

Sex, Lies, and Social Science

By R.C. Lewontin

....The National Health and Social Life Survey, to give the NORC study its full and revealing, or, rather, concealing title was designed originally to respond to a federal request for proposals (RFP) issued by the National Institutes of Health on behalf of a coalition of federal agencies concerned with AIDS. The missing "S" word in the title of the survey was a deliberate reflection of the absence of any reference to sex in the ironically misleading title of the RFP, "Social and Behavioral Aspects of Fertility-Related Behavior." At the very least there is some anatomical confusion here. The attempt to mislead the prudes in the Bush administration did not work, however, and final approval of the project was never given. Nor did the change in administrations help, because the Democratic Congress explicitly prohibited the use of NIH funds for such a survey. In the end it was those fonts of immorality, the Robert Wood Johnson, the Rockefeller, Kaiser, Mellon, MacArthur and Ford foundations who came to the rescue. Freed from the constraint of asking only about AIDS-related sex, the survey could then really ask about "fertility-related behavior."

It is a characteristic of the design of scientific research that exquisite attention is devoted to methodological problems that can be solved, while the pretense is made that the ones that cannot be solved are really nothing to worry about. On the one hand, biologists will apply the most critical and demanding canons of evidence in the design of measuring instruments or in the procedure for taking an unbiased sample of organisms to be tested, but when asked whether the conditions in the laboratory are likely to be relevant to the situation in nature, they will provide a hand-waving intuitive argument filled with unsubstantiated guesses and prejudices because, in the end, that is all they can do. *The Social Organization of Sexuality* [authors, Edward O. Laumann, John H. Gagnon, Robert T. Michael and Stuart

Michaels; publisher, University of Chicago Press, 1995] is a paradigm of the practice, made all the more objectionable by the air of methodological snootiness assumed by the authors when comparing their techniques with all the studies that have gone before. So they expend immense intellectual energy on the problem of taking a representative sample of Americans for an inquiry into their sex lives, but are rather cavalier about the question of whether people tell them the truth when asked....

The National Health and Social Life

“*So they [the authors of The Social Organization of Sexuality] expend immense intellectual energy on the problem of taking a representative sample of Americans for an inquiry into their sex lives, but are rather cavalier about the question of whether people tell them the truth when asked...*”

Survey's chief claim for its superiority over previous sex studies lies in its sampling methodology. The work of Kinsey, and of Masters and Johnson, were the efforts of "sexologists," investigators whose training and interest were not statistical but descriptive. It was sufficient for them that non-negligible fractions of Americans engaged in a diversity of different practices. Kinsey, in particular, thought that picking people out of a hat would produce a sample of recalcitrant subjects who were unlikely to tell him what he wanted to know. Given Kinsey's liberatory ideology, it was not of the utmost importance to him whether his estimate of 10 percent for male homosexuality was accurate. It was true to life. Kinsey's samples made

no pretense to be somehow numerically accurate representations of the entire population, but were what Edward O. Laumann and his colleagues in the NHSLs call "convenience samples," consisting of patients, friends, neighbors, relatives, employees, people who have answered ads soliciting subjects for an experiment, or who have filled in a questionnaire sent to them because they are on the list of a periodical or an organization.

In contrast, the NHSLs sample was a so-called "probability sample" meant to make precise the chance that any American would be included. The process occurred in two stages. First a "random sample" of nine thousand addresses drawn from the Census was taken so that every household in the nation was equally likely to be included. Of these, about 3,700 were useless because no one lived there, or were excluded because the household had no English speakers or anyone between the ages of eighteen and fifty-nine. The second stage was to increase the representation of black and Hispanic households by a known amount, producing a so-called "stratified sample," because it was felt that these groups would be insufficiently represented in the random address sample to get accurate statistics on them...

The problem for every sample survey is to know whether the answers are systematically untrue. Surveyed populations can lie in two ways. They can answer untruthfully, or they can fail to answer at all. This latter problem is known in the trade as "non-response bias." No matter how hard one tries, a significant portion of the sample that has been chosen will fail to respond, whether

Excerpted from *The New York Review of Books*, April 20, 1995, pp 24-28. Copyright © 1995 by *The New York Review of Books*. Reprinted by arrangement with R. C. Lewontin.

deliberately, through accident, lack of interest, or by force of circumstance.

It is almost always the case that those who do not respond are a non-random sample of those who are asked. Sometimes the problem is bad design. If you want to know how many women work outside the home you will not try to find out from a telephone survey that makes calls to people at home between nine AM and six PM. Much of the expertise of sample survey designers is precisely in knowing how to avoid such

between the two, but that still leaves in the air the unanswerable question about the sex lives of those who found \$100 an insufficient payment for their true confessions. If I can believe even half of what I read in *The Social Organization of Sexuality*, my own sex life is conventional to the point of being old-fashioned and I wouldn't have cooperated for any price the NORC was likely to find in its budget.

Finally, we cannot avoid the main question, whether those who did respond,

said it before and they say the same thing even if reluctant to answer. That many people at many times have independently claimed to have been present at Satanic rituals or seen Our Lady descend at Fatima, and that some of these witnesses have been reluctant to testify at first, will presumably convince Professor Laumann and his colleagues of the reality of those events.

Again and again the problems of how we elicit the truth when both conscious and unconscious distortions may

“*Anyway, why should anyone lie on a questionnaire that was answered in a face-to-face interview with a total stranger? After all, complete confidentiality was observed. It is frightening to think that social science is in the hands of professionals who are so deaf to human nuance that they believe that people do not lie to themselves about the most freighted aspects of their own lives, and that they have no interest in manipulating the impression that strangers have of them.*

mistakes. The real problem is what to do about people who deliberately avoid answering the very questions you want to ask. Are people who refuse to cooperate with sex surveys more prudish than others, and therefore more conservative than the population at large in their practices? Or are they more outrageous, yet sensitive to social disapprobation? Because they do not answer, and self-report is the only tool available, one can never know how serious the non-response bias may be. The best that can be done is to try to minimize the size of the non-responding population by nagging, reasoning, and bribing. The NHLS team tried all these approaches and finally got a response of 79 percent (3,432 households) after repeated visits, telephone calls, videotapes, and bribes ranging from \$10 to an occasional \$100. The result was that there were now three sample populations, those who were cooperative from the start, those who were reluctant but finally gave in, and those who refused to the end.

From an analysis of the eager and the reluctant it was concluded that for most questions there was no difference

reluctantly or eagerly, told the truth. Far from avoiding the issue, the study team came back to this central question over and over, but their mode of answering it threatens the claim of sociology to be a science. At the outset they give the game away.

In the absence of any means to validate directly the data collected in a survey of sexual behavior, these analyses assess data quality by checking for bias in the realized sample that might result from potential respondents' unwillingness to participate because of the subject matter, as well as by comparing results with other surveys. In every case, the results have greatly exceeded our expectations of what would be possible. They have gone a long way toward allaying our own concerns and skepticism... [emphasis added].

In other words, people must be telling the truth because other people have

be suspected are dealt with disingenuously. Men and women were interviewed by women and men indiscriminately, and there was no attempt to match race of interviewer and race of the respondent.

Will men and women respondents be affected in similar or different ways [by this mixing of sexes of interviewer and respondent]? Will people who have engaged in socially disapproved activities (e.g., same-gender sex, anal sex, prostitution, or extramarital sex relations) be equally likely to tell this to a male as to a female interviewer? At present, these questions remain unresolved empirically.... Although this issue is certainly important, we did not expect the effect of gender matching to be especially large or substantively noteworthy. The experience and belief among NORC survey research pro-

Measuring American Society — R. C. Lewontin

professionals was that the quality of the interviewer was important but that it was not necessarily linked to gender or race.

In other words, they don't know and hope the problem will go away. While sex and race are "master status" variables, "organizing the pattern of social relationships," apparently being interviewed about your sex life is not part of social relationships. Instead of investigating the problem, the team "concentrated our time and money on recruiting and training the best interviewers we could find." That meant three days of a "large-scale" training session in Chicago.

Anyway, why should anyone lie on a questionnaire that was answered in a face-to-face interview with a total stranger? After all, complete confidentiality was observed. It is frightening to think that social science is in the hands of professionals who are so deaf to human nuance that they believe that people do not lie to themselves about the most freighted aspects of their own lives, and that they have no interest in manipulating the impression that strangers have of them. Only such deafness can account for their acceptance, without the academic equivalent of a snicker, of the result of a NORC survey reporting that 45 percent of men between the ages of eighty and eighty-four still have sex with a partner.

It is not that the research team is totally unaware of sensitivities. In addition to about a hundred face-to-face interview questions, respondents were asked to fill out four short printed forms that were placed by them in sealed "pri-

vacancy" envelopes for later evaluation by someone other than the interviewer. Many of the questions were repetitions of questions asked in the personal interviews, following the common practice of checking on accuracy by asking the same question twice in different ways. Two matters were asked about, however, that were considered so jarring to the American psyche that the information was elicited only on the written forms: masturbation and total household income. Laumann et al are not so deaf to American anxieties as it seemed.

There is, in fact, one way that the truth of the answers on a sex survey can be checked for internal consistency. A moment's reflection makes it clear that, discounting homosexual partners, the average number of sex partners reported by men must be equal to the average number reported by women. This is a variant on the economist Robert Solow's observation that the only law in economics is that the number of sales must be equal to the number of purchases. Yet, in the NHLS study, and other studies like it, men report many more partners than women, roughly 75 percent more during the most recent five years of their lives. The reaction of the authors to this discrepancy is startling. They list "in no particular order" seven possible explanations including that American men are having lots of sex out of the country, or that a few women are having hundreds of partners (prostitutes are probably underrepresented in an address sample, but prostitution was not regarded as a "master status" variable to be inquired about since presumably it is not a "basic concept of self-identity"). Our authors then say,

We have not attempted to reconcile how much of the

discrepancy that we observe can be explained by each of these seven logical possibilities, but we conjecture that the largest portion of the discrepancy rests with explanation 6.

Explanation 6 is that "Either men may exaggerate or women may understate." So, in the single case where one can actually test the truth, the investigators themselves think it most likely that people are telling themselves and others enormous lies. If one takes the authors at their word, it would seem futile to take seriously the other results of the study. The report that 5.3 percent of conventional Protestants, 3.3 percent of fundamentalists, 2.8 percent of Catholics, and 10.7 percent of the non-religious have ever had a same-sex partner may show the effect of religion on practice or it may be nothing but hypocrisy. What is billed as a study of "Sexual Practices in the United States" is, after all, a study of an indissoluble jumble of practices, attitudes, personal myths, and posturing.

The social scientist is in a difficult, if not impossible position. On the one hand there is the temptation to see all of society as one's autobiography writ large, surely not the path to general truth. On the other, there is the attempt to be general and objective by pretending that one knows nothing about the experience of being human, forcing the investigator to pretend that people usually know and tell the truth about important issues, when we all know from our own lives how impossible that is. How, then, can there be a "social science"? The answer, surely, is to be less ambitious and stop trying to make sociology into a natural science although it is, indeed, the study of natural objects. There are some things in the world that we will never know and many that we will never know exactly. Each domain of phenomena has its characteristic grain of knowability. Biology is not physics, because organisms are such complex physical objects, and sociology is not biology because human societies are made by self-conscious organisms....

“*How, then, can there be a “social science”? The answer, surely, is to be less ambitious and stop trying to make sociology into a natural science although it is, indeed, the study of natural objects. There are some things in the world that we will never know and many that we will never know exactly. Each domain of phenomena has its characteristic grain of knowability.*”