# The Status Attainment Process: Socialization or Allocation?\*

ALAN C. KERCKHOFF, Duke University

### **ABSTRACT**

A review is presented of the research which has led to the construction of elaborated models of status attainment, noting that the major theoretical thrust in this work has followed a socialization perspective. It is suggested that there are both theoretical and empirical grounds for including in such investigation indices of the effects of allocation as well as socialization. This can be done by incorporating in the models measures of those characteristics used in making allocation decisions as well as through more refined use of contextual analysis. The greatest challenge in such further investigations is to explicate the association between educational attainment and occupational attainment.

Within the last decade there has been an almost overwhelming flood of research and writing about the process of status attainment in the United States. Beginning with the Coleman-Campbell analysis of Equality of Educational Opportunity and Blau and Duncan's catalytic reconceptualization of the investigation of social mobility, we have seen not only a large number of studies, but also a rapidly increasing complexity and sophistication in the analyses conducted. The purpose of this work has been twofold First, it has attempted to develop as powerful a prediction model as possible with which to explain the variation in status attainmen. Second, it has been concerned with the problem of estimating and then explaining the degree of intergenerational continuity of social position.

By far the most influential recent work in this problem area has followed the so-called "Wisconsin model" (Sewell and Hauser, a; Sewell et al., a, b). Beginning with a basic demographic model of intergenerational mobility taken from the Blau and Duncan volume and from Duncan's further work (a), social-psychological variables are introduced to explicate the associations found. The basic Duncan model uses SES of origin and ability to explain educational attainment, and then all three of those variables are used to explain occupational attainment] The most fundamental finding from that analysis is that occupational attainment is most fully influenced by educational attainment, and the great preponderance of the effects of SES and ability on occupational attainment are mediated through educational attainment. In effect, the Wisconsin model is an attempt to give further theoretical meaning to these basic findings. Work on the model began with the problem of explaining the associations between SES of origin and ability on the one hand and educational attainment on the other. The theoretical stance taken is that of the social educational attainment on the other. The theoretical stance taken is that of the social interactionist, with the link between origin and attainment being sought in the

<sup>\*</sup>Presidential address delivered at the annual meeting of the Southern Sociological Society, April 1976. I am indebted to Richard T. Campbell, Mark Evers, Charles Hirschman, James S. House, Alejandro Portes, and William H. Sewell for their comments on an early draft of this paper.

socialization process. Significant others are seen as having an influence on the goals of the young person, and these goals are viewed as instrumental in the attainment process. The theory anticipates that the encouragement by significant others will vary according to the social position and demonstrated ability of the child, and that this encouragement will affect the level to which he aspires. The family and the school are seen as the institutional settings of this socialization process, and the significant others include parents, teachers, and peers.

There is no doubt in my mind that this has been an important body of research which will have a very positive long-range effect on the discipline of sociology as well as on the society's view of social inequality and status attainment as major national issues. I have personally been very stimulated by the work and have attempted to contribute to it in several ways. As a social psychologist with a long-standing interest in the socialization process, I have found the Wisconsin model very appealing and persuasive. At the same time, I have felt the need to recognize the limitations of that model and of the theoretical position on which it is based. My own view is that the questions that can be raised about it do not justify rejecting the Wisconsin socialization model, but they do suggest ways in which we can go beyond it in our attempts to understand the status attainment process.

## ANOTHER APPROACH

There is a view which differs from the socialization perspective which I will refer to as offering an "allocation model" of status attainment. This perspective is at variance with the socialization model in that it minimizes the significance of variations in socialization outcomes as they influence in any direct way the individual's attainments and emphasizes the importance of societal forces which identify, select, process, classify, and assign individuals according to externally imposed criteria. Rather than differential attainment being seen as due to variations in learned motives and skills, as in a socialization model, an allocation model views attainment as due to the application of structural limitations and selection criteria.

To the extent that both view the characteristics of the individual actor as the product of influences from his social environment, a socialization model and an allocation model cannot be fully differentiated. Both acknowledge the importance of the actions of others in the determination of the attainments of the individual. However, a socialization model looks for the explanation of attainments in the analysis of the evolving characteristics of the individual actor, while an allocation model seeks an explanation through the examination of the mechanisms and criteria of control of the individual by social agencies. A socialization model thus tends to view the individual as relatively free to move within the social system, his attainments being determined by what he chooses to do and how well he does it. In contrast, an allocation model views the individual as relatively constrained by the social structure, his attainments being determined by what he is permitted to do.

Granted that the two positions are not fully separable, and granted that few

social scientists would be comfortable being classified as espousing one of these models to the exclusion of the other, the primary elaboration of the original Blau and Duncan status attainment model that has been developed to date has taken a socialization perspective, and some of its critics have taken an allocation perspective. Using what is perhaps an exaggerated contrast between these two perspectives as a point of departure, I want to specify some of the points of difference between them and to suggest the value of their combined contributions. Turning first to a discussion of their differences, there are two general types that are worth noting. First, they offer different theoretical interpretations of the same observations, and, second, they direct our attention to different kinds of phenomena. I will consider each of these briefly.

#### WHAT DO THE DATA MEAN?

The two most important socialization variables included in the Wisconsin model are significant others' influence and ambition. Both of these have been singled out as focal points in the analysis of status attainment. It has been said that "Perhaps the most important single finding [in the Wisconsin model] . . . is the critical role of significant others' influence in the status attainment process' (Sewell et al., b, 1025). And the measures of ambition have been said to constitute "the strategic center of the model" (Haller and Portes, 68). Certainly, these are the two most important variables the Wisconsin analyses have added to Duncan's basic model. When they are added to the model, not only is a large proportion of the effect of SES and ability on attainment mediated, but these variables independently add to the explanation of the variance in attainments. It is precisely this combination of mediation and additional explanatory power that gives the ring of validity to the Wisconsin model. Clearly, the inclusion of these social-psychological variables have added significantly to what Blau and Duncan had begun.

But does this demonstrate the validity of the socialization model of status attainment? Even though the Wisconsin model is based on socialization theory, there is some basis for doubt. First, looking at the measures of significant others' influence, it is important to recognize that influence is indexed by the correspondence between the son's goals and the goals espoused by people who presumably can influence him. (Such people include parents, teachers, and peers.) In all cases, however, the goals of these significant others are the ones the son perceives them to espouse. The difficulty with this is the fact that there is some evidence (Kerckhoff and Huff) that the sons often misperceive the others' goals. This misperception is more common among younger than older adolescents, but perceived agreement is also greater among younger adolescents while actual agreement is greater among older adolescents. This pattern of associations can be interpreted as indicating that adolescents tend to project their own goals onto their significant others and that the convergence between their own and these others' goals during adolescence is due to the child's increasing awareness of the realities of the status attainment process. I do

med p

not intend this to suggest that we should discard the idea of influence from significant others, but greater care in measurement and serious consideration of the  $\mathcal{L}$  significance of external constraints appear to be in order.

The socialization interpretation of the association between the child's goals and his later attainments is even more subject to reinterpretation from an allocation perspective. The socialization model interprets the strong association between ambition and attainment as indicating that the goals direct and motivate the child's efforts during the formative years and thus determine the level of attainment he reaches later. Again this interpretation implies an open system within which the major determinants of attainment are motivation and ability. Viewed from an allocation perspective, however, one could argue that the measures of ambition used in most analyses of status attainment do not index motivation so much as they index knowledge of "the real world." The crucial part of that claim would rest on the fact that most measures of ambition have been based on questions about the students "plans" or "expectations" rather than their "wishes" or "aspirations."

The distinction between "wanting" something and "expecting" something is critical for an understanding of the difference between a socialization and an allocation view of the status attainment process. An allocation interpretation would argue that expectations are strongly associated with attainments because adolescents become sufficiently knowledgeable to be able to estimate the probabilities of various outcomes. In this vein, it has been argued (Han, b) that everyone wants the same outcomes, but people at different levels of the stratification system quite understandably expect different outcomes. People's observations of the attainments of V others like themselves undoubtedly do have a feedback effect on their expectations, irrespective of the goals they would like to seek (Siegel). There is considerable evidence that expectations get adjusted to the "real world" during the childhood and adolescent years. For instance, the expectations of ninth and tenth graders are less strongly related to later attainments than are those of twelfth graders (Kerckhoff and Campbell, b; Wilson and Portes). Also, children become less convinced as they get older that everyone has an equal chance to obtain the "good things" in life (Simmons and Rosenberg). And, it has been observed that the greater the gap between wishes and expectations, the less faith youngsters have in the importance of ability and effort for getting ahead and the greater their belief in the importance of "pull" (Han, a). Thus, it seems reasonable to argue that expectations of the future are affected by observed structural constraints, and they thus reflect more t than pure motivation.

Because of these kinds of considerations, an allocation perspective would minimize the importance of interpersonal influence and internally generated goal-striving activities. In their place, such a perspective suggests that one simply assume that social structure limits attainments and that one's knowledge of the significance of such limitations increases as one gets older. The increasing similarity between parents' and children's expectations is made quite understandable in this way, and so is the increasing strength of the association between the children's expectations and their later attainments. This reinterpretation of the current models

does not question the importance of the social-psychological variables in explaining the variance in attainment; there is only a question of the conceptualization of their theoretical meaning in the analysis. An allocation perspective goes beyond this reconceptualization, however, to a consideration of additional kinds of observations which would increase the power of the status attainment model.

#### WHAT SHOULD BE OBSERVED?

The clearest example of the use of an allocation perspective within the main stream of the status attainment literature can be found in the discussion of racial differences. In a series of analyses (cf. Duncan, b), it has been demonstrated that the rewards blacks receive for any level of accomplishment are lower than those of whites at the same level. For any level of social origin, their educational attainments are lower than whites; for any level of educational attainment, their occupational attainments are lower; for any level of occupational attainment, their income is lower. There is no doubt in the minds of the analysts who have made these comparisons that such systematic differences are due to discrimination. To the best of my knowledge, no one has challenged that interpretation, and it seems unlikely that anyone would.

Yet, the evidence does not directly support that interpretation. There are no measures used in these analyses which in any direct way can be said to index discrimination. It is simply that we, as knowledgeable social scientists and citizens, are willing to interpret a racial difference as evidence of discrimination. In sharp contrast to this easy acceptance of such evidence, Christopher Jencks has been severely taken to task for having interpreted the unexplained variance in the attainment model as due to "luck," and he has been sufficiently chastened by the criticism to recant. Yet no one has attacked the interpretation of the black—white differences as being due to discrimination even though it has the same fragile empirical foundation in the modelling of the status attainment process as Jencks "luck" does: it is a label attached to differences that are unexplained within the limits of the model.

This is not to suggest, of course, that racial differences are not due to discrimination. It is only to suggest that, if we are going to consider discrimination as a significant part of the status attainment process, we need to find ways to build it into our models. I use this example because when black—white comparisons are made almost everyone agrees that the allocation process is important, and I want to suggest that we may be able to learn something more general from this experience with racial comparisons. A socialization model simply doesn't work very well for blacks (Kerckhoff and Campbell, a; J. N. Porter; Portes and Wilson), and our best guess is that this is because no matter what the socialization outcomes are, there are externally imposed limitations on their attainments. If discrimination is to be included in our model of the attainment process, we need to be more precise about the bases, the timing, the sources, and the kinds of externally imposed limitations. There is reason to believe that the limitations will be found throughout the attain-

ment process, that they are imposed by functionaries in various institutional settings, and that they consist largely in providing or withholding opportunities.

Using an allocation perspective, however, very similar kinds of influences will be expected in the process of status attainment within each race as well as between the races. If institutional functionaries can provide or withhold opporunities on the basis of racial identity, they presumably can (and do) do the same thing on the basis of other criteria. The important contribution of racial comparisons to a general model of status attainment, therefore, is to direct our attention to the existence of discrimination and to alert us to the possible points at which it can occur. It may be that some will prefer a term other than "discrimination" when the focus shifts from comparisons between the races to differentiation within a single racial group, but the kinds of influence on the attainment process are the same.

Of course, when we shift our attention away from racial comparisons, we obviously face the problem of specifying the characteristics of individuals (other than racial identity) which might form the basis of discrimination exercised by institutional functionaries and which should have an effect on attainment. About the only characteristic to have received much systematic attention in the literature thus far is SES of origin. There are countless discussions of the differentiation that is made within the school system based on the social origins of students. These range all the way from the effects of initial sorting of children into ability groups in the early grades (Rist), to the placement of adolescents in the various high school curricula (Alexander and Eckland), to the quality of college attended (Karabel and Astin). Not all of the evidence cited is wholly convincing, but the ideas warrant further investigation.

Since SES of origin is one of the basic exogenous variables in the attainment models developed recently, many of the findings suggesting differentiation by SES have been reported within the path analytic format. In general, these have been findings to the effect that SES has an effect on a dependent variable net of all other independent variables. For instance, about one-third of the effect of SES on educational attainment remains even after grades in school, the influence of significant others, and educational expectations are included in the model. That is, the various social-psychological variables in the socialization model fail to mediate fully the association between origin and attainment. In fact, less than half of the effect of father's occupation on son's occupational attainment is mediated by all of the other variables in the model. Whatever the merits of the socialization model, it does not fully explain the relationship between origin and attainment. It is reasonable to suspect that at least some of the remaining direct effect of SES on attainment is due to discrimination in favor of higher-status youngsters, but, of course, there is no direct evidence within the model itself to support that idea. As with the evidence on black-white differences, one can only speculate about the reasons for the observations.

Of course, some writers (Bowles; Cicourel and Kitsuse) have argued that decisions are made within the educational system which differentiate on the basis of the family's social position, and some research has suggested that teacher's ex-

individual students for special attention—in a critical or laudatory way. These decisions not only provide the individuals involved with some information about themselves and their probable future, but they also create socially significant classifications on the basis of which others will respond to them differentially. In short, the decisions segmentalize the population of students into categories whose attainment probabilities are different. The same kinds of decisions are made by counsellors (or by teachers in their counsellor role). Advice regarding course choices, the admission to the college preparatory curriculum, the taking of placement tests, the location of employment opportunities, the participation in extracurricular activities all involve some degree of judgment on the part of the counsellor as to the "suitability" of the various options for "this kind" of student. This means discriminating among "kinds" of students. In fact, advice may be worthless unless it does discriminate—the question faced by the advisor is not just "how do I do this?" but also "should I do this?" or "can I do this?"

Our problem is to learn more about the bases of this kind of discrimination. The current models do include academic performance as a variable, and thus partially deal with the matter. Grades in school are clearly important in the attainment process. But we know very little about the basis of grading from these analyses. Less than a third of the variance in grades is explained by the model, and most of this is due to the association between IQ and grades. It seems very likely that other factors would not only contribute to the explanation of grades but would also independently contribute to the further strengthening of the model. For instance, it seems reasonable to hypothesize that teachers also respond to the students' efforts or motivation or academic seriousness when assigning grades, and that the inclusion of a teacher's rating of each student on that dimension would not only increase the explained variance of grades, but would also add to the explanation of the goals set by significant others and by the individual himself. More generally, we need to look closely at the criteria of classification and differentiation used by teachers and counsellors and, to the extent they are generally used, build them into our models.

A recent finding in my own work with Richard Campbell (Kerckhoff and Campbell, b), suggests the kind of contribution such classifications can make—though it is at best a small beginning. Counsellors' ninth grade ratings of students on the degree of disciplinary difficulties they had experienced were used as a variable in our models explaining high school academic performance and educational attainment five years later. This proved to be a highly significant variable, even when IQ and junior high school grades are included in the model, and it is especially important in the explanation of performance and attainment for blacks. Although it is not an ideal allocation model variable, it suggests the value of bringing together into a single analysis the performances of individuals and the evaluations of school officials.

The kinds of variables needed can be devised only if we keep before us the idea that the school as an institution is more than a fixed obstacle course through which students with varying levels of skill and motivation are permitted to run. If we recognize the institutional necessity for teachers and other officials to differentiate

e germent

pectations of their students' performance influence how they treat the students and thereby also influence the students' performances (Rist; Rosenthal and Jacobson). Others (cf. John Porter) have noted that middle-class parents are more active in their attempts to influence school personnel either to make favorable decisions at the outset or to provide opportunities for a second chance when failure occurs. All of these kinds of discussions are relevant to the process of status attainment and to the observed associations among SES, school performance; and educational attainment. But no measures of this kind are currently included in the attainment models, nor do these authors provide very useful guidance in developing such measures. There is evidence that the models we now have are more powerful for whites than blacks (Portes and Wilson) and for upper-status whites than for lower-status whites (Kerckhoff and Campbell, a). We thus might expect that, if these measures of discrimination were included, they would not only increase the overall power of the models, but they would be most important in the explanation of the attainments of blacks and lower-status whites (Ellis and Lane; Simpson, 1962). But, whatever the criteria of discrimination might be, my purpose here is to emphasize the potential importance of discrimination in the attainment process. The basis of this claim lies in the reinterpretation of associations already included in the socialization models, in the fact that such models do not explain all of the variance of attainments, in the failure of the socialization variables to mediate fully the associations between social origins and attainments, and, most persuasively, in studies which focus on the effects institutional decision-makers have on aspirations, performances, and attainments.

## TOWARD A SYNTHESIS

If this evidence of the importance of the actions of institutional functionaries is taken seriously, it calls for a more concerted effort to include the allocation process in our models of status attainment. There seem to be two fundamentally different ways to go about doing this, at the individual level of analysis and at the institutional level of analysis.

The current models all use the individual as the unit of analysis. It is his social position, personal characteristics, performances, and attainments that are measured and interrelated. There are some clear methodological advantages, therefore, in using individual measures of the allocation process as well if these are to be added to current models. The most straightforward way to do this is to focus on the major decision points in the attainment process to examine the criteria institutional personnel use in making decisions, and to adopt those dimensions which seem to be generally used as additional variables in our models. Clearly some of the major criteria are already included in our analyses: IQ, grades, ambition, etc. An allocation perspective suggests that other less obvious criteria are probably used, however, and these are worth looking for.

In the school setting, for example, teachers make decisions when assigning grades, dividing a class into reading groups or other functional units, or singling out

individual students for special attention—in a critical or laudatory way. These decisions not only provide the individuals involved with some information about themselves and their probable future, but they also create socially significant classifications on the basis of which others will respond to them differentially. In short, the decisions segmentalize the population of students into categories whose attainment probabilities are different. The same kinds of decisions are made by counsellors (or by teachers in their counsellor role). Advice regarding course choices, the admission to the college preparatory curriculum, the taking of placement tests, the location of employment opportunities, the participation in extracurricular activities all involve some degree of judgment on the part of the counsellor as to the "suitability" of the various options for "this kind" of student. This means discriminating among "kinds" of students. In fact, advice may be worthless unless it does discriminate—the question faced by the advisor is not just "how do I do this?" but also "should I do this?" or "can I do this?"

Our problem is to learn more about the bases of this kind of discrimination. The current models do include academic performance as a variable, and thus partially deal with the matter. Grades in school are clearly important in the attainment process. But we know very little about the basis of grading from these analyses. Less than a third of the variance in grades is explained by the model, and most of this is due to the association between IQ and grades. It seems very likely that other factors would not only contribute to the explanation of grades but would also independently contribute to the further strengthening of the model. For instance, it seems reasonable to hypothesize that teachers also respond to the students' efforts or motivation or academic seriousness when assigning grades, and that the inclusion of a teacher's rating of each student on that dimension would not only increase the explained variance of grades, but would also add to the explanation of the goals set by significant others and by the individual himself. More generally, we need to look closely at the criteria of classification and differentiation used by teachers and counsellors and, to the extent they are generally used, build them into our models.

A recent finding in my own work with Richard Campbell (Kerckhoff and Campbell, b), suggests the kind of contribution such classifications can make—though it is at best a small beginning. Counsellors' ninth grade ratings of students on the degree of disciplinary difficulties they had experienced were used as a variable in our models explaining high school academic performance and educational attainment five years later. This proved to be a highly significant variable, even when IQ and junior high school grades are included in the model, and it is especially important in the explanation of performance and attainment for blacks. Although it is not an ideal allocation model variable, it suggests the value of bringing together into a single analysis the performances of individuals and the evaluations of school officials.

The kinds of variables needed can be devised only if we keep before us the idea that the school as an institution is more than a fixed obstacle course through which students with varying levels of skill and motivation are permitted to run. If we recognize the institutional necessity for teachers and other officials to differentiate-

e germand

among students and to attempt to provide the most suitable kinds of educational experiences to different kinds of students, we immediately face the problem of defining the bases of differentiation and the characteristics of the varying kinds of educational experiences. Of course, for the purposes of our status attainment model, we may not need to be concerned with all of these variations, but we need to be alert to their possible relevance.

A second form of analysis which can contribute to the elaboration of attainment models from an allocation perspective is currently being conducted under the rubric of contextual analysis. This involves examining the effects of the characteristics of the institution once the effects of all individual characteristics have been taken into account. The contexts considered are usually the whole school, and the characteristics considered range from the composition of the student body (Alexander and Eckland), to the physical facilities provided (Coleman et al.), to the "educational climate" of the school (McDill et al.).

This approach is a controversial one, at least one highly sophisticated analyst arguing that the outcomes are often "speculative, artifactual, and substantively trivial (Hauser, 645) Although there are some difficult methodological and interpretative problems involved, this seems an unnecessarily harsh evaluation of the method as a whole. <u>Two reasons</u> have been have been suggested for the often "trivial" outcomes produced by this method. First it is noted that the "context" is always multidimensional, and thus any simple comparison of within and between school differences can only deal with the net effects of all dimensions of contexts. Since these may have many different effects, some working in opposite directions, their net effect can be zero and yet their separate effects may be substantial. For instance, Alexander and Eckland have shown that the overall school context effect on the process of educational attainment is very weak, but aggregate school-level measures of student aptitude and SES have effects which run in opposite directions, in spite of the fact that these two contextual measures are positively correlated. Thus, when the two are used as separate variables, they each contribute to an explanation of the process (especially curriculum placement and significant others' influence), and their combined effect is substantial. This approach, then, attempts to refine contextual analysis by defining significant dimensions of contexts and using those dimensions in the models of attainment.

A second suggested reason for the often weak contextual effects found in the literature is that the contexts have different effects on different kinds of individuals. For instance, Heyns has argued that any global measure of the effect of a school's resources on students who attend that school will understate that effect because resources are not used equally by all students. She uses school counsellors as an example of a school resource and shows that visits to counsellors and the encouragement they give to students to seek post-high school education vary significantly according to whether or not the student is in the college preparatory curriculum. This approach to the problems of contextual analysis, therefore, attempts to differentiate among types of students according to the relevance of any given contextual characteristic.

Both of these approaches give promise of increasing the contribution of studies of "institutional effects" by examining more closely the specific nature of the association between contexts and individual performances. In doing so, they both necessarily direct our attention to the stimulating theoretical problems of attempting to generate testable hypotheses about the nature of this contextual-individual relationship, and that may be their most valuable contribution to the sociological enterprise.

I have thus suggested that the current models of status attainment, based on a socialization perspective, can be improved and made more powerful by including measures of the allocation process. I have also suggested that the allocation process occurs both within and between schools. Teachers and counsellors make distinctions among students, alter their behaviors accordingly, and thereby affect the opportunities and outcomes for their students. At the same time, decisions are made at the level of the school system or the larger community or society which affect the nature of the contexts within which these individual decisions are made and limit the range of possible effects within schools. All of these effects necessarily interact with the socialization effects currently emphasized in our models, and there will certainly be major theoretical and methodological problems involved in any research enterprise in which both are included. But there is great promise of an increase in the power of the model and an increase in our knowledge of the process it is intended to chart.

# THE GREATEST CHALLENGE

The great majority of literature I have referred to thus far is concerned with explaining educational attainment. It should be remembered, however, that the original Blau and Duncan research was oriented toward explaining occupational attainment. The focus on educational attainment in the most recent work is partially a function of Blau and Duncan's finding that educational attainment is a powerful predictor of occupational attainment. I suspect it is also a function of the fact that it is easier to follow young people through the school years and into early adulthood than it is to find out in any detail what happens to them once they leave school. Whatever the reasons, however, the fact is that the entire thrust of the work leading to elaborations of the Blau and Duncan basic model has been focused on the first step of the model—on the explanation of the association between social origin and ability on the one hand and educational attainment on the other.

The greatest challenge in the further work on the status attainment model is to develop comparable elaborations with respect to the second step, that from educational to occupational attainment. It is very striking that the model is more powerful in explaining educational attainment than it is in explaining occupational attainment. The variance explained drops from 54 percent to 42 percent. The social-psychological variables measured during the school years are not very powerful when occupational attainment is studied. Although occupational aspirations help

explain occupational attainment, that association is much weaker than the one between educational aspirations and attainment. There has been almost no work done to further explicate the link between educational and occupational attainment. I think this poses an important challenge, one which sociologists cannot ignore. And it is at precisely this point that allocation influences can be expected to be , A salient.

Our models are currently structured as if the occupational marketplace were an open one, finding employment at any given level being almost solely a function of the number of vacancies and one's talents, ambition, and credentials (indexed by educational attainment). Certainly this is not the case. Individuals with any given level of education are distributed over a rather wide range of occupations (Crowder). This is especially true for those having one of the two modal levels of educational attainment—high school or college graduation. What determines this distribution? The variables currently in our models such as ability and ambition provide only a partial answer to that question.

We need a concerted effort to refine our knowledge of the link between educational and occupational attainment. I think it can be done in much the same way we have begun to explicate the associations between origins and educational attainment. It will require both socialization and allocation perspectives. We may well need to enlarge our list of socialization outcomes to include variables that are more relevant to occupational than educational attainment. Such factors as knowledge of the availability and the requirements of various jobs, interpersonal skills, manual dexterity, autonomy, and so on may prove to be significant in predicting occupational outcomes. If jobs vary in the kinds of demands and opportunities they provide for the worker (Kohn), individuals with different personal characteristics will be attracted to different jobs. But certainly we also need to look at allocation variables. What criteria are used by personnel officers besides setting a floor of educational attainment? What does it take not only to get a particular kind of job but to keep it? To what extent is the association between educational and occupational attainment solely a function of the personnel selection process, and to what extent does one actually learn something in school that is needed on the job?6 What other selection stages occur between school and the job? For instance, how important is union membership and are there special criteria for membership?

Certainly there are also contextual effects involved here. Where do the pools of potential workers come from? In general, the pool becomes more geographically circumscribed as one moves down the status hierarchy. How does that variation in access affect the overall association between educational and occupational attainment? Similarly, different locations provide very different local options for those who "fish" in the local job pool. This is very analogous to the variations in "institutional facilities" emphasized by some students of educational attainment. Also, as noted in the earlier discussion, it is very likely that the characteristics of the local "occupational facilities" will have very different effects on different kinds of workers, and thus simple contextual analyses may be inadequate to highlight these differential effects.7

We have made some impressive gains in the systematic conceptualization and empirical verification of models of the status attainment process. I have found this to be one of the most exciting developments during my career as a sociologist. The socialization perspective has been the dominant one in the work to date, and the results have been very impressive. The gains made in both conceptualization and methodology constitute a solid contribution to the discipline. I am suggesting that we can build further on this initial work by directing our efforts toward two general goals—the inclusion of indices of the allocation process, and the further explication of the education—occupation relationship. If the work of the past decade is any indication, this will be a very worthwhile investment—for the discipline and for the society.

#### **NOTES**

1. The male pronoun is used here, and throughout the paper, not for sexist reasons, but because the research referred to has been almost wholly concerned with male status attainment.

2. Even the Wisconsin group have not followed a pure socialization conceptualization, although their earlier work comes closer to it than the more recent discussions. For instance, in the first major paper in the Wisconsin series (Sewell et al., a), the model specified that all effects of SES, IQ, and academic performance on educational and occupational attainment are mediated by aspirations and significant others influence. Later (Sewell et al., b), it was acknowledged that there was a significant direct path from academic performance to both educational and occupational attainment. This finding was unanticipated in the earlier article, and it was suggested there that it might reflect the importance of a mediating variable such as self concept—another socialization outcome.

3. The proportion of the variance in academic performance explained by the model varies in reports using other data sets. In my own work a larger proportion is explained for sixth graders (one-half) than for twelfth graders (one-third), although the latter agrees closely with the Wisconsin findings.

4/ See Stein for a discussion of some of the ways in which contexts are altered through the political pro-

5. In some of the recent analyses (Jencks et al.; Sewell and Hauser, b), considerable attention has been given to a further step in the model, that from occupation to income (or earnings). There is even greater drop in income variance explained by the model, the Sewell and Hauser analysis explaining only 8 percent. Although the work of Jencks et al. purports to explain a larger proportion of income variance (22%), this is still the weakest part of their extended model, and their analysis does little to advance our understanding of the distribution of incomes. It seems clear to me that the explanation of income presents an entirely new set of problems, and our work on educational and occupational attainment has done little more than raise questions about the associations among these three indices of attainment. Certainly educational and occupational attainment, as we have measured them, are much more closely associated than either is related to income.

6. The work of Bowles and Gintis (a, b) is often viewed as particularly relevant to an allocation perspective, but they actually use both socialization and allocation in their interpretation of the role of education in the stratification system. Although they do argue that capitalist society is organized so that those who have high-status origins are the most likely to attain high adult status, they see this as occurring through socialization mechanisms within the family and the school which facilitate the differential development of personal qualities according to origins. They argue that these different personal qualities are then used as criteria of selection by employers in allocating individuals to occupational positions. It is not always possible to locate the specific points at which they believe these socialization and allocation influences are effected, and their analysis is thus less useful for present purposes than it might be. The kind of combination of socialization and allocation processes which they suggest, however, promises to be fruitful if they can specify its characteristics more precisely.

7. A somewhat different form of analysis also gives promise of increasing our understanding of the attainment process, although it does not fit neatly into either a socialization or allocation conceptualization. This is the consideration of early career contingencies such as breaks in educational experience, marriage, and parenthood. There are suggestions from earlier work (Blau and Duncan) that early marriage and/or parenthood has a depressing effect on attainment, and we know that many men obtain further edu-

cation even after taking a full-time job (Campbell; Edkland). We may increase our understanding of the process of occupational placement by examining further the effects of these early career contingencies.

#### REFERENCES

- Alexander, K. L., and B. K. Eckland. 1975. "Contextual Effects in the High School Attainment Process." *American Sociological Review* 40(June):402-16.
- Blau, P. M., and O. D. Duncan. 1967. The American Occupational Structure. New York: Wiley.
- Bowles, S. 1972. "Schooling and Inequality from Generation to Generation." Journal of Political Economy 80(May/June):S219-51.
- Bowles, S., and H. Gintis. a:1972. "I.Q. in the U.S. Class Structure." *Social Policy* 3(November/December):65-96.
- b:1976. Educational Reform and the Contradiction's of Economic Life. New York: Basic Books.
- Campbell, R. T. 1973. "Social Class and College Graduation: A Replication and Extension." Unpublished Ph.D. dissertation, University of Wisconsin.
- Cicourel, A. V., and J. I. Kitsuse. 1963. The Educational Decision-Makers. Indianapolis: Bobbs-Merrill.
- Coleman, J. S., and E. Q. Campbell et al. 1966. Equality of Educational Opportunity. Washington: Government Printing Office.
- Crowder, N. D. 1974. "A Critique of Duncan's Stratification Research." Sociology 8(January):19-45.
- Duncan, O. D. a:1968. "Ability and Achievement." Eugenics Quarterly 15(March):1-11.

  b:1968. "Inheritance of Poverty or Inheritance of Race?" In D. P. Moynihan (ed.),
  On Understanding Poverty. New York: Basic Books.
- Eckland, B. K. 1964. "Social Class and Graduation: Some Misconceptions Corrected." American Journal of Sociology 70(July):36-50.
- Ellis, R. A., and W. C. Lane. 1963. "Structural Supports for Upward Mobility." *American Sociological Review* 28(October):743-56.
- Haller, A. O., and A. Portes. 1973. "Status Attainment Processes." Sociology of Education 46(Winter):51-91.
- Han, W. S. a:1968. "Discrepancy in Socioeconomic Level of Aspiration and Perception of Illegitimate Expediency." American Journal of Sociology 74(November):240-7.
- ——. b:1969. "Two Conflicting Themes: Common Values Versus Class Differential Values." American Sociological Review 34(October):679-90.
- Hauser, R. M. 1970. "Context and Consex: A Cautionary Tale." American Journal of Sociology 75(January):645-64.
- Heyns, B. 1974. "Social Selection and Stratification within Schools." American Journal of Sociology 79(May):1434-51.
- Jencks, C. 1973. "Inequality in Retrospect." Harvard Educational Review 43(February):138-64.
- Jencks, C. et al. 1972. Inequality: A Reassessment of the Effect of Family and Schooling in America. New York: Basic Books.
- Karabel, J., and A. W. Astin. 1975. "Social Class, Academic Ability, and College "Quality". Social Forces 53(March):381-98.
- Kerckhoff, A. C. 1974. Ambition and Attainment: A Study of Four Samples of American Boys. Washington: American Sociological Association.
- Kerckhoff, A. C., and R. T. Campbell. a:forthcoming. "Race and Social Status Differences in the Explanation of Educational Ambition." Social Forces 55(March 1977).
- b:unpublished. "Race and Social Status Differences in the Explanation of Educational Attainment."

- Kerckhoff, A. C., and J. L. Huff. 1974. "Parental Influence on Educational Goals." Sociometry 37(December):307-27.
- Kohn, M. L. 1969. Class and Conformity. Homewood: Dorsey.
- McDill, E. L., L. C. Rigsby, and E. D. Meyers, Jr. 1969. "Educational Climates of High Schools: Their Effects and Sources." *American Journal of Sociology* 74(May):567-89.
- Porter, J. N. 1974. "Race, Socialization, and Mobility in Educational and Early Occupational Attainment." *American Sociological Review* 39(June):303-16.
- Porter, John. 1968. "The Future of Upward Mobility." American Sociological Review 33(February):5-19.
- Portes, A., and K. L. Wilson. 1976. "Black-White Differences in Educational Attainment." American Sociological Review 41(June):414-31.
- Rist, R. C. 1970. "Student Social Class and Teacher Expectations: The Self-Fulfilling Prophecy in Ghetto Education." *Harvard Educational Review* 40(August):411-51.
- Rosenthal, R., and L. Jacobson. 1968. Pygmalion in the Classroom. New York: Holt, Rinehart & Winston.
- Sewell, W. H., A. O. Haller, and A. Portes. a:1969. "The Educational and Early Occupational Attainment Process." *American Sociological Review* 34(February):82-92.
- Sewell, W. H., A. O. Haller, and G. W. Ohlendorf. b:1970. "The Educational and Early Occupational Attainment Process: Replications and Revisions." American Sociological Review 35(December):1014-27.
- Sewell, W. H., and R. M. Hauser. a:1972. "Causes and Consequences of Higher Education: Models of the Status Attainment Process." American Journal of Agricultural Economics 54(December):651-61.
- b:1975. Education, Occupation, and Earnings: Achievement in the Early Career. New York: Academic Press.
- Siegel, P. M. 1965. "On the Cost of Being a Negro." Sociological Inquiry 35(Winter):41-57.
- Simmons, R. G., and M. Rosenberg. 1971. "Functions of Children's Perceptions of the Stratification System." *American Sociological Review* 36(April):235-49.
- Simpson, R. L. 1962. "Parential Influence, Anticipatory Socialization, and Social Mobility." American Sociological Review 27(August):517-22.
- Stein, A. 1971. "Strategies for Failure." Harvard Educational Review 41(May):158-204.
- Wilson, K. C., and A. Portes. 1975. "The Educational Attainment Process: Results from a National Sample." *American Journal of Sociology* 81(September):343-63.