moderns are privy. It is not surprising that the mark of this terminal fallacy is most evident in the single chapter which is not the work of a professional historian, a chapter entitled "The young researcher" prepared by Simone Raspail, the great-granddaughter of the subject and herself a biologist and pharmacist. Another slight weakness in this book arises out of the author's laudable aim of gauging the significance of Raspail's double allegiance, to science and to democracy. In considering Raspail's attempt to "serve both masters," she betrays hints of a commitment to a stereotyped view of the nature of science and the scientist as "coldly analytic" and "objective." But the positive features of this biography outweigh such reproof.

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Theories of Suicide

The Social Meanings of Suicide. Jack D. Douglas. Princeton University Press, Princeton, N.J., 1967. xiv + 398 pp., illus. \$8.50.

I doubt that any serious scholar writing about or researching any issues concerning suicide could fail to read and, in one or another way, to use The Social Meanings of Suicide, Douglas analyzes in detail and gives critiques of the most important English and some foreign literature on suicide. He presents the reader with summaries, to which he appends footnotes that are delightful excursions into small nuances which the original theorist may have handled too loosely. But more than this, he provides his own lively interpretation of the meaning of meaning and, finally, of the meaning of suicide. He causes us to doubt what has been taken for granted about Durkheim's classic work: he makes the definite now seem problematic; he raises important questions about official documents on which causes of death are recorded; he stirs the reader to think again and more critically about theories of suicide and the studies that correlate many other variables with this phenomenon. For these reasons, the book is a contribution to sociology and the study of deviance.

The book has four major parts: Part 1 is devoted to Durkheim, both the historical context in which his theory developed and the major work itself. Morselli, von Oettingen, and Quetelet

are given appropriate attention. Part 2, nearly a hundred pages on post-Durkheimian sociological theories of suicide, contains closely reasoned critiques of the status-integration thesis of Gibbs and Martin, Powell's status and anomie theory, ecological and status change theories, Halbwach's theory, the work of Henry and Short, and the work of Gold. Part 3 is an extended essay on the problems of definition and the use of official statistics on suicide. In part 4, another hundred pages, he gives his own thoughtful analysis of "suicidal actions as socially meaningful actions." There are two major appendices which should not be missed, one a continued discussion of Durkheim, the other a continued discussion of definitions of suicide. (It is not clear why these discussions are not sections of parts 1 and 3, respectively, for they seem not to have the character of extraneous materials or details of data commonly found in appendices.)

In general, Douglas is dissatisfied with all sociological theories of suicide on the grounds that their authors used abstract social meanings, such as abstract values opposing suicide, to explain quite specific social events. Failure to have accurate, valid, and detailed descriptions of the particulars connected with the social event of suicide results in repetition of the "ecological fallacy," the gap between two sets of phenomena, but most commonly the gap between concrete situations and abstract meanings imputed to them. The distinction between "situated meanings" and "abstract meanings" is probably the most important point Douglas wishes to make. He argues strongly that "it is not possible to study situated social meanings (e.g., of suicide), which are most important in the causation of social actions, by any means (such as questionnaires and laboratory experiments) that involve abstracting the communicators from concrete instances of social action (e.g., suicide) in which they are involved" (p. 339).

Part 3 is an especially cogent discussion for anyone concerned with the meanings of official statistics and how they have been too often used to support a theory without asking appropriate questions about the meaning of the data and the data gathering processes. As the author points out, it does no good to make up a formal definition of suicide to be tested with data operationally defined in some very different way. He convincingly shows that the term "suicide" has been used in official sta-

tistics to mean quite different things, not only as between America and Europe but within a given country over time. The variations have been great, and Douglas takes pains to show them in different countries during the 19th and 20th centuries. He lists five major sources of unreliability in official statistics: "(1) . . . from the choice of official statistics to be used in making the tests of the sociological theories; (2) ... from subcultural differences in the attempts to hide suicide; (3) ... from the effects of different degrees of social integration on the official statistics keeping; (4) . . . from significant variations in the social imputations of motives; and (5) . . . from the more extensive and professionalized collection of statistics among certain populations" (p. 203). Each of these he discusses in considerable detail.

A weakness of the volume is that it has a much too personal quality. Douglas has a somewhat hostile tone when reviewing and criticizing other writers in part 2. He borders on being harsh and acrid, especially with Henry and Short. He could have made the same observations without sounding unnecessarily aggressive and nearly arrogant. He uses convoluted language and split infinitives to the distraction of anyone with the slightest editorial eye. More important, in both text and footnotes he infers things from the writings of others and then proceeds to criticize the inferences he has drawn-sometimes not correct ones, I fear—as though they were the original authors' statements. These are some of the disturbing features of an otherwise erudite volume.

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Monitoring Devices

Bio-Medical Telemetry. Sensing and Transmitting Biological Information from Animals and Man. R. STUART MACKAY. Wiley, New York, 1968. xii + 388 pp., illus. \$12.50.

Bio-Medical Telemetry is a book on radiotelemetry, written (as is stated by the author) for biologists, physicians, and engineers. Its contents have been derived from a highly successful series of short courses presented annually by the author, a physicist who has had extensive experience in many areas of