

necessarily nonsense, though it seems to have a bias in that direction. It should not, however, be mistaken for that political science based on quantitative data and testable theory, which is now in the making.

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## Problems of Methodology

**Statistical Geography.** Problems in analyzing areal data. Otis Dudley Duncan, Ray P. Cuzzort, and Beverly Duncan. Free Press (Macmillan), New York, 1961. 191 pp. Illus. \$6.

*Statistical Geography*, written by three sociologists, "refers to a set of methodological problems and not to any unique body of subject matter which representatives of a particular discipline are best equipped to investigate." The text is divided into three chapters, with the first and second each accounting for about 16.5 percent and the third for some 60 percent of the total book.

Chapter 1, "Preliminary," deals with parallel and converging developments, the perspectives on areal differentiation, and the scope and purpose of the monograph.

Chapter 2, on areal units and areal data, is concerned initially with characterizing some formal properties of certain major types of areal units and areal data. Then the areal unit is considered in various ways: (i) as a collection of items; (ii) as a segment of space; (iii) as a site or location; (iv) as a member of a set of areal units; and (v) in relation to other units. The chapter ends with a discussion of the quality of areal data.

Chapter 3, on the analysis of areal data, is subdivided into components that deal with such topics as the aggregation of areal data, measurement of areal distributions, analysis of spatial structure, explanation of areal variation, contiguity and regional classification, and temporal aspects of areal variation.

The book may be correctly described as "a pilot investigation of the feasibility of formalizing and codifying methods of analyzing areal data." A study of the topics considered clearly shows the broad scope of inquiry. The authors were, however, modest in their hopes of what they expected to accomplish in their "pilot investigation." I know of no

other book that covers so broad a range of methodological issues connected with the description and analysis of such data. In a book of this size, one cannot expect as complete a discussion as one might wish of the large number of topics mentioned. Of course, each person's view on such a matter is influenced by his background and needs.

Researchers who are interested in various aspects and uses of areas and areal data and who belong to such diverse disciplines as geography, economics, regional science, sociology, and botany, will find this a very useful reference book. The excellent bibliography alone is of considerable value. Much of the material presented can be understood by those with little training in statistics or in mathematics and logic. However, a full grasp of some parts, especially portions of chapter 3, demands a high level of sophistication in the use of statistical tools and a knowledge of logical theory construction and use. Readers of this monograph will of necessity have more than a passing interest in methodology!

A steadily growing number of geographers believe their discipline would benefit from a more scientific approach to the description and evaluation of the areal arrangement of phenomena that concern them. The authors of this book provide substantial assistance toward achievement of such a goal. However, geographers and other researchers must be aware of the danger of being mastered by method. There must be a well-knit interaction between work and method.

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## Use of Statistical Method

**The Physical Anthropology of Southern Nigeria.** P. Amaury Talbot and H. Mulhall. With a preface by J. C. Trevor. Cambridge University Press, New York, 1962. xvi + 127 pp. Maps. \$6.50.

This work bears a somewhat deceptive title, for, in Mulhall's own words, it is primarily "an example of statistical method in physical anthropology." In it the junior author analyzes data on nearly 7000 natives of Southern Nigeria and adjacent regions, assembled by the late Amaury Talbot between 1902 and 1931. After Talbot's death it proved im-

possible to find his raw material, but Mrs. Talbot and Trevor managed to recover the means and standard deviations as well as the related typewritten notes, maps, and photographs. No photographs at all appear in the present work, which would also be more useful and appealing if it had an index, or even a detailed table of contents; otherwise the presentation is uniformly excellent.

The nine pages of chapter 1 are devoted to "The earlier classifications of the peoples of Southern Nigeria," of whom we hear no more, however, except incidentally, until we reach page 85, where the detailed analysis of Talbot's material begins. Chapters 2 through 7 are devoted to a thorough systematic examination of the development of statistical concepts and practices concerning the problems of sampling, variability, probability, and theoretical distributions, and to similarities and divergences between groups. This section on whys and wherefors is wonderfully well written, and almost as lucid to unmathematically minded people as such things can be made. The only practical question that it raises in my mind is whether the average physical anthropologist will find it worth his while, for the going inevitably becomes difficult every now and then. Some of even my more able colleagues would, I think, be willing to accept Mulhall's conclusions on faith and leave him to discuss his reasoning with professional statisticians. Nevertheless they will find this book very valuable as a work of reference if not as an everyday working tool.

In chapters 8 and 9 the various groups represented by Talbot's data are analyzed with a view to determining their internal characteristics of homo- and heterogeneity, and their external resemblances and differences. Such new knowledge as results from this methodical investigation seldom extends beyond matters of detail, but that alone is important, if only because Mulhall places previous surmises on a sounder base than was available before, and also because, in doing so, he shows clearly and convincingly how the same kind of thing can be done almost anywhere when one is willing to give enough thoughtful consideration to the possibilities and limitations of adequate raw data.

In a word, Trevor and Mulhall have taken a massive body of undigested material and have demonstrated precisely what can be done with this kind of

thing statistically, and how to do it. Their book is in the best vein of the tradition of mathematical analysis which Trevor has taught the world of physical anthropology to expect, as a matter of course, of Cambridge University. Even though, with characteristic modesty, he hardly appears in person except in the preface, his benevolent and meticulously brooding presence is felt strongly throughout.

To sum up, *The Physical Anthropology of Southern Nigeria* is not very useful for any but the most avidly earnest of laymen, but it is really valuable for specialists and most particularly for those who aspire to qualify as such.

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## A "Science of Leftovers"?

**Readings in Cultural Geography.** Edited with introductions and translations by Philip L. Wagner and Marvin W. Mikesell. University of Chicago Press, Chicago, Ill., 1962. xii + 589 pp. Illus. Map. \$8.50.

Anthropology has often been called the science of leftovers, but that title seems equally apt for cultural geography. Both sciences approach man's tools, toys, and totems with the same esoteric eclecticism and with the same unifying concept, culture. And the cultural geographer's studies of cattle collars in Switzerland or house types in Louisiana seem very akin to the anthropologist's study of needle cases in Alaska. Cultural geography emphasizes man's effect on and his relationship to the physical environment, and utilizes the concept of the cultural landscape to express these. Hence cultural geography is concerned, for the most part, with material culture, although this selection of readings does contain articles on religion, social organization, and other "non-material" aspects of culture. Cultural geography is also more concerned with modern Western culture than with primitive or preliterate cultures, which are the main concern of anthropology, but geographers study such subjects as the diffusion of the automobile in Sweden in much the same conceptual framework as anthropologists.

Presumably this group of readings is designed to be used in courses in cultural geography as an auxiliary, or perhaps primary, text; but I do not teach

such courses and am unable to judge the utility of the readings for that purpose. The selections concerned with specific cultural phenomena are wide-ranging, interesting, and written by a rather international set of authors; however, all are translated into English. The emphasis on man's domesticated plants and animals is particularly welcome, since I think this subject has been rather neglected by anthropologists.

The readings are arranged around what the editors call the themes of cultural geography. These themes are: culture, culture area, cultural landscape, cultural history, and cultural ecology. With the exception of the cultural landscape, the themes of cultural geography are also central concepts in cultural anthropology, but cultural geography even more than anthropology seems to shy away from theory. In both theoretical orientation and subjects of interest, present-day cultural geography seems to be very close to the American Historical School of anthropology which centered around Boas and Kroeber 25 or more years ago. In the rejection of any determinism, evolutionism, or general theory, they find refuge in enormously detailed studies of frequently trite cultural phenomena; and for a scientific explanation they substitute a chronicle of the unique events which led to the cultural phenomena being distributed the way it is. The distribution is thus thought to have been explained in some "genetic" or historical way, and the "principles" of diffusion and independent invention are elevated from simple statements of what happened to explanations or causes.

This antiscientific, antitheoretical approach in both sciences was a reaction to the grand generalizations of the late 19th and early 20th centuries. In cultural geography the theories of Ellsworth Huntington and other environmentalists were somewhat later than those of the classical evolutionists in anthropology; this perhaps explains why anthropology passed the peak of reaction in the 30's, while in cultural geography the peak appears to be in the process of passing. In the past few years science has crept back into anthropology, to a great extent through the concept of cultural ecology and its application. The analysis of covariation is essential to science in general and to ecology in particular. But to the editors of this volume, cultural ecology is simply the description of cultural processes. For example, "These fields are plowed twice a year" and "The government is building a

dam" (page 19) are given as illustrations of ecological statements, so that even ecology is reduced to simple description. This accords with the editors' concept of science, which seems to view this activity as just labeling and classifying the external world. The aims of cultural geography are thus to discover the "Who? Where? What? When? and How?" (page 24) of cultural phenomena; and when enough of these facts are known about culture, significant relationships might be forthcoming—but then again they might not. I think the conspicuous absence of any "Why?" is indicative of this unfortunately widespread view of science.

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## Cold War Focal Point

**Southeast Asia Today—and Tomorrow.**

Richard Butwell. Praeger, New York, 1961. x + 182 pp. Illus. Paper, \$1.75.

Excellent. Not a rehash, nor a collection of platitudes, but a thought-provoking analysis of Southeast Asia, focal point in the cold war. It will not be out-of-date tomorrow, because it is less concerned with the last than with the lasting.

Butwell has fine credentials. He received his doctorate at St. Anthony's College (Oxford University), and he is on the faculty of the University of Illinois. He has climaxed his research with travel and teaching experience in the region about which he writes. He does not approach his subject country by country, but devotes each chapter to the consideration of a single topic. These topics include nationalism, anti-colonialism, democracy, economic development, social reform, education, the preservation of law and order, socialism, communism, neutralism, and ordinary diplomatic relations. He assumes a reasonable amount of intelligence on the part of the reader.

A mass of information is presented which shows that the region is not stabilized, but is dynamic and growing. The prospect for quick Utopia, which seemed glamorous at the beginning of independence, has given way, at least in some places, to feelings of despair. The blessings of representative government and civil rights have been denied by the activities of dictators, military juntas, public opinion manip-