

SITUATIONAL ANALYSIS: AN OBSERVATIONAL APPROACH TO INTRODUCTORY SOCIOLOGY. By Lowell Julliard Carr. New York: Harper and Brothers, 1948. 178 pp. \$2.50.

Situational Analysis is a good introductory text which ought to be widely used as a handbook in conjunction with any one of eight correlated introductory texts, or by itself. The publisher's claim that "Here is an entirely new and revolutionary method of teaching sociology . . ." is exaggerated. Many good sociologists have taught as Carr urges them to teach, either without or in spite of many of the texts heretofore available. But Carr puts it on paper, and briefly at that.

Carr sees sociology as an observational science. Accordingly, he wants undergraduates to learn sociology as a method of discovery by the observation of group phenomena, and not merely as a collection of concepts and body of knowledge. He wants students to find sociology meaningful, practical, and exciting. Although we have not polled Carr's students who have already used the book, in the hands of a competent teacher it should produce these results.

The writing is lucid and lively. Most of the standard concepts are introduced and then applied to situations and cases with which undergraduates are generally familiar. A well built framework, drawn from Gestalt and topological psychology and from more "orthodox" sociology, gives the book organization and the student a frame of reference for his own thought and observation. The major elements are set forth in chapter headings; situational experience, life situation, situational field, institutions as standardizers of situations, residence—subsistence groupings (neighborhoods and communities, metropolitan centers and metropolitan regional communities), situations in motion, how society changes, where disturbances come from, problem situations, situational readjustment, leadership and situational readjustment, foresight and planning.

Fourteen specific assignments to be reported in an "observational notebook" (for which a form is suggested) take the student from analysis of the opening scene in Sidney Kingsley's play *Dead End* to getting evidence of foresight and planning by public officials. These are intended as primary teaching tools, together with nicely correlated readings in various journals and books, including texts by Gillin and Gillin, Hiller, Gregory and

Bidgood, La Piere, MacIver, Young, Ogburn and Nimkoff, Sutherland and Woodward.

The book is short on theories, long on description. This is its greatest weakness. Many of the classic contributions to our literature receive only passing mention or listing. The several categories and perspectives formulated by Max Weber and extended by Parsons for actor-situation analysis are neglected. Carr tends to use "operational" interchangeably with "observational," and fails to develop the more specific denotations of the former term, following Lundberg or Bridgman. These shortcomings, nevertheless, are distinctly minor, measured against the author's total product. Last but by no means least of Carr's accomplishments: he did it in all in 188 pages. Other introductory text writers please note.

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SEQUENTIAL ANALYSIS. By Abraham Wald. New York: John Wiley and Sons, Inc., 1947. 212 pp. \$4.00.

This is the first book-length treatment of the statistical technique of sequential analysis. Sequential analysis, developed as a technique of industrial statistics during the war, involves the testing, measurement, or examination of each unit in a sample as it is drawn. There is no pre-determined size of sample. The measurements are recorded sequentially as the units are sampled, and this technique tells when to stop sampling so that the conclusion will be correct to any pre-assigned level of probability. With this technique hypotheses can be accepted or rejected at any desired level of significance just as in classical statistics. The distinction is that with sequential analysis the average size sample, in general, is considerably smaller than in classical methods.

The method is primarily adapted to testing hypotheses and not to estimating parameters. It is most useful in situations where testing is expensive or where obtaining each unit in the sample is expensive. While it has not yet found application in the field of sociology, it has been applied in education and applications have been suggested in medicine, psychology, economics, etc. As more sociologists become familiar with the technique it doubtless will find many uses in a variety of situations.

With the exception of the technical appendix,

this book is written for readers with a knowledge of college algebra and a first course in calculus.

DANIEL O. PRICE

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MATHEMATICAL THEORY OF HUMAN RELATIONS. AN APPROACH TO A MATHEMATICAL BIOLOGY OF SOCIAL PHENOMENA. By N. Rashevsky. Bloomington, Indiana: The Principia Press, Inc., 1947. 202 pp. \$4.00.

According to the author the purpose of this monograph is "to outline a system of mathematical sociology in the spirit of mathematical physics and mathematical biology." It is important to note that he attempts to follow the *spirit* of these other sciences rather than the letter. He is very much aware of the shortcomings of the book and spends five pages of the preface reviewing the "most important shortcomings." After considering its shortcomings he justifies its publication by reviewing what he considers to be its positive contributions:

It is shown how the structure of a society and the behavior of its members can be mathematically described in terms of integral equations. It is shown how social groups or classes are formed within a society and equations are derived which determine the size and number of such groups. It is shown how the interaction of these groups determines the behavior of a society as a whole, and it is shown that this behavior may change either gradually or suddenly, in a revolution-like manner. Equations are derived for the time intervals between such sudden changes and for the speed of the changes, and the calculated values are found to be of the same order of magnitude as some observed ones. Mathematical relations are derived which govern the physical conflict between social groups. The outcome of such conflicts is shown to depend not only on purely physical factors, but also on such psychological factors as morale. A theory of "breakdown of morale" is suggested.

It is shown how mathematical relations could be derived for such diverse sociological quantities as national incomes, sizes of cities, ratio of urban to rural population, crime incidence, divorce rates, expenditures, and cultural productivity. Each case is illustrated by actual examples (p. xi).

The reviewer feels that these claims may be somewhat too broad inasmuch as it was necessary to make many simplifying assumptions. However, the important point is that such an attempt has been made and it seems fruitful. The author

admits that many of the results are first approximations and suggests directions in which they can be modified to more nearly fit the facts. The sociological theory in the book should be of primary interest to persons interested in group theories.

As important as the mathematical theory may be, it is felt that the methodology of the book is even more important. To see theories stated in such a way that they can be represented in mathematical terms is an interesting experience. Such a technique demands that the theories be precisely stated and that available knowledge be called on in formulating the mathematical expressions. Certain necessary conditions must be stated in order for the formulations to hold true, and in the statement of these limiting conditions the weaknesses and limitations of the general theory are clearly brought out. Such a formulation of theory makes for more precise statements and fewer broad generalizations. When a broad generalization is made its limiting conditions must be set down, and the result is subject to empirical testing.

Many sociologists will not read this book because of their complexes regarding mathematical statements. Others will put it aside because of their lack of knowledge of mathematics. However, the reviewer feels that the methods of the book should be of interest to every sociologist whether he knows mathematics or not. It should be of special interest to social theorists.

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SOCIAL PROBLEMS ON THE HOME FRONT. By Francis E. Merrill. New York: Harper and Brothers, 1948. 258 pp. \$3.50.

This volume was written as one of a series sponsored by the Committee on War Students of the Social Science Research Council and covers the subjects of war and the family, war and crime, war and personal disorganization. Its major interest is the family and supplements the author's *The Family in American Culture*. A short chapter deals with war and social change. It adheres closely to this phase of change, and therefore has little on economic or political events, the United Nations and peace efforts. It is necessary to concentrate on the specific social effects, but is it not also essential to relate the students to the social