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THE COMPARATIVE METHOD IN THE SOCIAL SCIENCES

GIDEON SJOBERG

1. Introduction. American social scientists, with the possible exception of the anthropologists, have typically been ethnocentric in their writings and research. Most of their studies are simply unique to a particular institutional complex, possessing little generality beyond a single socio-cultural system. Nevertheless, social scientists nowadays are evincing increased interest in comparative studies. They are coming to realize that many of their generalizations may be found wanting when tested in the laboratory of world cultures. For the solution of many significant problems cross-cultural comparison seems essential—the relationships among the variables involved must be examined under diverse cultural conditions.

An attempt is made herein to survey the principal obstacles to a comparative science of society. Three problems seem to be of primary concern. First, the question, "What is going to be compared?" immediately introduces a number of issues. Then there are impediments to cross-cultural comparison stemming from difficulties both in the sampling process and in attempts to standardize researchers' observations. This paper further demonstrates how these problems are interrelated and suggests procedures which might help to resolve some of these difficulties. Most of the examples for this discussion have been drawn from anthropology and sociology, although the principles enunciated are applicable to other social sciences as well.

Several kinds of comparison are possible. Comparison can be made within a single socio-cultural system of "units" from a given time period or of units from different time periods. Neither approach is given special attention in this paper. Instead, emphasis is placed upon the comparative study of different socio-cultural systems (or segments thereof) without spatial or temporal restrictions. Unfortunately some of what comes under the rubric of "comparative" social science is hardly comparative at all. This is to a considerable extent true of the field which is referred to as "area research"; here studies are often conducted in non-Western cultural settings, but little effort is made to relate the findings to those obtained from other areas. Those social scientists who seem to regard area studies as the only possible kind of "comparative" research neglect some of the fundamental issues pertaining to comparative social science.

2. The Bases of Comparison. As Clyde Kluckhohn (3) has observed, "... genuine comparison is possible only if nonculture-bound units have been isolated." Certain "invariant points of reference" or "universal categories"¹ are required

¹ In this study problems of terminology arise which are on occasion resolved in a rather arbitrary fashion. The terms, "invariant point of reference" and "universal category," are herein used synonymously. However, as becomes apparent from the discussion below, something may be "universal" simply to a special universe—e.g., that of industrialized social systems—but not necessarily to all socio-cultural systems (although the achievement which are not merely reflections of the cultural values of a particular social system. Comparable and relatively stable units must be consciously perceived if comparative study is to progress. Only through the use of invariant points of reference is it possible to test adequately various hypotheses in a cross-cultural setting.² None of the social sciences seems to have attained the level of sophistication developed, for example, in the field of linguistics, where more satisfactory universal categories (i.e., phonemes and morphemes) exist. It has often been remarked that more adequate theoretical formulations are sorely needed in the social sciences. Here the problem is the development of a theory of a special type: one which would make possible cross-cultural comparison.

One fundamental assumption must be made by all those who seek to establish invariant points of reference. This is that limits are imposed upon human behavior, whether by biological, geographical, or socio-cultural factors. And as a result only a limited number of stable patterns can arise. Social scientists who reject this premise also will not accept the fact that a science of society is an objective possibility.

Although much of social science inquiry has been relatively unconcerned with the construction of universal categories, some progress has nevertheless been made in this direction, especially in the fields of sociology and anthropology. One of the earliest efforts was Wissler's "universal pattern," (15) a crude empirical catalogue of culture traits which supposedly occur in all social orders. This formulation has proved to be inadequate. Murdock (8), following in much the same tradition, although starting from somewhat different assumptions, has sought to isolate certain "common denominators" of culture which may serve as guides not only to research but to cross-cultural comparison as well. This, too, is a systematic listing of rather "empirical" categories,³ although it represents a definite advance over that presented by Wissler.

In contradistinction to the aforementioned scholars are those who have sought to establish "abstract" categories for use in cross-cultural analysis. For example, Malinowski (5) claims to have isolated seven universal institutions which he believes are functionally necessary to meet the biological requirements of human beings. In a somewhat similar vein, Aberle *et al.* (1) have pointed up certain basic patterns which they contend are functional prerequisites to the survival not only of individuals but, more particularly, of social systems. Two other abstract theories will be discussed in somewhat greater detail. Florence

³ The use of the term, "empirical," is not meant to imply that no abstraction is involved here. It is simply intended to convey the idea that this kind of category (or concept) is more "closely associated" with empirical reality than is an abstract category.

of the latter appears to be a most desirable goal). Also, it seems obvious that reference points which are invariant within one frame of reference may be variable in another.

The employment of the adjective, "invariant," is not intended to invest universal categories with absolutism. Thus "probability" might be allowed for in the construction of some of these. In fact, von Neumann (13) seems to have done just this with his concept of the minimax in his *Theory of Games*.

² Studies of single socio-cultural systems, if they are to have any real significance, also should utilize general categories. For the "unique" takes on meaning only insofar as it can be related to the "general."

Kluckhohn has set forth five invariant points of reference around which she believes all cultural systems revolve. Through these, cross-cultural comparison of a certain kind is held to be possible. She writes (4):

The five common human problems which are tentatively singled out as those of key importance can be stated quite directly in the form of questions: (1) What are the innate predispositions of men? (2) What is the relation of man to nature? (3) What is the significant time dimension? or What is the direction in time of the action process? (4) What type of personality is to be most valued? (5) What is the dominant modality of the relationship of man to other men? The problems as stated are constant; they arise inevitably out of the human situation. The phraseology of them is variable but variable only within limits.

The limits of the variability, suggested here as at least a testable conceptualization of it, are three-point ranges for each of the main orientation dimensions.

Perhaps the most extensive approach on the abstract level to be offered by an anthropologist or sociologist in recent years is that of Talcott Parsons and his colleagues (10), who have constructed a system around what they term the pattern variable schema, the core of a rather complex theory.

"... a *pattern variable* is a dichotomy, one side of which must be chosen by an actor before the meaning of a situation is determinate for him, and thus before he can act with respect to that situation. We maintain that there are only five *basic* pattern variables (i.e., pattern variables deriving directly from the frame of reference of the theory of action) and that, in the sense that they are *all* of the pattern variables which so derive, they constitute a system. Let us list them ...

- 1. Affectivity—Affective neutrality.
- 2. Self-orientation-Collectivity-orientation.
- 3. Universalism-Particularism.
- 4. Ascription—Achievement.
- 5. Specificity-Diffuseness.⁴

Without embarking upon a detailed analysis of this schema (this would lead us far afield), suffice it to say that Parsons *et al.* have contended that these pattern variables enter into consideration upon the personality, societal, and cultural levels, although they are inherently patterns of cultural value orientation—culture being a more generalized concept than society or personality. Inasmuch as these basic "dilemmas" occur in all cultural situations, and inas

⁴ Parsons unfortunately has developed a somewhat "private" vocabulary. The following brief discussion, therefore, suggests the meanings given these terms. Each is considered here from a cultural point of view. Affectivity is the normative pattern which grants an actor permission in a given situation to take advantage of an opportunity for immediate gratification without regard to evaluative considerations; affective neutrality is the converse of this. Self-orientation is that pattern which permits an actor to pursue his private interests without regard to the interests of other actors; collectivity-orientation is the converse of this. Universalism obliges an actor to be oriented toward objects (e.g., persons) in the light of general standards rather than in the objects' possession of certain properties related to those of the actor; particularism is the converse of this. Ascription is the pattern which prescribes that an actor should, in his selection of differential treatment for social objects, give priority to attributes they possess over their performances; achievement is the converse of this. Specificity is that pattern which prescribes that an actor should confine his concern with an object to a specific sphere; diffuseness is the converse of this. much as they are logically exhaustive, they should, Parsons argues, facilitate cross-cultural comparisons. More specifically Parsons seems most interested in testing hypotheses which concern the relation of values and social structure, the former being viewed as the "independent" variable.

The preceding discussion serves as an introduction to some pertinent observations. The first is that a number of systems of universal categories have been suggested as possible solutions to the general problem of cross-cultural analysis. Only some of the more significant have been mentioned. Some social scientists become sceptical when confronted by a variety of categories. But different theories may well require different invariant reference points. Put in other terms, an economic or technological determinist who attempts to correlate various aspects of social organization with his most generalized independent variable may necessarily have to select a different set of categories from the social scientist who takes as his focus of study the interrelationships between a society's value system (viewed as the independent variable) and its social structure. So, too, a psychologist starting from different assumptions and faced with different problems would employ still other categories. And it appears that even those who take the same independent variable as their point of departure may be justified in developing different invariant points of reference, depending upon their assumptions and whether the problems to be considered are of a special nature (e.g., if they are treating some limited sub-universes). This practice does not appear to be out of line with that in the physical sciences, which also must resort to various theoretical systems to explain different phenomena. Although the ideal is the development of a unified theory, this is far from reaching fruition not only in the physical but especially in the social sciences. The latter must be wary of relving too heavily upon a single theory and a single set of reference points. The fact that different theories (and the different hypotheses which stem from these theories) may require different universal categories has direct bearing upon the nature of comparative research, a fact which is indicated below.

It should be stressed that the isolation of invariant points of reference is not an end in itself. Nor should these be used simply to classify various social phenomena. Rather they should permit the testing of hypotheses in a crosscultural setting. Before Max Weber could "demonstrate" relationships between the religious system and the economic system, it was necessary that he isolate certain "trans-cultural" reference points which would facilitate comparisons among European, Chinese, Indian, and other societies (9). Furthermore, only when invariant points of reference have been isolated is prediction possible. Because of their intrinsic importance, much more attention needs to be given them by the researcher.

Now, various problems arise in the selection of universal categories. First, should the social scientist choose concrete (empiric) or abstract categories? Although no sharp division exists between these two types of concepts and the choice to be made is to a degree a function of the particular research project, certain general issues appear. Many social scientists have sought to employ

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categories which are relatively concrete in nature. Their studies possess the very definite advantage that their generalizations have empirical meaning and content. On the other hand, we find numerous instances in contemporary social science where this procedure has led to some startling contradictions. The use of the concept, "divorce," as a category for examining family or societal solidarity in various cultures seems to be a case in point. Miner in his recent study of the city of Timbuctoo took as his working hypothesis the assumption that all urban centers exhibit a degree of secularization and/or disorganization (6). His choice of divorce as a criterion of disorganization was in accordance with the practice of students of European and American urban life. But for a crosscultural study such as Miner's the choice was a rather unfortunate one. The result is that Miner has implied that the sacred writings of the Koran, which justify divorce in Moslem society, are not sacred at all. Actually, divorce in one society may be an institutionalized and a highly orderly and acceptable procedure, whereas in another it may represent a form of societal disorganization. As an invariant point of reference for this kind of research it displays inherent limitations. Other social scientists who have used the concept of divorce in crosscultural studies as a reference point for familial disorganization have been faced with similar contradictions. This is just one example of the social scientist's capture by culture-bound concepts; still others could be enumerated. In fact, it may develop that most of the categories currently employed in socio-cultural inquiry are quite inadequate for comparative analysis. It should never be assumed that reference points which hold for one cultural setting are applicable to all others.

In an effort to resolve the contradictions which seem to be inherent in highly empiricized concepts, social scientists such as Florence Kluckhohn and Parsons have been searching for more abstract categories. This is line with the trend in all the sciences toward utilization of abstract concepts to circumvent problems arising on the "common-sense" level of inquiry. The disadvantages of abstract conceptualization, however, seem apparent enough. Some of the concepts employed by Parsons, e.g., universalism and particularism, and the universal categories offered by Florence Kluckhohn are so general that they are subject to numerous interpretations on the part of the investigator. They require empirical indicators-or better yet certain specified "operational" procedureswhich will relate them to empirical reality. Otherwise these invariant reference points will be part of a "neat" theory the empirical relevance of which is negligible. The charge of "over-abstraction" has been leveled against many social scientists-not only verbal theorists but also logico-mathematical "model builders" like the econometricians—who often lose sight of the empirical relevance of their models. Certainly if any theory is to be of value in comparative research the universal categories employed must be established in a manner which will permit their use in the testing of specific hypotheses. Although it is apparent that for some time to come much of cross-cultural research will be dependent upon rather loose and somewhat impressionistic conceptualization, social scientists must strive for a more rigorous approach.

A number of writers have stressed the need for a compromise between the

strictly empirical and the rationalistic conceptual schemes. Nowhere is this requirement more strongly felt than in efforts to establish invariant points of reference for cross-cultural research. The use of abstract or concrete categories can not be an either/or proposition. Actually the co-existence of these two approaches serves as a check upon the abuses to which each is susceptible. The process of constructing an adequate set of invariant reference points must, then, be one of continual trial and error and, fundamentally, one of self-criticism. For it appears that most of the systems currently employed in the social sciences will serve merely to "clear away the underbrush" for future scholars; not only are present-day categories unsatisfactory for predictive purposes but they are inadequate for most descriptive purposes as well.

Still other problems present themselves. Invariant points of reference, if they are to be meaningful, should be integrated into a logically consistent system.⁵ Few of the early comparative social scientists such as Spencer and Sumner were particularly concerned with this question. Their premises were not clearly stated nor did they attempt to relate their "categories" logically one to the other. In recent years attempts to improve this situation have occurred in the verbal as well as in the logico-mathematical traditions. Among verbal theorists Parsons has been a pioneer in that he has stressed the need for logical consistency. However, it is doubtful that he (or anyone else) has developed a satisfactorily consistent verbal theory. For example, Parsons' pattern variable schema does not appear to be homologous; by his own admission its categories do not appear to be derivable from a single principle, but rather from three (11, p. 66). Yet, through his effort the attention of social scientists has been directed to the need for more rigorous analysis in cross-cultural research.

Possibly the logico-mathematical tradition will give the greatest impetus to the formulation of a more rigorous set of universal categories. Although as presently constituted many logico-mathematical deductive models seem to have little empirical import, this does not appear to be an inherent limitation of the approach. Some effort is currently being made, especially through the use of "qualitative" mathematical models, to adjust these systems so that they will conform more closely to empirical reality. The classic work of von Neumann and Morgenstern (13) is an example of a mathematically derived model which has definite implications for cross-cultural research of a special type. The concepts developed—the minimax, coalitions, and randomized strategy—seem applicable to the study of conflict and competition under a variety of cultural conditions. Even when this mathematical model is translated into verbal form it offers some major advances in insight and rigor over previous formulations in the field of social conflict (12). The proliferation of the logico-mathematical approach within the social sciences would do much to further cross-cultural research.

3. Sampling and the Standardization of Observations. Let us turn our attention for a moment from the question of universal categories or invariant points of

⁵ Also, whenever categories are developed for a "limited universe," e.g., a kinship system or a class system, they should in turn be related to a still broader frame of reference.

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reference to problems of a more technical nature. First, just how are we to proceed in selecting "cases" for the comparative study of diverse socio-cultural systems or sub-systems? Here we might profitably take Murdock's recent work (7) as a starting point for this discussion. His comparative analysis of kinship systems is one of the studies which has drawn upon the data amassed by the Human Relations Area Files (at New Haven, Conn.) on numerous literate and nonliterate societies. Murdock's contribution is significant here for his use of sampling and probability statistics in comparative research (we shall not be concerned with his conclusions). Although this procedure can serve as a profitable implement to social science research, certain difficulties arise when probability statistics are applied on a cross-cultural basis. Murdock's sampling design with respect to world societies invites some serious criticisms. Just what is the universe from which his sample has been selected? The fact that he has included within his sample some historically "extinct" societies means that his universe embraces all societies which have ever existed. But we lack sufficient knowledge about this universe. It consists of societies for which we have adequate data. others upon which our knowledge is limited, and finally those about which we really know nothing. There is no way of determining how societies for which we lack information are related to those upon which we have information. Under these circumstances it is most difficult to consider his sample as "random"; some major "biases" may in fact be present. And if a random sample is not employed, extreme caution must be exercised in interpreting (if not actually in applying) inductive statistical techniques-e.g., the chi-square test which Murdock utilizes to generalize from his "sample" to the universe. Too often social scientists employ statistical procedures without examining the assumptions upon which their analyses necessarily rest.

Not only is it difficult to determine the nature of a universe, but problems are encountered in establishing the boundaries of societal or cultural systems. Many of these are interrelated historically. Are they to be treated as one, or separately? For example, should the Chinese in Malaya be classed as a separate socio-cultural system or as part of the Chinese social order? To a degree this is a function of the particular research problem. Yet historical interrelationships among socio-cultural systems serve to complicate the drawing of a sample by introducing the question of the "independence" of sampling units. The situation is made all the more confused by the absence of convenient standards for delineating the sub-systems of a social order. Some formalized procedures are certainly required if sampling is to be utilized in cross-cultural research.

Sampling units must also be comparable. If such units as household or community are employed, these can be subject to different cultural interpretations. A "household" in one socio-cultural system may be quite different from a "household" in another. Here, too, we are confronted with the need for "trans-cultural" or "nonvaluational" categories. Still another source of confusion—one of a logical nature—appears often in the literature. It seems fashionable nowadays to take the "community" as a unit for comparison. But can we really compare the Tikopia of Oceania (a nonliterate "community" which is co-terminous with the "society") with Yankee City or Chicago? In many instances this kind of comparison can lead to some questionable conclusions. Whereas the Tikopia constitute a functionally self-sufficient system, American communities such as Chicago are only partial systems. A primitive community logically needs to be compared not with an urban or rural community but with the total society of which the latter are integral parts. Yet comparison between sub-systems and total systems is common practice in the social sciences.

The application of statistical techniques in the face of the aforementioned problems might be rationalized by the investigator in certain types of crosscultural studies. However, due consideration must be given to the limitations of using random sampling and probability statistics in most cross-cultural research. In fact, as is indicated below, even social scientists who make comparisons within a single socio-cultural system are plagued by similar handicaps, although this is not often recognized.

Not only do pitfalls appear in the sampling process but considerable difficulty is encountered in standardizing the observations of researchers working in diverse cultural settings. Social scientists must strive toward the attainment of some degree of standardization: otherwise each field worker will record impressions which can not be validated by others. To be sure, rigorous research designs, sampling procedures, sociograms, and questionnaires have all contributed toward making social science research more than an individual venture. Possibly the greatest advances have been in the field of microscopic research-i.e., the study of small groups-where the situational factors seem somewhat more easily controlled. Nevertheless, some crucial aspects of the problem of standardizing observations, especially in cross-cultural research, remain relatively untouched. There is particular need for standardizing and objectifying the procedures by which imputations are made concerning the "subjective" aspects of human experience, data which are not directly observable. Just how to standardize the imputation of meanings to human action is a pressing issue in all the socio-cultural sciences. When a person enters a place of "worship," just what "meaning" is to be attached to his action? One can observe and record the act easily enough, but imputing meanings to it is another matter. At times it can prove quite trying for social scientists to reach a consensus concerning the meaning of certain acts in their own socio-cultural system, to say nothing of other cultural settings. Yet some standardization within this sphere nevertheless seems possible of attainment.

Another troublesome area, interrelated with that just mentioned, concerns standardizing the imputations of observers about the mechanics of large-scale, complex social systems—e.g., a governmental bureaucracy. Although considerable effort has been given to refining questionnaires and similar research tools, these have proved to be of very limited value for analyzing the functioning of complex social structures. There is clearly a need for standardizing the observations of participant observers in this kind of setting. Furthermore, efforts to standardize researchers' imputations from published records concerning the functioning of large-scale social systems (e.g., through the use of content analysis) are

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still far from satisfactory. Too many inconsistent interpretations concerning the nature of large-scale social systems have been put forth. Even a partial solution to these problems would do much to enhance cross-cultural research.

4. Possible Directions. At this point it seems appropriate to seek out the relationships among those facets of cross-cultural research discussed above-namely. invariant points of reference and the more strictly methodological problems of research as sampling and the standardization of observations—and through this means to uncover possible solutions to some of the aforementioned difficulties. In order better to perceive their functional interrelationships some slight digression seems necessary. In comparative research it appears that in the selection of cases (whether these be total systems or sub-systems) for testing hypotheses, social scientists must accept the fact that a crude statistical approach. or more often than not some kind of qualitative analysis, is required. This is probably all that can ever be achieved on a cross-cultural basis (especially on the macroscopic level) for some time to come. Among other factors, data simply are lacking on too many societies; therefore, reliance must be placed in most instances upon some kind of "judgmental" sample. This principle should be followed: utilize quantitative and other rigorous procedures where these are required and can legitimately be employed (especially within case studies, e.g., that of a single community), but recognize that certain kinds of problems can not be treated in a rigorous statistical fashion, especially through the use of probability statistics, at the present time. Unless the social scientist is willing to accept this obvious limitation, the whole of comparative study (which appears to form the basis of social science) must be conceded to have no future.

Even granted the limitations imposed upon research in comparative social science, the situation is not without hope. One approach might be pursued to advantage—i.e., the giving of increased emphasis to deviant or unique cases. Such a step may point up some hypotheses which should be rejected—or perhaps define more precisely the conditions under which the original hypotheses are valid—or even demonstrate the need for a broader hypothesis to cover the deviant cases. It is through deviant case studies that reference points can best be perceived or those already in use sharpened and clarified. Some social scientists seem to hold to the view that intensive knowledge of our own culture is required before we are justified in attempting analyses of other socio-cultural systems. But this brings us to a major impasse: the general and stable elements in our own culture can best be understood when the latter is compared with divergent cases.

The physical sciences took centuries to formulate and refine their invariant points of reference, and it seems unlikely that the social sciences will uncover any convenient short-cuts to this goal. Therefore, instead of merely searching for confirmatory evidence, as some social scientists prefer, it seems necessary purposively to gather contradictory evidence, then, in light of this, rework and reformulate the so-called invariant points of reference as well as the hypotheses being tested. A number of social scientists implicitly recognize the value of this procedure. However, there is need for more explicit recognition of its *essentiality* in cross-cultural research. This procedure, incidentally, is in conformance with the ideas of such philosophers of science as Popper and Wisdom (14), who argue that one can only disprove, never really prove, scientific hypotheses, and that the scientific method therefore basically embodies a negative approach.

Not only do carefully-designed case studies, especially deviant ones, sharpen invariant points of reference, but certain other facts should be noted. To the extent that invariant reference points or categories have been isolated for a particular research problem, a case study (whether of a society or community or other social group) takes on added significance. Not only can we perceive its general aspects but we can appreciate more fully the significance of its unique features.

The essential role of case studies for comparisons within a single socio-cultural system is also often overlooked. It is common practice nowadays to use the community as a setting within which to test various hypotheses concerning the functioning of the class structure, ecological system, kinship organization, etc. And it is a relatively simple matter to apply random sampling within this "primary" universe, if this is desirable. However, the community is still only a case study with respect to other communities in the total social order, to say nothing of in the world. It is considerably more difficult to draw a random sample of communities and to study a number of these even within a single socio-cultural system. Thus, social scientists usually take a case study of community life and generalize freely from it to other communities. But they give all too little attention to the question: Is the community representative both spatially and temporally of other communities within the socio-cultural system? Generalization from one or only a few cases is often necessary, but this is valid only if certain invariant reference points have been isolated. Put in more concrete terms, research projects in such communities as Yankee City and Middletown are significant for an understanding of other communities in the United States to the extent that their findings have been related to certain general and comparable categories.

Some other relationships between research and invariant points of reference merit attention. Social scientists should recognize that different theoretical systems may require different invariant reference points and that descriptive data for various case studies need therefore to be collected with this is mind. The practice of limiting observations to a single set of categories (as well as to a single hypothesis) can be far from satisfactory. If the need for a broader perspective were more explicitly recognized by researchers interested in comparative analysis, their case studies of societies, communities, kinship systems, etc. would be greatly enhanced. We can not be certain which set of reference points will prove to be most adequate: those which we now use are just too approximate. Why, then, gamble on collecting data simply in terms of a single set of categories? If more than one is consciously employed, more of our existing reference points can be sharpened or perhaps discarded, or the need for new ones clearly seen. Also, some comparative work must necessarily be done by non-field workers—the sheer impossibility of one individual ever conducting research in more than just a few cultures during a life-time seems obvious enough. There must be specialists to correlate these findings from various socio-cultural settings.

Finally, a few remarks about standardizing observations. This, too, is strikingly interrelated with invariant points of reference. For to the degree that relatively stable reference points have been isolated, standardization of observation becomes a more objective possibility. Observation necessarily takes place, whether implicitly or explicitly, in terms of some particular theoretical structure. If a researcher is dealing with universal and comparable categories, he is more likely to observe the same kind of social phenomena as do other researchers. This is especially true for studies of large-scale social systems. It seems to this writer that one of the principal reasons for the research difficulties encountered in the last-named area is that no really satisfactory invariant reference points have been isolated. Techniques alone can not resolve these issues.

This is not to imply that all that is required is the construction of conceptual categories. Measurement and operational procedures also have a place. Scales and indices are currently being developed and applied with the expectation that these will somehow standardize observations. And to a degree they may succeed. Unfortunately, however, these devices are often utilized without attention to general and comparable categories. The following question must be kept in mind: "What is going to be measured?" Sociologists are attempting to construct indexes and scales which will aid in depicting, for example, the American class structure or urban ecological patterns. But they are plagued by numerous discrepancies, one reason being that so much attention is given the "unique" rather than to universal reference points.

It is also the writer's contention that social scientists should employ less "stereotyped" methods in attempting to standardize observations. One such deviant approach is suggested by Firey and Belknap (2). They argue that society itself has refined techniques for imputing meanings to social action; one of these is the "jury system" with its judges, witnesses, advocates, etc. Social scientists, they believe, might well utilize some of the principles embodied in this approach as an aid to standardizing the imputation of meaning to social action. This is just one example of how a deviant technique might be employed to advantage, particularly if it is used in relation to sets of universal categories.

5. Summary. It should be emphasized that most social science research evinces no real effort to generalize beyond single socio-cultural systems, the United States in particular. There is a marked tendency to lose sight of the basic function of science—i.e., to generalize. Although the social sciences may never achieve the "predictability" of the natural sciences, a deeper understanding of society than is now apparent seems possible through the comparative method.

Given the intrinsic importance of comparative study, cognizance should be taken of the problems encountered in cross-cultural research. This paper has sought to isolate three of the most significant. Perhaps the major emphasis should be given to developing more satisfactory invariant reference points or universal categories. In order to test the relationships among variables in various socio-cultural settings, certain comparable and relatively stable categories must be employed. Some of these invariant points of reference, of course, might be applicable only to limited universes. Also, attention has been called herein to two pressing methodological problems, sampling and the standardization of observations. But even these, as has been shown, are interrelated with invariant reference points; the social scientist should keep this in mind when he seeks to resolve problems in cross-cultural research.

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