

groups: group A includes high-risk though nonneoplastic lesions or conditions, group B lesions that are benign or "imperfect neoplasms," and group C growths having the cardinal features of malignant tumors. Emphasizing that the principles on which the schema is based are most clearly applicable to skin, Foulds proceeds to examine them in relation to cancer of several visceral sites. It is here that the similarities between normal developmental growth and neoplastic development are presented.

The large number of agents that can induce cancer, the extreme variability in their chemical and physical properties, the dissimilarity in properties of cancers arising from different anatomic sites, the extreme variability of cancers from a single tissue source, the variable behavior of any one cancer during its long natural history, and the unpredictable effect of therapy appear incompatible with the notion that a single molecular event or a series of unique molecular events has initiated irreversible changes in a cell or population of cells. The relationship between transformed cells and the ultimate cancer and its properties is obscure. Dulbecco, in discussing transformation and neoplasms, has observed that "a precise relationship between transformed and neoplastic cells . . . cannot be established because the definition of a neoplastic cell is too vague. In fact, the cells of different neoplasms can differ greatly." The corollary of this would appear to be that the transformed cells initially present are further modified by as yet ill-defined internal environmental stimuli, but it is of prime importance to recognize that these ill-defined influences are crucial in relation to cancer. Foulds, in approaching neoplastic development as a problem in development, emphasizes the need to consider modifying influences and their relationship to and possible control of progression. The very nature of this approach denies the likelihood of a unifying concept for cancer induction and progression, and as of the present unifying concepts have little experimental or clinical basis and their contribution to cancer control has been negligible. Each neoplasm is indeed as individual as the host bearing it. Recent evidence suggesting the increasing incidence of patients with multiple primary neoplasms or new primaries subsequent to the treatment of earlier ones further em-

phasizes the systemic nature of the controlling factors.

In omnibus fashion Foulds reviews the various dogmas, such as somatic mutation and viral activation, all within the framework of biological organization. His argument from studies on malignant transformation is emphatically supported by data from studies on cancer induction, which show that there is no consistent relationship between etiological agent and natural history.

The experienced and mature *cancer* researcher will find the book of less use than those probing the "molecular mysteries" of the transformed cell. This should not dismay the author. The comprehensiveness of his approach provides a perspective unavailable in any other text of which this reviewer is aware. To the young or innocent cancer researcher, the volume is a mini-encyclopedia with a comprehensive and pleasingly current list of references. Discussion of the exciting area of viral oncology is limited to 16 pages, but this is an apparent rather than a real deficiency; studies in viral oncology are referred to throughout the text, particularly in the discussion of nucleic acids and of certain dynamic aspects of normal tissue and neoplasm organization. Readers will carry away a strong and responsible series of impressions which may be summarized provocatively as follows:

Cancer is a generic term for a group of diseases rather than a simple problem in growth. Malignant transformation and cancer are not synonymous terms. Exploitable biochemical differences between neoplastic and nonneoplastic tissue, when identified in the future, will, as in the past, be almost certainly specific to individual cancers only. As research subjects, homogeneous cell populations whether in tissue cultures or transplantable tumors are best characterized by the poverty of similarity to autochthonous tumors.

Foulds remarks in his preface that "cancer has always been a Problem . . . [and now] it is a Biological Problem." In reality, it is a constellation of biological problems, each for the most part an independent microcosm. Or in another view of reality, as Foulds also notes, "cancer is still a disease that kills people."

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## Anthropology before Its Time

**The Observation of Savage Peoples.** JOSEPH-MARIE DEGÉRANDO. Translated from the French and edited by F. C. T. MOORE. University of California Press, Berkeley, 1969. xii + 124 pp. + plates. \$4.

Historians of anthropology generally agree that scientific approaches to the study of primitive peoples, as opposed to unsupported speculations, are the product of the last half of the 19th century and that the development of systematic field methods is the result of the trend toward empiricism at the turn of the 20th century and later. Hence it comes as a distinct surprise to read this short book authored by a not-too-well-known French philosopher in 1800 in which he produces a "complete framework comprising any point of view from which these [savage] societies can be envisioned," an essay which proposes ethnographic field techniques of a high degree of sophistication as well as introduces ideas which embody the essentials of several key concepts of modern cultural anthropology. Written as a guide to a French exploring expedition to Australia and adjacent areas, Degérando's work was forgotten until it was discovered and edited by F. C. T. Moore, who introduces the paper by discussing in detail the historical and intellectual context of its creation.

Degérando, who probably never saw a "savage," would study primitives in much the same manner as would a skilled 20th-century field observer. Discarding as useless the superficial and erroneous accounts of most travelers, he points out the distinction between the overt and covert in a culture and urges a thorough examination of each of the facets of savage society, supplying detailed suggestions for securing data on the economic, material, linguistic, social, and psychological aspects of life. Like Boas 110 years later, he cautions against the unconscious biases of the investigator and he demands a wide sampling of informants in any group studied. And unlike the first recognized anthropologists of more than a half century later, Degérando takes an approach to the study of man that is primarily inductive. Some of his ideas foreshadow anthropological functionalism in that he brings out the interplay of the different features of a society. His recommendation that the observer try to understand the native's

perception of the world through a study of his language suggests the germ of cognitive anthropology. Throughout the work is the insistence that the "philosophical traveler" who makes scientific observations, and indeed the entire Western world, recognize the savage as a fellow human being to be neither idealized nor denigrated.

As Moore relates in his introduction, the Australian expedition came to little, the scholar charged with the investigation of native peoples totally ignored Degérando's guidelines, and the essay apparently had no part in the later development of anthropology. Why then, apart from purely historical interest, is an isolated beginning toward a study of anthropology significant? First, it brings out in a graphic manner the fact that even the most brilliant proposals tend to be discarded if the political and intellectual conditions of the time are not favorable. Indeed, this is the general theme of Moore's treatment of the work, and he points out that interest in primitives quickly declined as French leaders lost interest in colonization. A second point arises from the vaguely uncomfortable feelings that this little volume stirs in the modern ethnologist. We see an impressive number of techniques, viewpoints, and concepts virtually identical with those so laboriously developed by anthropologists over more than a century of trial and error but which in this case were apparently easily formulated before anthropology began by a writer from another discipline. Can there be better evidence for the essential unity of scientific thought?

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## Disciplinary Problem

**Politics and the Social Sciences.** SEYMOUR MARTIN LIPSET, Ed. Oxford University Press, New York, 1969. xxiv + 328 pp., illus. \$7.50; text ed., paper, \$2.75.

This book is a collection of essays purporting to show the past and prospective relationships of the discipline of political science to the other social sciences. The reader is likely to conclude that the achievements growing out of this interdisciplinary contact appear rather modest in comparison with the promise that the contributors to this volume foresee.

The appearance of a book of this kind reflects the fact that political science has for the last 40 years been working its way through an identity crisis from which it has still not emerged. Political science originated in political philosophy, and its tradition is historical, legalistic, and normative. Despite an attempt during the 1920's on the part of some of its leaders, especially those at the University of Chicago, to turn the discipline toward more objective methods of study, it remained for the most part, in Harold Lasswell's term, "trans-empirical." The New Deal and the Second World War drew many political scientists into problem-solving activities, and it was not until after the war that the discipline began to concern itself seriously with the quantitative analysis of political data. The development of the "behaviorist approach" attracted many younger scholars and created an important reorientation within the political science profession. In 1965 some kind of landmark was reached when the Social Sciences Division of the National Science Foundation, which had previously regarded political science as outside its purview, began to accept applications for research support from political scientists. Since that time they have shared the same underprivileged status in that agency that other social scientists enjoy.

In the very recent past the profession has experienced yet another internal division, identified by the retiring president of the American Political Science Association as "the post-behavioral revolution," the essence of which "consists of a deep dissatisfaction with political research and teaching, especially of the kind that is striving to convert the study of politics into a more rigorously scientific discipline." The battle cries of this new revolution are "relevance and action." This confrontation between science and action is a heated issue at the present time with all the social sciences, but it seems to be especially serious among the political scientists.

Political science has not only had problems in defining its mission, it also has had difficulty in establishing its disciplinary boundaries. Politics is an intellectual domain which has attracted freebooters from the entire range of the social sciences. In this book the editor asks representatives of these disciplines to project the probable developments in the study of politics within their own fields. The collection does not inspire

confidence in the ultimate unification of the contributions these various disciplines may make. The economist, the psychologist, and the sociologist all treat political science as though it should properly be subsumed under their own theoretical orientation. The two political scientists in their turn object that those disciplines tend to leave out of their political analysis most of what is truly "political," constitutions, electoral systems, ideologies, party structures. The anthropologist and psychiatrist hopefully predict that something good will come from collaboration between political scientists and themselves while admitting that nothing much has happened yet. The historian is willing to "open lines of intellectual exchange" but expects the first contacts to prove frustrating to both sides. The editor himself places a good deal of faith in system theory, which he believes has produced "a real movement" toward a single social science.

In the recently published report of the National Academy of Sciences-Social Science Research Council study of the social and behavioral sciences we find the following statement: "Political science is a well established discipline, but it is also a discipline in a phase of rapid transition, whose promises are still greater than its performances." This statement could also be applied in some degree to the other social sciences; and because this is true it will probably be some time before these various disciplines converge on a common theoretical understanding of their scientific problems. Some individual social scientists have achieved an impressive interdisciplinary competence, but the disciplines themselves continue to display a high degree of self-conscious autonomy. Political science undoubtedly touches all the other social sciences at its borders, and some of these points of contact have proved productive. The contributors to this volume are generally optimistic about the future of these cross-disciplinary developments, and in some cases they are rather specific as to what they expect these advances to look like. They do not inform the reader, however, as to how these activities at the edges of political science will help that discipline develop a distinctive science of politics, and indeed they leave some question as to whether it can or will.

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