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# CHANGES IN THE STRUCTURE OF STATUS SYSTEMS<sup>1</sup>

#### Archibald O. Haller

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Department of Rural Sociology, University of Wisconsin, Madison

ABSTRACT A distinction is drawn between content and structural dimensions of status. Wealth, power, and prestige are the main content dimensions. These appear to be shared by all societies. Structural changes in any or all of these constitute and produce some of the most far-reaching transformations in social systems. Concepts for describing structural changes in status systems are available but have not yet been elaborated systematically. Structural dimensions of status are those variables which permit such description. There seem to be six such dimensions, each of which is logically independent of the others, and each of which is, in the empirical world, to some extent influenced by the others. Three are well-known concepts of simple statistics: central tendency, dispersion, and skewness. Another is also an ordinary statistical concept: number of modes, here called stratigraphy. A fifth, called flux, is the degree to which the position of a social unit is determined by its (or a precursor's) position at a previous time; it is the correlation (or regression) of statuses at one time with statuses at another. Each of these five dimensions applies (1) to indicators of individual status variables, each measuring specific aspects of status dimensions, (2) to indicators of content dimensions of status which when combined describe a status system, and (3) to indicators of position in the more general status system. A sixth, crystallization, is the degree of correlation among, or factor structure of, status variables composing a content dimension, or of content dimensions composing general status variables. Changes in the states of five of the structural dimensions may be assessed by observations taken at two or more times. The sixth, flux, requires measurements Changes in at five or more times. four

This address deals with the theory and methodology of research on changes in the structures of status systems. It is a conceptual analysis, not a report on the changes that any particular status system has undergone. It may be considered as a prologue to such a study, for conceptual clarification is needed before much new ground will be gained in understanding the causes or consequences of changes in the distribution of wealth, power, and prestige.

#### CONCEPTS DESCRIBING STATUS PHENOMENA

In an illuminating analogy, Barber (1968) has likened Karl Marx's thinking about social stratification to that of Copernicus in astronomy.

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By demonstrating that the positions of the planets could be predicted easily and accurately by assuming that the sun was the center of the universe, the great Polish scientist destroyed the main barriers then restricting astronomical theory. Today we know that his hypothesis was a gross oversimplification. But his was a far more fruitful approach than was the complicated and elegantly embellished earth-centered Ptolemaic theory which had dominated the field for 1500 years. Marxian theory, too, was an oversimplification-indeed, it was never even fully stated (Dahrendorf, 1959). As Barber indicates, Marx may have oversimplified the structure of stratification by reducing it to one factor, control of the means of production, and perhaps overstressed the role of stratification as the "prime mover" of social change. But he was right in calling attention, first, to the powerful effects of stratification and its changes on sector after sector of human life and, second, to the fact that economic relations are at least among the most important dimensions of stratification.

There can be little doubt, however, that the reformulation by Max Weber (1946: 180–195; 1947: 424–429) dominates thinking in stratification today. As Runciman (1968) has shown, Weber expanded the theory of stratification to encompass relationships among social units whose incumbents are unequal in wealth, power, or prestige. Today's thinkers tend to concentrate on variables describing these three content dimensions, some focusing on one, some on another, and some on combinations of them. I think it is quite reasonable that Weber singled out these dimensions and that later writers have seized upon them: they constitute the minimum set of hierarchical inequalities which apparently discriminate among all peoples.

From the point of view of those who wish to explain the constancy of complex social systems, wealth (access to goods and services) and prestige are the most general concepts summarizing the sets of rewards for competence in role performance (Davis and Moore, 1945; Tumin, 1953a, 1953b, 1963; Davis, 1953; Moore, 1953, 1963) and power is the most general concept summarizing those coercive phenomena which insure system maintenance or system goal attainment (Parsons, 1963). From the point of view of those who wish to explain change, power is that by which some control others for their own benefit; wealth is the main benefit sought or protected; and prestige (if considered at all) seems to be a noncoercive inducement used by the powerful to insure compliance at low cost. Empirically, it would seem that all three dimensions exist in every known society.

The same universality may not be claimed for other dimensions which have been proposed. Whatever the conflicting views about the primacy and functions of these dimensions, the fact is that almost all contemporary stratification theorists, including Marxists (for example, Stavenhagen, 1969), use all or some of these three and very few others. It is almost as if a tacit consensus has grown up to the effect that social stratification may be defined as that which consists of institutionalized inequalities among social units in wealth, power, and/or prestige.

This is not to say that agreement is perfect. There are at least three other variables in frequent use in the stratification literature, all of which might be considered candidates for inclusion as primary status dimensions: socioeconomic status (SES), education, and color. SES is used loosely as a name for almost any index of status position. When it is used precisely it refers to multi-item indexes of status. SES scales have had a long history in the field (Chapin, 1933; Sewell, 1940; Belcher and Sharp, 1951; Ramsey and Collazo, 1960; Ramsey and Sharp, 1963; Haller and Saraiva, 1970). Research using modern techniques (Belcher and Sharp, 1951) shows the main factor in earlier instruments purporting to measure SES to be composed largely of household consumption items. Such purified "level of living" scales are indicators of the wealth dimension in that they measure access to household goods and services. Another meaning of SES, very like that originally intended by Sewell (1940), is reintroduced by Haller and Saraiva (1970). In this sense SES is the one factor accounting for practically all of the common variance of indicators of wealth, prestige, and power. Here again, SES is not a fourth dimension of status but a summary of the three main dimensions.

As a candidate for inclusion as a status variable, education presents a different problem. Surely it has an important bearing on stratification, but in what way? It is probably impossible to defend it as being a special case of any one or any combination of the three main dimensions; it is not wealth, nor power, nor prestige. Yet educational hierarchies, with their gradings by year and by level of school, almost seem to be models of a status stratification system. Svalastoga (1965) seems to want to treat it as a fourth status variable. This treatment probably makes sense when accorded to societies with complex economies and polities, especially in the last century. But formal education lacks the apparent generality of the other three. What seems to have happened is that as complexity increased there was an increased demand for people steeped in certain general symbolic skills (language, logic, and mathematics) and informed about one or more of many special occupational lores. Existing systems such as the family were obviously unable to fulfill the need, and formal educational systems developed. They are hierarchical because some kinds of knowledge are preconditions for others. Thus, on the average, the higher the level of general knowledge and the greater the refinement of specific knowledge, the higher the prestige, power, and wealth. So, in modern societies it might be argued that education may have emerged as a new status variable.

However, my own preference is to consider advanced education as a common but not indispensable precondition for higher status in societies with exceedingly elaborate occupational structures.

The third is color. Color emerges as a criterion of status difference when peoples of sharply different hues have collided, as, for example, when the dark-skinned Moors conquered most of the fair people of Spain and Portugal, or when the light-skinned Europeans organized and ran American plantations with black slaves. When color and the three content dimensions have become correlated, people base their cues for interaction, and often their laws governing it, on color. In this way color almost takes on an independent existence as a status variable. Clearly, color lacks universality, and its status effects may easily be derived from the three universal status content dimensions.

To indicate that there is a powerful de facto consensus is not to say that all the questions of terminology have been resolved. Sociologists whose concern is with the causes of changes in the structure of social systems (Dahrendorf, 1959; Stavenhagen, 1969) tend to emphasize power relations between classes which differ in their access to the means of production, and to relegate the prestige dimensions ("estate," social honor) to a lesser role. Such writers tend to separate what they call status, stratum, or stratification (the "lesser" dimensions) from class (the more basic dimension). But regardless of the relative importance assigned to the three Weberian dimensions, no theorist concerned with social inequality can ignore any of them.

This address is concerned with all three. In it, I will discuss only part of the domain of stratification: status systems. The word "stratification" logically applies to relations of inequality among instances of any type of social unit or even among social units of different types. Lagos (1963) and Horowitz (1966) have argued that the relationships between nation states can be stratified. So can the relationships between organizations. For that matter, the relationships between individuals and organizations may also be stratified. In short, stratification may exist among social units of any or all levels of complexity, as long as they are units which can have enduring relationships. The term "status" limits the concern to stratified relationships among small units: households, families, and persons. As if this were not enough, the word "status" is itself ambiguous (Zelditch, 1968). If we were to be as careful as the language of sociology permits, we would call our phenomenal domain "status stratification."

The "structure of status systems" thus refers to enduring inequalities in wealth, power, and prestige. We are concerned with changes in the structure because this is an area which has never received detailed analysis. True, many writers have noted the appearance of a feudal status system in Europe followed by an industrial status system (perhaps capitalist, perhaps socialist), and many have proffered hypotheses about supposed causes or consequences of changes in status systems. As I read them, almost all who are interested in changes in status systems write as though such a system is a fixed entity for a period; then a sudden change occurs and a new fixed entity stands in the place of the former; almost no one seems to consider seriously the possibility that changes in status systems may be going on all the time—though at a "glacial" rate, as someone has aptly phrased it.

By including the word "structure" in the title I intend to convey that the focus of this address is on changes in form, not substance. I shall shortly distinguish between two classes of dimensions of status: content dimensions and structural dimensions. This address treats the latter.

## IMPORTANCE OF STRUCTURAL CHANGES IN STATUS SYSTEMS

The topic is worth our time and attention because of the importance of status inequalities in the life of everyone. The individual dimensions are of significance. "Power" refers to the fact that people do exert control over one another's behavior. "Prestige" refers to the fact that there are social definitions controlling the ways in which people evaluate each other. Any society has one or more sets of cultural values which, when brought into play in normal interaction, communicate to all the participants what the general worth of each is. As a general term indicating access to goods and services, "wealth" is of obvious importance. As a variable, wealth ranges from the most marginal level of poverty to the height of riches. It includes money but is not restricted to it. It includes access to expensive services, such as medical treatment and education, which are in some places paid from taxes. At the lowest levels it may be indexed by quality and amount of food; at higher levels, by conspicuous spending.

When a change occurs in the structure of any or all of these dimensions, some of the deepest relations among people are affected. The most pervasive immediate effect may be the degree of unpredictability in interpersonal and intergroup behavior which results—when one acts in terms of previously dependable norms, his actions no longer elicit the expected responses. Durkheim's "anomie" refers to this phenomenon (Durkheim, 1951:252–258). I would hypothesize that any change in the structure of a status system—a redistribution of power, a rise or a fall in wealth, a change in prestige—produces anomie. Since—as I further suppose—status systems are always changing, the sociological question is not "Why are people so upset?" but rather "How is it that people adapt as well as they do to the status changes which are going on, and under what conditions does orderly adaptation break down?" But I shall not try to spell out the detail of such effects here. Another and more specific consequence is that many of those who lose status resent it and try to reestablish themselves. This perhaps is easiest of all to grasp; "white backlash" is a current example. It is enough to say that changes in status systems are a large part of what revolution is all about (among others, see Portes, 1970).

My own interest in the topic, however, arose because of a highly specific research problem. For years a group of us has been working on what we now call the "status attainment process" (which some have called "occupational choice research" and others, "aspiration research": for example, Haller and Woelfel, 1970; Sewell, Haller, and Ohlendorf, 1970; Sewell, Haller, and Portes, 1969; Haller and Sewell, 1967; Haller, 1968). As many of you know, the dependent variables in most of this work are, primarily, levels of occupational prestige (Blau and Duncan, 1967; Sewell, Haller, and Ohlendorf, 1970; Sewell, Haller, and Portes, 1969; Featherman, 1970) and, secondarily, income (for example, Featherman, 1970), with level of educational attainment being a key antecedent variable. Income and occupational prestige are clearly status variables, and almost everyone speaks loosely of educational status attainment. It is easy to see that status systems and variables describing them are central to this research area. Attainment is always with respect to something, and in this research area that something is a status variable. But there are more subtle reasons why a knowledge of status systems is absolutely indispensable in this area. Research indicates that two other key classes of variables in the status attainment process take their form from status variables. These are the level of status aspiration of a person and the level of status expectation of his significant others for him. These are not social structural variables; they do not describe social systems. They describe differences among persons within a social system. Nor do they derive from the person; they are not the usual variables of the psychology of individual differences. They are social-psychological variables of the purest type. Levels of educational and occupational aspiration (Haller and Miller, 1963) are variables describing the levels of each of two hierarchies toward which the individual orients his behavior. Each stands for a desirable or tolerable but currently unrealized level which the person recognizes as appropriate for him and toward which, by design or default, he directs his activities. Levels of educational and occupational expectation, using our terminology, are levels of the two hierarchies which others think appropriate for the person and which, by design or default, they steer him toward. So we have three classes of variables in the status attainment process which are referable in part to the status system itself: status attainment levels, which describe differences in attainment behavior states among persons; status aspiration levels, which describe differences in status goal orientations of persons whose attainment

levels we wish to explain and predict; and status *expectation* levels, which describe differences in the goals which others set for and communicate to the persons whose aspirational and attainment levels we wish to explain and predict.

Status attainment is a long-term process. It is probably finished only at death. But much time is required even to work out the temporary status attainment levels of, say, early adulthood. We know that occupational and educational aspiration levels already take some sort of form by the fifth grade (Rieger, 1961), and that they seem to be powerful determinants of attainments of young men (Sewell, Haller, and Ohlendorf, 1970; Sewell, Haller, and Portes, 1969). Similarly, occupational expectation levels of each parent have been found to be positively correlated ( $r \approx +0.40$ ) with the I.Q. and achievement of fourth and fifth graders (Boerger, 1970), seemingly indicating that this class of status-related variables may begin to function as early as middle childhood. So we must allow for time spans of 20 or 30 years-perhaps more -during the life of those whose attainment behaviors we are studying. In a period so long as that, it is easily possible that important changes may occur in the status system with respect to which attainment behaviors are being enacted. Clearly, if we are to understand status attainment we must ultimately understand the moving status system with respect to which status attainment behaviors occur.

# VARIABLES FOR MEASURING STATUS DIMENSIONS

By this time you must be curious as to referents of the three main dimensions. First, the social units of status stratification are those persons who share a home. Technically, this is a "household." This might be a nuclear family-often with one or two others attached-or it could be a single person living alone. So the variables must describe status differences among such units. Variables describing the unit as a whole, such as total family income, are included. A bachelor, in this case, could be a family of one. Also included are variables which apply secondarily to the unit as a whole because they apply primarily to the head of the household-the prestige attributed to a family because of the work of a breadwinner, for example. The range of applicability of certain status variables is bounded by the level of the social system to which the status variable applies. As is well known, certain status variables-notably community prestige-discriminate among households in but one community; others function among all comparable units in a total society.

"Wealth" I define as access to goods and services. It functions at both societal and community levels. As a variable, it ranges from opulence to the most desperate poverty. No single variable from ordinary discourse measures it well: hereditary assets easily converted to

money apply to only a small percentage of the population in any society. Wages, salaries, and fees apply to most, but not to the poorest nor to the nonworking, whether rich or old. At the survival level, differences in access to food discriminate among the penniless (Saraiva, 1969). Then, too, money is by no means the only indicator of wealth, even at the levels at which it functions. Access to educational, medical, or other facilities sometimes takes the place of money where attempts have been made to equalize wealth by constructing free public facilities (Haller, 1967). Finally, factorially pure multi-item indexes of household facilities and equipment obviously measure access to household goods and services. This is illustrated by some of the items in our "Açucena Level of Living Index-24-Item Long Form" (Haller and Saraiva, 1970; Saraiva, 1969): number of rooms and chairs; facilities for bathing, lighting, and sewage; radio; whether servants do the cooking, the washing, the ironing. Monetary income is usually, but not always, a satisfactory single index of the wealth dimension for most purposes in nonsocialist societies, like the United States, which are wholly on a money economy and which have high employment rates. In others, such as some of the rural communities in which we have worked in Brazil (Haller, 1967; Haller and Saraiva, 1970; Saraiva, 1969), there seem to be large numbers of families which have annual monetary incomes of zero to less than \$100 per year. In such places we must depend upon other indexes, such as quantity and variety of food consumed, if we wish to detect the real differences in wealth which in fact exist even at this low level. Clearly, the concept "wealth" has several referents.

Power is usually viewed in the political context. Despite a long history of experimental research and precise theory regarding power in small groups (for example, Berger, Cohen, and Zelditch, 1966; Gamson, 1968), it appears as though sociologists have a considerable distance to go before exact measurements are taken of power as a dimension of nonexperimental status systems. This dimension remains the most poorly conceptualized and badly measured of the three. At the level of the society as a whole, measurements are usually not taken, and power analysis is performed through ideal types, like the analysis of Bottomore (1964), who examines the concept of "elites," although empirical methods are available for measuring political inequality at the state level (Alker and Russett, 1964).

Empirical work on political power as a status variable is apparently restricted to the community level and even there to the identification of leaders, occasionally with distinctions being drawn among "decisionmakers" (Pease, Form, and Rytina, 1970; Spinrad, 1965). Concentration on a few locally powerful persons is partly justified because it would appear that only a few are deeply involved in community deci-

sion-making. But a little ingenuity should lead us to valid and reliable indicators of political power as a status dimension in which measurements could be taken on social units at all levels of power. These need not function merely at the community level. For example, it should not be hard to make one such index by first listing a clear hierarchy of political offices. The powers and levels of responsibility of each such office are clearly spelled out in the laws of any modern society. Of course, a great many offices cannot be neatly ordered; they can be dropped. Enough would remain to provide a sample spanning the entire range, from the mightiest to the most humble. A measure of political influence applicable to any citizen can be formulated by asking each respondent to indicate the highest level at which he had ever succeeded in attempts to gain an objective by working through the incumbent of an office. We have tried this in Brazil and, although we are not wholly satisfied with our first technique, the index seems to work just about as hoped (Haller and Saraiva, 1970; Saraiva, 1969).

Prestige has been much more thoroughly explored. Today, occupational prestige—the average evaluation of specific occupational titles by the adult members of a society—is almost universally conceded to be the key prestige variable functioning at the societal level, and it also functions at the community level. Occupational prestige hierarchies have been established for many societies. It is now known that for urban samples the hierarchies are very similar, regardless of country (Armer, 1968; Hodge, Treiman, and Rossi, 1966), and that in the United States the relative standing of occupations has not changed notably since 1925 (Hodge, Siegel, and Rossi, 1966). Occupational prestige status is the evaluation of the social unit (say, family) which it derives from the most prestigious occupation of any of its members. Naturally, families in a community can be ranked according to occupational prestige.

Community prestige of the family itself is another such variable. It is the evaluation of the social unit as the other members of the community assess it. This assessment is probably based upon all the roles of the units which are known to other members of the community. The average evaluation of the head of the household seems to be assumed to index the variable well. (For citations, see Jackson and Curtis, 1968, and Lasswell, 1965). Saraiva (1969) has worked out a novel and seemingly valid and reliable way to measure this variable. His data on Açucena, Brazil, have one of the most skewed distributions I have ever encountered; on a scale including well over 300 points, 84 percent lie below 100 points, 8 percent between 100 and 199, and 8 percent over 200.

This review illustrates what the referents are for the three key status dimensions, and it exposes to a degree our weaknesses in measurement. For better or for worse, just such indicators as we have discussed must provide the data to construct the variables by which we can observe the changes which status systems may undergo.

# STRUCTURAL DIMENSIONS OF STATUS<sup>2</sup>

Having made a few remarks about the three main dimensions of status stratification, I would now like to suggest that together they constitute only one of at least two classes of status dimensions: *content* dimensions of status. To study changes in the structure of status systems, we need a second class: *structural* dimensions of status. If we are going to measure changes in such systems, these new dimensions must have properties making them amenable to careful observation, especially to numerical measurement and statistical analysis. Fortunately, we do not have to look far; for many years, sociologists, economists, and political scientists have proposed such dimensions without naming them as a class and without seriously attempting to specify complete lists of them. But before going to these, we need still another conceptual distinction.

There are three classes of hierarchical concepts and their referents which are needed to describe and to measure similarities and differences among status stratified social units: (1) Status variables, the individual variables which together are needed to measure each aspect of the conceptual domain of a given content dimension of status. Several variables are necessary to measure wealth and the same probably may be said of prestige and power. (2) Content dimensions of status, each consisting of a set of status variables. (3) The status system, consisting of all three basic content dimensions. When the components of a status system can be summarized by a single factor, that factor may be called a general status variable.

<sup>2</sup> Changes other than those in structural dimensions of status systems are ignored here. One such change is the shifts in the criteria of occupational prestige hierarchies, which are variations in the content dimensions rather than in structural dimensions. One of the more interesting examples is the comparatively great use made of Tokugawa criteria in the occupational evaluations of rural Japanese boys (Lewis and Haller, 1964), and there is a parallel case in rural Brazil (Haller, Saraiva, and Holsinger, 1970). These data seem to show that people use the occupational prestige criteria characteristic of Euro-American urban culture when that becomes meaningful to them. Another such change is a possible increase or decrease in the degree to which the functioning of one status variable is contingent upon the operation of another. This is an extension of the "variable discrimination hypothesis" first clearly articulated in Saraiva's thesis (Saraiva, 1969). We do not yet know how widespread this phenomenon is. Despite strong evidence for its existence, we know from Saraiva's thesis that linear statistical devices work quite well even in systems where the variable discrimination phenomenon is quite clearly manifest. If it were to be too strongly present in a given social system, it would, I believe, make most of the subsequent discussion inapplicable, because the basic summary measures such as means, variances, and correlations would be meaningless.

The structural dimensions of status apply to these three classes of concepts; more accurately, five structural dimensions apply to all three and one applies to the last two. Not that these dimensions are new; the literature abounds in terms whose authors intend them to function as variables describing changes in status systems: central tendency, dispersion, and form (Jackson and Curtis, 1968); Lorenz curves, Gini indexes, Schutz indexes (Alker and Russett, 1964; McKee and Day, 1968; Bonnen, 1968); lognormal distributions and "permeability" (Svalastoga, 1965); "class cleavage" and crystallization (Landecker, 1970); polarization (Jackson and Curtis, 1968; Haller, 1967). Practically all such concepts can be summarized into six structural dimensions (or classes of them), each of which can vary independently of the others. When measured, these six dimensions will provide a thorough description of the structure of any status system. When observed over a period of time, they will describe the changes in any status system. They are central tendency, dispersion, skewness, stratigraphy, flux, and crystallization.

The first four describe, at one point in time, the distribution of any status content variable, whether it is an index of a general status factor summarizing the three content dimensions, or one of the content dimensions per se, or one of the set of status variables measuring a content dimension. The last two are more complex.

Obviously, central tendency would normally be measured by a mean  $(\bar{X})$  (Jackson and Curtis, 1968). I shall not dwell on it, except to remind you that changes in such measures indicate a shift upward or downward in the whole status indicator. If that indicator measures general status, such a change shows that the whole status system is shifting upward or downward. Implications of this are too obvious to belabor.

Most of what is meant by "inequality" is indicated by dispersion; measures of changes in dispersion tell whether the statuses are coming together or separating—whether the system is squeezing together or stretching, so to speak—or, as it has been expressed elsewhere, experiencing "equalization or polarization" (Haller, 1967).<sup>3</sup> As Jackson and Curtis (1968) have indicated, the skewness and stratigraphy of the distribution affect to a degree the usefulness of most statistical devices for measuring it. Nonetheless, the variance ( $\sigma^2$ ) is probably the best single numerical indicator of dispersion. Actually, the "distortion" of the variance which would be introduced by the upwardly skewed distribu-

<sup>3</sup> Vijai P. Singh (personal communication) has made the observation that even when the variances on status dimensions are not especially high, equality may still vary widely, because it also depends upon the degree of crystallization (which I am about to discuss). The point is that to a degree one can make up for his lower status on one dimension by a higher status on another. But if crystallization is high, a person's statuses are about equal; if he is low on one he is low on all. tions typical of status variables, and by polymodality if it exists, may not be inappropriate when applied to status indicators: larger variances indicate larger inequality, and upward skewness and polymodality will increase the variance. Of course, other devices are useful in certain research problems. Percentile distributions (for example, Roby, 1968; Miller, 1966; Lampman, 1962), and Lorenz curves and their derivatives (Svalastoga, 1965: 37-39; Alker and Russett, 1964; Bonnen, 1968; McKee and Day, 1968) are good indicators of the relative inequality among units of the same system at the same time. And important structural changes may be signaled by changes in these indicators over the course of time. Yet when used to indicate changes over a period of time, they are often deceptive. The trouble is that such percentages and indexes can maintain the same values over a period of time or even yield values suggesting that equalities are increasing when in fact the social units are becoming more unequal because the absolute distances (say in income) between them are increasing. On the assumption of a constant Gini coefficient, if a social system's total wealth, say, doubles over a period of time, the units at all levels will also double their assets. In absolute terms, those at, for example, the 20th percentile point would make a modest gain and those at the 80th percentile point would experience a substantial increase in their wealth. For all their difficulties, variances would appear to be the best measures of dispersion.

Skewness (discussed by Svalastoga, 1965, as a lognormal distribution, and mentioned by Jackson and Curtis, 1968, as "form") shows the extent to which the few are favored over the many. It is probably best presented by simply displaying the frequency distribution, although numerical indexes of skewness are available in statistics books of the 1920's and 1930's.

Stratigraphy is a structural variable far more often discussed than observed. It would be indicated by a distribution with multiple modes. That is, if it is important to discuss "discrete classes" or "social cleavages" (Landecker, 1970),<sup>4</sup> they must be observable. If they are observable, they will appear on a frequency distribution as the valleys and

4 "Cleavage" may also mean a break in the interaction rates between two or more sets of social units occupying different levels of a status system. This is probably what most thinkers have intended by the concept (Lasswell, 1965:319-323). It is of great importance because such a break in interaction rates within a community or larger social system signals a break in communication between contiguous strata. It is difficult to see how the government of communities or societies could be based on "consent of the governed" when such cleavages are pronounced. Because of the confusion on this point, it is worth emphasizing that the status indicators which show the level of various strata in the system may or may not be continuously distributed; "breaks" or nodes of interaction rates among units may approach zero with or without "cleavage" (polymodality) on the status indicator. hills of a polymodal distribution. With modern data-processing equipment, there is no reason why this too cannot be represented by a straightforward display. If found to exist, such a phenomenon would be of great importance even if it held only for a single content dimension or for even one of its components; if it held for a general status factor, it would indicate a general schism in the social system.

Flux is the degree of correlation between (or the regression of) comparable social units' levels of the same status indicator at two points in time. The higher the correlation, the lower the "circulation" (flux) of social units. It is worth noting that the amount of flux is almost totally independent of the previous four structural dimensions. (Svalastoga [1965:40] calls this "permeability," but I prefer "flux" because it seems to be more precise English.) A special case of flux, which could be called "heritability," is of particular importance. It is the degree to which one generation's levels are determined by those of their forbears, and is usually indicated by the correlation of an individual's status with that of his parents (see, for example, Duncan [1964:70] discussing Rogoff [1953]; also Svalastoga [1965:40]).

H= 25 (G=feen) +: fling F= 1-62

Crystallization (Landecker, 1970) is a structural dimension which describes the "tightness" or "looseness" of the system. It is known from correlations among status indicators at one point in time. It thus applies only to the two most complex classes of status indicators. At the level of the single status content dimension, its primary data are correlations among status variables. At the status systems level, its data are correlations among status dimensions. To determine it and measure it with precision, one must consider three properties, all based on factor analysis: (1) the number of factors (almost sure to be small because there are few variables factored), (2) the amount of common variance accounted for by each factor, and (3) the factor loadings of the correlated indicators. Each of these provides different information. The degree of crystallization per se would be estimated by the size of loadings of the constituent variables of the factor or factors most clearly measuring status. If the loadings are high, so is crystallization. If they are low, crystallization is low. If they are variable, crystallization may still be high on the most definitive status variables, or there may be a multifactor solution with high crystallization on at least one factor. Detailed multidimensional analyses of status are surprisingly few in number; I know of only one such where data essentially appropriate to illustrate this are available (Saraiva, 1969:80). It presents a factor analysis of seven status variables, at least one of which was a measure of each content dimension. It yielded a one-factor solutiongeneral status, or, as he called it, "socioeconomic status"-with very high loadings. It is not yet clear just how to determine a single number which will stand for the degree of crystallization of a status dimension or of a status system at a point in time. Possibly a mean of the loadings on a given factor might serve. In any case, when we get to the point of studying the status crystallization levels of many status systems, such a "crystallization coefficient" will have to be provided. This dimension is important because it summarizes the degree to which a unit's status on one content variable or dimension may be estimated from its status on the others. In other and looser words, it measures the "degree of stratification" in the total system.<sup>5</sup>

A complete analysis of changes in particular status systems will require the examination of the concurrent shifts in all of these structural dimensions. Space does not permit detailed presentation of the implications of the various combinations of changes on all. A simple dichotomy of each such structural dimension yields 26 or 256 possible combinations, and even this assumes but one content dimension (or variable or factor). One example might be based on changes in only three of the structural dimensions and in one content dimension, wealth. Imagine that mean wealth per capita doubles over a period of 20 years, that the variance also doubles, and that flux ("mobility") also increases. This would be a situation of rapidly rising income and greatly increasing inequality, in which, because of the increase in upward and downward movement of persons, the former changes would be unusually visible. The changes in the mean would increase anomie, the changes in the variance would produce a sense of injustice, and the high rate of flux would magnify the anxieties produced by both. I shall not continue with this example because its general implications are obvious. The reader may wish to spell out implications of other such changes for himself.

# CONCLUSION

In 1953, a group of eminent sociologists reviewed the state of theory and method in social stratification research as it applied to rural life (Kaufman, Duncan, Gross, and Sewell, 1953). Their essay is surprisingly modern. The basic theory has not changed much; it is just more explicit. In particular, they pointed out the need for studying changes

<sup>5</sup> One last derivative topic is changes in the status of nominal strata. It is often useful to consider the comparative status (on one or all content dimensions) of a specific nominal category whose dimensionality is based on a variable other than the status indicator under consideration. The comparative wealth of blacks and whites may be of concern, or the changes in the political power of Chicanos or Indians, or perhaps even the power of "poor people." These are not, strictly speaking, changes in either the content or the structure of status. They are changes in the status position of particular social categories and are amenable to analysis through the use of the concepts presented here. (For an elaborate nonquantitative analysis of the changing status of a number of such nominal categories, see Dahrendorf, 1964.) in "the stratification structure," and called for raising the priority of research on "trends in stratification." Even so, they seemed doubtful of the sociologist's ability ever to describe such states and their changes. Our progress since then has been less than spectacular. But at least it appears that we now know how to measure trends in status systems. I hope that the concepts presented herein may help researchers to document the deep changes in status systems which are now going on and that they may provide dependent and independent variables for those who wish to study the antecedents or consequences of such changes.

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