But those who want to place the truly significant work of Vancouver in its historical setting in the development of the cartography of the northwest coast of North America will find the book somewhat disappointing. It is apparent that the author has not given the same critical attention to the cartographic sources pertinent to his subject that he has to the journals, letters, and other text materials. Three of the five maps provided show detailed routes of the survey ships along the northwest coast. The crude delineation of coastal features, however, hardly justifies the description "Adapted from Vancouver's Charts."

CARL H. MAPES
Rand McNally and Company, Chicago, Illinois

Medicine and Society in America 1660–1860. Richard Harrison Shryock. New York University Press, New York, 1960. viii + 182 pp. $4.

First prepared as the Anson G. Phelps lectures on early American history and delivered at New York University in 1959, this volume presents in concise form a synthesis of the author's views on the development of medicine in America up to about 1860.

In three chapters covering the period 1660–1820 and one covering 1820–60, Shryock lucidly describes medical thought and practice, the composition of the profession, as well as its education, regulation, research (or lack of it), institutions, organizations, and publications. He discusses health conditions among the general population and the efforts made to improve these conditions by public and private measures. These topics, developed historically, are carefully related to each other, to the general background of American society, and to their European origins or counterparts.

Clearly, the best that Americans could offer in original medical thought and research or in medical institutions still fell far behind the best that Europe could offer in 1860. The history of the profession does show, however, constant efforts to improve education, practice, and standards, and it is not so clear that in 1860 the average American practitioner was inferior to the average European. As Shryock points out, the chief difference was that the second-class practitioner in Europe was so labeled. The self-criticism and disillusionment prevalent among American medical leaders by 1850 may be traced, in part, to the very real problems they faced: weak proprietary schools, the absence of research, widespread quackery, medical sectarianism, and the ineffectiveness, increasingly recognized, of traditional medical practices. But their complaints also indicate progress; they show how much higher medical leaders had raised their sights.

This book offers, in compact form, a sound and readable synthesis of many aspects of American medical history, which is based on the author's years of brilliant and productive research in the field. Perhaps the least satisfactory part is the general picture of diseases and health conditions in the colonial era: the data are scarce and difficult to interpret in modern terms; intensive study is still needed in this area. To date, however, this book is the best brief, interpretive account of American medicine up to 1860, of interest and value to historians and physicians alike.

JOHN B. BLAKE
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Economics and Social Sciences

Communist China and Asia: Challenge to American Policy. A Doak Barnett. Published for the Council on Foreign Relations by Harper, New York, 1960. xi + 575 pp. $6.75.

Granted that there has been all too little public debate of United States policy toward China since the scapegoat-hunting, "Who lost China?" days, what there has been of it has unfortunately centered on the merely tactical question of diplomatic recognition. The great virtue of Barnett's book is that it places the challenge presented by Communist China to America within the critical context of the political and economic future of Asia as a whole, and it does so with a wealth of documented facts that form the basis for some tough-minded conclusions.

Communist China and Asia is concerned primarily with the political, economic, and cultural means by which Communist China is seeking to influence the future of the noncommunist countries of Asia. Barnett begins his examination of the challenge of Peking's multiform foreign policy with an appraisal of the stability of the Chinese Communist regime at home and with an examination of its motivation and strategic aims. He then turns to an analysis of Peking's ways and means in its relations with Asia, the history of these relations since 1949, and an appraisal of the significance of the Sino-Soviet alliance. The concluding chapters take up the question of Taiwan and then offer the most sensible discussion of United States policy toward Communist China that I have yet seen.

These are the important conclusions that emerge from Barnett's judicious sifting of the information available to us:

1) The Chinese Communist regime exercises effective, totalitarian control over the mainland of China. There is little, if any, prospect either for the overthrow of the regime by an internal revolt or for the reconquest of the mainland by Chiang Kai-shek.

2) Despite serious problems in the agricultural sector, China's economic advances in the past decade have been impressive. Its "rate of economic growth now appears to be almost double that of India, and in a few years Peking will probably have built a base of heavy industries overshadowing that of Japan." Both as a carrot (suggesting a model for forced industrialization elsewhere) and as a stick (because it has made Communist China's military strength greater, perhaps, than that of all other countries in East Asia combined), Peking's growing economic potential has rapidly increased its power and influence relative to those of its neighbors.

3) In the years ahead Communist China will employ its firm rule at home and its economic and military strength in an effort to achieve Great Power status and to promote the spread of communism in Asia. To attain these ends, "Peking has already used, and will continue using, all the instruments of foreign policy at its command, including diplomacy, political maneuver, subversion, trade, and economic aid, as well as military power." Moreover, Peking can count on the firm backing of the Soviet Union. "There is little chance of an open split between them within the next few years, and the Sino-Soviet alliance undoubtedly will hold together for the predictable future."

4) Chinese Communist success in dominating Asia would mean a disastrous shift in the world balance of power in favor of the Communist bloc. To prevent this outcome, adequate mili-

tary security measures are necessary, but not enough. If the military balance can be maintained, the issue in Asia will depend fundamentally on whether the major noncommunist nations succeed or fail in their efforts to achieve economic growth and viable political institutions.

5) For the United States, the implication of the foregoing is that it must devote a major effort to supporting these nations, "not only in their efforts to preserve their independence, but also in their attempts to realize their potential for political and economic growth." There must be acceptance of the fact that although the nonaligned Asian powers may differ from the United States in their policies toward China, it is critical that the United States help these powers achieve their internal goals. This, and not an attempt to line these countries up behind present American policies, is the way that Peking's influence may be offset.

6) Finally, toward Communist China itself, present American policy is untenable in the long run. By tending to heighten military tensions in Asia, American policy diverts attention from the priority task of building economic and political strength in the noncommunist nations of the area. Moreover, the American position lacks general international support and is "vulnerable to steady erosion or sudden collapse."

In effect, Barnett writes, the United States has the choice of four broad lines of policy. Two of these—full accommodation to Peking on the one hand and a "liberation" policy of all-out pressure on the other—can be ruled out immediately. The real alternative to continuing the present negative policy of "limited pressure" and diplomatic isolation is a "two Chinas" policy that would seek to stabilize and gain international acceptance of a new *status quo* based on a divided China. The essence of this policy would be to put an end to the fiction that the Kuomintang regime on Taiwan still exercises jurisdiction over all of China, but to do this without abandoning Taiwan to the Communists. Of course neither Taiwan nor Peking will accept such an outcome easily, but in the case of Taiwan a strong reaffirmation of the United States commitment to defend Taiwan and the Pescadores (but not the offshore islands, which should be evacuated) and to aid it economically (along with some judicious pressure) should do the trick. Acknowledgement of Peking's *de facto* control of the mainland, and the inducement of more formal recognition in the future, would throw the onus onto Peking to accept a genuine truce and neutralization of the Taiwan Strait. With the end of direct military confrontation between the United States and Communist China in the Taiwan area, the United States could turn its main efforts to countering Peking's influence in Asia as suggested above. Within the United Nations, although the United States should link the seating of Peking with the simultaneous admission of Nationalist China as a new member, the United States should also be willing to accept the view of the majority. The price that the United States has had to pay in the resentment of many of those who have, to date, voted against the seating of Peking is too great, and in any case that majority is surely slipping away.

Even from this brief summary, it should be clear that Barnett has provided a fresh examination of American policy in Asia, based on the realities of the current situation there and on the real and primary interests of the United States. As he wisely says in his conclusion, "Emotional feelings and moral aversion are not, in and of themselves, a sufficient or valid basis for determining the United States' aims, strategy, and tactics in any major area of foreign policy. . ." Following this advice, and drawing on many years of firsthand observation in China and much careful research in a field where the materials are overwhelming, Barnett has put together the best book on its subject that has yet been published.

ALBERT FEUERWERKER
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People, Jobs and Economic Development. A case history of Puerto Rico supplemented by recent Mexican experiences. A. J. Jaffe. Free Press, Glencoe, Ill., 1959. 381 pp. $6.

This is a welcome study for those who wish to follow the Puerto Rican experience and to understand its significance for the effort being made to better the situation of underdeveloped countries. The study picks up where Perloff's *Puerto Rico's Economic Future* (1950) left off. It may be said at once that the progress noted by Perloff has continued. The insular economy is now well into what appears to be a productive spiral which, unless some political catastrophe occurs, will bring its people to the level of well-being that is enjoyed in the continental United States.

There is a clearer and clearer understanding, as there was not a few years ago, that it is the connection with the economy of the United States that has made the difference between Puerto Rico and the more backward Caribbean areas. One problem of such economies, in trying to enter the upward economic spiral, is always the pressure for welfare measures which must be sacrificed if economic progress is to be seriously sought. The United States has supported education, health programs, social security measures, and special programs for agriculture. Most of the federal-aid provisions—such as those for roads, airports, agricultural extension, and so forth—have been extended to the island's people. These are facts which are sometimes overlooked or are judged to be less important than they actually are. Large sums, and much effort, have been expended in the economic field at the same time that welfare was being enhanced. This could be done because welfare was being taken care of by gifts.

Still, of course, the problem has not been an easy one to solve; and the ingenuity and determination of the Puerto Ricans themselves deserve praise. Mistakes have been made, sometimes costly ones; but they have been recovered from. It appears now that progress may well go on; the chances improve as the better health and nutrition, the increased productivity of labor, and the diversification of opportunities make themselves felt. There is one failure (the agricultural sector) not yet attacked with any vigor, but perhaps it will be in the future.

Supplementing the Puerto Rican record (Puerto Rico's record is fully related with careful factual analysis in every relevant area) is some consideration of the similar problems in Mexico. The comparison shows how considerable the difference is for a country supported during its early effort by a strong and willing neighbor and one which has good-will but no real help of this sort. Mexico is fast running into trouble resulting from a rapidly growing population with a productive system unable to expand with sufficient rapidity to cope with the needs.

Jaffe is chary of criticism, but he does touch one vulnerable spot when

he analyzes the result of distributing government-induced growth in Puerto Rico according to a preconceived sociological standard rather than an economic one. "We may seriously ask," he says, "whether some other program might not have better satisfied the economic and political requirements for large scale economic development. Perhaps an even higher rate of economic development would have occurred if business establishments and factories had been established only at those points which seemed most desirable for economic reasons." It is not difficult to predict that within a few years there will be a good many abandoned factories in the Puerto Rican countryside, monuments to a nostalgia for rural values in an industrial revolution.

This is a valuable study—clear, relevant, and with adequate laying-out of facts and figures. Our thanks to the Bureau of Applied Research of Columbia University as well as to the author.

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Beyond the Mountains of the Moon. The lives of four Africans. Edward H. Winter. University of Illinois Press, Urbana, 1959. xii + 276 pp. Illus. $5.50.

Beyond the Mountains of the Moon consists of the life histories of two men and two women of the Amba tribe of Uganda. An opening chapter gives a brief description of the country of the Amba and a sketch of their social organization. A final chapter discusses certain aspects of the role of women in Amba society and makes a few observations about changes taking place in the society as a result of the introduction of Christianity and the incorporation of the Amba into the political system of Uganda. While these observations are of interest in themselves, the value of the book lies in the use of the life history as a means for giving insight into the way in which a foreign people actually see their own lives. In many ways it gives the reader a more vivid picture of the realities of African life than does the formal anthropological monograph.

The Amba, who now number some 30,000, live in western Uganda to the west of the Ruwenzori Mountains. Natural barriers separate them from other peoples of Uganda, and their closest affinities are with other forest people of the Belgian Congo. They did not come under close administration until the period of the first World War, and it was only in the 1930's that the building of a road into their country brought them into close contact with other regions in Uganda. When E. H. Winter worked among the Amba in 1950, they were still remote from many of the developments which are rapidly changing African life throughout Uganda.

Although the men and women who tell their life histories are of different ages and have had different experiences, their lives have much in common. Particularly striking in all the narratives is the frequency of death and illness, the instability of marriages, and the constant suspicion that others are using sorcery to cause misfortune. Each of the four has been suspected of sorcery, and all of them constantly suspect others of using sorcery against them. Close kinsmen are the most likely targets of suspicion. Although these traits are in no way unique to the Amba, the context within which they occur and the Amba reaction to them are unique. *Beyond the Mountains of the Moon* gives an insight into what it means to be an Amba, but the reader cannot generalize from this about life in other African societies.

Winter has not attempted to make a theoretical interpretation of the life history material. Instead, he has given a few Amba an opportunity to speak for themselves in the hope that the Western reader will gain some intuition into the full complexity of the life of people in a very different culture. The result is a fascinating book.

E. COLSON
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Marxism in Southeast Asia. A study of four countries. Frank N. Trager, Ed. Stanford University Press, Stanford, Calif., 1959. 381 pp. $7.50.

After a short introductory section by the editor, Frank N. Trager, this book goes on to give studies of Marxism in Burma (by John Seabury Thomson), in Thailand (by David A. Wilson), in Viet Nam (by I. Milton Sacks), and in Indonesia (by Jeanne S. Mintz). In conclusion, there is a fairly long section by the editor. The book is very fully documented, with over 50 pages of notes and references and 13 pages of bibliography.

A great deal of it is rather hard reading. This is almost unavoidable in any serious study of revolutionary politics, because revolutionary groups tend to be more unstable than regular political parties. Continuity is interrupted by government suppression, alliances are formed and break up over disagreements about policy or doctrine, rival movements struggle for leadership of the revolution. All this produces a bewildering variety of names, but any attempt to cut them out would mean that the author was giving, not a history of the actual development of the revolutionary movement, but his interpretation of the underlying trends behind this movement.

The influence of Marxism seems to have been smallest in Thailand, and the study brings out very clearly the reasons for this. There was no colonial regime to be overthrown, the country was comparatively prosperous, there was no large group of alienated intellectuals, and politics have traditionally been a matter of personalities rather than principles. As a result, revolutionary Marxist groups have been small, and even general Marxian ideas have had only slight influence.

In Burma there was an anticolonial struggle, but the first contacts of the revolutionary intellectuals were with left-wing thought in England, which was not very definitely Marxist. Marxism did not become important until the 1930's, and the first communist cell dates only from 1939. In the postwar period Marxist ideas have had a considerable influence, but many Burmese leaders have accepted Marxist ideas only in so far as they could reconcile them with Buddhism and have drawn a distinction between Marxism and communism. While there has been a communist rebellion, even the Burmese communists seem to have developed only gradually toward a monolithic Leninist party.

In both Viet Nam and Indonesia, Marxism came earlier, soon after the first World War, and its contacts were with the definitely communist organizations of continental Europe. In both there was an authoritarian colonial government which gave some advantage in the general nationalist, anticolonial revolutionary movement to a party with the regular Leninist conspiratorial organization. Even so, a monolithic

communist party only emerged gradually from a period of confused struggles and alliances between various local groups. In both countries one can also trace, very clearly, the direction of the communist movement from Moscow. Within the communist movement, the Moscow oriented group won out against various forms of national communism, but leadership from Moscow has often been inclined to regard local communist parties as expendible in the cause of general communist world strategy. In Indonesia, for example, the communists suffered severe setbacks from revolts in 1926 and 1948, which seem to have been responses to directives from above about which many local leaders had serious misgivings.

The conclusion which emerges, and to which the editor points in his final section, is that there is an important distinction between the influence of general socialist or Marxian ideas and the power of an organized Leninist party. Marxism had a strong power of general attraction as a theoretical basis for the anticolonial struggle, and most views of the new society, at which the revolution was aiming, were more or less socialist. The monolithic Leninist party has had an advantage over rivals with less discipline and with less organizing ability, but it loses popular support when it is compelled to reveal its real objective of total power *before* it has managed to seize power. The "right" strategy of maintaining alliances with noncommunist groups is probably more dangerous to the noncommunist world than the "left" strategy aimed at direct communist seizure of power.

LINDSAY OF BIRKER
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Max Weber. An intellectual portrait. Reinhard Bendix. Doubleday, Garden City, New York, 1960. 480 pp. $5.75.

Although the German sociologist Max Weber (1864–1920) was one of the outstanding social scientists of our epoch, his voluminous publications have become available in English only after much delay. Translations appear in no coherent order and often with important components omitted. Reinhard Bendix, of the University of California (Berkeley), is a scholar superbly qualified by language, training, and research achievement to provide a one-volume selection from Weber's life work.

The most novel and welcome feature of the Bendix book is the coverage given to the early studies wherein it is possible to identify, in rudimentary form, the problems which concerned Weber throughout his career. Weber's doctoral dissertation was a contribution to the legal and economic history of the Middle Ages. He examined the legal principles by which the burdens and benefits of a business were distributed among several individuals. From the beginning, Weber focused upon capitalistic society, exploring its contemporary operation and historical setting.

Weber's researches led to the discovery of the ideological preconditions of voluntary saving and investment. In this connection, his most famous work is *The Protestant Ethic and the Spirit of Capitalism*. In order to obtain a broad comparative basis for generalization, Weber investigated the social consequences of religion in ancient China, India, and Palestine. As a means of bringing legal and political factors into view, he explored the phenomena of domination, which he divided into three principal categories called personal (charismatic) leadership, traditionalism (feudalism, for example), and legalism (organized legitimacy).

Throughout his life Weber pursued scientifically verifiable generalizations about the nature and varieties of human society. Hence he maintained creative tension between the proposing of theoretical models, the invention of methods of investigation, and the execution of new empirical studies. Weber's ideas about method have been much discussed, particularly the conception of "value-free" science and the "typological" method. The present book underlines the degree to which Weber's historical inquiries were supplemented by field work on contemporary developments.

Viewing the Weber legacy as a whole, it is obvious why his contributions were little emphasized during the 1920's and the 1930's in the United States and why they are more influential today. The most creative social scientists in the United States began, as did Weber, steeped in the traditional disciplines of philosophy and history. But they saw it as their mission to supplement their inheritance by inventing more intensive procedures for the conduct of field and experimental research. To this end they resolved "institutions" into "interaction processes" which they examined in the light of the mechanisms of psychology and culture (for example, Boas and the students of G. H. Mead), and with the aid of relatively new techniques such as the solicited autobiography (for example, W. I. Thomas and F. Znaniecki) and the arrangement of data to reveal social gradients (for example, R. E. Park and E. W. Burgess). Among those who knew the continental literature, Simmel and Durkheim were more rewarding than Weber.

Today a fusion is taking place between the older formalisms coupled with historical research and the newer formalisms linked with field and laboratory. The fusion is encouraged by the attempts to transform whole societies by means of economic assistance and related programs. Hence the timeliness of a succinct presentation of Weber.

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The Antecedents of Man. An introduction to the evolution of the primates. W. E. Le Gros Clark. Quandrangle Books, Chicago, Ill., 1960. 374 pp. Illus. $6.

This is essentially a revision of a previous book, *Early Forerunners of Man*, published in 1934 and now long out of print. The revision is, however, so thorough and the new material so extensive that publication under a new title is not misleading. Both books have, it is true, somewhat misleading titles. The comparative anatomy of the primates, comprising the bulk of the work, is necessarily based largely on recent forms, not on early forerunners and not, literally, on antecedents. However, the truly early fossil forms and more or less literal antecedents, such as the australopithecines, are treated in due proportion. The fact that there is little *special* emphasis on man is one of the valuable features. There are plenty of books on human origins and fossil men, but this is the only one that places man in true proportions among all the primates and in their long history.

The book opens with a wholly new chapter that ably summarizes in 36 pages pertinent processes of evolution and the interpretation of evidence on phylogeny. The following chapters survey the primates summarily in space and time and then treat, in sequence, the comparative anatomy, viewed as

evidence of evolutionary relationships, of the dentition, skull, limbs, brain, special senses, digestive system, and reproductive system. These are modified from the earlier version only to the extent demanded by more recent studies. The final chapter on evolutionary radiations of the primates summarizes their essential adaptive trends and reviews their phylogeny.

No really startling discoveries of earliest primates, Paleocene to Oligocene, were published between 1934 and 1959, and the most noteworthy change here is a less sharp dichotomy of tarsioids and lemuroids and less insistence on a definitely tarsioid ancestry for higher primates. Just now, however, this part of the subject is changing rapidly because of new work, and the present treatment is already beginning to be dated. Among the higher primates, two bodies of new materials have radically changed conceptions about the group, and these changes are well discussed by Le Gros Clark. One consists of the numerous specimens of *Proconsul* and other Miocene primates found by Leakey in central Africa and mostly described by Le Gros Clark himself. The other comprises the South African australopithecines. Le Gros Clark's stubborn insistence on their near-ancestral relationship to man, maintained in the face of virulent criticism, now is justified in the opinion of most of his colleagues.

The book requires minimal prior knowledge of anatomy and zoology and can be read with profit by anyone seriously interested in primates or physical anthropology. It may even be somewhat too simple for suggested use as a textbook in a course which, in this country at least, would be unlikely to be offered in so specialized a subject, except at an advanced level. On its own terms, this book is a superior accomplishment and is highly recommended.

G. G. SIMPSON
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Structure and Process in Modern Societies. Talcott Parsons. Free Press, Glencoe, Ill., 1960. 334 pp. $6.

Since the end of World War II, sociology has emerged from a study of particular social problems and has become a more analytical discipline concerned with the totality of contemporary social structure. Talcott Parsons, theoretical sociologist and member of the department of social relations, Harvard University, has been a leading figure in this reconstruction.

While Parsons' interests have ranged broadly, for the last quarter of a century his energies have focused on the formulation of a more adequate conceptual framework to guide sociological research. His "structure-function" approach was, in part, developed in response to economics—classical and modern—which he believed to be too rational and too delimited for a full understanding of social life. Interestingly enough, his thinking about society as a system was initially, and deeply, influenced by the biological analogy, in particular by the work of Henderson. The substantive aspects of his position are derived from the works of those European sociologists who rejected economic determinism and Marxian sociology, and who, instead, were concerned with the influence of ideas, social values, and the persistence of the moral bond between human beings. These sociologists, in particular Max Weber and Emile Durkheim, saw the processes of social change initiated by technological development. But the transformation of society is crucially propelled and directed by the cultural values inherent in human organization.

First, in a monumental volume, entitled *The Structure of Social Action,* Parsons synthesized the state of sociological theory as it existed before World War II. Subsequently, in *The Social System,* he set forth his own conceptual framework for analyzing society and social values. Because of his powerful interest in general social science, he sought to formulate his sociology so that it could be integrated with the study of personality. For him, sociology is not the synthesis of social science, but rather, the analysis of societal behavior just as economics is the analysis of market behavior.

While the bulk of Parsons' work has been concerned with theoretical and formal problems, his writing has stimulated a considerable amount of research in sociology. His writings have also been crucial in supplying links between sociology and the other social sciences. But along with the emphasis on theoretical writing, Talcott Parsons has produced a variety of more empirical essays which bridge the gap between his general formulations and social reality.

Structure and Process in Modern Societies is a collection of ten such essays written by Parsons during the past 5 years. The table of contents reveals the breadth of his interests and the concerns of contemporary sociology. These studies include general topics such as the analysis of formal bureaucratic organizations, social structure and economic development, sociological analysis of specific problems such as community organization, social aspects of medical education, and religious organization in the United States. In each of these areas, Parsons analyzes the processes of social change and highlights the sources and consequences of strain. While his audience is often his professional colleagues in the social sciences, many of the more specific chapters will have wider appeal, for they demonstrate the linkage between sociological theory and empirical problems.

MORRIS JANOWITZ
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Essentials of Psychological Testing. Lee J. Cronbach. Harper, New York, ed. 2, 1960. xxi + 650 pp. Illus. $7.

Cronbach proposes that "the basic course in testing should present the principles of testing in such a way that the student will learn to choose tests wisely for particular needs, and will be aware of the potentialities and limitations of the tests he chooses." In *Essentials of Psychological Testing,* Cronbach has prepared a text which exposes undergraduates and beginning graduate students in psychology and counseling to a thorough grounding in the principles and practices of psychological testing. The coverage in this second edition is comprehensive; the author is obviously well-informed and discerning. The amount of information presented is considerable; yet it has clearly been selected and carefully organized to stimulate the student to think about each topic and derive from the experience a series of generalizations and principles. This is no cookbook for the student who likes to learn rules by rote, nor for the professor who unambitiously teaches that way. The text is thoughtful and thought-provoking; the beginning student of measurement who is to derive proper profit from it will have to exercise his powers of serious consideration, deliberation, and judgment.

Among the specific highlights are

Cronbach's discussion of decision theory in the evaluation of test utility, the summary of the present status of interest measurement, and the inclusion of controversial questions calculated to lead the student to understand that many problems in the test field do not have simple answers.

The frequent interruption of textual material with posed questions is an unusual pedagogical device, and there are those who will quarrel with its effectiveness. Cronbach's sympathetic presentation of "impressionistic testing" (looking for cues by any available means) and the corollary extension of the definition of tests to include any "systematic procedure for comparing the behavior of two or more persons" are certain to be challenged by many psychometricians. An occasional assumption of more statistical competence (for example, the concept "proportion of variance") than a beginning student is likely to have may be troublesome.

But these latter criticisms do not seriously detract from the undeniable value of a truly excellent text. The student who absorbs the ideas set before him will be prepared to select and evaluate tests intelligently; some teachers (and other professionals in the measurement world) might also find food for thought and growth by self-exposure to the concepts in this book.

ALEXANDER G. WESMAN
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New York, New York

Contributions to the Physical Anthropology of the Soviet Union. V. V. Bunak *et al.* Russian translation series of the Peabody Museum of Archaeology and Ethnology, Harvard University, vol. 1, No. 2. Henry Field, Ed. Peabody Museum, Cambridge, Mass., 1960. vii + 192 pp. Maps and tables. $4.50.

Following so closely on the heels of the first number of this new series [*Science* **130**, 1467 (1959)] and issuing from the hands of the same production team, the present publication, unfortunately, suffers from most of the same technical faults that reviewers pointed out in its predecessor. Basically, the faults stem from the fatal combination of a translator (however skilled) who knows no anthropology and an editor who, although an anthropologist, evidently knows no Russian. Even so, it is difficult to comprehend how the latter could have missed such boners as the references to Palaeolithic pottery (page 126) or Palaeolithic domestic animals (page 187).

This second number differs, however, in being a collection of scholarly papers, by numerous authors and from various sources, rather than a single semipopular work. Some cohesion is supplied by the fact that 9 out of 14 papers deal with the physical anthropology of the Caucasus area, past and present—which is the editor's particular field of interest; they supplement, to some extent, his own published work. In addition, there is a gazetteer of the peoples of southwestern Asia (outside the U.S.S.R.), with ethnic maps, which incorporates some less familiar Russian source materials; two papers on the physical anthropology of southern Siberia; one paper on method; and a brief progress report (without illustrations) on one season's activities of an archeological expedition in eastern Kazakhstan, which has scant relevance to the rest of the volume and little permanent value.

As a sample, one selection (No. 10) was checked against the original since the Russian text chanced to be on hand. The selection was found to be capriciously abridged (contrary to the editor's statements in the introduction), freely translated to the point of carelessness with constant omission of significant data and statements, and with the meaning distorted or destroyed by a plethora of errors—some very serious. Surely we have a right to expect better than this under the Peabody Museum imprint; it is scarcely calculated to inspire confidence in the remainder of the volume.

Physical anthropologists and others interested in population history will find a great deal of useful information concerning especially the racial history of the Caucasus area and an additional view of current Soviet physical anthropology. The data are concerned primarily with cranial and cephalic measurements; pigmentation; variations in the form of external features such as the epicanthic fold, nose, lips, and profile; the form, quantity, and distribution of hair; and the distribution of the major blood groups. Where pertinent, the adults have been divided into different age groups. Consequently, some major age changes are well documented (for example, the epicanthic fold which showed a frequency of 84.5 percent among Nogais 18 to 24 years old and only 15.3 percent among those aged 40 or more). Such data may be of considerable interest to researchers concerned with adaptation to cold and who suggest that the fold is such an adaptation.

Numerous groups have been studied, and the samples are often large. Americans who have become accustomed to relying upon C. S. Coon's *Races of Europe* (Macmillan, 1939), will, of course, find these works much more extensive, though they must still return to Coon, or to an earlier study, for a good map of the peoples of the Caucasus. Particular groups of long-term interest to anthropologists are treated in sufficient detail to assign their position in population movements with accuracy. Thus, the Kumyks display few Mongoloid traits, and the Nogais display a great many. The local population does not appear to have been significantly affected by migrant Turks, despite their having accepted the language, and the number of migrants, by inference, was probably small.

Blumenbach first used the term *Caucasian* to denote a variety of mankind nearly two centuries ago; in this decision, he was partially influenced by an unusually handsome Georgian skull. *White* has taken the place of *Caucasoid* in an increasing number of usages, and the latter term has been more narrowly defined. Historians of science as well as anthropologists will be interested in the identification of the Kavkasioni type as the "most Caucasian" type of the Caucasus and in the fact that the area occupied by this type lies wholly within the limits of the Caucasus. The type is characterized by a broad face (146.0 to 148.0 mm), light eyes, and dark-blond hair. The researchers, Debets among others, have carefully observed that the head form is difficult to determine because cradles were used for infants; recent changes in head form are also reported.

Though only the blood groups O, A, B, and AB are reported, sufficient groups have been typed to substantiate a major cline in distribution, an increase of O in the western regions. Concern is expressed for the objective observation of continuous morphological traits though these papers do not indicate comparable concern with detection of the mode of inheritance of such traits. Readers will need to pay careful attention to use of the term *type* for individuals displaying various combinations of traits within different populations as opposed to the use of *type*

(as a shorthand expression) for the central tendencies of a population. This collection of papers does reveal an enormous scholarly industry involving both skeletal and living populations.

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The Survival Book. Paul H. Nisbit, Alonzo W. Pond, and William H. Allen. Van Nostrand Company, Princeton, N.J., 1959. v + 338 pp. Illus. $7.50.

The active involvement of behavioral scientists in the research programs of national military departments was appreciably increased during and after World War II. When the findings and methods developed in the course of such work are made available to the general public, society's return on its investment of funds and scientific talent is appreciably enhanced. The writing of *The Survival Book* (by staff members of the Air Force Arctic-Desert-Tropic Information Center at Maxwell Air Force Base, Alabama) is illustrative of such a return.

In *The Survival Book* the authors have drawn on their several years of rich and varied experience, primarily anthropological, as well as on the collective experiences of several hundred other explorers and travelers. The result is an exceedingly useful body of information on the geographical and environmental features of at least seven different regions or areas of the world: the arctic and subarctic, deserts, tropical rain forests, savannas, seashores and coasts, tropics, and oceans and seas. Appropriately interspersed in the text are more than 90 figures and tables which graphically detail and illustrate several aspects of the discussions.

If one selects this book to secure a general treatment of survival, equally applicable for all kinds of travelers, he will be disappointed. From the preface he will learn that "the book has one purpose—to aid and insure survival after an emergency aircraft landing regardless of geographical location." From this point on, while the contents of the book quite clearly have some general application for many kinds of accidents and disasters, the material was generally derived for, and the suggested survival procedures will be most satisfactorily implemented by, trained and equipped military personnel. (Few civilian travelers ever begin a flight or trip appropriately dressed for survival; nor are they likely to have the benefit of the many uses to which a parachute can be put after it has served its primary function.)

In addition to the very extensive information presented on the environmental and geographical factors pertinent to survival, Nisbit, Pond, and Allen include many useful findings on the physiological reactions that an individual would experience under the diverse environmental stimuli to which he might be exposed. The physiological stimuli include cold, wind chill, heat, thirst, hunger, and food poisoning. These and several other items are included in the discussion of 17 different stresses to which a survivor may be exposed. Unfortunately, none of the discussions adequately face up to the fact that a survivor may also experience strong psychological and social stresses, and there is evidence indicating that these phenomena can appreciably influence the manner in which physical stresses are perceived and met, successfully or unsuccessfully.

The reader who is oriented toward behavioral studies is quite apt to be disappointed with the rather brief treatment of social-psychological phenomena. For example, he is told, in one paragraph, to organize his camp and to "decide who will be in charge and let him run the show." Criteria and procedure for implementing this decision are ignored. The reader is also told that the "will to survive" is a "vitally important factor in every successful survival incident." Unfortunately, the 12-line discussion of this subject does not provide any of the principles for implementing this crucial component. There is a fair amount of available evidence, including some experimental work, that could have been tapped, and it suggests that group factors are sometimes critical.

Few survival manuals or other reference sources ever neglect to adjure their readers: "Don't make the mistake of running off in panic." The present text, like so many others, does not go much beyond this point. The inquiring reader has a right to know, in some detail, what "panic" involves, how often and under what circumstances it occurs, and what techniques might be employed for its control. Students of stress behavior do know that panic, in the sense that it is employed by many writers, is not modal behavior. There may be some virtue in indicating this fact to those who would be prepared to survive.

The selected bibliography certainly will not satisfy many readers. A number may wonder why more explicit recognition was not given to other related Air Force research programs such as Robert L. French's Crew Research Laboratory (Randolph Air Force Base) and Paul Torrence's Survival Research Field Unit (Stead Air Force Base). Consideration of such sources conceivably could have led the authors to make an effort to relate and integrate their subject, survival, to other kinds of behavior induced by other stress-provoking circumstances.

The authors have not written the kind of survival book that I would have most appreciated, but they have assembled, analyzed, and presented in a very lucid and usable manner, a vast amount of up-to-date basic information. I am glad that the excellent work done by Nisbit and his staff has been made available to the public.

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Japan's American Interlude. Kazuo Kawai. University of Chicago Press, Chicago, Ill., 1960. 257 pp. $5.

This is an interesting, informative book about the American occupation of Japan. It is not a detailed account of what we did, but a restrained, balanced analysis of the way the Japanese responded. It shows how the brief interlude under the Americans fits into the pattern of Japan's historical development, and how the occupation contributed to the astonishing social changes and the rapid progress made in Japan since our departure.

There is not a dry page in the book —Kazuo Kawai is too dynamic for that; besides, Kawai, who was editor-in-chief of the *Nippon Times* (Japan's leading English-language newspaper) from 1946 to 1949, writes with the facile pen of a skilled journalist. During the period he served as editor of the *Nippon Times*, Kawai was caught in the middle between the occupation officials who wanted his help in putting across their ideas to the Japanese public, and the Japanese public which wanted him to explain the Japanese point of view to General MacArthur and his staff.

Kawai's inside stories show very clearly why many of our officials thought the Japanese were often stupid or cussed; and they show equally well why the Japanese often regarded even our highest echelon as bush-leaguers who, by accident, happened to be playing in the majors.

A dozen chapters give the author's ideas on a dozen phases of the occupation: Japanese attitudes; the character of the occupation; the Japanese background for democratization; the Constitution; the Emperor; political reorganization; the location of political power; economic reforms; labor, agriculture, and economic recovery; new basic education; higher education and mass education; and social change.

Kawai is critically analytic, but sympathetic. He believes that the occupation was benevolent, constructive, and sound, and that General MacArthur was brilliant, sincere, and intensely idealistic. He feels that the occupation was three steps forward and two steps backward in the direction of democracy, and that is tremendous progress for a brief moment in the history of a nation. He tempers his optimism with the wise caution that there is no assurance that democracy in Japan will always prevail. No nation can be master of its own destiny, particularly if it is surrounded as a democratic island in a communistic sea. But Kawai believes that Japan would not willingly go back to its chauvinistic past; thus, Japan's future is not a national but a world problem.

This is a book that will please a discriminating reader. The subject matter is vital; the author is competent. And he tells his story in a forceful, entertaining and human way.

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The Sea off Southern California. A modern habitat of petroleum. K. O. Emery. Wiley, New York, 1960. xi + 366 pp. Illus. $12.50.

Between the mainland coast and the continental slope off southern California lies a tract of deep marine basins and bold submerged ridges twice the size of Switzerland. Because of its unusual sedimentary, structural, and hydrographic features; its parallelisms with bordering oil-saturated basins ashore; and the high density of nearby population centers and research institutions, this area has become one of the world's most intensively studied offshore reaches.

In *The Sea off Southern California*, a leading student of this province successfully extracts and interrelates the essential elements from a formidable mass of published and previously unpublished data relating to this province. He does this in seven well-coordinated, conveniently subtitled, and profusely illustrated chapters on physiography, lithology, structure, water, life, sediments, and economic aspects. Special emphasis is placed on sediments, but one of the notable features of this book is the facility with which Emery moves about among the various subjects whose exposition comprises a general synthesis of the area treated. Outstanding for their thoughtfulness and balance are the sections on basins and troughs, phosphorite, currents, waves, slope sediments, interstitial water, the organic constituents, the origin of petroleum, and pollution. Emery's summation of the characteristics of sediment from various environments (Table 12, page 181) fills a serious and prospectively fruitful reference need. Moreover, Emery squarely confronts the problem of nuclear waste disposal at sea (pages 302–304), and presents data that indicate rapid turnover of the California basin waters (page 110).

With all its virtues, this book is not easy reading. It is an unremittingly serious, unabridged, technical treatise. The illustrations are closely related to the text and require careful study. By and large, they are well chosen and well executed, but some are cluttered and difficult to interpret. Related Figures 144 and 178 are so oriented that direct comparison within a single copy of the book is impossible.

An outstanding feature of the book is its ample documentation. With characteristic energy and command of detail, Emery has made effective use of a bibliography of some 850 titles, among which the principal contributors are himself and F. P. Shepard. Despite the labor of assembling and publishing such a quantity of data covering such a broad range of knowledge, it was done with few errors of typography or judgment. The name of the French mathematician Coriolis, is misspelled, the frequent use of "doubtlessly" (where there is doubt) is distracting, and Mohorovičić is written both with and without diacritical marks. To me, Emery's dismissal of A. O. Woodford's thoughtful discussion of submarine canyons seems too categorical, his espousal of the thesis that "many" Paleozoic black shales are marsh deposits uncritical, and his reasoning about the temperature requirements of organisms without sufficient rigor. Variations in calcium computed from the chloride ratio (page 239) are not quantitatively significant, inasmuch as this ratio can remain constant only in the absence of solution or precipitation of $CaCO_3$.

The good features of this work, however, far outweigh these minor objections. It is a scholarly and thoughtful compendium that at once gives perspective to the continental borderland off southern California and illuminates the general principles of marine science by applying them to a large scale natural model. It should be at the hand of all serious students of marine geology, sedimentation, oceanography, oil, or southern California.

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Advances in Spectroscopy. vol. 1. H. W. Thompson, Ed. Interscience, New York, 1959. ix + 363 pp. Illus. $12.50.

This book is the first volume in a series having as its goal "to present, interpret, and evaluate significant accomplishments in spectroscopy, and to indicate the most promising lines of advance." Thompson states in the introduction that he hopes "to cover in this series all important aspects of spectroscopy, pure and applied, atomic and molecular, emission and absorption, relating to physics, chemistry, biology, astrophysics, meteorology and general technique." These quotations indicate that the editor has in mind a gigantic undertaking which will run into many volumes, if the selected fields of research are properly covered.

Volume 1 contains eight articles by seven authors, each well qualified in his field of discussion. The titles are: "The spectra of polyatomic free radicals," "Spectroscopy in the vacuum ultra-violet," "The index of refraction of air," "Determination of the velocity of light," "High resolution Raman spectroscopy," "Modern infra-red detectors," "The infra-red spectra of polymers," and "Rotational isomerism about C-C bonds in saturated molecules