Laws of Socio-Cultural Change

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DURING the past decade, and especially during its latter half, historians and philosophers of science have given increased attention to the logical and empirical foundations of the social sciences. In part, this is a reflection of the growth of the disciplines so designated; in part, it is due to new developments in philosophical inquiry. Whatever the reason, several books have appeared recently wherein the social sciences are examined at length along with the physical and biological sciences (Feigl and Brodbeck 1953; Gibson 1960; Nagel 1961; Brown 1963; Kaplan 1964). Comparisons are inevitably made, one outcome of which is a general consensus that the former have not yet produced laws of the same order, reliability, or applicability as have the latter. This conclusion is not surprising; but some of the reasons for it deserve the consideration of those of us who believe that the comparison is a justifiable one. There is no intention of reviewing those reasons here. Rather, I propose to concentrate attention upon a particular aspect of the problem; namely, the circumstances which hamper the formulation of laws of socio-cultural change. To some extent these impediments are generally operative; some, however, are specifically related to change in human behavior.

The Thomas Theorem

Both basic and applied science have flourished in the United States since the First World War. Among the social sciences this is especially true of psychology and economics. The side-effects of both world wars have had something to do with this; so have affluence and mass education at the college level. While the social sciences have been stimulated by these and other circumstances, they lag far behind the physical sciences in public esteem, supported research, salary scales, or almost any other criterion of development. In 1963 the National Opinion Research Center at the University of Chicago conducted a nation-wide
survey of the prestige attached to occupations in the United States and compared the results with those of a similar survey made in 1947. An initial tabulation shows that in 1963 the American public gave nuclear physicists and the vague category of "scientists" a rank order of 3 (in 1947 they were, respectively, 18th and 7th), just below United States Supreme Court Justices and physicians; chemists were assigned 10th place (18th in 1947); and psychologists, the only social scientists specifically named, were in 16th place out of 24 (28th out of 28 in 1947) (N.S.F. 1964: 38).

No single term will serve to characterize the comparatively unfavorable climate of opinion in which most social scientists conduct their activities. It is a compound of several adverse attitudes—ranging from indifference to intolerance—and disinterest resulting from widespread ignorance of the subject matter and the objectives of some of the disciplines, especially anthropology. A brief discussion of a very small sample of such attitudes will suffice to make the point.

One of the most common arguments against the search for any kind of laws of human behavior is that the subject matter is too complex. When stated in just this way the meaning of the argument is that the human situation involves too many variables and fugitive conditions to encourage the hope that they can be isolated and their significance assessed. This does seem to be the case, but perhaps the difficulty is more apparent than real. In other words, it does not seem improbable that as beings attempting to study ourselves we are too close to our material to discern universal patterns and regularities in it. We are so intimately, personally, and microscopically entangled with our subject that irrelevant factors obscure those which are relevant to generalizations. In this connection it is well to remind ourselves that all sciences are confronted with complexities, and that they are such to the extent that they can abstract significant units and relations from a nexus of particular things and events. In the process they deliberately ignore or suppress features that are important in other contexts and for other purposes. It does not belittle the difficulty of studying human behavior to note that the structure of atoms appear to be getting ever more complex as the techniques for investigating them improve; and that their dynamic properties are not more directly accessible to observation than is the functioning of the human mind. A human being in a society can scarcely be more erratic in his behavior than is an oxygen molecule in a gas chamber.

This introduces another aspect of the argument; namely, that experimentation is limited, and sometimes entirely precluded, when human beings are concerned, and that little confidence can be placed in predictions of their behavior. Both of these deficiencies have been discussed by other writers more competent to deal with them, and their comments need only be summarized. As for experimentation, some physical sciences, such as geology and astronomy, are only inferentially based upon it; psychologists do perform experiments both in the laboratory and outside it; the theoretical ideal of varying only one factor at a time in an experiment is rarely if ever possible in fact; and the matching of naturally given situations for similarities and differences is a feasible and logical