

Articles

ROBIN MARANTZ HENIG, "ANIMAL EXPERIMENTATION: THE BATTLE LINES SOFTEN" BIOSCIENCE, MARCH, 1979 (VOL. 29, NO. 3), PG. 145-148, 195-196.

Most current literature on the use of animals in scientific research--whether pro or con-- emphasizes the ethical side of the issue. Henig provides a succinct and readable survey of the trend among scientists toward greater humaneness based on the principles of good science. This area may become a meeting place where scientists and animal welfarists who are not opposed to research can share concerns and engage in useful dialogue. At least this is the hope of open-minded individuals like Henig.

The idea behind this trend is simple: 'Badly treated animals make for bad scientific results,' and as Henig points out by means of a few good examples, the message is getting through to investigators in increasing numbers. A variety of approaches are discussed in which both physical and behavioral environments are altered to suit animals' needs better, or in which animals are conditioned in advance to accept without fear research equipment, laboratory procedures and personnel. The object of these measures is to reduce stress levels--a variable which can seriously affect or even nullify experimental findings.

Newer concepts of this sort were presented systematically in the Guide for the Care and Use of Laboratory Animals, prepared by the Institute for Laboratory Animal Resources of the National Academy of Sciences for the National Institutes of Health. Even such seemingly remote influences as the effects of chemicals in laboratory air fresheners and disinfectants on enzyme activity in animals receive attention to this publication.

Some scientists object that "environmental flexibility" of the sort Henig reviews "introduces too many variables

into the experimental design." The answer to this is often that where such precision is crucial, alternatives to the use of animals should be chosen. This of course leads to a whole new controversy. For many scientists--admitting that refinements in methodology can lead to reductions in the number of animals used or to reconsideration of the species to be selected--reply that in many kinds of experiments there is no alternative to live animals. Ironically, this realization springs from the same source as the argument for more humane environments: the awareness that the systems of complex living organisms form an integrated whole, much like an ecological system. It is also pointed out by scientists that if experiments are to be relevant to humans, "false economies and improper species selection"--which waste more animals in the long run--must be avoided. In response to these problems the National Library of Medicine has established a Laboratory Animal Data Bank to provide information that will assist researchers in the choice of animals.

Other topics discussed by Henig are the use of animals for teaching, toxicity tests, the initiative taken in recent years by major granting agencies and research-supporting groups to promote rather than oppose more enlightened animal welfare policies and legislation, and mounting political pressures for animal welfare reform outside the scientific community.

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