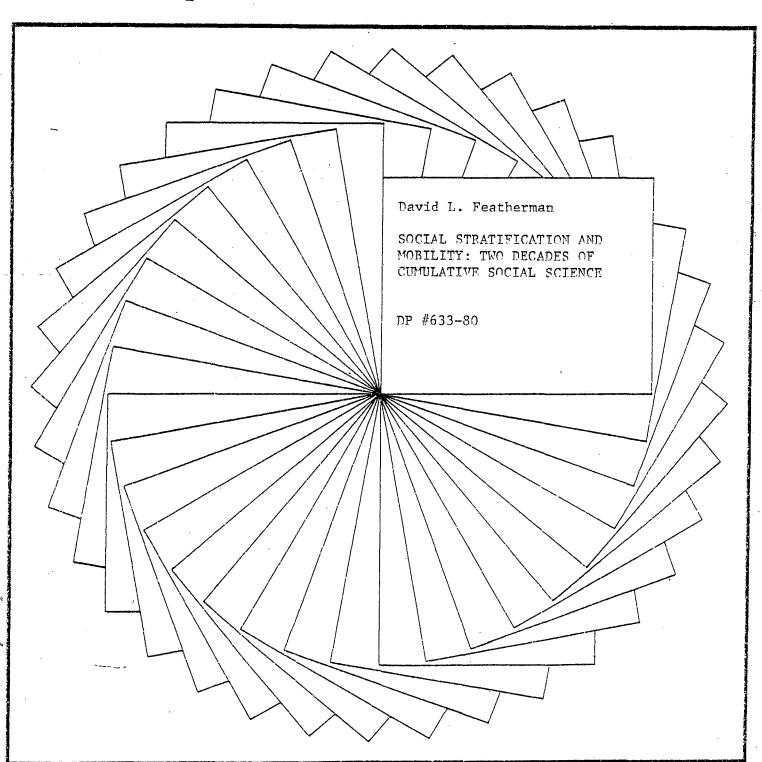


Institute for Research on Poverty

Discussion Papers



Social Stratification and Mobility:
Two Decades of Cumulative Social Science

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October 1980

This paper was written while the author codirected the 1980 Summer Institute at the Center for Advanced Study in the Behavioral Sciences, Stanford, California. The Institute was sponsored by the Center, with funds from the Andrew Mellon Foundation, and by the Social Science Research Council Committee on Life Course Perspectives on Middle and Old Age. The author thanks Professor William H. Sewell for his critical reading of an earlier draft.

ABSTRACT

The last 25 years have been a period of cumulative social science in the sociological study of inequality and social mobility. This outcome stems both from the diffusion of new methods of quantitative analysis and from the use of a life-course conceptual model that fostered an incremental approach in research. On the other hand, this positivistic sociology of social stratification has not engendered as much progress in building middle-range theory. As a commentary on these relative developments over the last two decades, this essay suggests that progress in the future will require departures from existing designs of research and from dominant theories and their metatheoretical world views.

Social Stratification and Mobility: Two Decades of Cumulative Social Science

In the last two decades, the subdiscipline of sociology known as social stratification and mobility has made greater progress toward cumulative social science than any other branch of sociological research. Developments have been most extensive in the statistical description of both intergenerational and intragenerational processes of socioeconomic allocation -- social mobility. Progress in descriptive model building reflects wide application and refinement of various advanced statistical techniques, including structural equation models of the process of stratification (mobility), loglinear analysis of mobility tables, and stochastic models of positional (status) change. Advances have been less cumulative in analyzing class relations and hierarchical categories of social structure, especially when these relations and categories are conceived as properties of social aggregates and not of individuals (e.g., social classes, ethnic and racial strata) or of non-person entities (e.g., labor markets). Little, if any, refinement of major theoretical positions has ensued, particularly if attention is restricted to intellectual derivations from Marx, Weber, Durkheim, Sorokin, or Parsons.

This pattern of relative development in the last two decades has prompted at least one sociologist to argue that stratification and mobility research has become little more than mindless quantification of trivialized relationships in the social structure (Coser, 1975). Whether this provocative accusation was intended to be taken literally or as merely a dialectical admonition to improve an inherently sound line of scientific

inquiry is a crucial distinction. Its importance is reflected in the thesis of this essay that the last 25 years—principally the last decade—have been a historical watershed for American sociology as a social science. Led by statistical applications and technical advances in social stratification research during this period, the day—to—day practice of academic sociology now requires sophistication in middle—range theory specification and estimation—i.e., knowledge of mathematics and advanced statistics—that runs far in excess of the typical curriculum of sociologists educated in Europe and America in the 1950s and before. In that context, one can interpret the cited criticism of "mindless" stratification and mobility research as a lament for the passing of intellectual power (knowledge) and scholastic leadership from the hands of the "old" to those of the "young"—Mannheim's "problem" of the generations. 1

Whether this interpretation applies to the motivation of any specific critic is not pertinent in this essay. Rather, it serves as a metaphor to emphasize the potential significance of developments within the subdiscipline for sociology as a whole. At the same time, assessment of that significance would be incomplete if it ignored and did not interpret the extensive controversy and criticism, however valid, that have surrounded these scientific developments in stratification and mobility research—facets of the last 25 years that signal more than intellectual reactions to the changes in the field.

This essay offers a commentary on the recent history and future prospects of social stratification and mobility as a subdiscipline of sociology. It does not provide a comprehensive review and summary of research and theory, for several excellent reviews are available (e.g.,

Matras, 1980; Kalleberg and Sørensen, 1979; Mayer, 1979). In addition, no systematic attention to developments outside the United States has guided this essay, even though European influences in particular have played an ever larger role in the American subdiscipline as it has increased its participation in the growing international network of colleagues (see Featherman et al., 1974, for one instance of this collaboration and informal influence).

THE SEMINAL WORK OF BLAU AND DUNCAN

There can be little dispute of the influential character that the monograph by Blau and Duncan, The American Occupational Structure (1967), has exerted on the conduct and scope of stratification and mobility research during the last two decades. Whether or not its impact on the content and organization of scientific inquiry has achieved the status of a Kuhnian paradigm is an issue that runs beyond the limits of this essay (cf. Mullins, 1973). This work and the related writings of Duncan recast the empirical study of social mobility into inquiries about the inter- and intragenerational processes of socioeconomic stratification. They provided a rudimentary conceptual framework--the socioeconomic life cycle--for cumulative studies that extended and elaborated the descriptive features of stratification as a dynamic process of generational and cohort replacement in the society over time. This framework helped to organize and focus discussion about questions of inequality and the transmission of differential opportunities from generation to generation, a discussion that involved social scientists outside the discipline and a variety of theoretical

points of departure. It provided a focus for discussions of public policy about poverty and human rights that prevailed during the 1960s and early '70s as well as for debates between academic scholars. More generally, the line of work associated with Duncan and The American Occupational Structure became an exemplar for the design and analysis of national studies of mobility and inequality. Yet the greatest impact of this program of research on the discipline may have been indirect, through its introduction of an approach to "causal modeling" of hypothesized processual relationships that could be applied to other substantive areas.

Blau and Duncan cast the study of social mobility as the study of the process of stratification. Following Sorokin (1927), they conceived of mobility as a process of social metabolism whereby the inequalities that characterize the society in one generation are reproduced, in whole or in part, in the next. By studying intergenerational mechanisms of socioeconomic transfer and factors that mitigate the effects of these mechanisms in the lives of individuals, they saw themselves to be investigating societal changes in the dispersion of socioeconomic statuses through the succession of generations.

Duncan's (1967) schema of the socioeconomic life cycle expressed this process of stratification in terms of life-span experiences of a hypothetical birth cohort. It characterized inequalities within the cohort at birth by the socioeconomic statuses, genetic endowments, cultural and racial features, and related factors across parental households and community milieus. These inequalities of social background were taken as the antecedents of educational differences, which in turn were antecedent to variability in occupational and economic statuses across the working life

of the cohort. By studying interindividual differences in hierarchical standing across the successive "stages" or phases of the cohort life cycle, Blau and Duncan portrayed the pattern of social mobility over the life span. Their conceptual model or framework permitted them to examine, for example, to what extent years of school attainment across individuals reorganized the patterns of socioeconomic inequality ascribed by social background as the cohort entered the work force and achieved places in the social hierarchy. By comparing and contrasting this process of stratification in the experiences of successive cohorts, they were able to assess changes in inequality in the society that were associated with changes in the antecedent-consequent relationships between social background, schooling, and occupational careers.

The impact of this definition of social stratification and the framework of its study in relation to the lifelong mobility experiences of individuals in a population of cohorts might not have been so pervasive or long-lasting in the discipline were it not for Duncan's (1966b) introduction of path analysis as a tool for sociological research. Neither the conceptual point of view that was embodied in the socioeconomic life cycle nor path analysis itself was the discovery of Blau and Duncan. But the conjunction of the two was a powerful combination that both added to the scientific potential of the Duncan-Blau approach to stratification and illustrated how sociologists might represent and study "causal" processes generally.

Path analysis, developed by the population geneticist Sewall Wright, provided Duncan with the capability of partitioning the correlations among the constituent phases of the socioeconomic life cycle (i.e., the relation between two instances of interindividual differences) into the paths of

direct and indirect influence between (hypothetically) antecedent and consequent events. For example, the correlation of social background and adult socioeconomic status (as indexed by parental and adult occupational prestige) could be decomposed algebraically into a precise statistical estimate of the direct effect of background through schooling. In addition, in order to use this statistical method the analyst was forced to be explicit about the hypothetical model to be estimated—that is, to specify all direct and indirect relationships and to examine variance left unexplained in each variable by the "causal" system of alleged antecedents. So, for example, Blau and Duncan could analyze the mobility—inducing effects of formal schooling that were independent from inequalities of social background that were transmitted through schooling and converted into inequalities in the cohort's occupational attainments.

The analytical power that the introduction of path analysis provided for stratification research was twofold. First, its requirement of precise specification of the analyst's hypothesized model and its capacity to provide statistical estimates of the model's credibility helped to formalize and make concrete the theoretical or conceptual discussions of mobility processes. Analysts could visualize and critique each other's work far more easily than in the past because of the technique's specificity about the entire system of relationships being considered and/or excluded. As is mentioned subsequently, this facility increased the frequency of cross-disciplinary citation, especially between economists and sociologists nominally at work on the same topic; it also increased the rigor with which theoretical disagreements could be pursued.

The second effect of path analysis as a tool of stratification research was that it led to rapid accumulation of descriptive findings and to a deep richness of understanding of the process of stratification. Because the technique was based on correlations, it was possible for analysts to synthesize complex path models from fragments of data across several independent inquiries, subject to the constraints of population and sampling comparabilities. This strategy of incremental model building is illustrated by Duncan, Featherman, and Duncan (1972), who elaborated and extended the basic five-variable model that underlay the analysis of The American Occupational Structure. They introduced cognitive and motivational variables that were thought to intervene between social background and scholastic attainment; they examined the ability of schools to affect the distribution of achievement apart from the personal and background qualities of students in these schools; and they investigated the role of selected life-cycle events in adulthood--e.g., marriage, parenting, migration -- in altering the pattern of socioeconomic careers.

Another instance of the integrating, cumulating effect of path analysis on the scientific quality of stratification research is the so-called "Wisconsin status attainment model" (e.g., Sewell, Haller, and Portes, 1969; Sewell and Hauser, 1975). William H. Sewell was engaged in a longitudinal follow-up of a cohort of Wisconsin high school seniors at the time that Blau and Duncan undertook their 1962 survey, "Occupational Changes in a Generation" (OCG), and when Duncan was reading Sewall Wright. The richness of the data that Sewell and colleagues were collecting on social background, schooling, and early work histories from this and similar cohorts suited the application of the path analysis method and in some sense anticipated

the Duncan-Blau framework for the socioeconomic life cycle. By the mid1970s a rapidly expanding literature had appeared in which analysts at
Wisconsin and elsewhere elaborated and replicated a complex sociopsychological
model of status attainment that ran well beyond the modest limits of Blau
and Duncan (see Sewell and Hauser, 1980, for a comprehensive review of this
work and its replication and modification by others). 2

The influence of The American Occupational Structure ranged beyond stratification research to alter the empirical standards of sociological inquiry. In turn, these developments reflected back on stratification research to increase its quantitative and statistical complexity. At the time The American Occupational Structure was published, Blalock and other sociologists were developing methodologies for "causal" analysis using survey data. Duncan's introduction of path analysis into sociology, coupled with its visibly productive use in stratification research, met a receptive audience in the discipline. Later, Duncan and others recognized relationships between econometrics, psychometrics, path analysis, and structural equation models, as illustrated in Duncan's (1975) primer, Introduction to Structural Equation Models. (See Bielby and Hauser, 1977b, for a review of the increasing use of structural equation models in sociology.) intellectual bridge, together with the development of statistically efficient computer programs for estimating complex structural equations with latent or unobserved variables (e.g., Jöreskog and Sörbom, 1979), invited the crossing of new technologies in economics and educational psychology into the sociology of stratification and permitted even further precision in model construction and estimation. For example, Bielby (Bielby et al., 1977; Bielby and Hauser, 1977a) has compared interpretations of the role of

schooling in occupational and economic attainment in which detailed issues of data quality—errors in variables and in relationships—are modeled explicitly as part of the theories to be compared. In one sense this mode of theory specification epitomizes the positivistic approach within sociology, for it takes the measurement of "true" relationships and "valid" concepts as equally important.

Another more recent instance of "crossing" from the statistical literature into stratification research has had little to do with Blau and Duncan's seminal work per se, although an indirect connection exists. A longstanding problem in the subdiscipline has been the separation of "forced" or "structural" mobility from "free" or "circulation" mobility. This distinction calls attention to the macrosocial changes such as industrialization that affect the volume and pattern of mobility (and inequality) apart from the effects of social background, education, and so on. It is a distinction that has frustrated cross-societal and crosstime comparisons of social mobility because of methodological difficulties in separating the two types (see, e.g., Duncan, 1966a). Development of statistical analysis of discrete data (e.g., Bishop, Fienberg, and Holland, 1975) and of loglinear models to disaggregate mobility flows from effects of "structure" in mobility tables (e.g., Goodman, 1979; Duncan, 1979; Hauser, 1978a) appears to have solved these problems. The result is that stratification analysts have returned to the study of categorical data and contingency tables (to determine, for example, intergenerational occupational mobility); they no longer have to rely on structural equation models for the benefits of statistical precision and cumulative model construction. Moreover, they do not have to accept without option the

cardinal or ordinal scaling assumptions for variables such as occupation and education in order to achieve these benefits. Finally, the acceptance of these statistical tools into stratification research seems likely to foster cross-societal comparisons of stratification systems in ways that are more facilitative than through the application of path analysis and structural equations. This issue is discussed subsequently.

In sum, the stimulus of Blau and Duncan had wide-ranging responses in sociology as well as in stratification research. Yet the impact of their work is best understood as representing the interdependence between technological advances and important research questions that can be answered (or rephrased) better through technological application. Through this interplay, richly detailed models of the process of stratification have emerged, and the full potential for further elaboration and synthesis is as yet untapped. Nevertheless, progress toward cumulative social science has proceeded apace with marked upgrading in the quantitative sophistication that is required for academic sociologists who seek to keep up with, let alone contribute to, this field.

Hegemony of the "Status Attainment" Approach

As is implied by the recent renaissance of interest in nominal data and contingency tables, not all of the heavily quantified research in social stratification in the last two decades derives explicitly from the tradition of Blau and Duncan. What factors, therefore, other than its quantitative methodology and capacity to foster the cumulation of empirical findings might account for the hegemony of the so-called "status attainment" approach?

One factor was the historical influence of the social indicators "movement" during the late '60s and early '70s. This public policy-related emphasis on societal monitoring and the development of normative statistical indicators of social process recognized and embraced models such as that of the socioeconomic life cycle (e.g., Land and Spilerman, 1975). connection between the Duncan-Blau approach, with its visibly demographic conceptual base, and efforts of the time to develop a set of demographic social accounts prompted this recognition. Duncan himself wrote a chapter, "How Much Opportunity Is There?" in the first federal social report (Panel on Social Indicators, 1969) in which data from the Blau-Duncan OCG survey appeared. When plans for the replicate OCG study of 1973 were drawn (Featherman and Hauser, 1975, 1978), they were cast in terms of a time series on "opportunity" using the status attainment model as an indicator (see Sheldon and Land, 1972), and funding was obtained from the new division, Research Applied to National Needs, of NSF. Thus, one sustaining influence on status attainment research derived from the momentary florescence of interest within sociology in social indicators research, from federal funding tied directly or indirectly to "applied" research, and from the natural fit between the Duncan-Blau demographic approach and these policyrelated developments.

Another factor was connected with policy-related debates, within academia and without. The American Occupational Structure was published just after the Civil Rights Act of 1964 and in the midst of political and social attention to President Johnson's program for a "Great Society."

Status attainment models of the socioeconomic life cycle often helped to focus discussions and debates surrounding questions of inequality and

mobility—for persons of different economic strata and races, in particular. The best illustration of this stimulus, which brought widespread publicity to the field, was Christopher Jencks' Inequality (Jencks et al., 1972).

Jencks used structural equations, the implicit conceptual framework of the socioeconomic life cycle, the approach of incremental model building, and the OCG and Wisconsin (Sewell) data (together with the Equality of Educational Opportunity data, Coleman et al., 1966) to discuss the policy implications of the manifest pattern of inequality and its transmission across generations. More than any recent piece of social science research and policy analysis (perhaps more than any since the so-called "Coleman Report"), Inequality exemplified for the public and the social science community alike the "practical" value of this approach—methodological and conceptual—to issues in social stratification.

Academic interests in social indicators and public attention to equality of opportunity (and absolute equality, which was Jencks' political agenda) both have waned since the mid-'70s, being replaced by other issues. Yet in the wake of these supporting developments for the hegemony of the status attainment approach came a curious replacement—neo-Marxian research.

The earliest instances of neo-Marxian interests in the Duncan-style stratification research occurred in the work of several "radical economists"—e.g., Samuel Bowles and Herbert Gintis (see Bowles and Gintis, 1976, for a mature summary of their position). Although they did not accept the interpretations of the "status attainment" researchers (who were not necessarily of a single mind, in any case), the radical economists accepted the methods and framework of the socioeconomic life cycle concept and used them to pose alternative interpretations and to reestimate relationships. Their

work prompted an active exchange among many researchers, and the approach pioneered by Sewell, Duncan, and Blau was the focus of that theoretical debate (e.g., Bielby, 1976). More recently, Erik Wright and Luca Perrone (1977; see also Wright, 1980), neo-Marxian sociologists, used the "status attainment" framework and at the same time criticized it for its theoretical inattention to class relations that structure the status attainment processes. An important observation about these debates and revisions involving class analysts is that they reflect the methodological power of the Duncan-style approach—perhaps as another instance of incremental model building—and its capacity to formalize and focus substantive debates. Some might counter this interpretation by construing that capacity as a theoretical weakness, reflecting a theoretical void. Another observation is that the hegemony of the approach—at least of its empirical model—was so powerful in the '70s that Marxists and non-Marxists alike found it useful as a focus for description and theoretical criticism.

Another contributing factor to the dominance of the Duncan-style research through the mid-1970s was the execution of several national mobility inquiries that reflected the methodology and design of the Blau-Duncan OCG survey. These inquiries were fostered by the reactivation of the International Sociological Association's Research Committee on Stratification and Mobility, which served as a forum for principal investigators from the several nations to discuss plans and early results (see Featherman et al., 1974). To be sure, the design and conception of these independent inquiries reflected a broad array of theoretical departures and national themes. But the early discussions among investigators rarely neglected to refer to Blau and Duncan, and several cross-national comparative analyses of path

diagrams and structural coefficients were published. In effect, models of the socioeconomic life cycle and benchmark comparisons with the United States, using the status attainment methodology, formed the starting point of cross-societal studies of stratification and mobility during the mid-1970s. (Matras, 1980, summarizes these comparisons, and Mayer, 1979, reviews with great skepticism the cumulative effect of comparative efforts.)

Last, it might be said that the hegemony of the status attainment approach was sustained by the lineage of intellectual kinsmen that stemmed from Sewell and Duncan and that found its critical mass at the University of Wisconsin-Madison. Duncan was an undergraduate student of Sewell's at Oklahoma A&M (Duncan's father, Otis Durant Duncan, chaired the Sociology Department there). Sewell and Duncan became friends and remained in touch intellectually as Duncan moved through graduate work at Minnesota and Chicago and on to academic posts at Penn State, Wisconsin, Chicago, and Michigan; Sewell moved to Wisconsin in 1946 and has remained there to the present. Hauser and Featherman were students of Duncan at Michigan and subsequently accepted positions at Wisconsin. Hauser developed a long collaboration with Sewell in his longitudinal follow-up of the Wisconsin cohort, and Featherman and Hauser collaborated in replicating and extending the OCG survey in 1973. The three of them have had a close intellectual collaboration since coming together at Wisconsin. Also at Wisconsin was Archibald O. Haller, a former student of Sewell's, who was engaged in similar studies with a rural sample in Michigan. Haller was instrumental in bringing Featherman to Wisconsin in the Department of Rural Sociology, which Sewell had a chaired a decade earlier. These individuals, and their students, formed a close network of common intellectual ancestry -- a circumstance

that encouraged sustained interaction, collaboration, and cumulative effort. Thus, one might say that the dominance of the status attainment approach rested on more than its intellectual base. It drew strength from the informal social organization of the discipline and from a localized group of associates—a set of circumstances that may have been unique and that may have imparted an idiosyncratic character to the pattern of development for this subdiscipline.

REACTIVE DEVELOPMENTS

Beginning with the mid-1970s a series of sociological articles appeared that explicitly challenged the intellectual base of status attainment. research (e.g., Spilerman, 1977). Their critical position might be termed the "structural" approach to stratification. The critique was broadly based, but in essence it faulted the "status attainment" approach for its focus on individuals as units of analysis to the neglect of the features of social structure that mold the process of stratification as conceived by Duncan and others. To be sure, status attainment models had incorporated or represented racial, ethnic, industrial, regional, and (to a far lesser extent) gender-based contexts of stratification. But the critics found that this representation of status-group, industry, and regional "structure" reflected ad hoc aggregations and lacked a consistent theory of social organization from which the operative elements of structure and their interrelatedness could be deduced. Indeed, the latent critique of the Duncan tradition was that it was little more than a method of demographic description (describing a process of population transformation and its

differentiation across time). It could describe how persons were allocated to hierarchically ranked social roles from one phase of the life cycle to the next and how such processes changed across cohorts but, according to these critics, it could account neither for the hierarchical base of social positions and rewards nor for changes in them or their age-related features.

Another critical view saw a theoretical base in the Blau-Duncan tradition and rejected it (e.g., Horan, 1978; Bowles and Gintis, 1976). The tradition was challenged as a form of functional theory; it was chastened for its implicit Durkheimian model of organic solidarity and its excessive emphasis of Weberian status groupings and (free) market (class) relations. Some found parallels between status attainment models and human capital theory in economics, a correspondence encouraged by the interpretative language (e.g., "economic returns to education"), if not the formal specifications, of Sewell's and Duncan's students and collaborators. alleged link to neoclassical economics fueled the attack on status attainment research; criticisms of human capital theory were translated and transferred into sociology. Just as orthodox economic theory was said to be unable to account for poverty, discrimination, or persistent economic inequality (in the face of declining differences in the quality of the labor supply, e.g., in its education) so were status attainment models. Similarly, neo-Marxian critics in sociology were inspired by their colleagues who promulgated a radical economics.

The intellectual bridge to economic theories of labor markets was built from this critical response to the hegemony of status attainment research (see Kalleberg and Sørensen, 1979, for a summary of the influence of those economic theories on sociology; see Baron and Bielby, 1980, for a critique

and revision of structuralist approaches to stratification). Structural revisions of stratification theory borrowed concepts from economic labor market analysis—e.g., "dual (primary/secondary) markets," "segmented markets," "internal labor markets," and "wage— vs. job—competition sectors." Analysts used job, occupational, and industrial characteristics (rather than those of persons) to represent the (hypothetical) organizational properties of the capitalist economy that underlay the stratifying relationships among education, occupation, and earnings, for example, at the individual level. They emphasized that the economy necessarily was composed of qualitatively different processes of stratification, rather than of a single, society—wide process, because of (1) the dialectics between the interests of labor and those of management that differed across industries or regions, (2) differential rules of recruitment and promotion across firms and occupations, (3) the development of national versus local career lines, and (4) the monopolistic versus competitive context of an industry, and so on.

It would be inaccurate to view these structural approaches as either internally consistent theories or as necessarily distinct from either neoclassical microeconomics or status attainment research. Cain (1975, 1976), for one, argues that the economics of market segmentation reflect less of a departure from the orthodox position than its proponents claim. Many efforts at specifying structural contexts have been fraught with technical difficulties and with unsatisfactory disjunctions between theory, defensible operational measurements, and available data (see Beck et al., 1978; Hauser, forthcoming).

One notable characteristic of the reactive, structural analyses was the tendency to incorporate structural variables—e.g., indicators of

labor market segmentation or of class relationships—into structural equation models of the process of stratification. For example, Wright (1980) introduced an occupation—based class category into a model of differential earnings in order to analyze the relative importance of class versus status antecedents. He also analyzed the status attainment process (i.e., the determination of income differences among men) within his theoretical categories of social class, a method not unlike the one non—Marxists had used to examine racial or gender differences in attainment.

Thus, even among a large segment of stratification research that sought to supplant the apparent theoretical deficiencies of the Duncan tradition, proponents adopted the statistical methods of model construction and hypothesis testing that had been pioneered in status attainment research. This pattern emphasizes my previous observation that a major effect of the Blau-Duncan work was the facilitation of cumulative social science through the introduction of a methodology and methods of inquiry that enabled contrasting theoretical perspectives to be discussed systematically.

One wonders whether "status attainment" research, insofar as the label refers to the whole tradition inspired by Sewell, Blau and Duncan is not a misleading rubric. The status attainment approach, even as exemplified in the writings of the Wisconsin sociologists, has dealt with issues (dependent variables) other than occupational status or prestige (e.g., income, job authority). The methods associated in the early development of the approach have provided a common context for investigation across a variety of conceptual points of view. Further, taking the whole array of work that has utilized the methods and practiced incremental model building —for example, the five-variable model of Blau and Duncan (1967) and

extensions in Duncan et al. (1972), Jencks et al. (1972), Sewell and Hauser (1975), and Wright (1980)—one sees correction, modification, and cumulative knowledge about the process of stratification (mobility). If one takes this view, then "status attainment" denotes no single theoretical position. It refers to a general methodology of analysis and to some technical conventions.

The methodology has, however, been the subject of criticism and revisions as well. For example, Sørensen (1977) has argued that regressionbased analytical models inherently assume that the process of stratification is in a stable or stationary state and that all that remains problematic is the distribution or allocation of individuals across successive socioeconomic hierarchies (e.g., family, school, economy). Using a differential equation approach to the study of change, an approach popularized for sociologists by James Coleman (1964), Sørensen has proposed models that separate the allocative mechanisms (i.e., status attainment in terms of human capital formation) from mechanisms that reflect changes in the distribution of social positions (e.g., jobs) to be filled. In essence, this is another attempt to differentiate "circulation" from "structural" mobility. Whether the differential equation approach is conceptually different from the interpretations of structural equation models estimated across a cohort-sequential longitudinal research design is open to debate (e.g., Hauser, 1978b). Suffice it to say that Sørensen's effort to construct multilevel models (i.e., changes in structure and changes in individuals' statuses across the life span) have path-breaking potential (see the discussion below).

Another critical assessment has been offered by Baron and Bielby (Baron, 1979; Baron and Bielby, 1980). Their argument is directed at the use of individual-level data, as collected for example in the OCG and Wisconsin surveys, whether aggregated into cohorts, races, regions, industries, social classes, market segments, or whatever. In short, it is a broadside criticism of both "status attainment" and "structural" approaches. They recognize the methodological and, in some fundamental sense, conceptual unity of the two approaches. They argue that the basic unit of social inequality—the unit that generates inequality through the organization of jobs and that regulates social mobility—is the firm; what alters a regime of mobility and inequality over time is change in the social organization of firms. They, therefore, call for a "new structuralism" in which empirical studies of firms—of the social organization of work—replace OCG—type researches. (A related view has been advanced by Mayer, 1979, for cross—societal research.)

THE CRUCIAL NEED FOR THEORETICAL REVITALIZATION

Despite the accumulation of descriptive statistics about the process of stratification through the adoption (with whatever level of commitment) of some methodological conventions by proponents of different hypothetical models of American society, it is hard to recognize as much progress in stratification theory. At one level, this assertion is contradictory. One can argue defensibly that juxtaposition of market segmentation and "Wisconsin" models really reflects a theoretical argument leading to better theory; or, that descriptive statistics reflected in social indicator

models generate medium-range or low-range theoretical statements. Yet there have been few explicit efforts to test or contrast opposing theoretical models; that is, to deduce models formally from theory and to propose critical tests within the conventions of standardized methods of analysis. By contrast, there has been a lot of defensive carping in the literature among intellectual opponents (for which the editors of journals are culpable).

Aside from the preponderance of descriptive versus hypothesis—testing approaches, theory construction has been limited by the absence of proper data. One quite apparent instance is the comparatively underdeveloped base of information from which the process of stratification for American women can be described or analyzed theoretically. Some systematic gender comparisons within the status attainment approach have appeared recently (e.g., Sewell et al., 1979) but these also have been descriptive and have not been motivated by theoretical propositions. For example, this work has not started with hypotheses derived from some a priori conception of the relationship between the genders or spouses—as one might with the study of social classes or racial—ethnic status groups (e.g., Wright, 1980; Hodge, 1973; Bonacich, 1976); nor has its slow accumulation of descriptive findings prompted much conceptualization of how the processes for the genders are interrelated within a population or a societal model of stratification in which gender is an analytical (theoretical) construct.

What this research on women has suggested is that OCG-style inquiries (and there are no national data for the female population comparable to the data from the OCG studies), carried out as replicates of the projects about men's work and mobility patterns, will not yield the details necessary

to study women's stratification or the relationship between the genders. Variability of work and schooling patterns, for example, is too great among women, both within but especially between birth cohorts, to assume the simple age-grading of life events that has underlain the design of research on the male socioeconomic life cycle. Methodologically, this observation leads to different research designs in the future -- those, for example, eliciting continuous-event histories and employing retrospective longitudinal designs (e.g., Coleman et al., 1972; Featherman, 1980). Presumably, such data for both men and women, rich in the timing as well as in the statussignificance of behaviors, would facilitate theory building about societal stratification with gender as an analytical construct rather than as a limited descriptive category. Ironically, the shift to such designs would imply a departure from the OCG time-series for men, which has featured replication and quite limited data collection. Were funding for stratification research unable to support both types of inquiries, this departure potentially could destroy the OCG series as a source of federal social indicators (a series currently reflecting only male experiences of "opportunity").

Another historic constraint to progress in theory construction has been associated with the lack of comparable cross-societal and over-time data and research in which societies have been units of analysis. Most of the long-standing theories of social stratification at least implicitly contrast social conditions over time or across societal types, as instanced by both structural-functional and Marxian theories. Yet the great volume of research during the last 25 years has not been carefully comparative; it has featured time-bound case studies and has been flawed by comparisons across nonequivalent methods. Perhaps as the international research

community analyzes the recent round of national mobility surveys (cited above), students of stratification will be able to examine the historical, cultural, political, and economic factors that major theories emphasize. With societies to analyze as units (i.e., using comparative structural equations or loglinear models of the process of stratification), perhaps theoretical statements about society and social change will again motivate the attention of empirical researches. This possibility is made more likely by the formation of a Social Science Research Council committee on comparative stratification (SSRC, 1980). The agenda of this committee, guided by an international team of collaborators, is to execute a series of explicitly comparative analyses of the mobility inquiries that succeeded the studies of Sewell, Blau, and Duncan, and to minimize noncomparability across studies. The contrasting theoretical perspectives of the collaborators will be brought to the analysis of these multisociety data.

Future progress in theory may not, however, issue either from the acquisition of more extensive data for empirical research or from a more effective organization of effort within the international research community (see Mayer, 1979). The barriers to progress are to be found within contemporary theoretical frameworks themselves, in the data that are collected under their guidance, and within the divisive conflicts among current "schools" of stratification research.

Despite the signal importance of the Sewell-Blau-Duncan tradition for the scientific development of stratification research (and the discipline as a whole) in the last decade, this line of work has provided few answers to some fundamental questions that students of stratification address. This intellectual limitation has been noted by the tradition's cofounder (Duncan, 1968) and by critics as cited above. But even for the task of understanding how stratification systems change over time, a purpose behind the continuation of the OCG time-series begun by Blau and Duncan and sustained by the social indicators movement, the data and the conceptual framework that lies behind the data have not proven sufficient (see Featherman, forthcoming).

The problem may reside in the metatheories that influence how issues in social stratification are stated and embodied in theories and empirical inquiries. What is missing from both the demographic conceptions of the process of stratification and the several structural perspectives is a thoroughgoing postulation of dialectical relationships that underlie and define the stratification system at any moment (see Laslett, 1980) but that also contribute to change in the stratification process and its important social elements over time. For example, the dynamics of population transformation through cohort succession and the processes of crossgenerational status (positional) transmission to which the status attainment approach calls attention fail to incorporate mechanisms of social discontinuity. That is, massive change must come from sources exogenous to the cohort and to the generational processes of stratification themselves -such as from industrialization, technological innovations, and revolution. In addition, this demographic approach, while not atheoretical (see Ryder, 1964), is insufficient in its theoretical scope to explain the genesis of generational relationships or their persistence and change.

Similarly, those structural approaches to the understanding of societal stratification that draw from Marxian theory, while inherently dialectical, limit their attention to dialectics in the economy. That is, relationships

to the means of production--putatively generic processes of social control -- are the basis of social class formation, and class conflict is the basis of institutional transformation. These theories, by giving primacy across historical time to economic dialectics, ignore the possibility that generic issues of social control (intergroup dialectics) may manifest themselves primarily outside the confines of class dynamics as understood from the vantage of modern European history. For example, can Marxian dialectics account for the power relationships that underlie African age-set societies? In short, even Marxian theories are not dialectical metatheories of social stratification insofar as they are insensitive to processes that modify and change the form in which power relationships in a society are most manifest across historical moments. In principle, age (generation, cohort) rather than social class could be (or could become) a central basis of socioeconomic allocation in a postindustrial society, depending on the prominence of issues around which questions of resource and positional allocation are organized in a society with a stable population structure (see Keyfitz, 1973). A truly dialectical theory should call attention to the processes and social relationships that produce discontinuities in the basis of social stratification (i.e., from class to age-sets) as well as those that at any moment define the socioeconomic classification.

It is beyond the scope of this essay to venture into the construction and defense of such a theory of social stratification. Suffice it to say that the theory should be a multilevel behavioral one that articulates the reciprocal relationship between life-span changes in individual behavior and secular changes in the fabric of institutional and intergroup relationships.

The theory should feature relationships among social entities or aggregates (e.g., classes, age-sets, generations identified by interentity relationships that reflect the organizing principles of the dynamic system of social stratification). The fundamental relationship is the allocation principle that determines how the collectivity settles or manages potential or actual conflicts over access to valued positions and resources. It is a principle involving the scheduling of access and control, and it forms the linkage from life-span processes at the individual level to secular changes at the institutional level of analysis.

Unfortunately, current tendencies within the discipline have polarized scholarly effort—as reflected in the reactive, often antagonistic relationship between the "status attainment" and "structural" schools of thought. At one level, this opposition could be considered healthy dialectical scholarship, but one sees too little indication of intellectual synthesis to be optimistic about the theoretical benefit of prevailing forms of dissent and criticism.

If there is to be progress in stratification theory during the next 25 years, it will not ensue from reactionary rejection of the advances in positivistic social science that have occurred in sociology in the last two decades. The adoption of this methodology as the context within which contemporary cohorts of sociologists are trained seems too widespread across theoretical and subdisciplinary specialties. At the same time, the quest for empirical "universals" must be tempered by the recognition of historical and cultural discontinuities, and therefore, the methodologies of stratification research must remain pluralistic.

In addition, advances in stratification theory will require greater scholarly cooperation than now typifies the discipline. What is needed is a "new structuralism," but not one that rejects a complementary behavioral theory that features active (vs. reactive) individuals who create, modify, or choose to ignore "structure." Surely there can be a division of labor among students of stratification, and perhaps the best that one can expect is a variety of "middle-range" theories that selectively treat issues of "structure" or individuals' behaviors. But this strategy of organizing for efficient scholarship must be joined by a commitment to collegiality in pursuit of a common goal—namely, the most complete understanding of social inequality and mobility that contemporary scholarship will admit. It is inconceivable that only one school of thought, with its middle-range theory, will attain that goal unassisted by the intellectual dialectics (as opposed to egoistic antagonism) of theoretical pluralism. 7

CONCLUSION

The last two decades of research on social stratification and mobility have moved the discipline of sociology as a whole toward higher standards and practices of positivistic science. A major impetus in that direction was given by The American Occupational Structure and the "status attainment" approach pioneered by Sewell, Duncan, and Blau. Widespread adoption of this approach was linked to the general utility of the analytical methods that characterized it and to other sustaining developments in sociology. The hegemony of "status attainment" research has been challenged by a variety of "structural" approaches, some of which share the methodological and

conceptual characteristics that they have criticized. Progress in theory during this period of challenge has been slow and has been more noticeable in low-range or middle-range conceptual models with descriptive and predictive rather than analytical potential. Advances in the future hinge on the adaptation of a dialectical metatheoretical paradigm, new data resources with greater potential for theory building, and a spirit of collegiality amid pluralistic diversity in theory and methodology.

NOTES

Age per se is not the issue; instead, the distinction is between those whose knowledge and training permit them to learn and utilize the latest advances in quantitative methods as a tool of social science and those who are unable to do so. That the ability is greater among more recent cohorts of doctoral students reflects the patterns of recruitment into the field of sociology and the mechanisms of training. Were sociologists recruited from predoctoral backgrounds in mathematics or behavioral sciences rather than the humanities and social studies, the rough cohort patterns of quantitative facility might disappear. Instead, the discipline relies upon the graduate curriculum to train in these skills, which often are not augmented by continuing education or aided by the basic quantitative aptitudes of professional sociologists.

²An instance of the cumulative stimulus to research provided by path analysis and structural equations appears in the programmatic social psychological work of Kohn (1969), and Kohn and Schooler (1978, 1979) at NIMH. Longitudinal studies of value socialization through work and occupation careers, of the intergenerational relationship between adult (parental) and childhood (filial) socialization, and of occupational recruitment were integrated into the broad status attainment approach. This type of inquiry has provided an intellectual link between social stratification and social structure and personality, on the one hand, and emerging multidisciplinary inquiries into life-span human development and aging, on the other.

³Some of this cross-disciplinary fertilization grew out of collaboration between Duncan and Arthur Goldberger, an econometrician at Wisconsin (e.g., Goldberger and Duncan, 1973). They discovered mutual intellectual concerns about inequality and mobility, but this also led to their exploration of common methodological issues and analytical solutions in econometrics, psychometrics, and structural equations.

⁴Scientific cumulation was also made possible in the structural equation approach by certain operational and conceptual conventions that evolved through research. This is especially notable in the development of scoring conventions for occupational standing (Reiss, 1961; Hodge et al., 1964; Siegel, 1971; Hauser and Featherman, 1977, Ch. 2; Treiman, 1978). While this literature manifests some conceptual and operational disagreement, particularly with regard to the preferability of prestige or socioeconomic indexes, it also shows the explicit effort to calibrate the indexes against each other (e.g., Stevens and Featherman, 1979). This standardization of measurement also has been typical of this genre of stratification research.

⁵Clearly, not all "structural" research in stratification was motivated by an implicit desire to correct or supplant the Duncan tradition. The work of Bonacich (1976), Hechter (1974), and Burawoy (1976; compare 1977) illustrates this genre but was among many structural analyses that were able to ignore the "status attainment" model.

⁶It is interesting to speculate about the use of the term "status attainment" to refer to the line of research pioneered by Sewell, Blau, and Duncan. The origin of the phrase is perhaps Blau and Duncan (1967), but its use as a deliberately chosen rubric first appeared in Haller and

Portes (1973). It is unfelicitous terminology, for it commotes status in the Weberian sense of prestige — a basis of deference/derogation — and Durkheimian organic solidarity. In fact, the models, as instanced by the "Wisconsin status attainment model" of Sewell and his collaborators, are more nearly approximations to Weber's notion of "class" than of "status," although even here there is no implicit or explicit attempt at construct validation. Unfortunately, the label has invited theoretical criticism for unwarranted reasons. Perhaps this reaction to and use of the label by critics help to consolidate the position of the opponent by creating greater apparent differences in approach than actually exist. This is an implication of Cain's (1975, 1976) argument about the critique of neoclassical economics. One wonders whether this is unwitting strategy of "young Turks" who seek to wrest intellectual dominance from the old guard; it is potentially another instance of Mannheim's dialectic of generational succession, which was mentioned at the outset of this essay.

Admittedly the purposes of theory are many, and the vision of "grand" theory building out of pluralistic diversity among middle-range theories may be illusory (see Gergen, forthcoming, for the development of this skeptical evaluation using an instance in developmental psychology). Still, efforts at integrating a multilevel perspective, perhaps a more realistic goal than a multilevel theory, may yield richer insights at any given level. (The multidisciplinary life-span approach to human development vis-a-vis developmental psychology theory is again a case in point; see Gergen, forthcoming; Baltes et al., 1980。)

REFERENCES

- Baltes, P., Reese, H., and Lipsitt, L. 1980. Life-span developmental psychology. Annual Review of Psychology, 31, 65-110.
- Baron, J. 1979. The "new structuralism" in stratification research.

 Unpublished paper, Department of Sociology, University of CaliforniaSanta Barbara.
- Baron, J. and Bielby, W. 1980. Bringing the firms back in: Stratification, segmentation, and the organization of work. American Sociological
 Review, 45, 737-765.
- Beck, E., Horan, P., and Tolbert, C. 1978. Stratification in a dual economy:

 A sectoral model for earning. American Sociological Review, 43, 704-720.
- Bielby, W. 1976. Response error in models of the intergenerational transmission of socioeconomic status. Ph.D. dissertation, Department of Sociology, University of Wisconsin-Madison.
- Bielby, W. and Hauser, R. M. 1977a. Response error in earnings functions for nonblack males. Sociological Methods and Research, 6, 241-280.
- _____. 1977b. Structural equation models. Annual Review of Sociology, 3, 137-162.
- Bielby, W., Hauser, R. M., and Featherman, D. L. 1977. Response error of black and nonblack males in models of the intergenerational transmission of socioeconomic status. American Journal of Sociology, 82, 1242-1288.
- Bishop, Y. M., Fienberg, S. E., and Holland, P. W. 1975. <u>Discrete multi-</u> variate analysis: Theory and practice. Cambridge, Mass: MIT Press.
- Blau, P. and Duncan, O.D. 1967. The American occupational structure.

 New York: Wiley.

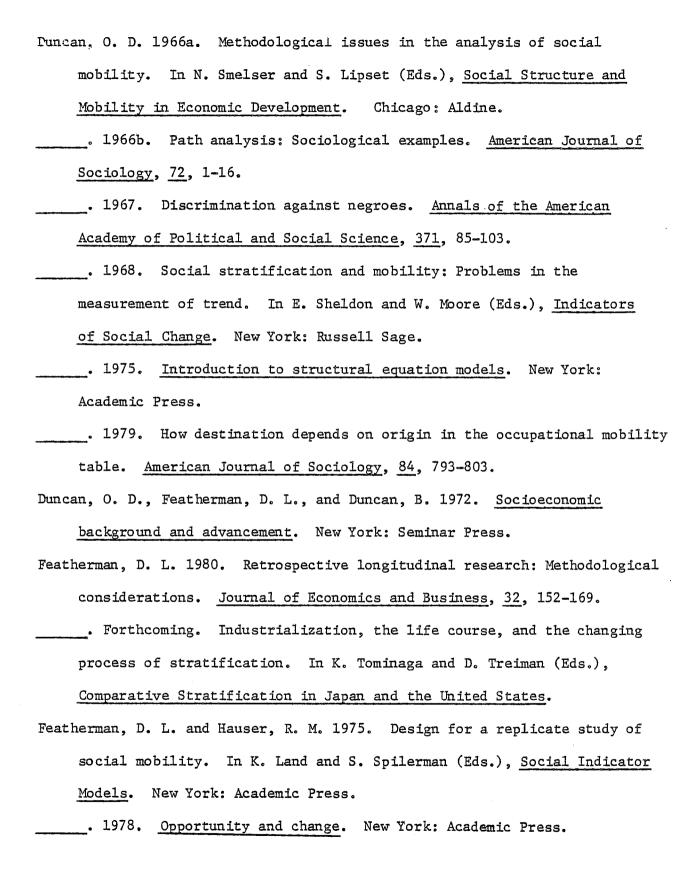
- Bonacich, E. 1976. Advanced capitalism and black/white race relations in the United States: A split labor market interpretation. American Sociological Review, 41, 34-51.
- Bowles, S. and Gintis, H. 1976. Schooling in a capitalist America. New York: Basic Books.
- Burawoy, M. 1976. The functions and reproduction of migrant labor:

 Comparative material from southern Africa and the United States.

 American Journal of Sociology, 81, 1050-1087.
- . 1977. Social structure, homogenization, and "the process of status attainment in the United States and Britain." American Journal of Sociology, 82, 1031-1041.
- Cain, G. 1975. The challenge of dual and radical theories of the labor market to orthodox economic theory. American Economic Review, 65, 16-22.
- . 1976. The challenge of segmented labor market theories to orthodox theory: A survey. Journal of Economic Literature, 14, 1215-1257.
- Coleman, J. S. 1964. Mathematic sociology. Glencoe, Ill.: Free Press.
- Coleman, J. S. et al. 1966. Equality of educational opportunity.

 Washington, D.C.: U.S. Government Printing Office.
- Coleman, J. S., Blum, Z. D., Sørensen, A. B., and Rossi, P. H. 1972.

 White and black careers during the first decade of labor force experience, part I: Occupational status. Social Science Research, 1 (3), 243-270.
- Coser, L. 1975. Two methods in search of a substance. American Sociological Review, 40, 691-700.



- Featherman, D. L., Hauser, R. M., and Sewell, W. H. 1974. Toward comparable data on inequality and stratification. American Sociologist, 9, 18-25.
- Gergen, K. Forthcoming. The emerging crisis in life-span development theory. In P. Baltes and O. G. Brim (Eds.), <u>Life-Span Human</u>

 Development (Vol. 3). New York: Academic Press.
- Goldberger, A. S. and Duncan, O. D. 1973. <u>Structural equation models in</u> the social sciences. New York: Academic Press.
- Goodman, L. 1979. Multiplicative models for the analysis of occupational mobility tables and other kinds of cross-classification tables.

 American Journal of Sociology, 84, 804-819.
- Haller, A. O. and Portes, A. 1973. Status attainment process. Sociology of Education, 46, 51-91.
- Hauser, R. M. 1978a. A structural model of the mobility table. <u>Social</u>
 <u>Forces</u>, <u>56</u>, 919-953.
- . 1978b. Comment on Sørensen and Hallinan: A reconceptualization of school effects. Sociology of Education, 51, 68-72.
- _____. Forthcoming. On "stratification in a dual economy." American Sociological Review, 45, 702-712.
- Hauser, R. M. and Featherman, D. L. 1977. The process of stratification.

 New York: Academic Press.
- Hechter, M. 1974. The political economy of ethnic change. American Journal of Sociology, 79, 1151-1178.
- Hodge, R. 1973. Toward a theory of racial differences in employment.

 Social Forces, 52, 16-31.

- Hodge, R., Siegel, P., and Rossi, P. 1964. Occupational prestige in the United States, 1925-1963. American Journal of Sociology, 70, 286-302.
- Horan, P. 1978. Is status attainment research atheoretical? American Sociological Review, 43, 334-341.
- Jencks, C., Smith, M., Acland, H., Bane, M., Cohen, D., Gintis, H., Heyns,
 B., and Michelson, S. 1972. <u>Inequality: A reassessment of the effect</u>
 of family and schooling in America. New York: Basic Books.
- Jöreskog, K. and Sörbom, D. 1979. Advances in factor analysis and structural equation models. Cambridge, Mass.: ABT Books.
- Kalleberg, A. and Sørensen, A. B. 1979. The sociology of labor markets.

 Annual Review of Sociology, 5, 351-379.
- Keyfitz, N. 1973. Individual mobility in a stationary population. Population Studies, 27, 335-352.
- Kohn, M. 1969. <u>Class and conformity: A study of values</u>. Homewood, Ill.: Dorsey Press.
- Kohn M. and Schooler, C. 1978. The reciprocal effects of the substantive complexity of work and intellectual flexibility: A longitudinal assessment. American Journal of Sociology, 84, 24-52.
- _____. 1979. The reciprocal effects of the substantive complexity of work and intellectual flexibility: A longitudinal assessment. In Matilda W. Riley (Ed.), Aging from Birth to Death. Boulder, Colo: Westview Press.
- Land, K. and Spilerman, S. (Eds.). 1975. Social indicator models. New York:

 Academic Press.
- Laslett, B. 1980. The place of theory in quantitative historical research.

 American Sociological Review, 45, 214-228.

- Matras, J. 1980. Comparative social mobility. <u>Annual Review of Sociology</u>. 6, 401-431.
- Mayer, K. 1979. Class formation and social reproduction: Current comparative research on social mobility (Working Paper No. 4). VASMA

 Project, Institute for Social Research, University of Mannheim,

 Mannheim, W. Germany.
- Mullins, N. 1973. Theories and theory groups in contemporary American sociology. New York: Harper and Row.
- Panel on Social Indicators. 1969. <u>Toward a social report</u>. Washington, D.C.: U.S. Department of Health, Education, and Welfare.
- Reiss, A. 1961. Occupations and social status. Glencoe, Ill.: Free Press.
- Ryder, N. 1964. Notes on the concept of a population. American Journal of Sociology, 69, 447-463.
- Sewell, W. H., Haller, A., and Portes, A. 1969. The educational and early occupational attainment process. American Sociology Review, 34, 82-92.
- Sewell, W. H. and Hauser, R. M. 1975. Education, occupation, and earnings.

 New York: Academic Press.
- _____. 1980. The Wisconsin longitudinal study of social and psychological factors in aspirations and achievements. Research in Sociology of Education and Socialization, 1, 59-99.
- Sewell, W. H., Hauser, R. M., and Wolf, W. 1979. Sex, school, and occupational status (Working Paper No. 79-47). Center for Demography and Ecology, University of Wisconsin-Madison.
- Sheldon, E. and Land, K. 1972. Social reporting for the 1970s: A review and programmatic statement. Policy Sciences, 3, 137-151.

- Siegel, P. 1971. The American occupational prestige structure. Ph.D. dissertation, University of Chicago.
- Social Science Research Council. 1980. Societal patterns of industrial changes, social mobility and inequality. Unpublished proposal submitted to the National Science Foundation. New York: SSRC.
- Sørensen, A. B. 1977. The structure of inequality and the process of attainment. American Sociological Review, 42, 965-978.
- Sorokin, P. 1927. Social mobility. New York: Harper.
- Spilerman, S. 1977. Careers, labor market structure, and socioeconomic achievement. American Journal of Sociology, 83, 551-593.
- Stevens, J. and Featherman, D. L. 1979. A revised socioeconomic index

 of occupational status (Working Paper No. 79-48). Center for

 Demography and Ecology, University of Wisconsin-Madison.
- Treiman, D. 1978. Occupational prestige in comparative perspective.

 New York: Academic Press.
- Wright, E. 1980. <u>Class structure and income determination</u>. New York:

 Academic Press.
- Wright, E. and Perrone, L. 1977. Marxist class categories and income inequality. American Sociological Review, 42, 32-55.