defense of the convention system as an expression of democratic forces. Paul T. David of Brookings surveys recent research at the state level in his "Comparative state politics and the problem of party realignment." David B. Truman of Columbia presents an interesting concluding paper, "The impact on political science of the revolution in the behavioral sciences," that rescues political science from the psychologists, social anthropologists, and sociologists.

This small volume covers much ground. A short review can do scarcely more than point to the chapter headings. The papers give much emphasis to voter behavior and administrative practices. But little attention seems to be given to the political forces behind the voter and the bureaucrat. Nor is attention given to the absorbing problem of the bureaucrat and the political administration. Who really runs the show? The relationships between the Congress and the bureaucracy afford another avenue of fruitful research that is not mentioned here. Some things must be dropped in any short series of lectures, and this one did not drop as many as might be expected. ARTHUR E. BURNS

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A Solomon Island Society. Kinship and leadership among the Siuai of Bougainville. Douglas L. Oliver. Harvard University Press, Cambridge, Mass., 1955. xxii + 535 pp. Illus. + plates. \$10.

The Siuai are Melanesian people who live in southwestern Bougainville in the Solomons. They constitute a discrete and self-conscious social aggregate sharing common linguistic and general cultural features, but they lack any formal organization; that is, there is no Siuai political group. In 1938-39 there were 4658 Siuai, and for 18 months during that period Douglas Oliver and Eleanor Schirmer Oliver lived among them and collected the data, some of which were presented as "Studies in the culture of Bougainville" [Papers of the Peabody Museum of Archeology and Ethnology 29 (1949)], but most of which have been cast into the present volume, a superb ethnography.

Oliver's objectives in writing A Solomon Island Society were threefold: to summarize the whole culture of Siuai; to fill a pedagogic need for reliable ethnographic descriptions of whole cultures; and to present much-needed substantive material on the subject of political institutions in stateless society. I am not expert in Oceanian culture, but I believe that Oliver has brilliantly achieved his goals. Furthermore, the modesty and honesty of Oliver's presentation and the demonstration in other publications of the author's expertness in things Oceanic lead to the conclusion that the previous judgment will be confirmed by specialist colleagues.

The present study of Siuai describes the society that existed in southwestern Bougainville at the time of investigation. The author, lacking firsthand observation of this culture since the war ("What if anything remains of the Siuai culture ... I do not know") wisely refrains from comment on the more recent period. He does, however, set Siuai into the framework of expanding European influence in Melanesia. It is, he tells us, in the second stage of Westernization. The first stage, which lasted until 1915, saw ephemeral contacts with white traders; the second, much more significant, was dominated by the imposition and maintenance of peace by the Australian government (a cosmic irony in view of the events of 1942-43 in the Solomons). This pax Australianus is regarded by Oliver as one of the most potent forces that subverted the older Siuai polity and led to the emergence of the system he portrays.

Siuai subsistence is based on taro, which furnishes 80 percent of the diet and which demands more Siuai labor than any other occupation. The Siuai cultivate a field once, then allow it to lie fallow for a minimum of 5 years. There are several alternative designs to the pattern of shifting fields, but even under the most ideal system known to the Siuai at least five units of land not under immediate cultivation must exist for every unit in operation, or there is danger of famine. Oliver makes it clear that population in this area is far from the saturation point in terms of the productive capacity of native agriculture, but food shortages can occur locally. If the reader is puzzled at the seeming contradiction, he is urged to read Oliver's brief account of the labor involved in clearing virgin ground-it will then become quite clear why the Siuai men prefer to return to previously used land.

As a matter of fact, the field-clearing job done by the Siuai men was much more onerous and time consuming before their contact with Europeans. The difference can be laid to the greater efficiency of the new metal tools. This change, in combination with the effects of the pax Australianus, is said by Oliver to be responsible for the major changes that he believes have occurred within Siuai society in the past several decades. But before Oliver permits himself such generalizations and conclusions, he has taken us through a detailed and very neatly organized treatment of the major aspects of Siuai culture.

The book begins with a general orien-

tation—a concise treatment of the ecological background, followed by an effective picture of the world as it is seen, more or less, by a Siuai. This is managed by a clever manipulation of native mythology and genealogy against a background of analytic insights provided by the anthropologist.

The author then turns to the social organization, bringing the material to the reader through ever-widening frames of reference, households, hamlets, larger kinship groups, and, finally, associations. Next, he returns to Siuai economy and lays the basis for an extensive treatment of leadership, its structure and functions. The book concludes with general statements and conclusions of several different types, only one of which is represented by the foregoing remarks.

Among Oliver's most interesting generalizations is his thematic analysis of Siuai, which, despite merely tangential reference to Morris Opler, is strongly reminiscent of that author's treatment of Chiricahua Apache. There is an important difference, however, in Oliver's division of Siuai ideology into four distinctive and fairly discrete sets of themes dealing with kinship, ranking, Australian-derived administration, and "mission ideology." These different sets of themes may conflict, and, indeed, Oliver indicates that acculturation may be in part described in terms of the shifting significance of the various sets of themes. He does not, however, see these ideologies as motive forces. Two of them, the administrative and mission ones, are obviously externally derived and historically late; they may be the shape of the future but they are not yet (1939) dominant or even particularly ascendant. As for the remaining two, Oliver makes the hypothesis that a major technologic change (metal tools for clearing gardens, page 470) and a major alteration in polity (the substitution of the pax Britannica for indigenous warfare, page 423) produced a trend "away from other systems towards a more elaborate, a more timeoccupying, and a more potent decisioninfluencing rank system" (page 466).

After this brief sketch of the contents of Oliver's book, which gives only the smallest clue to its breadth of treatment and treasury of detail, it may come as a surprise to the reader that Oliver, in his preface, regards his own work rather narrowly as descriptive and only in the most peripheral sense theoretical or "related to theory formation." I may be reading things into this book that the author would reject, but I believe that his formulation of the different and somewhat competing ideologies and his attempt to tie them to underlying conditions of technology and social organization represent a high level of theoretical activity.

Although the field work was done almost two decades ago, Oliver casts much of his material against a theoretical field of much more recent vintage. His terminology conforms to that of Homans, Kluckhohn, and Hoebel, among others. Unfortunately, Oliver does not seem to be aware of such work as that of Karl Polanyi, for the Polanyi approach to such concepts as money and value might have added greater clarity to the book. Similarly, the employment of the concept of "redistribution" with its implications and ramifications might have made Siuai economy seem more rational (although not in terms of classical economics!) and less atomistic.

As a final word I would like to say that this is, above all, an exceedingly fine ethnography and one that is certain to be widely used in testing current theories about the emergence of ranking and stratification and the development of political power. Although it does not give great detail on the precise field methods used, it is an excellent job of analytic reporting and well worth recommending to those scientists who, not anthropologists themselves, would like to see a competent ethnographer at work.

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Information Theory in Psychology. Problems and methods. Henry Quastler, Ed. Free Press, Glencoe, 1955. 436 pp. \$6.

Information theory has stimulated at least its share of large-scale conferences and symposia. The papers presented at five of these conferences have been collected into book or booklike form, and now we have a sixth.

The conference from which this volume was derived was held under the auspices of the Control Systems Laboratory at the University of Illinois in the summer of 1954. It had a somewhat more restricted scope than, for instance, the biannual London conferences on communication theory, in that it was exclusively concerned with the application of information measures and theory to behavioral studies. However, of the 53 conferees and/or contributors to this volume, 21 are not professional psychologists, or in any event are not listed in the latest directory of the American Psychological Association. Quastler, who organized the meeting and edited this volume of the proceedings, is a radiobiologist.

Partly as a result of the interdisciplinary structure of the meeting, nonpsychologists will find things of interest here. In particular, those who are concerned with the application of information theory to finite samples and situations that do not fit the conventional communication system model will find some of their problems discussed. The admonitions of Cronbach, "On the nonrational application of information measures in psychology," are a particularly good antidote to the overenthusiastic acceptance of the verbalisms of information theory. It probably should be pointed out that the too ready use of information measures is by no means confined to psychologists; other conferences on information theory could well have started out with this same skeptical note.

Also in this volume will be found the first readily accessible publication of Miller's work on the bias of information estimates. In fact, this is the first collection of papers on information theory in which there appears a recurring awareness of the *statistical* problems involved in the application of information measures.

Unfortunately, such genuine contributions to the field are interleaved with a number of other papers that either duplicate material which the same author has presented more completely elsewhere or that read like informal progress reports to a small group of coworkers. Perhaps the best part of the book is the editorial comment by Quastler, who introduces and then comments on each paper. These comments are uniformly wise and thoughtful, and in many instances they contain substantial amounts of additional data. By this device, Quastler gives a coherence to this collection of papers that is more apparent than real. The reader who would like to get a picture of the successes and failures of information theory in psychology would do well to read Quastler's comments first and then make a judicious selection of the papers that constitute the bulk of the volume.

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Handbook of Vital Statistics Methods. Series F, No. 7. *Studies in Methods*. Statistical Office of the United Nations, New York, 1955. 258 pp. \$2.50.

The purpose of this handbook is to "explore current practices, to make conveniently available recommended statistical standards, and to present uniform concepts, definitions and procedures upon which development of national vital statistics and the improvement of their international comparability may be based."

Following a historical summary, the whole scope of vital statistics operations

is described, including their uses; legal and administrative provisions for their recording; definitions of the events covered (births, deaths, stillbirths, marriages, and divorces); duties and qualifications of registrars and informants; types of registration; details of the reporting process and of report forms; uses, definitions, and classification of statistical items as well as problems relating thereto; compilation and tabulation of data from the reports; computation of rates and indexes; and evaluation of the entire system.

The presentation of the basic principles involved by citation of actual practices in 65 different countries avoids the impression of dogmatic pronouncements and hence makes the recommendations especially acceptable. Moreover, the equitable discussions of the advantages and disadvantages of various methodsfor example, "civil" versus "health" administration-serve to suggest adoption of specific arrangements that will avoid or circumvent the deficiencies inherent in a particular system. Similarly, the exposition of the problems created by variations in definitions or in application of definitions-for example, "live birth" versus "stillbirth"---emphasizes the care required in analysis. Authoritative suggestions regarding such basic factors as size, shape, and layout of report forms, color of forms and inks, and wording of instructions bring the report to practical elementals.

Detailed and summary tables have been profitably used to identify general patterns of vital statistics practices. Such factors as the limitations of specific collection methods—for example, aggregation of data from summary reports versus compilation from individual reports have been readily illustrated by this means. Specific vital statistics data from selected areas also serve effectively to demonstrate the points at issue.

Coding, classification, and tabulating problems are explained in detail, and the need for error control is emphasized. Tabulating methods are briefly but adequately mentioned, while such factors as coverage (partial versus complete), time reference (year of registration versus year of event), and geographic reference (occurrence versus residence) are thoroughly explored. Specific "minimum" tabulations are outlined; in addition, "optional" ones are presented for jurisdictions that can undertake them. Statements of the uses or purposes of each tabulation fully justify the recommendations.

The description of rates, ratios, and other vital indexes is sufficient for a general understanding of the problem of computing them and of the limitations inherent in them.

Evaluation methods include sugges-