and Padgett & Ansell (1993) develop the analysis of a particular family of social structures—termed "structural holes" or "network holes"—and of the implications of these structures for attainment, though neither cites the other (see also Burt 1992b, Padgett 1990). Burt (1992a:25-26) grounds the history of the concept in White's models of vacancy chains; in the blockmodel analysis of White, Boorman, & Breiger, for whom there is an essential asymmetry between ties that are present and the "holes" in a network; and in Granovetter's thesis on "weak ties."

For Burt, by dint of who is connected to whom, holes exist in "the social structure of the competitive arena." These structural holes become "entrepreneurial opportunities for information access, timing, referrals, and control" (Burt 1992a:1-2, 1992b). Players whose network locations are rich in structural holes are said to have high structural autonomy and are postulated to enjoy high rates of return on investments (such as human capital investments for individual persons, or capital investments for firms). The basic implication, for individual players as for managers, is to optimize structures with respect to nonredundant ties. A player's "optimal" position has ties to diverse clumps of the structure, which are themselves at best only weakly tied to one another and which thus benefit only additively rather than multiplicatively from efficient exposure to diverse sources of information (Burt 1992b:67-72). Padgett & Ansell come to a similar concept through their study of political parties and elite networks in fifteenth-century Florence. The Medici party was "an extraordinarily centralized, and simple, 'star' or 'spoke' network system, with very few relations among Medici followers: the party consisted almost entirely of direct ties to the Medici family." An important consequence was that Medici partisans were connected to other partisans almost solely through the Medici themselves, and to the rest of the oligarchic elite only through the intermediation of this family (Padgett & Ansell 1993:1278). Padgett & Ansell are

particularly attentive to a multiplex version of the network holes argument, i.e. a version in which different clumps of the structure are accessed through ties of different qualities (marriage, personal loans, patronage, kinship). Padgett & Ansell (1993:1280) determine that the Medici segregated their ties to their followers in order to maintain control over them.

Within a contemporary context, implications of structural holes for research on attainment are spelled out in Burt's (1992a:115-180) study of senior managers in a large high-technology firm (see also Burt & Ronchi 1990, Burt & Talmud 1993). The 284 respondents were asked about their contacts in a number of areas inside and outside the firm, and to indicate the relative strength of relationship ("don't mind working with the person," etc). Constraint, the inverse of "structural holes," is measured for a given manager by the extent to which his or her contacts are especially close and have relations exclusively with each other in the manager's network (Burt 1992a:126). Having a network rich in structural holes is associated statistically with managers being promoted sooner than expected on the basis of their personal attributes (sex, rank, seniority) and those of their positions within the firm (plant location, division). Hole effects are found to be most evident for managers operating on a "social frontier" such as field managers (who mediate external relations and those in the firm; p. 130). In the case of the Medici, attainment consisted not of maximizing attributes (Padgett & Ansell 1993:1268-74) but of survival and political control "produced by means of network disjunctures within the elite, which the Medici alone spanned" (p. 1259).

Opportunity-oriented networks composed of many structural holes are not always productive of career advance. For example, Burt (1992a:164-66) found that women and entry-level men who were promoted early are those who have a hierarchical network around a strategic partner. Burt (1992a:82-114) also extends the argument to an analysis of 77 American product markets over a 20-year period, finding that the ratio of net income to total sales increased with the structural autonomy of producers (measured by indicators based on concentration ratios). In a related study, Han (1992) found that structural autonomy is of critical importance with respect to the turnover and stability of firms within US product markets.

**RATIONALITY AS THE TERMINATION OF STRATEGY** Rationality and appropriate strategy are not always synonyms. Stark (1992a:301) refers to the notion that more-rational institutions can be implemented by conscious design as the "rationalist fallacy." Game theory, an important motor for rational choice analysis, is described by Leifer (1991:v) as "a model for games that do not have to be played." Leifer develops a theory of skill from his study of actual chess playing. Chess tournaments result in an extreme attainment hierarchy. In good chess, the better the game the more likely a draw. Skill at good chess

is more than the ability to make rational choices that exploit positional imbalance; it is also the ability to hold off commitment to a farsighted and elaborate plan of action, while engaging in the poking and tweaking that allow observation of one's opponent's skill and, ultimately, force one's competitor to lock into a rational design (Leifer 1991:67-91). In the gloss of White (1992a:85), "clear goals are antithetical to establishing identities."

Leifer (1988:865) argues that the status attainment literature reveals powerful institutional screening and sorting mechanisms but provides no guidance in face-to-face competition with others, which is most intense "where screening and sorting have already run their course." Leifer's emphasis on the element of skill in generating hierarchical roles seems to this reviewer to be highly compatible with Bourdieu's analysis (1984) of "the practical mastery of classification," which "in no way implies the capacity to situate oneself explicitly ... (as so many surveys on social class ask people to do)," but which consists rather of "the competence presupposed by the art of behaving *comme il faut* with persons and things that have and give 'class' ...," as illustrated, for example, by the operation of condescension strategies such as, in French, use of the familiar *tu* form of address (Bourdieu 1984:472). Padgett & Ansell (1993:1307-10) adopt Leifer's (1988, 1991) concept of "local" or "robust" action in their portrayal of the man at the pinnacle of power in Renaissance Florence, Cosimo de' Medici, as located "behind a shroud of multiple identities," a sphinx-like figure whose legitimacy was "above the self-interested fray" and who was able to gain autonomy by bridging the holes across multiple networks of finance, patronage, and kinship.

**THE SOCIAL STRUCTURE OF FAILURE** Failure is more than the obverse side of the coin of attainment. By implication, mainstream analyses of attainment consider failure to require no special treatment. The new phenomenologists, in contrast, have interesting lines of analysis on the social structure of failure. The most intricately elaborated view is implicated in Bourdieu's concept of the habitus, the "strategy-generating principle" that confronts both the objective reality of an individual's location within a stratification system and the subjective "dispositions" that integrate one's past experience (Bourdieu 1977: 72, 95; Wacquant 1992:18). An insightful example is Bourdieu's (1988:210-225) analysis of obituary notices of graduates of the elite French educational system. As their lives are reviewed in their official obituaries, those who became mere secondary school teachers "rejected the university as much as it excluded them. Any successful socialization tends to persuade agents to collaborate with their own destiny" (Bourdieu 1988:216). Burt's formulation of "the commit hypothesis" (1992a:197-208) is more general, positing that players with little structural autonomy conform more closely to the behavior characteristic of their location in the social structure. Burt demonstrates that

entire markets may be characterized with respect to their autonomy, and that more autonomous markets have a "strong" position in that they can persist even despite large deviations from the market's schedule. Han (1995) analyzes the existence of a more variegated system of freedom from imitation at both the top and the bottom of the hierarchy of firms with respect to their choices of corporate auditors. Finally, in what is in effect another instance of the "commit hypothesis," Gustin (1973) proposes that publication of scientific research is a charismatic activity connecting the producer with a transcendent realm of nature, and that the majority of scientists, who publish an average of only one paper or a fraction thereof per individual lifetime, are led by their low attainment to be bound to the core institution of science. Social analysts such as these, all of whom are concerned with the question of how social structure is generated or maintained by processes of low attainment, seem in little contact with one another's ideas.

## CONCLUSION

Bringing social structure more closely to bear on the study of individuals' achievements and status attainment continues to be a principal concern of sociology. The advances reviewed in this chapter provide recent contributions and additions that expand our repertoire.

Is there a revolution brewing in the area of research on achievement and social structure? Perhaps so, although with respect to representativeness of data, rigor of research design, and ease by which new analytical frameworks might be adopted by others, there is not yet a counterpart to Blau & Duncan's 1967 classic. The most elaborated empirical applications have been those of Burt (1992a) and Padgett & Ansell (1993). Burt's sustained analyses of data on corporate managers and markets provides the clearest bridge (as it were) between the traditional concerns of status attainment researchers and the "structural holes" phenomenology, and already other innovative researchers are seeking to elaborate his findings that, for example, managers with ties to others within diverse clumps of an organization have earlier promotion prospects. Padgett & Ansell's combination of network, historical, organizational, phenomenological, and quantitative analysis in application to data of unparalleled richness on Renaissance Florence, which historians have amassed, provides an exemplar of a genuinely novel form of sociological inquiry capable of defining a new agenda for research on attainment. Though it is hard to imagine any straightforward emulation of Padgett & Ansell's innovative study of the rise of a party system, productive dialogue on questions of historical sociology and the proper relations among structure, culture, and agency has already begun (Emirbayer & Goodwin 1994; cf DiMaggio 1992).

The ease with which the usual boundaries patrolled by vigilant sociolo-



gists—rational choice, organizational ecology, network and structural, and discourse and conversational analysis—have been crossed in this review of new developments suggests that, if indeed there is a revolution under way, it will have little to do with flags of commitment such as these, and much more to do with the new phenomenology of actual societies, perhaps especially those in Eastern Europe in which new networks of recombinant property (Stark 1994) are now being formulated, and with specific research contributions and modeling techniques that are being worked out. The use of matching algorithms (Coleman 1991), queuing models (Boylan 1993), and methods for aggregating social categories (Breiger 1994) may provide some formal guidance to this emerging stream of research that will depend for evaluation of its performance more on the substantive insights gained than on technical acuity, and both of White's recent books (1992a, 1993) are filled with suggestive leads about new models and analytical strategies. It is too early to assess the potential of these developments to produce a sturdy reorientation. However, the oft-proclaimed narrowness of contemporary stratification research has been clearly and significantly challenged.

#### ACKNOWLEDGMENTS

Helpful comments from the editor and from Shin-Kap Han, Pamela Jull, Philippa Pattison, David Stark, and Robin M Williams, Jr, are gratefully acknowledged. Part of the writing of this chapter took place while I was a research associate at the Survey Research Center, University of California-Berkeley. I am appreciative of support from the SRC and from the College of Arts and Sciences, Cornell University.

Any *Annual Review* chapter, as well as any article cited in an *Annual Review* chapter, may be purchased from the Annual Reviews Preprints and Reprints service.  
1-800-347-8007; 415-259-5017; email: arpr@class.org

#### Literature Cited

- Abbott A. 1988. *The System of Professions: An Essay on the Expert Division of Labor*. Chicago: Univ. Chicago Press
- Abbott A. 1993. The sociology of work and occupations. *Annu. Rev. Sociol.* 19:187-209
- Aldrich HE, Waldinger R. 1990. Ethnicity and entrepreneurship. *Annu. Rev. Sociol.* 16: 111-35
- Althauser RP. 1989. Internal labor markets. *Annu. Rev. Sociol.* 15:143-61
- Averitt RT. 1992. The new structuralism. *Contemp. Sociol.* 21:650-53
- Baker WE. 1992. The network organization in theory and practice. See Nohria & Eccles 1992, pp. 397-429
- Baker WE, Faulkner RR. 1991. Role as resource in the Hollywood film industry. *Am. J. Sociol.* 97:279-309
- Baker WE, Faulkner RR. 1993. The social organization of conspiracy: illegal networks in the heavy electrical equipment industry. *Am. Sociol. Rev.* 58:837-60
- Baron JN. 1984. Organizational perspectives on stratification. *Annu. Rev. Sociol.* 10:37-69
- Baron JN. 1994. Reflections on recent generations of mobility research. See Grusky 1994b, pp. 384-94
- Baron JN, Bielby WT. 1980. Bringing the firms back in: stratification, segmentation, and the

- organization of work. *Am. Sociol. Rev.* 45: 737-65
- Bearman PS. 1993. *Relations into Rhetorics: Local Elite Social Structure in Norfolk, England, 1540-1640*. New Brunswick, NJ: Rutgers Univ. Press
- Berger PL, Luckmann T. 1966. *The Social Construction of Reality*. New York: Doubleday
- Bielby WT. 1981. Models of status attainment. *Res. Soc. Strat. Mobil.* 1:3-26
- Bielby WT. 1992. Organizations, stratification, and *The American Occupational Structure*. *Contemp. Sociol.* 21:647-50
- Biggart NW, Hamilton GG. 1992. On the limits of a firm-based theory to explain business networks: the western bias of neoclassical economics. See Nohria & Eccles 1992, pp. 471-90
- Blau PM. 1992. *The American Occupational Structure: Reflections after Twenty-five Years*. *Contemp. Sociol.* 21:596-98
- Blau PM, Duncan OD. 1967. *The American Occupational Structure*. New York: Wiley
- Blau PM, Ruan D, Ardel M. 1991. Interpersonal choice and networks in China. *Soc. Forces* 69:1037-62
- Blossfeld H-F. 1986. Career opportunities in the Federal Republic of Germany: a dynamic approach to the study of life-course, cohort, and period effects. *Eur. Sociol. Rev.* 2:208-25
- Boden D, Zimmerman DH, eds. 1991. *Talk and Social Structure: Studies in Ethnomethodology and Conversation Analysis*. Berkeley: Univ. Calif. Press
- Bourdieu P. 1977. *Outline of a Theory of Practice*. Transl. R Nice. Cambridge: Cambridge Univ. Press
- Bourdieu P. 1984. *Distinction: A Social Critique of the Judgement of Taste*. Transl. R Nice. Cambridge, MA: Harvard Univ. Press
- Bourdieu P. 1988. *Homo Academicus*. Transl. P Collier. Stanford, CA: Stanford Univ. Press
- Bourdieu P, Wacquant LJD. 1992. *An Invitation to Reflexive Sociology*. Chicago: Univ. Chicago Press
- Boylan RD. 1993. The effect of the number of diplomas on their value. *Sociol. Educ.* 66: 206-21
- Breiger RL. 1990a. Introduction: on the structural analysis of social mobility. See Breiger 1990b, pp. 1-23
- Breiger RL, ed. 1990b. *Social Mobility and Social Structure*. Cambridge: Cambridge Univ. Press
- Breiger RL. 1991. *Explorations in Structural Analysis: Dual and Multiple Networks of Social Interaction*. New York: Garland
- Breiger RL. 1994. *Dual aggregation on the basis of relational homogeneity*. Presented at Int. Sunbelt Soc. Networks Conf., 14th, New Orleans
- Brittain JW, Wholey DR. 1990. Structure as an environmental property: industry demographics and labor market practices. See Breiger 1990b, pp. 155-82
- Bruszt L, Stark D. 1991. Remaking the political field in Hungary: from the politics of confrontation to the politics of competition. *J. Int. Aff.* 45:201-45
- Burawoy M, Krotov P. 1992. The Soviet transition from socialism to capitalism: worker control and economic bargaining in the wood industry. *Am. Sociol. Rev.* 57:16-38
- Burawoy M, Lukács J. 1985. Mythologies of work: a comparison of firms in state socialism and advanced capitalism. *Am. Sociol. Rev.* 50:723-37
- Burgess SM. 1994. Matching models and labor market flows. *Eur. Econ. Rev.* 38:809-16
- Burt RS. 1992a. *Structural Holes: The Social Structure of Competition*. Cambridge, MA: Harvard Univ. Press
- Burt RS. 1992b. The social structure of competition. See Nohria & Eccles 1992, pp. 57-91
- Burt RS, Ronchi D. 1990. Contested control in a large manufacturing plant. In *Social Networks through Time*, ed. J Weesie, H Flap, pp. 121-57. Utrecht, Netherlands: ISOR, Univ. Utrecht
- Burt RS, Talmud I. 1993. Market niche. *Social Networks* 15:33-49
- Burton MD, Grusky DB. 1992. A quantitative history of comparative stratification research. *Contemp. Sociol.* 21:623-31
- Carroll GR, Mayer KU. 1986. Job shift patterns in the Federal Republic of Germany: the effects of class, industrial sector, and organizational size. *Am. Sociol. Rev.* 51: 323-47
- Chase ID. 1991. Vacancy chains. *Annu. Rev. Sociol.* 17:133-54
- Coleman JS. 1990. *Foundations of Social Theory*. Cambridge, MA: Harvard Univ. Press
- Coleman JS. 1991. Matching processes in the labor market. *Acta Sociol.* 34:3-12
- Coleman JS. 1993. The rational reconstruction of society: 1992 presidential address. *Am. Sociol. Rev.* 58:1-15
- Coleman JS, Hao L. 1989. Linear systems analysis: macrolevel analysis with microlevel data. *Sociol. Methodol.* 20:395-422
- DiMaggio P. 1992. Nadel's paradox revisited: relational and cultural aspects of organizational structure. See Nohria & Eccles 1992, pp. 118-42
- DiPrete TA. 1993. Industrial restructuring and the mobility response of American workers in the 1980s. *Am. Sociol. Rev.* 58:74-96
- Dronkers J. 1993. Educational reform in the Netherlands: Did it change the impact of parental occupation and education? *Sociol. Educ.* 66:262-77
- Eccles RG, Crane DB. 1988. *Doing Deals: In-*

- vestment Banks at Work. Boston: Harvard Bus. School Press
- Elder GH Jr. 1992. Models of the life course. *Contemp. Sociol.* 21:632-35
- Emirbayer M, Goodwin J. 1994. Network analysis, culture, and the problem of agency. *Am. J. Sociol.* 99:1411-54
- Entwisle DR, Alexander KL. 1993. Entry into school: the beginning school transition and educational stratification in the United States. *Annu. Rev. Sociol.* 19:401-23
- Erikson R, Goldthorpe JH. 1992a. *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Clarendon
- Erikson R, Goldthorpe JH. 1992b. The CASMIN project and the American Dream. *Eur. Sociol. Rev.* 8:283-305
- Farkas G, Lang K, England P. 1994. Economic sociology and social economics: Where are we now? In *Industries, Firms, and Jobs: Sociological and Economic Approaches*, ed. G Farkas, P England, pp. xv-xxxiii. New York: Aldine de Gruyter
- Friedland R, Robertson AF, eds. 1990. *Beyond the Marketplace: Rethinking Economy and Society*. New York: Aldine de Gruyter
- Fukumoto IK, Grusky DB. 1993. Social mobility and class structure in early-industrial France. In *Building European Society: Occupational Change and Social Mobility in Europe, 1840-1940*, ed. A Miles, D Vincent, pp. 40-67. Manchester: Manchester Univ. Press
- Ganzeboom HBG, Treiman DJ, Ultee WC. 1991. Comparative intergenerational stratification research: three generations and beyond. *Annu. Rev. Sociol.* 17:277-302
- Gartrell CD. 1985. Relational and distributional models of collective justice sentiments. *Soc. Forces* 64:64-83
- Gartrell CD. 1987. Network approaches to social evaluation. *Annu. Rev. Sociol.* 13:49-66
- Gerlach ML. 1992a. *Alliance Capitalism: The Social Organization of Japanese Business*. Berkeley: Univ. Calif. Press
- Gerlach ML. 1992b. The Japanese corporate network: A blockmodel analysis. *Admin. Sci. Q.* 37:105-39
- Gerlach ML, Lincoln JR. 1992. The organization of business networks in the United States and Japan. See Nohria & Eccles 1992, pp. 491-520
- Gibbons R, Murphy KJ. 1990. Relative performance evaluation for chief executive officers. (Do compensation policies matter?) *Indust. Labor Relat. Rev.* 43:S30-51
- Gibbons R, Murphy KJ. 1992. Optimal incentive contracts in the presence of career concerns: theory and evidence. *J. Polit. Econ.* 100:468-505
- Goodman LA, Clogg CC. 1992. New methods for the analysis of occupational mobility tables and other kinds of cross-classifications. *Contemp. Sociol.* 21:609-22
- Granovetter M. 1985. Economic action and social structure: the problem of embeddedness. *Am. J. Sociol.* 91:481-510
- Granovetter M. 1990. The old and the new economic sociology: a history and an agenda. See Friedland & Robertson 1990, pp. 89-112
- Granovetter M. 1992a. Economic institutions as social constructions: a framework for analysis. *Acta Sociol.* 35:3-11
- Granovetter M. 1992b. Problems of explanation in economic sociology. See Nohria & Eccles 1992, pp. 25-56
- Grusky DB. 1994a. The contours of social stratification. See Grusky 1994b, pp. 3-35
- Grusky DB, ed. 1994b. *Social Stratification: Class, Race, and Gender in Sociological Perspective*. Boulder, CO: Westview
- Gustin BH. 1973. Charisma, recognition, and the motivation of scientists. *Am. J. Sociol.* 78:1119-34
- Haller AO. 1982. Reflections on the social psychology of status attainment. In *Social Structure and Behavior: Essays in Honor of William Hamilton Sewell*, ed. RM Hauser, AO Haller, D Mechanic, TS Hauser, pp. 3-28. New York: Academic
- Han S-K. 1992. Churning firms in stable markets. *Soc. Sci. Res.* 21:406-18
- Han S-K. 1995. Mimetic isomorphism and its effect on the audit services market. *Soc. Forces* 73:637-64
- Hannan MT. 1992. Rationality and robustness in multilevel systems. In *Rational Choice Theory: Advocacy and Critique*, ed. JS Coleman, TJ Fararo, pp. 120-36. Newbury Park, CA: Sage
- Hannan MT, Carroll GR. 1992. *Dynamics of Organizational Populations: Density, Legitimation, and Competition*. New York: Oxford Univ. Press
- Hannan MT, Freeman JH. 1989. *Organizational Ecology*. Cambridge, MA: Harvard Univ. Press
- Hartog J, van Ophem H. 1994. On-the-job search and the cyclical sensitivity of job mobility. *Eur. Econ. Rev.* 38:802-8
- Haveman HA, Cohen LE. 1994. The ecological dynamics of careers: the impact of organizational founding, dissolution, and merger on job mobility. *Am. J. Sociol.* 100:104-52
- Hechter M, Friedman D, Kanazawa S. 1992. The attainment of global order in heterogeneous societies. In *Rational Choice Theory: Advocacy and Critique*, ed. JS Coleman, TJ Fararo, pp. 79-97. Newbury Park, CA: Sage
- Hersch J, Davis P. 1994. Job matching and women's wage-tenure profile. *Appl. Econ.* 26:205-15
- Hirshleifer J. 1985. The expanding domain of economics. *Am. Econ. Rev.* 85:53-68

- Horan PM. 1978. Is status attainment research atheoretical? *Am. Sociol. Rev.* 43:534-41
- Hout M. 1989. *Following in Father's Footsteps: Social Mobility in Ireland*. Cambridge, MA: Harvard Univ. Press
- Hout M, Hauser RM. 1992. Symmetry and hierarchy in social mobility: a methodological analysis of the CASMIN model of class mobility. *Eur. Sociol. Rev.* 8:239-66
- Jasso G. 1980. A new theory of distributive justice. *Am. Sociol. Rev.* 45:3-32
- Jencks C. 1990. What is the true rate of social mobility? See Breiger 1990b, pp. 103-30
- Jencks C, Perman L, Rainwater L. 1988. What is a good job? A new measure of labor-market success. *Am. J. Sociol.* 93:1322-57
- Kalleberg AL, Stark, D. 1993. Career strategies in capitalism and socialism: work values and job rewards in the United States and Hungary. *Soc. Forces* 72:181-98
- Kerckhoff AC. 1995. Processes of social mobility in industrial society. *Annu. Rev. Sociol.* 21:In press
- Knottnerus JD. 1987. Status attainment research and its image of society. *Am. Sociol. Rev.* 52:113-21
- Kurz K, Müller W. 1987. Class mobility in the industrial world. *Annu. Rev. Sociol.* 13:417-42
- Leifer EM. 1988. Interaction preludes to role setting: exploratory local action. *Am. Sociol. Rev.* 53:865-78
- Leifer EM. 1991. *Actors as Observers: A Theory of Skill in Social Relationships*. New York: Garland
- Lin N. 1990. Social resources and social mobility: a structural theory of status attainment. See Breiger 1990b, pp. 247-71
- Lin N, Bian Y. 1991. Getting ahead in urban China. *Am. J. Sociol.* 97:657-88
- Lin N, Xie W. 1988. Occupational prestige in urban China. *Am. J. Sociol.* 93:793-832
- Lincoln JR, Kalleberg AL. 1990. *Culture, Control and Commitment: A Study of Work Organizations and Work Attitudes in the United States and Japan*. Cambridge: Cambridge Univ. Press
- Lindenberg S, Frey BS. 1993. Alternatives, frames, and relative prices: a broader view of rational choice theory. *Acta Sociol.* 36: 191-205
- Lynd R, Lynd H. 1929. *Middletown*. New York: Harcourt
- Marini MM. 1989. Sex differences in earnings in the United States. *Annu. Rev. Sociol.* 15: 343-80
- Marsden PV, Campbell KE. 1990. Recruitment and selection processes: the organizational side of job searches. See Breiger 1990b, pp. 59-79
- McPherson JM, Popielarz PA, Drobnic S. 1992. Social networks and organizational dynamics. *Am. Sociol. Rev.* 57:153-70
- Meyer JW. 1994. The evolution of modern stratification systems. See Grusky 1994b, pp. 730-37
- Moen P, Wethington E. 1992. The concept of family adaptive strategies. *Annu. Rev. Sociol.* 18:233-51
- Molotch H, Boden D. 1985. Talking social structure: discourse, domination, and the Watergate hearings. *Am. Sociol. Rev.* 50: 273-88
- Montgomery JD. 1994. Weak ties, employment, and inequality: an equilibrium analysis. *Am. J. Sociol.* 99:1212-36
- Myles J, Turegun A. 1994. Comparative studies in class structure. *Annu. Rev. Sociol.* 20:103-24
- Nakao K. 1992. Occupational stratification: issues of measurement. *Contemp. Sociol.* 21: 658-62
- Namboodiri K, Corwin RG. 1993. *The Logic and Method of Macrosociology: An Input-Output Approach to Organizational Networks*. Westport, CT: Praeger
- Nee V. 1989. A theory of market transition: from redistribution to markets in state socialism. *Am. Sociol. Rev.* 54:663-81
- Nee V. 1991. Social inequalities in reforming state socialism: between redistribution and markets in China. *Am. Sociol. Rev.* 56:267-82
- Nee V. 1992. Organizational dynamics of market transition: hybrid forms, property rights, and mixed economy in China. *Admin. Sci. Q.* 37:1-27
- Nohria N, Eccles RG, eds. 1992. *Networks and Organizations: Structure, Form, and Action*. Boston, MA: Harvard Business School Press
- Olzak S. 1992. *The Dynamics of Ethnic Competition and Conflict*. Stanford, CA: Stanford Univ. Press
- Olzak S, Shanahan S, West E. 1994. School desegregation, interracial exposure, and antibusing activity in contemporary urban America. *Am. J. Sociol.* 100:196-241
- O'Rand AM, Kreckler ML. 1990. Concepts of the life cycle: their history, meanings, and uses in the social sciences. *Annu. Rev. Sociol.* 16:241-62
- Padgett JF. 1990. Mobility as control: Congressmen through committees. See Breiger 1990b, pp. 27-58
- Padgett JF, Ansell CK. 1993. Robust action and the rise of the Medici, 1400-1434. *Am. J. Sociol.* 98:1259-319
- Pappi FU, Knoke D, Bisson S. 1993. Information exchange in policy networks. See Scharpf 1993, pp. 287-313
- Peng Y. 1992. Wage determination in rural and urban China: a comparison of public and private industrial sectors. *Am. Sociol. Rev.* 57:198-213
- Petersen T. 1992. Alternative ways of modeling mobility. *Contemp. Sociol.* 21:636-39

- Petersen T. 1993. Recent advances in longitudinal methodology. *Annu. Rev. Sociol.* 19: 425-54
- Pong S-L. 1993. Preferential policies and secondary school attainment in penninsular Malaysia. *Sociol. Educ.* 66:245-61
- Powell WW, DiMaggio PJ, eds. 1991. *The New Institutionalism in Organizational Analysis*. Chicago: Univ. Chicago Press
- Raftery AE, Hout M. 1993. Maximally maintained inequality: expansion, reform, and opportunity in Irish education, 1921-75. *Sociol. Educ.* 66:41-62
- Reddy W. 1984. *The Rise of Market Culture: The Textile Trade and French Society, 1750-1900*. Cambridge: Cambridge Univ. Press
- Reskin B. 1993. Sex segregation in the workplace. *Annu. Rev. Sociol.* 19:241-70
- Róna-Tas Á. 1994. The first shall be last? Entrepreneurship and communist cadres in the transition from socialism. *Am. J. Sociol.* 100: 40-69
- Rosenbaum JE. 1990. Structural models of organizational careers: a critical review and new directions. See Breiger 1990b, pp. 272-307
- Rosenfeld RA. 1992. Job mobility and career processes. *Annu. Rev. Sociol.* 18:39-61
- Sabel C. 1991. Moebius-strip organizations and open labor markets: some consequences for the reintegration of conception and execution. In *Social Theory for a Changing Society*, ed. P Bourdieu, JS Coleman, pp. 23-54. Boulder, CO: Westview
- Scharpf FW, ed. 1993. *Games in Hierarchies and Networks: Analytical and Empirical Approaches to the Study of Governance Institutions*. Boulder, CO: Westview
- Schütz A. 1967. *The Phenomenology of the Social World*. Transl. G Walsh, F Lehnert. Evanston, IL: Northwestern Univ. Press
- Sewell WH, Hauser RM. 1992. The influence of *The American Occupational Structure* on the Wisconsin model. *Contemp. Sociol.* 21: 598-603
- Skocpol T. 1992. *Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States*. Cambridge, MA: Harvard Univ. Press
- Skocpol T. 1993. Soldiers, workers, and mothers: gendered identities in early U.S. social policy. *Contention* 2:157-83
- Sørensen A. 1994. Women, family, and class. *Annu. Rev. Sociol.* 20:27-47
- Sørensen AB. 1986. Theory and methodology in social stratification. In *The Sociology of Structure and Action*, ed. U Himmelstrand, pp. 69-95. Beverly Hills, CA: Sage
- Sørensen AB. 1991. On the usefulness of class analysis in research on social mobility and socioeconomic inequality. *Acta Sociol.* 34: 71-87
- Stark D. 1989. Bending the bars of the iron cage: bureaucratization and informalization in capitalism and socialism. *Sociol. Forum* 4:637-64
- Stark D. 1992a. From system identity to organizational diversity: analyzing social change in East Central Europe. *Contemp. Sociol.* 21: 299-304
- Stark D. 1992b. Path dependence and privatization strategies in East Central Europe. *East Eur. Polit. Soc.* 6:17-51
- Stark D. 1994. *Recombinant property in East European capitalism*. Work. Pap. Inst. Adv. Study, Collegium Budapest (Hungary)
- Strang D, Meyer JW. 1993. Institutional conditions for diffusion. *Theory Soc.* 22:487-511
- Sutton JR, Dobbin F, Meyer JW, Scott WR. 1994. The legalization of the workplace. *Am. J. Sociol.* 99:944-71
- Treas J. 1987. The effect of women's labor force participation on the distribution of income in the United States. *Annu. Rev. Sociol.* 13:259-88
- Treas J. 1993. Money in the bank: transaction costs and the economic organization of marriage. *Am. Sociol. Rev.* 58:723-34
- Treiman DJ. 1970. Industrialization and social stratification. In *Social Stratification: Research and Theory for the 1970s*, ed. EO Laumann, pp. 207-34. Indianapolis: Bobbs-Merrill
- Treiman DJ, Yip K-B. 1989. Educational and occupational attainment in 21 countries. In *Cross-National Research in Sociology*, ed. ML Kohn, pp. 373-94. Newbury Park, CA: Sage
- Wacquant LJD. 1992. Toward a social praxeology: the structure and logic of Bourdieu's sociology. See Bourdieu & Wacquant 1992, pp. 1-59
- Warner K, Molotch H. 1993. Information in the marketplace: media explanations of the '87 crash. *Soc. Probl.* 40:167-88
- Waters M. 1995. Ethnic inequality in America: current changes and shifts over time. *Annu. Rev. Sociol.* 21:415-46
- Wegener B. 1992. Concepts and measurement of prestige. *Annu. Rev. Sociol.* 18:253-80
- Western M. 1994. Class structure and intergenerational class mobility: A comparative analysis of nation and gender. *Soc. Forces* 73:101-34
- White HC. 1992a. *Identity and Control: A Structural Theory of Social Action*. Princeton, NJ: Princeton Univ. Press
- White HC. 1992b. Agency as control in formal networks. See Nohria & Eccles 1992, pp. 92-117
- White HC. 1993. *Careers and Creativity: Social Forces in the Arts*. Boulder, CO: Westview
- White HC, Boorman SA, Breiger RL. 1976. Social structure from multiple networks: I.

- Blockmodels of roles and positions. *Am. J. Sociol.* 81:730-80
- Wiegand B. 1994. Black money in Belize: the ethnicity and social structure of black-market crime. *Soc. Forces* 73:135-54
- Williamson OE. 1991. Comparative economic organization: the analysis of discrete structural alternatives. *Admin. Sci. Q.* 36:269-96
- Wilson TP. 1991. Social structure and the sequential organization of interaction. See Boden & Zimmerman 1991, pp. 22-43
- Wong RS-K, Hauser RM. 1992. Trends in occupational mobility in Hungary under socialism. *Soc. Sci. Res.* 21:419-24
- Zukin S, DiMaggio P, eds. 1990. *Structures of Capital: The Social Organization of the Economy*. New York: Cambridge Univ. Press