Letters

Biomedical Research: Ethics and Rights

Questions should be raised about biomedical research. The aim is to protect people. It is rarely considered necessary to protect the researcher, who is generally seen as the aggressor.

Two News and Comment articles by Barbara J. Culliton suggest to me that we need to begin worrying about the rights of the researcher. The first (22 Nov. 1974, p. 715) was entitled: "Patients' rights: Harvard is site of battle over X and Y chromosomes"; the second (27 June, p. 1284) reported the outcome: "Harvard researcher under fire stops newborn screening," the gist being that Stanley Walzer and Park Gerald gave way under pressure initially generated by a group informally led by Jonathan Beckwith of Harvard and Jonathan King of the Massachusetts Institute of Technology.

If research is to be halted on ethical grounds—and sometimes it should be—it should not be done by adversary proceedings in the media. Appropriate means exist. These include the funding agency (which approved the screening project), the faculty (which voted by about 200 to 30 in favor of continuing the project), and committees (such as that headed by Dana Farnsworth, which concluded that Walzer's work should continue).

Scientists deserve some protection from public adversary proceedings undertaken by other scientists acting without regard for their colleagues' rights to something approaching due process. Academic institutions with an interest in research have a clear and present need to formulate policies to guard the rights of the researcher.

FREDERICK HECHT
Child Development and Rehabilitation Center, University of Oregon Health Sciences Center, Portland 97201

The article on the cessation of the Harvard XYY screening program headed by Walzer and Gerald raises an important issue that could have unfortunate ramifications for future biomedical research.

Many features of contemporary society and its institutions give just cause for fears about disregard for the right and dignity of individuals and for their social and psychological needs. In this regard, Beckwith and King, as well as others, may have helped alert the academic community to such risks in the XYY screening program. It is a great satisfaction, therefore, to learn of the thorough and competent manner with which these matters were treated by the Benson and Farnsworth committees and of the overwhelming vote of confidence given by the Harvard Medical School faculty to Walzer and Gerald's research project.

On the other hand, Beckwith and King appear to have overlooked numerous scientific and humanistic aspects of this research. For example, in infantile autism the ratio of boys to girls afflicted is approximately 4 to 1, and chromosome screening may offer a potential for early detection, perhaps correlated also with parental chromosome patterns. The National Society for Austistic Children is an organization of parents and professionals devoted to the social and psychological needs of these children and to making their path through life as happy and useful as possible. In this organization there is universal support for research which seeks to test links between behavior and genetic parameters. It is estimated that the infantile autism syndrome may be present in 4 of every 10,000 births, and currently there are 80,000 afflicted children in the United States. Other similar organizations represent far larger populations of children who possess both more and less severe mental handicaps.

Biological and physical science is just now making a very small beginning toward understanding of neurological processes, and it is often at this stage that a few seminal pieces of research have great impact on the rate at which knowledge is acquired. It is not unreasonable that in the future the lives of hundreds of thousands of people might have been beneficially influenced by the notably promising Walzer-Gerald research program.

LELAND C. ALLEN*
Department of Chemistry, Princeton University, Princeton, New Jersey 08540

*The writer is founder and former president of the Central New Jersey Chapter of the National Society for Austistic Children.

Limits to Understanding?

Gunther Stent, in his article "Limits to the scientific understanding of man" (21 Mar., p.1052), thoughtfully suggests that there are impassable barriers to a full scientific comprehension of human behavior. He tells us that any explanation of "the complex phenomenon of man" is ultimately limited by the nature of the irreducible, inaccessible structures of the mind. It is certainly plausible that any attempt of the human nervous system to analyze itself *completely* presents some inherent limits. However, many of the barriers to the scientific explanation of our species noted by Stent might be products of his own assumptions and analytic tools, rather than being deducible from universal structures of the mind.

One could certainly agree with Stent that many structuralist theories (such as those propounded by Levi-Strauss) tend to be unverifiable; but here the structures are phantasms—neo-Platonic ideal forms with no material referent. When attempts are made to reduce "deep structures" to biobehavioral mechanisms (*1*), a great many of the epistemological problems raised by Stent obligingly vanish (along with the deadening weight of Cartesian dualism).

For structuralist anthropology in particular, we need to ask why inaccessible and unverifiable structures deduced from linguistic phenomena (myths, rules of kinship, and so forth) should be taken as the basis of "all human customs and institutions." Indeed, the structuralist view of "mind" presents insoluble problems for scientific explanation, but these problems are greatly ameliorated by viewing minds as neurophysiological process, and as only one factor in an equation that includes evolutionary history and a continual dialectic with the environment.

ERIC A. SMITH
Department of Anthropology, Cornell University, Ithaca, New York 14850

References

1. C. D. Laughlin and E. G. d'Aquili, *Biogenetic Structuralism* (Columbia Univ. Press, New York, 1974); E. H. Lenneberg, *Biological Foundations of Language* (Wiley, New York, 1967).

A caveat is indicated for Stent's pessimistic essay. First, he seems to be following the conventional conditioned clichés of professional philosophers. Second, he gets into semantic traps in so doing. Third, he is conveniently sketchy in his neurophysiological surmises. Fourth, he seems to discount historical factors in the development of scientific endeavor. And, fifth, he seems not to realize that "Occam's razor" remains a useful tool in logical analysis.