Despite his devotion to clowning and theatrics, Feyerabend gets very serious when it comes to the political control of science, his most recent book Science in a Free Society (New Left Books, London, 1978) being devoted to the subject. Here Feyerabend is confronted with a paradox. He wants to argue for the democratic control of science, but his relativistic views on the practice of science seem to make this impossible. Rationalists can envision a "scientific method" that anyone, even a nonscientist, can master with sufficient application. But irrationalists, such as Feyerabend, usually say science can only be learned by "intuition," by actually doing it. This view has been defended by Kuhn and by British philosopher Michael Polanyi.

Rather than capitulate to the "elitist" position, Feyerabend argues that citi-

zens must judge science according to their own standards, not necessarily those of the scientists. Science, he says, is not beyond the reach of the natural shrewdness of the human race. "This assumption is confirmed in trial after trial. Conceited and intimidating scholars, covered with honorary degrees and university chairs, are tripped up by a lawyer who has the talent to look through the most impressive piece of jargon and to expose the monumental ignorance behind the most dazzling display of omniscience. I suggest that this shrewdness be applied to all important social matters which are now in the hands of experts."

The places to which logic leads are at times convincing, at other times not. What is clear in all this is that Feyerabend is dead set against what has been called "scientism"—the faith in the existence of a unique "method" whose application leads to exclusive "truths" about the world. When this becomes the ideology behind the Big Business of research, of teaching, of technology, Feyerabend wants to smash it, and open the way for diversity, personal choice, and play. Compared with the stiff and sober work that is often done in the philosophy of science, his views are a breath of fresh air. It is also clear that Feyerabend is far from naïve in his political world view. He recognizes that in different circumstances he might argue for reason and against anarchy. "There may," he says, "come a time when it will be necessary to give reason a temporary advantage and when it will be wise to defend its rules to the exclusion of everything else. I do not think we are living in such a time today."-WILLIAM J. BROAD

Ethics in Social Science Research

Deep thinkers convene at Kennedy Ethics Institute to define rights, wrongs, risks, and benefits of social research

In 1969 Laud Humphreys, an Episcopal minister working on his doctorate in social relations at Harvard, conducted a study designed to cast light on society's treatment of homosexuals. He set himself up as a "watchqueen" in a public bathroom in Saint Louis to alert homosexuals to intruders while they were engaging in fellatio with each other. Humphreys also observed the license numbers of the habitués of the "tea room," as it is called, and learned their identities by going to the Department of Motor Vehicles and representing himself as a market researcher. He then joined a public health survey team, changed his hairstyle, and interviewed his subjects as a public health researcher.

The social science community is still talking about that project. It has become a classic in the fast-growing field of ethics in social science research, where it is commonly cited as a crass violation of subjects' rights. Although Humphreys was scrupulous about guarding the confidentiality of his subjects, and although his book, *The Tea Room Trade*, is supposed to demonstrate that homosexuals are ordinary folk and not menaces to society, such a project is regarded as indefensible in the ethical climate of the late

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1970's. Humphreys deceived his subjects, failed to get anything remotely resembling informed consent from them, lied to the Bureau of Motor Vehicles, and risked doing grave damage to the psyches and reputations of his subjects.

The Humphreys experiment was mentioned repeatedly at a recent 2-day conference on the ethics of social science research held at the Joseph and Rose Kennedy Center for Bioethics at Georgetown University. The meeting, funded by the National Science Foundation, brought together about 30 experts in philosophy, ethics, law, and social sciences to thrash out the costs and benefits and rights and wrongs of social research. The meeting was unusual, according to one observer, because most meetings on this topic are little more than "gripe sessions" about federal regulations or strategy meetings on how to conduct research without running afoul of them. Social scientists say the federal regulations on research with human subjects, which are based on the recommendations of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, are primarily designed for biomedical research and are either too inflexible or inapplicable to the array of research situations in which social scientists are involved. They find little guidance in the codes of ethics of various professional societies, which rarely go beyond bland generalities.

In addition to government regulations, the participants discussed privacy and confidentiality, informed consent and deception, and harm in social science research. The theoretical talk, in other words, boiled down to the nature of harm and what should be done to avoid it.

Discussions among social scientists, as among biomedical researchers, represent two schools of thought. One is consequentialism, also known as utilitarianism, which holds that the rightness or wrongness of an act can be judged by its consequences. In this school of thought it can be inferred that certain apparently immoral practices are justifiable on the grounds that they provide a large benefit or prevent a greater evil. This philosophical framework is characterized by costbenefit equations. Thus, for example, the introduction of hepatitis virus in a childrens' home might be justified on the grounds that many cases of hepatitis will ultimately be prevented by the research.

The consequentialist approach stands

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in contrast to the nonconsequentialist or deontological school of thought, which is fundamentally more conservative and prominently features statements of absolute moral values. An extreme deontological position, for example, would be that deception of research subjects is in no case justified, whatever the potential benefits of the research. Those who lean toward the deontological view commonly resort to the categorical imperative of Immanual Kant and his emphasis on treating human beings as "ends" rather than "means."

In the 1960's the consequentialist view of ethics prevailed, along with a degree of moral relativism that it logically implies. Now the pendulum seems to be swinging back toward the deontological position, although the picture has become a good deal more complex as the purview of social science research continues to enlarge. Furthermore, the heightened ethical sensitivity that now surrounds all scientific research has brought into the open certain fine distinctions that hitherto rarely strayed from purely academic realms.

Alasdair MacIntyre, of Boston University's philosophy department, for example, introduced distinctions between

wrong—such as using deception in an experiment where the risk to the subject is negligible.

One study that was extensively discussed in the context of wrongs to subjects was the famous project on obedience to authority conducted in the late 1960's by social psychologist Stanley Milgram, then at Yale University. In that investigation, Milgram told volunteers they would be subjecting unseen persons to electric shocks of varying degrees of severity. His purpose, which he did not reveal until the end, was to see how far people would go in subjecting others to pain at the order of the investigator. (No one was actually shocked in the experiment, but subjects got feedback in the form of cries of pain.) He and everyone else was appalled at the results of the experiment, which was so provocative that it has led to at least 130 attempts at replication, according to one participant. Milgram justified his work as a contribution toward avoiding another "holocaust"a clear case of consequentialist thinking in that the evils implicit in the experiment were seen as being outweighed by the far greater evil the knowledge gained might help avert.

Nowadays the study is condemned on

In the 1960's the consequentialist view . . . prevailed. . . . Now the pendulum seems to be swinging back. . . .

different types of harm to human subjects: harm to a person's interest (such as reporting a case of venereal disease which constitutes a harm but not a wrong); wrong to a person (such as lying to him, which may cause no harm but is intrinsically wrong); and "moral harm," which is doing something to make a person less good, such as encouraging him to lie. MacIntyre contended that harms are theoretically rectifiable or commensurable whereas wrongs, by their nature, cannot be compensated for. He took the radical deontological view that "If the doing of a wrong is essential for certain research then that research should be prohibited.'

Other participants found these distinctions interesting but questioned their practical application when it comes to making decisions for funding research. These decisions always rely to some degree on measuring risks against potential benefits, and MacIntyre's system gives no guidance for what to do about a minor

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several grounds. In addition to the simple matter of deceit, scholars are concerned about the psychological damage incurred when people are involuntarily exposed to unsavory aspects of their own natures—"involuntary self-knowledge," this is called.

Alan Elms, a psychologist at the University of California at Davis who worked with Milgram at Yale, defended the study, drawing a distinction between deception that misrepresents procedural details of an experiment and deception that imputes important characteristics to a subject, such as neurosis or homosexuality, which could cause continuing selfdoubt even after debriefing. He said that the Milgram deception was of the former kind (subjects were led to believe they were in fact shocking people) and the characteristic the subjects found in themselves (willingness to harm others) was self-revealed and not wrongly imputed. Elms, who is in the consequentialist camp, felt that whatever discomfort the study had caused in subjects was justified by the larger contribution made by the study, which is now extensively featured in textbooks and classroom teaching.

The debate over the Milgram study clearly illustrated today's ethical trends. A decade ago it was hailed as a brilliant if disturbing experiment. Now it is regarded as raising serious ethical questions; the dominant view is that to conduct such a study is wrong. Harvard psychologist Herbert Kelman, who was perhaps the most prominent figure at the meeting, said that the Milgram experiments involved "entrapment and degradation" and asserted, "I don't think unsought self-knowledge is morally defensible."

It was instructive to witness a group of social scientists, aloft in their ethical stratosphere, belittling the value of social science research. Ruth Warwick of the Hastings Center, for example, questioned whether such research would be any worse off if deception were outlawed. When another participant suggested that if ethical strictures became too stifling, certain kinds of research would "go underground," Joan Cassell of the Institute for Policy Research said she doubted that, as social scientists, like everyone else, want to be where the most money is and are willing to adjust their research accordingly. And, in discussing the ethics of the Milgram research, several participants tried to belittle its significance, even though it is one of the most widely known pieces of social research of the past couple of decades. (Indeed, Milgram got the AAAS award for social psychology in 1964.)

A main thrust of the theoretical discussions at the meeting was an attempt to find ways to move away from the costbenefit model of judging research, on which federal regulations are based, or at least to incorporate more deontological thinking into deliberations. On the one hand, this is seen as freeing social science research, particularly field research, from cumbersome, arbitrary, and inappropriate standards. (An absurd example was cited in which a woman who had been working with an Indian tribe for 10 years was suddenly required to get informed consent forms signed by every member of the tribe.) On the other hand, it means introducing ethical distinctions and, in some cases, absolute prohibitions reflecting considerably more exquisite ethical sensitivities than are contained in federal guidelines.

Field research, which everyone seemed to agree was least susceptible to (Continued on page 540)

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the type of cost-benefit analysis required by federal regulations, is the area where the most new ideas are needed, and several people offered tentative modes for assessing such research ethically. Alexander Capron of Harvard Law School, for example, suggested a handful of strategies for achieving the goals of informed consent in cases where strict application of the requirement is unfeasible. These included giving subjects detailed debriefings at the end of a project and allowing them veto power over the findings, and consultations with peers of the group to be studied. These were not substitutes for informed consent, he said, but strategies for "making things right." Cassell pointed out that cost-benefit equations are impossible in field research, where the variables are legion and uncontrollable, and long-term consequences of a project cannot be foreseen. She proposed instead that field researchers be guided by the principle of treating people as ends rather than means-an idea that contains the obligation to do as much good to subjects as possible, to be open and honest, and to share any benefits with them.

Anthropologist Murray Wax of Washington University said that neither Kant nor consequentialism was applicable to anthropological relationships. He proposed development of an ethical model based on reciprocity. "Good fieldwork," he said, "is when a worker enters into a host's system of exchange and reciprocity." In other words, one does not impose one's cultural values but more or less adopts the ethical standards of the hosts. MacIntyre agreed that going with the other culture offered part of the answer, but within certain absolutist prohibitions. One would not, to pose a facetious example, bow to a host's demand that a human sacrifice be made before the beginning of each day's work.

Although consequentialist arguments still hold sway, those concerned with ethics are increasingly climbing aboard the deontological bandwagon. There is now almost universal condemnation of certain types of research, a common example being studies of "helping behavior," in which a person is sent into the subway to fall down and froth at the mouth to see what the bystanders will do. The benefits of such research are now commonly regarded as insufficient to justify manipulating unconsenting bystanders.

Another type of research now regarded as untenable is exemplified by psychologists' infiltration of millennial cults and passing themselves off as true

believers in order to gain inside information. This is now considered an unacceptable betrayal of the subjects' trust. In another type of project, conducted a decade ago by psychologist Philip Zimbardo at Stanford University, students were randomly assigned to be "prisoners" and "guards" in an experiment about prison life. The "prisoners" were picked up without warning by real police and taken to a "jail" in the basement of the Stanford psychology building, where they were met by the "guards." The role-playing became so brutally in earnest that the investigator had to call off the game shortly after it began. This project, as well as involving a measure of deceit, held the risk of psychological and physical damage to the subjects, as well as involuntary self-knowledge.

Some moral hard-liners believe a strong case can be made for outlawing all deception in social science research. This would be a drastic step, since estimates show that 19 to 44 percent of social psychological research relies on some degree of deception. Federal regulations do not say anthing about the permissibility of deception; however, the detailed strictures about circumstances requiring informed consent implicitly allow for deception in experiments involving negligible risk to the subjects.

Revised regulations, based in large part on the same recommendations as the current ones, were published in the Federal Register on 14 August and are still in the public comment period. The degree to which they put crimps on research still depends on how rigidly they are interpreted by institutional review boards (IRB's), and there is considerable unease among some social scientists and even humanists that more and more types of research will be sucked into IRB purview. Thus some people fear that survev research and even historical and biographical research will be subjected to IRB review even when the possibility of risk to subjects under investigation is remote.

The theoretical discussions at the recent ethics meeting are part of a relatively new phase in the ongoing controversy over research. They are still too tentative to be distilled into a set of principles that would differentiate standards for social research from those for biomedical research. But at least the discussions are becoming disentangled from the strong political currents that have caused sharp nd sometimes bitter divisions of opinion over the past decade, as participants grope for deeper principles that will withstand the rapid changes of the time.—CONSTANCE HOLDEN

Headache for Bristol-Myers

If a recent Federal Trade Commission judge's ruling holds. Bristol-Myers Co. will no longer be able to claim that Bufferin works faster than aspirin or characterize Excedrin as "the extra-strength pain reliever." Nor will advertisements be able to include any mention of aspirin without admitting that the primary ingredient of the two drugs is aspirin. Any claims of comparative effectiveness will have to include a disclaimer, such as "Bufferin has not been proven to be a faster pain reliever than aspirin." The order also bars the company from claiming fewer side effects (namely stomach upset) from the drugs in the absence of an "adequate and well-controlled study" and prohibits it from insinuating that they contain any special or unique product.

Bristol-Myers is appealing the decision to the full commission. The ruling culminated the second of three trials resulting from a combined action brought by the FTC in 1973 against three major manufacturers of overthe-counter analgesics. Last year the same judge directed a similar ruling (now under appeal) at American Home Products, makers of Anacin (which contains "more of the ingredient doctors recommend most"--again, aspirin) and Arthritis Pain Formula. Next on the docket is a case against Sterling Drug Co., makers of Bayer aspirin and the aspirin-based pain relievers Cope, Vanguish, and Midol.

The stakes are high in these cases, as over-the-counter analgesics generate revenue approaching \$1 billion a year. Each trial has lasted about a year, with the Bristol-Myers people submitting 13,000 pages of testimony. The effectiveness of the drugs for relief of headaches is difficult to ascertain because people treat their headaches at home and controlled clinical trials are practically nonexistent.

Experts at congressional hearings over the years have expressed outrage at the way drug companies gull the public into believing that their analgesics, which cost about twice as much as plain aspirin, have special pain-relieving powers. The charge of false advertising is difficult to nail down because of the sneaky wording of the ads. Bufferin, for example, is