Book Reviews

Age as Explanation

Aging and Society. Vol. 3, A Sociology of Age Stratification. MATILDA WHITE RILEY, MARILYN JOHNSON, and ANNE FONER, with contributions by 11 others. Russell Sage Foundation, New York, 1972. xviii, 652 pp., illus. $20.

Regarding age, behavioral and social scientists are like laymen in one respect: they discuss age and aging with resignation and without knowing much about the subject. On occasion, they will note that Plato, Aristotle, and Shakespeare made wise comments on aging as an inevitable part of the human condition or that all human societies make some distinctions based on age. Although sociologists routinely report the age of the individuals they study, just why they do so is often implicit rather than explicit, as though the social and psychological significance of age and aging can be taken for granted.

Although scientific interest in age and aging in the United States can be traced at least to the turn of this century, popular interest and sustained, systematic research are recent. The work of Talcott Parsons in the 1940's and S. N. Eisenstadt in the 1950's generated considerable discussion of the social origins and significance of adolescent groups and "youth culture." And at the beginning of the 1960's James Birren, Clark Tibbitts, and Ernest Burgess edited significant volumes summarizing research on the psychological, socioeconomic, and societal aspects of aging and the aged. Behavioral and social scientists interested in the young or the old rarely found occasion to address one another; and the utility of age as a variable in systematic research has suffered from neglect and abuse. Consequently, a great deal of research has had to be devoted to challenging gratuitous popular stereotypes regarding age, aging, and the aged. Recent events have suggested that systematic research is overdue. Current discussions, frequently uninformed by evidence, about problems associated with youth and old age are a case in point. The social and economic integration of the young and the old into contemporary society is now considered more than merely the personal troubles of those who are moving into or out of adulthood; their integration is considered a social problem which has no obvious, simple solution.

The volume under review is the last of a three-volume series related to this timely subject, produced under Matilda White Riley's direction with the support of the Russell Sage Foundation. Volume 1, subtitled *An Inventory of Research Findings* (1968), a summary of work on physiological, psychological, and social aspects of aging, has proved to be a useful and reasonably comprehensive account of the correlates and implications of human aging. It assembles data tables from original sources along with critical annotations, an extensive current bibliography, and a suggested list of topics for future research. Volume 2, *Implications for the Professions* (1969), is a collection of essays by persons in a wide variety of disciplines, who consider the theoretical and practical implications of the findings reviewed in the first volume. Volume 3 is a discussion of the significance of age for sociological theory. It outlines some of the issues and suggests the ground rules for adequate sociological research.

Riley has assembled an impressive collection of sociological talent. Robert Merton, John Clausen, Norman Ryder, and Talcott Parsons, for example, have written or co-authored chapters on particular aspects of age and aging. Although Riley announces her intention to promote "a new field in sociology," she modestly notes that an adequate theoretical paradigm of age stratification belongs to the future. Her modesty is appropriate. The data and the theory reviewed illustrate just how neglected age as a variable in sociological research has been in the past and suggest some possible reasons for that neglect. Chronological age has frequently been imprecisely used and has rather consistently been confounded with cohort in much of the most relevant literature. Consequently, Riley and her associates usually have to contrive data to illustrate a research strategy appropriate to the theory of age stratification they wish to develop. But even when the available research data are found adequate to be introduced into the discussions of particular issues, age and cohort rather consistently appear to have limited explanatory power as compared with other social variables.

The book begins with a detailed, somewhat tedious presentation of terminology and methodological problems which is made palatable by the principal author's conscientious attempt to provide overviews and summaries at strategic points. It ends with a useful appendix on methodological strategies in cohort analysis. In between there is an uneven mixture of chapters by various authors on age and age cohorts in relation to politics, labor force participation, community organization, higher education, the organization of science, friendship patterns, and the life course of individuals. While each of the chapters is readable and provides a useful review of relevant literature, as a whole they are, with notable exceptions, primarily descriptive and discursive. The explicit derivation of testable propositions from theory and the test of these propositions are, as the reader is warned at the outset, on some future agenda. The most obvious exceptions to this characterization are the chapters by Foner on politics and by Zuckerman and Merton on the age structure of scientific organizations. But even in these two chapters, the data analyzed invite the conclusion that age and cohort are not particularly salient variables in explaining interesting behavior.

The entire volume, in fact, is a testimony to the difficulty associated with the use of age as a sociological variable. Chronological age is undoubtedly a convenient personal and social marker indicating where a person is in a hypothetical life course. But laymen as well as scientists sense just how crude these chronological markers can be. Measurement of intellectual functioning in relation to chronological age has produced considerable evidence of variation among persons of the same age. And persons who are equidistant from birth at a point in time are demonstrably not equidistant from death. Chronological age, psychological age, sociological age, and biological age are correlated but only modestly so. Moreover these various sequences

are affected by environmental factors, and the effects are variable and largely indeterminate at present.

While all societies take note of movement through the life cycles and tend to mark transitions from one grade to another, persons in the same age grade do not universally create age groups. S. N. Eisenstadt attempted more than two decades ago to explain this transformation among youth in terms of the replacement of familistic social structures by universalistic structures. The present volume repeatedly refers to Eisenstadt without, however, expressing much interest in the utility of his theory. And the useful research of Irving Rosow on the social integration of the aged in modern societies receives no attention at all. In sum, then, Riley and her associates do not claim to provide a theory of age stratification or to test propositions derived from theory. They are as good as their word. *Aging and Society: A Sociology of Age Stratification* is nonetheless an important and useful volume.

Riley and associates make an effective case for cohort analysis in sociological research. Most, if not all, research on social processes has badly confounded behavior which might be attributable to age (as a proxy for maturation), to cohort (as a proxy for specific historic experiences), and to the interaction between age and cohort at particular points in time within particular environments. Conventional wisdom bolstered by demonstrably inadequate evidence has it that individuals become politically conservative as they age and experience irreversible intellectual decline. The hearty persistence of these and similar inaccuracies is impressive. What is more impressive is the continuing insensitivity of so many investigators to the methodological demands of research on human aging. This volume itself gives evidence of how persistently life course differences are confounded with cohort differences. If behavioral and social scientists intend to present more than static, quickly outdated, and inadequate characterizations of social and biosocial phenomena, they will have to utilize cohort analysis. Riley and associates provide some fundamental guidelines for adequate research, and this is the real strength of the volume.

Two substantive chapters already remarked upon warrant further attention. Foner's review of research on age and politics demonstrates the necessity as well as the difficulty of cohort analysis. Cohort differences appear to be more related than age per se to political attitudes, political participation, and voting behavior, but observed changes in the political behavior of specific age cohorts more often than not mirror changes in the general political environment. Foner argues persuasively that such correlates of age as length of identification with a political party or residential stability are more explanatory than age per se. Unfortunately, she notes but does not assess the potential for the emergence of politics of age in the United States at the national and local levels. Although there is not much evidence that the elderly 10 to 15 percent of the national electorate has been or is likely to be mobilized as an effective political force, in many local areas the elderly constitute upward of 20 percent of the electorate. The reader is left to speculate about the possibility and probability of politics of age involving either the young or the old.

Zuckerman and Merton's chapter on the age structures of science is certainly one of the most rewarding pieces in the volume. Their topic is substantively interesting and they cleverly tap some unusual data sources. They report that, in general, there is little evidence of age discrimination in science. If anything, in rapidly expanding disciplines the young are more likely to discriminate against the elders than the reverse. But age per se consistently turns out to be less salient than the degree of quantification and theoretical specificity in accounting for observed stratification (power, prestige, advancement) in various disciplines.

This volume convincingly argues, though often implicitly, against the utility of chronological age per se as a sociological variable. The principal focus is on understanding the collectivity of cohorts which constitute a given society and on the ways in which that society prepares successive cohorts for future roles and allocates resources to them. Riley and her associates have made a reasonably effective case for a sociology of age stratification. Whether cohort analysis can actually provide an increasingly accurate and useful explanation of social behavior and societal processes is a question for future research to answer.

GEORGE L. MADDOX
Duke University Center for the Study of Aging and Human Development, Durham, North Carolina

New Light on a Pavlovian Idea

Inhibition and Learning. A conference, Sussex, England, Apr. 1971. R. A. BOAKES and M. S. HALLIDAY, Eds. Academic Press, New York, 1972. xvi, 568 pp., illus. $22.50.

For Pavlov, inhibition was a central process that could suppress behavior and produce other, less direct effects. The inhibitory process was labile and complex; Pavlov called it "accursed," yet found it fundamental to the control of unconditioned and conditioned responses. In Western psychology, however, the study of inhibition languished, a victim of inappropriate methods and of the complexity that made a workable behavioral definition difficult to establish. Now new methods and fresh data are rapidly reviving interest in the concept, with an especially strong stimulus coming from studies of instrumental (or "operant") behavior, formerly relatively barren of such work.

Definition is still a problem; the authors of the 20 contributions to this volume use the term "inhibition" to cover many kinds of observation. The reader would do well to start with Hearst's thoughtful analysis (chapter 1) before following his interests to other selections. A familiarity with the first 100 pages of Pavlov's *Conditioned Reflexes* is equally useful; in fact, there seems no better way to suggest the book's content than to choose a few Pavlovian concepts and see what becomes of them here.

One such concept is "conditioned inhibition," which arose from Pavlov's finding that, through conditioning, he could give an arbitrary stimulus the power to depress behavior below a level to be seen when the stimulus was absent. Conditioned inhibition embodies in a direct way the notion of active suppression, and it is relatively close to the idea of inhibitory neural interaction. For these reasons, it is considered by Hearst and others the central focus of inhibition research. Wagner and Rescorla (chapter 12) show how conditioned inhibition flows from their model of the conditioning process. It arises not from some particular operation (such as nonreinforcement) but from certain conjunctions of stimuli that (as it were) lead the subject to predict more reinforcement than is actually forthcoming. Though their model touches only a limited range of inhibitory effects, Wagner and Rescorla present impressive data that can probably be extended.

If stimuli can acquire inhibitory