continuity. The reader will miss a treatment leading up to numerical prediction of motion systems. Although this is regrettable, particularly in view of V. Bjerknes' early formulation of the initial value problem in meteorology, it should be remembered that the manuscript was completed in 1948 before any substantial development took place in this most modern branch of meteorology.

Part IV, which is written mainly by J. Bjerknes and T. Bergeron, is called "Climatological and synoptic models." It is more than this. It is an extraordinarily cogent presentation of atmospheric structures, characterized by great simplicity and a wealth of information, and it is well connected with the foregoing theoretical parts. This, indeed, is pleasant reading.

Part V, which deals with weather forecasting, may be criticized on many scores, but, again, it should be remembered that the manuscript was completed in 1948, before the practices developed during World War II could be properly evaluated and the winnowing process completed. The presentation is often formalistic and shows little connection with the treatment in the theoretical parts. One may question the wisdom of including, in a treatise of this kind, descriptions of meteorological codes and operational practices, the life of which is not comparable with that of a basic text. In reading the historical notes one becomes impressed with the difficulties in the way of avoiding bias.

At the end, one may well ask: what use can the book be put to? Will it be used in instruction at the university level? On the whole, it is a book for researchers and instructors rather than for students, and, as such, it will do much to raise the level of learning. One may hope that it will be often revised and kept up to date. Like all true monuments, it should enjoy a long life.

The meteorological profession will be grateful to the authors for the immense work that has gone into the writing and to the American Meteorological Society and the Carnegie Institution of Washington for the excellent manner in which the book has been produced.

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Social Sciences

The Structure of a Moral Code. A philosophical analysis of ethical discourse applied to the ethics of the Navaho Indians. John Ladd. Harvard University Press, Cambridge, Mass., 1957. 474 pp. $8.

The empirical part of this book undertakes, primarily through the interviewing of selected wise men of a Navajo community, to elicit and exhibit the moral code of that particular nonliterate society. But John Ladd, a philosopher by trade and training, has not merely done extracurricular service in an alien discipline. He has also endeavored to frame a general theory and methodology for descriptive ethics, the latter being distinguished, on either side, from overt moral teaching and from philosophic analysis of moral utterances. The method he has outlined and employed is presumed by him to be available and utilizable by any anthropologist who may wish to discover and reconstruct the moral code of any group whatsoever.

The moral code of a group is imbedded in the general ethical system of that group, while the ethical system also includes the "ethical conceptions and argumentation" to which the group subscribes. To disinter a moral code is to do a bit of social science, in the sense that a proper reconstruction of the code will, ideally, permit both explanation and prediction of the sorts of moral statements likely to be uttered by members of the group over whom the code holds. The reconstruction will, however, not permit either prediction or explanation of the *conduct* of those individuals, nor will observation of their conduct apparently help in determining their moral code.

The author is quite resolute in excluding matters of behavior from consideration, though his reasons for doing so, if understandable on the practical level (he spent about 5 weeks "in the field"), are theoretically questionable. Most of us, after all, would regard, as the most decisive evidence of a man's moral beliefs, not what he says but the way in which he makes choices. And it must seem perverse or arbitrary when someone proposes that "evidence (such as actual behavior) will be considered irrelevant."

So far as Ladd's technique of reconstruction is concerned, it seems chiefly to consist in finding major premises for arguments which natively occur as enthymemes—that is, where prescriptive conclusions are directly drawn from factual premises. Thus, "don't steal, because it will get you in trouble!" can be validated as a piece of moral reasoning (and can be effective as a piece of moral dissuasion) only in cases where the parties who utter and heed it are prepared to adhere to the missing prescriptive premise, "don't do anything that will get you in trouble!" When this same major premise is found to be required by a significantly large number of moral arguments, one is likely to have a "basic prescription" in one's hands, and accordingly the logical wherewithal to deduce (hence, predict) specific prescriptions—provided that one is also aware of what sorts of acts are regarded as trouble-producing. Different groups will, of course, wield different basic prescriptions, and wield them in different ways, but a given group may be depended on to wield its basic prescriptions in a manner sufficiently consistent to allow some general characterization of that group's ethical slant.

The ethical slant of the Navajos, according to the thesis advanced here, is both "teleological" and "egoistic." That is, an action which is morally relevant must (i) produce (or avert) some "end-state-of-affairs," and (ii) the latter must in some sense conduce to the personal welfare of the individual agent. Accordingly, the typical Navajo may be expected to be unmoved by other kinds of moral reasons—for example, that an act is forbidden from on high, or will conduce to the social good, or has been sanctioned by ancestral practice. One verifies these theses by asking leading questions and seeing whether or not the anticipated responses are forthcoming. Within the limits he sets himself (namely, to restrict himself exclusively to verbal evidence), I should say that Ladd's reconstruction is reasonably well verified. He is a good interviewer and, despite a formidable linguistic barrier, manages to get his informant to think about certain moral situations which, though almost classical in our ethical experience, are clearly novel to the Navajo.

The book suffers from that kind of running methodological patter which lengthy books in the social sciences so often display. And Ladd's epitomization of the Navajo code as "a Hobbesian ethical system, modified by an Epicurian psychology and a Spinozistic sociology" sounds just the sort of crashing chord that will lift the spirits of some men and set other mens' teeth on edge.

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The Foundations of Science and the Concepts of Psychology and Psychoanalysis. vol. I of *Minnesota Studies in the Philosophy of Science.* Herbert Feigl and Michael Scrivens, Eds. University of Minnesota Press, Minneapolis, 1956. 346 pp. $5.

In the tradition of the close relationship that has prevailed for the past few decades between the philosophy of science and the science of psychology, the Minnesota Center for the Philosophy of Science has published a volume containing a dozen methodological papers (several of which have been published elsewhere) that are directed at the behavioral sciences. The combined papers, especially those of the members of the center (Feigl, Meehl, Sellars, and Scriven), do not offer any methodological