Sexuality: Reports from 1970

Sex and Morality in the U.S. An Empirical Enquiry under the Auspices of the Kinsey Institute. Albert D. Klassen, Colin J. Williams, and Eugene E. Levitt. Hubert J. O'Gorman, Ed. Wesleyan University Press, Middletown, CT, 1989. xxxii, 462 pp. \$35.

This book reports the results of a survey done in 1970. The research was designed to assess individuals' sexual experience and moral judgments of sexual behaviors. It was initially directed by Klassen and Levitt. In 1975, the Kinsey Institute placed Williams in charge of the project. By 1979, a manuscript reporting the results had been drafted. A dispute occurred about the order in which names would be listed on the book; the dispute could not be resolved, and the report was not published. In 1986, further negotiations were initiated, and an agreement was reached. As part of that agreement, O'Gorman was brought in to edit and oversee publication of this report.

This research grew out of the work of the National Institute of Mental Health Task Force on Homosexuality, established in 1967. The Task Force recognized the need for research on the reactions of the heterosexual majority to homosexuals. NIMH officials approached the Kinsey Institute. The decision was made to conduct a general study of American sexual norms and attitudes, with NIMH financial support. This research was intended to be descriptive. It was not guided by an explicit theoretical framework. The lack of such a framework is reflected in the eclectic nature of the questions asked and in the absence of a conceptual synthesis of the results.

The investigators contracted with the National Opinion Research Center to collect the data. The survey instrument included questions about norms and attitudes toward various sexual behaviors and questions about the respondent's sexual history, including extent of premarital, extramarital, and homosexual activity. Items were included to measure many variables that might be related to sexual attitudes and behavior, including family characteristics, childhood and adolescent experiences, and social and marital status. The instrument was pretested twice, on a "fairly random" sample of 100 persons and subsequently on a sample of 200. In the second pretest, the sexual experience of 100 interviewees was assessed by direct questions and the behavior of the others by a self-administered questionnaire. On the basis of feedback from the interviewers, the self-administered questionnaire was used for all respondents in the main study.

The sample was selected by NORC to represent the adult population of the United States. Interviews were conducted in the fall of 1970 with 1318 males (including 209 blacks) and 1328 females (including 204 blacks). The researchers recognized the importance of the interviewers' attitudes toward the survey and of training the interviewers to deal with respondents who were suspicious, hostile, or uncooperative. Three-day training sessions were held for NORC field supervisors. Particular attention was given to the use of sexual language by interviewers and respondents and ways to minimize the anxiety of the interviewing staff.

The results are presented in ten chapters. Four chapters (2 through 5) are devoted to sexual morality, that is, to answers to questions about whether specific behaviors are wrong. The distribution of answers and their relationship to demographic characteristics are presented in tables. Indices are constructed and then correlated with the variables that might be associated with moral evaluations. Finally, a path analysis designed to identify the influences on moral evaluations is reported. In general, those surveyed reported extremely conservative views, disapproving of premarital sex under most circumstances and of extramarital sex, prostitution, and homosexuality. Following the questions about moral evaluation, respondents were asked "Have you always felt this way?" Answers were combined to create a moral change index. This index showed that most respondents had not changed their evaluations. On this basis, the authors conclude that there was no sexual revolution in the 1960s. Chapter 6 deals with reports of premarital sexual experience and respondents' feelings about their experience (or lack thereof).

Chapters 7 through 10 are devoted to detailed analyses of the results regarding homosexuality. Chapter 7 reports the incidence of various reactions to homosexuality, including fear and revulsion, and support for controlling and limiting of the rights of

homosexual persons. In chapter 8, the results of a factor analysis of these items is reported. Three factors are identified and used to analyze variation in attitudes by age, race, gender, education, and other variables. Chapter 9 presents and tests a model of the dynamics of antihomosexual attitudes. The results of a path analysis of influences on attitudes toward homosexuals are the focus of chapter 10.

Chapter 11 considers more generally reactions to violations of sexual norms. A scale, propensity to sanction, is created. This scale assesses the respondent's willingness to punish those who participate in premarital, extramarital, and homosexual activity. Again, path analysis is used to identify the determinants of this tendency. The final chapter interprets some of the results and emphasizes the conservatism in moral beliefs evident in the results.

The results of the path analyses are consistent. The variables found to be related to moral evaluations, attitudes toward homosexuals, and propensity to sanction are generally the same. They include the respondent's current religion or devoutness, premarital sexual experience, engaging in child-hood sex play, being raised in a sexual environment (knowing people who engaged in premarital, extramarital, or homosexual behavior), and race, age, sex, and some parental characteristics.

In important ways, this book and the research reported in it are anachronisms. The design of the study is clearly a product of the late 1960s. The survey emphasizes attitudes and gives much less attention to behavior. The focus is on antihomosexuality and the sexual revolution, prominent issues in 1969. The techniques used to analyze the data include factor, regression, and path analyses, which were state-of-the-art in 1975-1978, when the report was written. Finally, the literature reviewed and cited is almost entirely material published before 1980; only 8% of the references are to material published between 1980 and 1989. A conscious decision was made, in the interest of quick publication, not to update the report. Thus, the book has a dated quality, and its relevance to contemporary social and scientific concerns is sharply reduced.

The strengths of the research are several. First, the questionnaire was carefully designed and pretested. Second, the data are from a representative sample of the adult population; the survey is unique in this regard. The systematic comparison of the characteristics of the sample with data from the 1970 Census (appendix D) demonstrates the quality of the sample. Third, blacks were oversampled, which allows systematic analysis of black sexual attitudes and

behavior; this is an important contribution. Fourth, the extensive analyses of attitudes toward homosexuals provides insight into the nature of antihomosexual sentiment. An important unanswered question is whether these analyses are still valid in 1989.

The weaknesses of the research are serious. First, there is virtually no discussion of the quality of the data. The only discussion of reliability reports data from reinterviews of 16 pretest respondents. This is inadequate. There is no discussion of validity of measures. The investigators appear to assume that questions measure the variables of interest, for example, that answers to the question "Have you always felt this way?" are a valid measure of moral change. The only exceptions are those instances where scaling techniques are employed with attitude items. There is no mention of rates of refusal or termination by selected respondents. There is no discussion of the incidence of missing data, a special concern with regard to measures of sexual activity. Finally, there is no mention of possible interviewer effects. Most of the interviewers were white middle-class women; one wonders whether respondents' answers, particularly those of males and black females, were influenced by this.

A major limitation is that the key questions regarding sexual behavior were imprecise. The questions about premarital, extramarital, and homosexual experience ask whether "you had sexual activity with someone . . . when either you or your partner came to a sexual climax?" Thus a "yes" answer could reflect masturbation, oral-genital contact, vaginal intercourse, or anal intercourse. It is likely that this phrasing was used to maximize response rate. This may be another reflection of the anachronistic character of the research; though such delicacy may have been necessary in 1970, it creates a serious ambiguity. Contemporary surveys of sexual behavior use much more detailed questions. Some reviews and media reports suggest that Sex and Morality provides information that will be invaluable in understanding or predicting the spread of HIV infection. This claim, unfortunately, is not true. HIV infection is probably transmitted by anal intercourse, may be transmitted by vaginal intercourse and oral-genital contact, and is unlikely to be transmitted by masturbation. Since the behavioral measure used in this research does not differentiate these behaviors, its usefulness in this context is greatly reduced.

A weakness of the book is the lack of integration. Some of the chapters, for example 6 and 9, are not related to those that precede or follow. Further, the analytic strategy is not systematic. In some instances,

indices are constructed and discussed but not included in subsequent analyses. The final chapter does not systematically summarize the results of the various analyses.

Despite its weaknesses, this is an important book. It should be read by serious students of sex and morality in the United States. It provides a wealth of data about the attitudes of adults in 1970 and some information about their sexual experience. As the editor suggests, these data can serve as a benchmark; if future research employs the same questions with comparable samples, we will be able to assess the changes in sexual morality and behavior that will inevitably occur.

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Colonial Adaptations

Bryozoan Evolution. F. K. McKinney and J. B. C. Jackson. Unwin Hyman, Winchester, MA, 1989. xiv, 238 pp., illus. \$45. Special Topics in Palaeontology, vol. 2.

The phylum Bryozoa, a diverse assemblage of colonial coelomate organisms, has attracted the interest and piqued the curiosity of biologists and paleontologists for more than two centuries. In *Bryozoan Evolution*, a paleobiologist (McKinney) and a biologist (Jackson) merge their expertise to analyze trends in the evolution of colonial morphology within the marine bryozoans over geologic time.

The authors note that despite the seemingly endless ways in which the diverse modules (zooids) could be organized into colonies, only a few such patterns were developed. The "repeated evolution and stability of [these few] growth forms, the improvement of design within them, and their distribution in space and time are the major subjects of this book." Readers may well benefit from reading first the four-page concluding chapter. There, eight trends in the evolution of bryozoan colony design are summarized. In large measure, these patterns may justify the adaptational interpretations used throughout the volume: the trends identified are clearly ones of parallel evolution correlated with specific ecological niches and are not reflections of the phylogenetic history of a given clade.

In the first two chapters, the reader is introduced to general features of bryozoan zooids and their integration into colonies, major taxonomic divisions including extinct groups, and difficulties of determining micro- or macroevolutionary patterns in the phylum.

Details of the astogenetic development of the major growth forms (encrusting, erect, free-living, and rooted) known for the phylum, including mathematical models for the generation of such colonies, are provided in chapter 3. In essence, this chapter serves as an introduction to the remainder of the book, in which the ecological and evolutionary corollaries of these variants are documented. In the latter chapters, McKinney and Jackson have relied heavily on a "growth form model" "to deduce the adaptive significance of different growth forms as strategies to reduce risk of mortality due to known ecological processes." That dependence is perhaps most pervasive in the chapters on growth forms as adaptive strategies and life histories.

A chapter on feeding provides insight into the impacts of biomechanical constraints, zooidal and colonial morphologies, and colonial integration on food, feeding patterns, and feeding efficiency.

In the three chapters on specific growth forms, the authors usually emphasize one of the multitude of biotic and abiotic attributes of the environment as a backdrop against which to evaluate in detail the advantages and shortcomings of the specific colony architecture. For example, chapter 8 deals extensively with the biomechanics of engineering an erect colony that can survive water flow of differing velocities, but only briefly notes the advantages of such a growth form (avoidance of crowded substrata, exposure to a richer food resource, and isolation from competitors and predators). Although chapter 7 is entitled "Encrusting growth: the importance of biological interactions," virtually all the correlations are made apropos the relative permanence of the substrata. Similarly, the rare bryozoans with free-living, rooted, or interstitial growth forms are largely interpreted with reference to the instability of the sediments in which they reside (chapter 9). Although the scope of some chapters is narrow, it must be appreciated that extensive original research was necessary to make the book as comprehensive as it is.

Bryozoan Evolution is profusely illustrated and has a bibliography of over 400 titles. It will find an appreciative audience of paleon-tologists, invertebrate zoologists, and ecologists thanks to its innovative and detailed evaluations of the roles of ecology, adaptive and functional morphology, life histories, biomechanics, developmental constraints, and chance on the evolution of the marine taxa of this speciose group.

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