

—the production of enough food (and other goods), its equitable distribution, and rates of reproduction. For centuries these questions were recognized as the vital ones in “political economy.” Since 1900, they have been progressively zoned out of the offspring social sciences—economics, political science, sociology—whose practitioners, ever more ramified, have lost their capacity to cope with earthy variables such as mosquitoes, microbes, genes, proteins, soils, and rainfall (Philip Porter). Meanwhile, the bulk of geographers and ethnologists have dispersed into far corners of the globe to stake out private scholarly claims. (There have been individual exceptions, of course, of the stature of Isaiah Bowman, Owen Lattimore, Ruth Benedict, and Gilbert White.) The 1967 conference was a major step toward reversing the trend toward exotic fragmentation, and “re-integrating” geography. The participants were of a dozen nationalities, with strong input from America, France, and Poland. Several were elder statesmen of their faculties, who formulated crucial problems of distribution of wealth and the ecological balance long before these hit the comic strips, *Fortune*, and the *National Geographic*. The geographical coverage of the contributions is remarkable: de Planhol compares societies along the mountain backbone of Eurasia; Brookfield compares social systems in Malagasy, Mauritius, and New Guinea; Kempton Webb reports ten years of study of northeast Brazil, and Gerhard Sandner of Costa Rica. Urban population structures are discussed for cities of India, Japan, and Jamaica. The historical perspective is also broad: Pokshishevskii takes the millennial view, Bonasewicz and Taeuber a scale of generations; and William Vogt reminds us of our short collective memory (“What ever happened to Kriliun?”—the miracle fertilizer reported at the AAAS meeting of 1951). The bibliographies extend the horizons still farther.

In contrast to any textbook of world geography, this volume is an impressive answer to the question (fair enough), What are geographers good for? If they continue in this direction, putting first things first, posing the questions carefully, comparing, exploring the political implications, then Pierre George's comment is indeed prescient: “It is not surprising any longer that geography is considered by some to be a dangerous discipline.”

The medium does not do full justice to the message. As with other “proceedings,” one doesn't read the 600 pages cover to cover. But anyone who dips into this work frequently enough or long enough becomes another Jacob wrestling with the angel. He confronts the issue of his own relevance and the problem of reintegrating or collapsing the fragmented “sciences.”

Is there no new medium for capturing the magnificent spectacle of 40 people thinking? A good scholarly symposium is a Woodstock and wants sharing. In this particular case, revolutions, political and technological, are the substance. Yet, as the editors comment, “despite deep anxieties and a lack of agreement on remedial strategies, there was almost no gnashing of teeth and crying of havoc.” The humanity of this work, in the midst of the clamor, calls for a more powerful means of expression.

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Psychoanalytic Theory

Freud and Philosophy. An Essay on Interpretation. PAUL RICOEUR. Translated from the French by Denis Savage. Yale University Press, New Haven, Conn., 1970. xviii, 574 pp. \$15. Dwight Harrington Terry Foundation Lectures, vol. 38.

This book, with its many insights into Freud, psychoanalysis, religion, and the theoretical structure of psychoanalytic psychology, is both stimulating and frustrating. The conceptual framework is difficult and the argument somewhat elusive, being a mixture of Hegelianism and phenomenology with some cogent comments about the causal nexus of behavior as distinguished from the reasons that are often given for behavior. The distinction attempted between causes and reasons is not spelled out in the usual terminology employed in the philosophy of science. Rather, the terms “archeology” and “teleology” are used to express these concepts. Although Ricoeur, a philosopher and professor at the University of Paris, disarmingly disclaims expertise as a psychoanalyst, or even having been psychoanalyzed, it is apparent that his theoretical knowledge about Freudian analysis (to which he restricts his discussion) is greater than that of most

psychiatrists and a great many analysts.

Ricoeur's concern is not with the therapeutic efficacy of psychoanalysis but rather with the implications of the Freudian view of man, which in effect he sees as a particular view of the development of culture. He has constructed his exposition in three “books”: the “problematic,” in which questions are raised about Freudian philosophy, principally through the analysis of language and its variations in terms of “ordinary usages”; the “analytic,” composed of the author's insights from his reading of Freud utilizing the rules of symbolic transformation and language; and the “dialectic.”

It is in the dialectic section that the philosophical problems most relevant to the current scene in psychoanalysis emerge, problems that are of particular concern to the psychologist with an interest in problems of theory or the philosophy of science and that should also concern clinicians who blindly use theoretical notions with few questions regarding the nature, validity, or generalizability of the theories they use. Here perplexing and unresolved problems arise, such as the disparity between giving reasons why a given child or adult has followed particular pathological lines of development and demonstrating the necessity of the development's having taken that particular route. Our theories can give us reasons, but these reasons never achieve a state of sufficiency. Hence the possibility for an endless multiplication of reasons, none of which are compelling. What this means is that psychoanalytic theory—like other psychological theories—is left at the level of lacking a causal network of explanation.

Perhaps the problem resides in our inability to get at sufficient numbers of independent variables that may then achieve causal status in a nomological system. During the course of psychoanalytic therapy relying on a reconstructive model many significant variables are elicited. Yet still we can provide only insightful explanations which are based on alleged and inferred reasons for development and behavior but which can be rejected. Theory formation in psychology has come a long way since the proposed hypothetical-deductive model, but even employing a probabilistic-statistical model we arrive only at a partial theory which at best has many difficulties in terms of confirmation or disconfirmation. The original strict criteria for a scientific theory set forth by Karl Popper are

not strictly adhered to at present. The variables are too complex and too numerous to be easily subsumed under a theory adequate to produce more than fragmentary confirmations or disconfirmations. In the absence of an ability to know what variables are significant, and to what extent, prior prediction concerning lines of development becomes at least hazardous, if not mere speculation. Particularly is this so when, as in psychoanalysis, we are not dealing with discrete variables such as certain physical attributes. Lacking the ability to make predictions, and ideally "point predictions," we lack a means to a tight theory which can abandon many of its unusable components as well as its disconfirmed parts while retaining enough openness not to foreclose useful concepts.

Ricoeur's treatment of these issues relies heavily on the English philosophers of language and their style of exegesis. This is most intriguing to me, yet also most disappointing. Ricoeur makes almost no mention of the philosophers who appear to be exerting the most groundbreaking and compelling influence these days in the philosophy of science. Especially is this so with regard to the structure of scientific theories. Over the past decades there has been monumental work on this subject, but it is given only nodding acknowledgment in this book. Such philosophers as Popper (mentioned once, on p. 363), Herbert Feigl (mentioned in one footnote), and Stephen Toulmin (pp. 359 and 363 and one footnote) are examples. The work of Imre Lakatos, Paul Feyerabend, and the late Arthur Pap receives no mention whatsoever. One waits disappointingly and in vain for Ricoeur to deal with the insights of these men into the nature of scientific theory, explanation, and nomological networks.

I have no personal acquaintance with today's scene in Paris in the philosophy of science, but I think it fair to presume that the work of the philosophers mentioned cannot have been ignored there. I can only speculate that these neglected "philosophies" do not appeal to the author, with his predilection for the analysis of language and the philosophers of meaning. To appraise Ricoeur's book requires an appraisal of the philosophy of "ordinary language" as well as of his attempt at a synthesis of dialectic philosophy based on his reading of Freud. This is all highly stimulating, and provides exposure to

a perspective on Freud and psychoanalysis I have not had before. I was left wishing for an opportunity to sit down with Ricoeur and personally explore many of the issues he has raised in his book and also those raised in this review.

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Books Received

Acoustics. B. J. Smith. Elsevier, New York, 1970. vi, 138 pp., illus. \$9.45. Environmental Physics Series.

Advances in Behavior Therapy. Proceedings of a conference, 1969. Richard D. Rubins, Herbert Fensterheim, Arnold A. Lazarus, and Cyril M. Franks, Eds. Academic Press, New York, 1971. xviii, 302 pp., illus. \$14.50.

Advances in Metabolic Disorders. Vol. 5. Rachmiel Levine and Rolf Luft. Eds. Academic Press, New York, 1971. xvi, 374 pp., illus. \$18.50.

Advances in Photochemistry. Vol. 8. J. N. Pitts, Jr., George S. Hammond, and W. Albert Noyes, Jr., Eds. Wiley-Interscience, New York, 1971. x, 366 pp., illus. \$22.50.

Air Pollution Control. Part 1. Werner Strauss, Ed. Wiley-Interscience, New York, 1971. x, 452 pp., illus. \$19.95. Environmental Science and Technology Series.

The Analysis of Intelligence. J. P. Guilford and Ralph Hoepfner. McGraw-Hill, New York, 1971. xiv, 514 pp., illus. \$16.95.

The Anatomy of a Scientific Institution. The Paris Academy of Sciences, 1666-1803. Roger Hahn. University of California Press, Berkeley, 1971. xiv, 433 pp. + plates. \$12.

Antigens, Lymphoid Cells, and the Immune Response. G. J. V. Nossal and G. L. Ada. Academic Press, New York, 1971. xx, 324 pp., illus. \$17.50. Immunology Series.

The Application of Metabolic and Excretion Kinetics to Problems of Industrial Toxicology. Jerzy Piotrowski. Prepared under the Special Foreign Currency Program of the National Library of Medicine. Superintendent of Documents, Washington, D.C., 1971. iv, 166 pp., illus. \$2.25.

Archaeological Survey in the Lower Yazoo Basin, Mississippi, 1949-1955. Philip Phillips. Peabody Museum of Archaeology Ethnology, Cambridge, Mass., 1970. In two parts. Part 1, xviii + pp. 1-572, illus. Part 2, x + pp. 573-1000, illus. Paper, \$30. Papers of the Peabody Museum, vol. 60.

Archaeology. Discoveries in the 1960's. Edward Bacon. Praeger, New York, 1971. xiv, 294 pp., illus. \$12.50.

Associative Information Techniques. Proceedings of a symposium, Warren, Mich., September 1968. Edwin L. Jacks, Ed. Elsevier, New York, 1971. x, 224 pp., illus. \$15.50.

Astronomy. Richard Whittingham. Hubbard, Northbrook, Ill. 1971. 48 pp., illus. \$2.95.

Atomic and Molecular Orbital Theory. Peter O'D. Offenhartz. McGraw-Hill, New York, 1970. xiv, 370 pp., illus. \$14.50.

Atoms, Molecules and Chemical Change. Russell H. Johnsen and Ernest Grunwald. Prentice-Hall, Englewood Cliffs, N.J., ed. 3, 1971. xiv, 368 pp., illus. \$10.95.

Autonomy and Biogenesis of Mitochondria and Chloroplasts. A symposium, Canberra, December 1969. N. K. Boardman, Anthony W. Linnane, and Robert M. Smillie, Eds. North-Holland, Amsterdam, and Elsevier, New York, 1971. xii, 512 pp., illus. \$38.50.

Basic Principles of Spectroscopy. Raymond Chang. McGraw-Hill, New York, 1971. x, 304 pp., illus. \$14.95.

Behavior Therapy and Beyond. Arnold A. Lazarus. McGraw-Hill, New York, 1971. xiv, 306 pp. \$8.95.

Cambrian of the New World. C. H. Holland, Ed. Wiley-Interscience, New York, 1971. viii, 454 pp. + plates. \$29. Lower Palaeozoic Rocks of the World, vol. 1.

Campustown U.S.A. at Midcentury. Mark Graubard. Campus Scope, Minneapolis, 1971. viii, 300 pp. Paper \$3.95.

Cell Biology. Robert M. Dowben. Harper and Row, New York, 1971. xiv, 570 pp., illus. \$12.95.

Cell Fine Structure. An Atlas of Drawings of Whole-Cell Structure. Thomas L. Lentz. Saunders, Philadelphia, 1971. xiv, 438 pp., illus. \$11.25.

Chemical Mutagens. Principles and Methods for Their Detection. Alexander Hollaender, Ernst Freese, Kurt Hirschhorn, and Marvin Legator, Eds. Plenum, New York, 1971. Vol. 1, xxviii + pp. 1-310, illus. + index. Vol. 2, xxii + pp. 311-610, illus. + index. \$17.50 each.

A Collation of Anthropometry. John W. Garrett and Kenneth W. Kennedy. Aerospace Medical Division, Air Force Systems Command, Wright-Patterson Air Force Base, Ohio, 1971. Vol. 1, A-H, viii + pp. 1-1110. Vol. 2, I-Z, index, x + pp. 1111-2176. \$12 each volume.

Comprehensive Biochemistry. Vol. 26. Extracellular and Supporting Structures. Part C. Marcel Florkin and Elmer H. Stotz, Eds. Elsevier, New York, 1971. xii + pp. 595-898, illus. \$21.50.

The Contemporary American Family. William J. Goode, Ed. Quadrangle, Chicago, 1971. viii, 302 pp. Cloth, \$8.95; paper, \$2.95. A New York Times Book.

Contemporary Nursing Practice. A Guide for the Returning Nurse. Signe Skott Cooper. McGraw-Hill, New York, 1970. xii, 348 pp., illus. \$7.50.

A Critical Review of the Techniques for Testing Insecticides. James R. Busvine. Commonwealth Agricultural Bureaux, Slough, England, ed. 2, 1971. xiv, 346 pp., illus. \$13.

Data Structures. Theory and Practice. A. T. Berztiss. Academic Press, New York, 1971. xiv, 442 pp., illus. \$14.50. Computer Science and Applied Mathematics series.

Decision and Stress. D. E. Broadbent. Academic Press, New York, 1971. xiv, 522 pp., illus. \$21.

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