emergence of organizations like Adam Smith's pin factory, or the richness of interactions in a tropical forest, without the help of such models.'

See also: Artificial Social Agents; Functional Equations in Behavioral and Social Sciences; Markov Models and Social Analysis; Population Dynamics: Mathematic Models of Population, Development, and Natural Resources; Social Behavior (Emergent), Computer Models of; Social Network Models: Statistical

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Social Stratification

In all complex societies, the total stock of valued goods is distributed unequally, with the most privileged individuals and families enjoying a disproportionate share of income, power, and other valued resources. The term 'stratification system' refers to the complex of social institutions that generate observed inequalities of this sort. The key components of such systems are (a) the institutional processes that define certain types of goods as valuable and desirable; (b) the rules of allocation that distribute these goods across various positions in the division of labor (e.g., doctor, farmer, 'housewife'); and (c) the mobility mechanisms that link individuals to positions and thereby generate unequal control over valued resources. It follows that inequality is produced by two types of matching processes: The social positions in society are first matched to 'reward packages' of unequal value, and members of society are then allocated to the positions so defined and rewarded.

There are of course many types of rewards that come to be attached to social positions (see Table 1). Given this complexity, one might expect stratification scholars to adopt a multidimensional approach, with the objective being to describe and explain the full distribution of goods listed in Table 1. Although some scholars have indeed advocated an approach of this sort, most have instead opted to characterize stratification systems in terms of discrete classes or socioeconomic strata whose members are endowed with similar amounts and types of resources. The goal of stratification research has thus reduced to (a) describing the major forms of class inequality in human history, (b) specifying the structure of contemporary classes and strata, (c) modeling the processes by which individuals move between class and socioeconomic positions, and (d) examining the effects of race, ethnicity, and gender on such mobility processes.

1. Basic Concepts

The foregoing lines of inquiry cannot be adequately reviewed without first defining some of the core

Table 1 Types of assets, resources, and valued goods underlying stratification systems

Asset group	Selected examples	Relevant scholars
1. Economic	Ownership of land, farms, factories, professional practices, businesses, liquid assets, humans (i.e., slaves), labor power (e.g., serfs)	Karl Marx; Erik Wright
2. Political	Household authority (e.g., head of household); workplace authority (e.g., manager); party and societal authority (e.g., legislator); charismatic leader	Max Weber; Ralf Dahrendorf
3. Cultural	High-status consumption practices; 'good manners'; privileged life-style	Pierre Bourdieu; Paul DiMaggio
4. Social	Access to high-status social networks, social ties, associations and clubs, union memberships	W. Lloyd Warner; James Coleman
5. Honorific	Prestige; 'good reputation'; fame; deference and derogation; ethnic and religious purity	Edward Shils; Donald Treiman
6. Civil	Rights of property, contract, franchise, and membership in elective assemblies; freedom of association and speech	T. M. Marshall; Rogers Brubaker
7. Human	Skills; expertise; on-the-job training; experience; formal education; knowledge	Kaare Svalastoga; Gary Becker

concepts in the field. The following definitions are especially relevant for our purposes:

- (a) The degree of *inequality* in a given reward or asset depends, of course, on its dispersion or concentration across the population. If some types of assets (e.g., civil rights) are distributed more equally than others (e.g., political power), then the level of inequality obviously cannot be adequately characterized with a single parameter.
- (b) The *rigidity* of a stratification system is indexed by the continuity (over time) in the social standing of its members. The stratification system is said to be highly rigid, for example, if the current income, power, or prestige of individuals can be accurately predicted on the basis of their prior statuses or those of their parents.
- (c) The stratification system rests on ascriptive processes to the extent that traits present at birth (e.g., sex, race, ethnicity, parental wealth) influence the subsequent social standing of individuals. In modern societies, ascription of all kinds is usually seen as undesirable or discriminatory, and much governmental policy is therefore directed toward fashioning a stratification system in which individuals acquire resources solely by virtue of their achievements.
- (d) The degree of *status crystallization* is indexed by the correlations among the assets in Table 1. If these correlations are strong, then the same individuals (i.e., the 'upper class') will consistently appear at the top of all status hierarchies, while other individuals (i.e., the 'lower class') will consistently appear at the bottom of the stratification system.

These four variables can be used to characterize differences across societies in the underlying structure of stratification (see Table 2). As the following discussion shall reveal, there is much cross-societal variability not merely in the extent of inequality, but

also in the underlying shape of the class structure and the processes by which classes are reproduced.

2. Forms of Stratification

It is useful to begin with the purely descriptive task of classifying the various types of stratification systems that have appeared in past and present societies. The first panel of Table 2 pertains to the 'primitive' tribal systems that dominated human society from the very beginning of human evolution until the Neolithic revolution of some 10,000 years ago. Although tribal societies have of course assumed various forms, the total size of the distributable surplus was in all cases quite limited; and this cap on the surplus placed corresponding limits on the overall level of economic inequality. Indeed, some observers have treated tribal societies as examples of 'primitive communism,' since the means of production (e.g., tools) were owned collectively and other types of property were typically distributed evenly among tribal members. Moreover, insofar as positions of power emerged (e.g., shamans), these were never inherited but instead were secured by demonstrating superior skills in the relevant tasks. While meritocratic criteria are often seen as prototypically modern, they were in fact present in incipient form at quite early stages of societal development, no doubt because the surplus was too small to permit the luxury of less adaptive forms of allocation.

With the emergence of agrarian forms of production, the economic surplus became large enough to support more complex and less meritocratic systems of stratification. The 'Asiatic mode,' which some commentators regard as a precursor of advanced agrarianism, is characterized by a poorly developed proprietary

Table 2
Basic parameters of stratification for eight ideal-typical systems

System center (1)	Principal assets (2)	Major strata or classes (3)	Inequality (4)	Rigidity (5)	Crystallization (6)	Justifying ideology (7)
A. Hunting and gathering society						
1. Tribalism	Human (hunting and magic skills)	Chiefs, shamans, and other tribe members	Low	Low	High	Meritocratic selection
B. Horticultural and agrarian society						
2. Asiatic mode	Political (i.e., incumbency of state office)	Office-holders and peasants	High	Medium	High	Tradition and religious doctrine
3. Feudalism	Economic (land and labor power)	Nobility, clergy, and commoners	High	Medium-high	High	Tradition and Roman Catholic doctrine
4. Slavery	Economic (human property)	Slave owners, slaves, 'free men'	High	Medium-high	High	Doctrine of natural and social inferiority (of slaves)
5. Caste society	Honorific and cultural (ethnic purity and 'pure' lifestyles)	Castes and subcastes	High	High	High	Tradition and Hindu religious doctrine
C. Industrial society	1 ,					
6. Class system	Economic (means of production)	Capitalists and workers	Medium-high	Medium	High	Classical liberalism
7. State socialism	Political (party and workplace authority)	Managers and managed	Low-medium	Low-medium	High	Marxism and Leninism
8. 'Advanced' industrialism	Human (i.e., education, expertise)	Skill-based occupational groupings	Medium	Low-medium	Medium	Classical liberalism

class and a powerful state elite that extracted surplus agricultural production through rents and taxes (see line B2 in Table 2). This mode provides the conventional example of how a 'dictatorship of officialdom' can flourish in the absence of institutionalized private property. Whereas political assets were thus dominant in the Asiatic mode, the ruling class under Western feudalism was, by contrast, very much a propertied one. The distinctive feature of feudalism was that the nobility not only owned large estates or manors but also held legal title to the labor power of its serfs (see line B3). If a serf fled to the city, this was considered a form of theft: The serf was stealing that portion of his or her labor power owned by the lord. With this interpretation, the statuses of serf and slave differ only in degree, and slavery thereby constitutes a limiting case in which workers lose all control over their own labor power (see line B4; also see Slavery as Social Institution).

The historical record makes it clear that agrarian stratification systems were not always based on strictly hereditary forms of social closure. To be sure, the era of classical feudalism (i.e., post-twelfth century) was characterized by a rigid stratification of classes, but there was far greater permeability during the period prior to the institutionalization of the manorial system and the associated transformation of the nobility into a legal class. The most extreme example of agrarian closure can of course be found in caste societies (see line B5). The Indian caste system, for example, is based on (a) a hierarchy of status groupings (i.e., castes) that are ranked by ethnic purity, wealth, and access to goods or services; (b) a corresponding set of 'closure rules' that restrict all forms of intercaste marriage or mobility and thereby make caste membership both hereditary and permanent; (c) a high degree of physical and occupational segregation enforced by elaborate rules and rituals governing intercaste contact; and (d) a justifying ideology (i.e., Hinduism) that induces the population to regard such extreme forms of inequality as legitimate and appropriate. What makes this system so distinctive, then, is not merely its well-developed closure rules but also the fundamentally honorific (and noneconomic) character of the underlying social hierarchy.

The defining feature of the industrial era (see panel C) has been the emergence of egalitarian ideologies and the consequent 'delegitimation' of the extreme forms of stratification found in caste, feudal, and slave systems. This can be seen, for example, in the European revolutions of the eighteenth and nineteenth centuries that pitted the egalitarian ideals of the Enlightenment against the privileges of rank and the political power of the nobility. In the end, these struggles eliminated the last residue of feudal privilege, but they also made new types of inequality and stratification possible. Under the class system that ultimately emerged (see line C6), the estates of the feudal era were replaced by purely economic groups

(i.e., 'classes'), and closure rules based on heredity were likewise supplanted by (formally) meritocratic processes. The resulting classes were neither legal entities nor closed status groupings, and the associated class-based inequalities could therefore be represented and justified as the natural outcome of competition among individuals with differing abilities, motivation, or moral character (i.e., 'classical liberalism'). As indicated in line C6, the class structure of early industrialism had a clear economic base, so much so that Marx ([1894] 1972) defined classes in terms of their relationship to the means of economic production. The precise contours of the industrial class structure are nonetheless a matter of continuing debate (see below); for example, a simple Marxian model focuses on the cleavage between capitalists and workers, while more elaborate Marxian and neo-Marxian models identify additional intervening or 'contradictory' classes (e.g., Wright 1997), and yet other (non-Marxian) approaches represent the class structure as a continuous gradation of income, prestige, or socioeconomic status.

Whatever the relative merits of these models might be, the ideology underlying the socialist revolutions of the nineteenth and twentieth centuries was of course explicitly Marxist (see line C7). The intellectual heritage of these revolutions and their legitimating ideologies can again be traced to the Enlightenment, but the rhetoric of equality that emerged in this period was now directed against the economic power of the capitalist class rather than the status and honorific privileges of the nobility. The evidence from Eastern Europe and elsewhere suggests that these egalitarian ideals were only partially realized. In the immediate postrevolutionary period, factories and farms were indeed collectivized or socialized, and various fiscal and economic reforms were instituted for the express purpose of reducing income inequality and wage differentials among manual and nonmanual workers. Although these egalitarian policies were subsequently weakened through the reform efforts of Stalin and others, inequality on the scale of pre-revolutionary society was never re-established among rank-and-file workers (see Lenski 2001). There nonetheless remained substantial inequalities in power and authority; most notably, the socialization of production did not have the intended effect of empowering workers, as the capitalist class was replaced by a 'new class' of party officials and managers who continued to control the means of production and to allocate the resulting social surplus. This class has been variously identified with intellectuals or intelligentsia, bureaucrats or managers, and party officials or appointees (see Gouldner 1979). Regardless of the formulation adopted, the presumption is that the working class ultimately lost out in contemporary socialist revolutions, just as it did in the so-called bourgeois revolutions of the eighteenth and nineteenth centuries (e.g., see Postsocialist Societies).

Whereas the means of production were socialized in the revolutions of Eastern Europe and the former USSR, the capitalist class remained intact throughout the process of industrialization in the West, even as ownership and control separated and a distinct managerial class emerged (see Dahrendorf 1959). The capitalist class may nonetheless be weakened by the structural changes of postindustrialism, with the most important of these being the rise of a service economy and the consequent emergence of technical expertise, educational degrees, and training certificates as new forms of property (see line C8). By this formulation, a dominant class of cultural elites may be emerging in the West, much as the transition to state socialism (allegedly) generated a new class of intellectuals in the East. This is not to suggest that all theorists of advanced industrialism posit a grand divide between the cultural elite and an undifferentiated working mass. In fact, some commentators (e.g., Dahrendorf 1959) have argued that skill-based cleavages are crystallizing throughout the occupational structure, with the result being a finely differentiated class system made up of discrete occupations (Grusky and Sørensen 1998) or a continuous gradation of socioeconomic status (e.g., Hauser and Warren 1997).

3. The Structure of Contemporary Stratification

The history of stratification theory is in large part a history of such debates about the emerging structure of contemporary inequality. Moreso than usual, political and intellectual goals are conflated in this literature and, accordingly, the relevant research is infused with much scholarly contention. These debates are complex and wide-ranging, but it will suffice to review four approaches that have proven to be especially popular.

3.1 Reductionism

Among contemporary interpreters of inequality, the prevailing approach has long been to claim that only one of the 'asset groups' in Table 1 is truly fundamental, whereas all others are somehow epiphenomenal. There are nearly as many claims of this sort as there are dimensions in Table 1. To be sure, Marx is most commonly criticized (with some justification) for placing 'almost exclusive emphasis on economic factors as determinants of social class' (Lipset 1968, p. 300), but in fact much of what passes for stratification theorizing amounts to reductionism of one form or another. Among non-Marxist scholars, inequalities in honor or power are frequently regarded as the most fundamental sources of class formation, while the distribution of economic assets is seen as purely secondary. For example, Dahrendorf (1959) argues that 'differential authority in associations is the

ultimate 'cause' of the formation of conflict groups' (p. 172), while Shils (1968) suggests that 'without the intervention of considerations of deference position the ... inequalities in the distribution of any particular facility or reward would not be grouped into a relatively small number of vaguely bounded strata' (p. 130). These extreme forms of reductionism have been less popular of late; indeed, even neo-Marxian scholars now typically recognize several stratification dimensions, with the social classes of interest then being defined as particular combinations of scores on the selected variables (e.g., Wright 1997).

3.2 Synthesizing Approaches

There is an equally long tradition of research based on synthetic measures that simultaneously tap a wide range of assets and resources. As noted above, many of the rewards in Table 1 (e.g., income, honor) are principally allocated through the jobs or social roles that individuals occupy, and one can therefore measure the standing of individuals by classifying them in terms of their social positions. In this context, Parkin (1971) has referred to the occupational structure as the 'backbone of the entire reward system of modern Western society' (p. 18), while Hauser and Featherman (1977) argue that studies 'framed in terms of occupational mobility ... yield information simultaneously (albeit, indirectly) on status power, economic power, and political power' (p. 4). The most recent representatives of this position, Grusky and Sørensen (1998), have argued that detailed occupations are not only the main conduits through which valued goods are disbursed but are also deeply institutionalized categories that are salient to workers, constitute meaningful social communities and reference groups, and serve as fundamental units of collective action. Although occupations continue, then, to be the preferred classificatory tool within this tradition, other scholars have pursued the same synthesizing objective by simply asking community members to locate their peers in a hierarchy of social strata (e.g., Warner et al. 1949). Under the latter approach, a synthetic classification is no longer secured by ranking and sorting occupations in terms of the bundles of rewards attached to them, but rather by passing the raw data of inequality through the fulcrum of individual judgment.

3.3 Aggregation Exercises

Regardless of whether a reductionist or synthesizing approach is taken, most scholars adopt the final simplifying step of defining a relatively small number of discrete classes (e.g., see *Class: Social*). For example, Parkin (1971) argues for six occupational classes with the principal 'cleavage falling between the manual and non-manual categories' (p. 25), whereas

Dahrendorf (1959) argues for a two-class solution with a 'clear line drawn between those who participate in the exercise [of authority] ... and those who are subject to the authoritative commands of others' (p. 170). While close variants of the Parkin scheme continue to be used, the emerging convention among quantitative stratification scholars is to apply either the 12-category neo-Marxian scheme fashioned by Wright (1997) or the 11-category neo-Weberian scheme devised by Erikson and Goldthorpe (1994). At the same time, new classification schemes continue to be regularly proposed, with the impetus for such efforts typically being the continuing expansion of the service sector and the associated growth of contingent work relations (e.g., Esping-Andersen 1999). The question that necessarily arises for all contemporary schemes is whether the constituent categories are purely nominal entities or are truly meaningful to the individuals involved. If the categories are intended to be meaningful, one would expect class members not only to be aware of their membership (i.e., 'class awareness') but also to identify with their class (i.e., 'class identification') and occasionally act in its behalf (i.e., 'class action').

3.4 Gradationalism

The prior approaches involve mapping individuals or families into mutually exclusive and exhaustive categories. By contrast, the implicit claim underlying gradational approaches is that such 'classes' are largely the construction of overzealous sociologists, and that the underlying structure of modern stratification can, in fact, be more closely approximated with gradational measures of income, status, or prestige. Although there is some sociological precedent for treating income as a gradational indicator of class, most sociologists opt for either prestige scales based on popular evaluations of occupational standing or socioeconomic scales constructed as weighted averages of occupational income and education. In recent years, such gradationalism has been subjected to criticism on various fronts, with the main objections being that (a) the fluidity and openness of the stratification system is overstated by conventional prestige and socioeconomic scales (Hauser and Warren 1997); (b) the desirability of jobs is best indexed by directly measuring such job-level attributes as earnings, promotion opportunities, complexity, or autonomy (Jencks et al. 1988); and (c) the convention of converting discrete occupations into scales strips away precisely those gemeinschaftlich features of discrete occupations that make them analytically so powerful (Grusky and Sørensen 1998). There is of course no guarantee that any of these criticisms will take hold; indeed, because socioeconomic scales have dominated sociological research since the 1960s, inertial forces are quite strong and will not be easily overcome.

4. Generating Stratification

The foregoing debates may be seen, then, as disputes over which data reduction techniques best reveal the fundamental features of the distribution of rewards. If one or more of these simplifying assumptions is applied and a mapping of inequality is thereby developed, it becomes possible to examine the flow of individuals between the various categories of this mapping. The language of stratification theory thus makes a sharp distinction between the distribution of social rewards and the distribution of opportunities for securing these rewards. The latter distribution has come to determine popular judgments about the legitimacy of stratification; that is, substantial inequalities in power, wealth, or honor are typically seen as tolerable (and even desirable) provided that the opportunities for securing these social goods are distributed equally. Whatever the wisdom of this popular logic might be, stratification researchers have long sought to explore its factual underpinnings by monitoring and describing the structure of mobility chances. The relevant literature is vast, but of course broad classes of inquiry can be distinguished, as indicated below.

4.1 Mobility Analyses

The conventional starting point for mobility scholars has been to analyze bivariate 'mobility tables' formed by cross-classifying the class origins and destinations of individuals (e.g., see Social Mobility, History of). The tables constructed can be used to estimate densities of inheritance, to map the social distances between classes and their constituent occupations, and to examine differences across subpopulations in the amount and patterning of fluidity and opportunity. Moreover, when comparable mobility tables are assembled from several countries, it becomes possible to address fundamental debates about the underlying contours of cross-national variation in stratification systems (e.g., Erikson and Goldthorpe 1994). This long-standing line of analysis, while still underway, has nonetheless declined of late, perhaps because past research has been so definitive as to undercut further efforts. The focus has thus shifted to studies of income mobility, with the twofold impetus for this development being (a) concerns that poverty may be increasingly difficult to escape and that a permanent underclass may be forming, and (b) the obverse hypothesis that growing income inequality may be counterbalanced by increases in the rate of mobility between income groups.

4.2 The Process of Stratification

It is by now a sociological truism that Blau and Duncan (1967) and their colleagues (e.g., Sewell et al.

1969) revolutionized the field with their formal 'path models' of stratification. These models were intended to represent, if only partially, the processes by which background advantages could be converted into socioeconomic status through the mediating variables of schooling, aspirations, and parental encouragement. Under formulations of this kind, the main sociological objective was to show that socioeconomic outcomes were structured not only by ability and family origins, but also by various intervening variables (e.g., schooling) that were themselves only partly determined by origins and other ascriptive forces. The picture of modern stratification that emerged suggested that market outcomes depend in large part on unmeasured career contingencies (i.e., 'individual luck') rather than influences of a more structural sort (Jencks et al. 1972). This line of research, which fell out of favor by the mid-1980s, has been recently reinvigorated as stratification scholars react to the controversial claim (i.e., Herrnstein and Murray 1994) that inherited intelligence is increasingly determinative of stratification outcomes (e.g., Fischer et al. 1996). In a related development, contemporary scholars have also turned their attention to the effects of family structure on attainment, given that new nontraditional family arrangements (e.g., female-headed households) may in some cases reduce the influence of biological parents and otherwise complicate the reproduction of class.

4.3 Structural Analyses

The preceding models are frequently criticized for failing to attend to the social structural constraints that operate on the stratification process independently of individual-level traits. The structuralist accounts that ultimately emerged from these critiques initially amounted, in most cases, to refurbished versions of dual economy and market segmentation models that were introduced and popularized many decades ago by institutional economists. When these models were redeployed by sociologists in the early 1980s, the usual objective was to demonstrate that women and minorities were disadvantaged not merely by virtue of deficient human capital investments (e.g., inadequate schooling and experience), but also by their consignment to secondary labor markets that, on average, paid out lower wages and offered fewer opportunities for promotion or advancement. At the same time, more deeply sociological forms of structuralism have also appeared, both in the form of (a) mesolevel accounts of the effects of social networks and 'social capital' on attainment, and (b) macrolevel accounts of the effects of institutional context (e.g., welfare regimes) on mobility processes and outcomes.

The history of these research traditions is arguably marked more by statistical and methodological signposts than substantive ones. Although there is, then, no grand theory that unifies seemingly disparate

models, the field has long relied on middle-range theorizing addressing such issues as the forces making for discrimination, the processes through which class-based advantage is reproduced, and the effects of industrialism, capitalism, and socialism on mobility and attainment. The main contenders, at present, for a 'grand theory' of mobility are various forms of rational action analysis that allow middle-range accounts to be recast in terms of individual-level incentives and purposive behavior (e.g., see *Rational Choice Theory in Sociology*). Indeed, just as the assumption of utility maximization underlies labor economics, so too a theory of purposive behavior might ultimately organize much, albeit not all, sociological theory on social mobility and attainment.

5. Ascriptive Solidarities

To this point, the discussion has focused on class and socioeconomic inequalities, while considerations of race, ethnicity, and gender have been brought in only indirectly. This omission reflects, however improperly, the historical development of the field; that is, status groups were once regarded as secondary forms of affiliation, whereas class-based ties were seen as more fundamental and decisive determinants of social and political action. The first step in the intellectual breakdown of this approach was the fashioning of multidimensional models of stratification (e.g., Lipset and Bendix 1959) that moved beyond a strict class analytic emphasis on economic inequalities. The early multidimensionalists thus emphasized that social behavior could only be understood by taking into account all status group memberships and the complex ways in which these interacted with one another. There was much concern, in particular, that 'inconsistent' statuses (e.g., upper class and African American) might generate personal stress that would ultimately be resolved through extremist political action.

Although this old variant of multidimensionalism has fallen out of fashion, new variants have been pursued on two intellectual fronts, neither of which similarly emphasize the stressfulness of multiple or inconsistent statuses. In the postmodernist variant, the essentialism of conventional class analytic theorizing is again rejected forcefully, with the claim being that class affiliations are by no means fundamental and that various nonclass statuses are more salient in many situations. Under some postmodern formulations, even the categories of race, ethnicity, and gender have no privileged position, and instead the presumption is that individuals are simply a congeries of manifold, situationally invoked statuses. As the British sociologist Saunders (1989) puts it, 'On holiday in Spain we feel British, waiting for a child outside the school gates we are parents, shopping in Marks and Spencer we are consumers, and answering questions, framed by sociologists with class on the brain, we are working class' (pp. 4–5).

This approach, which has not yet informed much empirical research, might be usefully contrasted to the 'intersectionist' accounts of Collins (1990), where the categories of race, class, and gender are seen as master statuses that form a new holy trinity of stratification analysis. The theoretical framework motivating this approach is not well-developed, but the implicit claim seems to be that the most fundamental subcultures in the modern context are defined by the intersection of race, class, and gender categories (e.g., black workingclass women, white middle-class men). The social spaces defined by particular combinations of these statuses thus shape the experiences, lifestyles, and life chances of individuals and define the settings in which interests typically emerge. The obvious effect of this approach is to invert the traditional post-Weberian perspective on status groupings; that is, whereas orthodox multidimensionalists described the stress experienced by individuals in inconsistent statuses, these new multidimensionalists emphasize the shared interests and cultures generated within commonly encountered status sets.

Among stratification scholars, the attention paid to issues of race, ethnicity, and gender has thus burgeoned of late, and entirely new literatures within these subfields have of course emerged (e.g., see Feminist Political Theory and Political Science, Ethnic Conflicts, Racial Relations). In organizing these literatures, one might usefully distinguish between (a) macro-level research addressing the structure of ascriptive solidarities and their relationship to class formation, and (b) attainment research exploring the effects of race, ethnicity, and gender on individual life chances. At the macrolevel, scholars examine such issues as the social processes by which ascriptive categories (e.g., 'white,' 'black') are constructed, the sources and causes of ethnic conflict and solidarity, and the relationship between patriarchy, racism, and class-based forms of organization. The microlevel research tradition emphasizes, by contrast, such topics as the size and causes of the gender gap in income, the sources of occupational sex segregation, and the effectiveness of various social interventions (e.g., affirmative action, comparable worth initiatives) in reducing ascriptive inequalities.

6. The Future of Stratification

It is instructive to conclude by contrasting structural and cultural accounts of stratificatory change. Although there are many variants of structuralism, a common starting point is the claim that human and political capital are replacing economic capital as the principal stratifying forces in advanced industrial society. In the most extreme versions of this claim, the old class of moneyed capital is represented as a dying force, and a new class of intellectuals, managers, or party bureaucrats is assumed to be on the road to power (e.g., Gouldner 1979). There is of course much criticism of 'new class' interpretations of this sort. The (orthodox) Marxist stance is that 'news of the demise of the capitalist class is ... somewhat premature' (Zeitlin 1982, p. 216), whereas the contrasting position taken by Bell (1973) is that neither the old capitalist class nor the so-called new class will have unfettered power in the postindustrial future. To be sure, there is widespread agreement among postindustrial theorists that human capital is becoming a dominant form of property, yet this need not imply that 'the amorphous bloc designated as the knowledge stratum has sufficient community of interest to form a class' (Bell 1987, p. 464).

As is well-known, Bell (1973) also argues that human capital (e.g., education) will become the main determinant of life chances, if only because the expansion of the professional and technical sectors serves to upgrade job skills and thus requires a welltrained workforce. Although the returns to education are indeed increasing as predicted, the occupational structure is not upgrading quite as straightforwardly as Bell (1973) suggested; and various 'pessimistic versions' of postindustrialism have accordingly emerged. In the US variant of such pessimism, the main concern is that postindustrialism leads to a 'declining middle' and consequent polarization, as manufacturing jobs are either rendered technologically obsolete or exported to less developed countries where labor costs are lower. These losses may be compensated by the predicted growth in the service sector, yet the types of service jobs that have emerged are quite often low skill, routinized, and accordingly less desirable than Bell imagined. In Europe, the same low-skill service jobs are less commonly found, with the resulting occupational structure more closely approximating the highly professionalized world that Bell envisaged. The European pessimists are nonetheless troubled by the rise of mass unemployment and the associated emergence of 'outsider classes' that bear disproportionately the burden of unemployment. In both the European and US cases, the less-skilled classes are therefore losing out in the market, either by virtue of unemployment and exclusion (i.e., Europe) or low pay and poor prospects for advancement (i.e., the US). The new pessimists thus anticipate a 'resurgent proletarian underclass and, in its wake, a menacing set of new class correlates' (Esping-Andersen 1999, p. 95).

The driving force behind these accounts is, of course, structural change of the sort conventionally described by such terms as industrialism, post-industrialism, and post-Fordism. By contrast, cultural accounts of change tend to de-emphasize these forces or to cast them as epiphenomenal, with the focus thus shifting to the independent role of ideologies, social

movements, and cultural practices in changing stratification forms. This approach underlies, for example, all forms of postmodernism that seek to represent 'new social movements' (e.g., feminism, ethnic and peace movements, environmentalism) as the vanguard force behind future stratificatory change. As argued by Beck (1999), the labor movement can be seen as a fading enterprise rooted in the old conflicts of the workplace and industrial capitalism, whereas new social movements provide a more appealing call for collective action by virtue of their emphasis on issues of lifestyle, personal identity, and normative change. Under this formulation, the proletariat is stripped of its privileged status as a universal class, and cultural movements emerge as an alternative force 'shaping the future of modern societies' (Haferkamp and Smelser 1992, p. 17). Although no self-respecting postmodernist will offer up a fresh 'grand narrative' to replace that of discredited Marxism, new social movements are nonetheless represented within this subtradition as a potential source of change, albeit one that plays out in fundamentally unpredictable ways.

The final, and more prosaic, question that might be posed is whether changes of the preceding sort presage a general decline in the field of stratification itself. It could well be argued that Marxian and neo-Marxian models of class will decline in popularity with the rise of postmodern stratification systems and the associated uncoupling of class from lifestyles, consumption patterns, and political behavior. This line of reasoning is not without merit, but it is worth noting that (a) past predictions of this sort have generated protracted debates that, if anything, have re-energized the field; (b) the massive facts of economic, political, and honorific inequality will still be with us even if narrowly conceived models of class ultimately lose out in such debates; and (c) the continuing diffusion of egalitarian values suggests that all departures from equality, no matter how small, will be the object of considerable interest among sociologists and the lay public alike. The latter sensitivity to all things unequal bodes well for the future of the field even in the (unlikely) event of a long-term secular movement toward diminishing inequality.

See also: Class: Social; Democracy; Democratic Theory; Egalitarianism: Political; Egalitarianism, Sociology of; Equality and Inequality: Legal Aspects; Equality of Opportunity; Equality: Philosophical Aspects; Income Distribution; Income Distribution: Demographic Aspects; Inequality; Inequality: Comparative Aspects; Mobility: Social; Poverty: Measurement and Analysis; Poverty, Sociology of; Racism, Sociology of; Social Inequality in History (Stratification and Classes); Social Mobility, History of; Socialism; Socialism: Historical Aspects; Urban Geography; Urban Poverty in Neighborhoods; Wealth Distribution

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D. B. Grusky

Social Support and Health

The concept of social support as an important factor in health and illness is not new. 'Friendship is a basic human need along with food, shelter, and clothing. We naturally desire to love other human beings and to be loved by them. A totally loveless life—a life without friends of any sort—is a life deprived of much needed good.' These thoughts were expressed by Aristotle, 350 years BC (Alcalay 1983). During and toward the end of the Middle Ages the concept was even addressed as a possible remedy for illness. In 1599 Paracelsus, a pharmacist and natural scientist, actually prescribed 'love as the best possible cure for several diseases.' That love and affection 'influence life and death in both animals and humans' was further observed by a Russian ethologist (Kropotkin 1908).

In this article some of the empirical evidence that 'love and affection influence life and death' will be reviewed. The distinctions between social networks and social support are explained; the definition, concepts, and functions of social support are further described; and their impact on health and disease are demonstrated and discussed. With a focus on coronary heart disease (CHD), the most common cause of death among men and women in the developed world, the hazards of lack of social support are disentangled, and differences and similarities in men and women are discussed. Finally, implications for therapeutic interventions are considered.

Systematic and conclusive empirical studies of social support and health, however, did not begin until the 1970s, when this field emerged as a new area of research, making a bold link between people's social ties and social networks on the one hand and population morbidity and mortality on the other. In the pioneering work by Berkman and Syme on residents of Alameda County, California, modern epidemiological tools were applied to demonstrate what had long been sensed to be true: social ties are protective against ill health.

Soon a number of population-based studies mainly from the USA and Scandinavia confirmed the findings

of Berkman and Syme. These findings were systematically interpreted and discussed by House et al. (1988) who concluded that the impact of lack of social ties was similar to that of smoking. With such emphasis and visibility of the concept, a new research field was established.

A general definition of social support was agreed upon, which was broad enough to incorporate most of the research traditions in the field: 'Social support is the resource provided by other persons. By viewing social support in terms of resources—potentially useful information or things—we allow for the possibility that support may have negative as well as positive effects on health and well-being' (Cohen and Syme 1985).

Soon, however, researchers began to ask why and how social ties might influence mortality and morbidity; in particular investigators were focusing on the function and contents of social ties and their assessment (Cohen and Syme 1985). On the one hand, large epidemiological studies of populations typically would find that mortality increased with a decreasing number and frequency of social contacts. On the other hand, the more sophisticated measures of social context, social anchorage, social environment, and social support were limited to specific indicators of disease such as blood pressure in smaller selected groups of persons or patients. Thus two types of research traditions developed within this area—social network epidemiology (see Social Integration, Social *Networks, and Health*) and social support psychology. Attempts to unite these traditions have not always been successful. Where the first type of research mostly examined all causes of mortality or general well-being as end-points, the latter has looked more closely at specific disease end-points, such as cardiovascular disease. The latter has become a model for research on social support and disease, and will be the focus here, because heart diseases are common, develop gradually, and are found in all populations.

Coronary heart disease (CHD) is the most common of cardiovascular diseases and the most common cause of death in highly developed and industrialized countries, and it is rapidly increasing in developing nations of the third world. In many countries it is also the most common cause of hospitalizations and an important factor in work absenteeism. The clinical manifestations of CHD are dependent on the extent of underlying atherosclerotic changes of the coronary arteries. With more advanced atherosclerosis, the risk of an acute myocardial infarction (AMI) or sudden cardiac death (SCD) is increased. The occurrence of both atherosclerosis and clinical manifestations of CHD increases with increasing age, in men as in women.

Below the age of 65, clinical manifestations of CHD, including myocardial infarction and sudden death are rare in women. In particular before menopause at age 50, women seem to be protected. Women are also relatively spared in the following decade, between 50

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