

Verdict: Researchers 16, anti-vivisectionists 1

Maryland psychologist Edward Taub, who last fall became the first American scientist to be convicted in court of cruelty to laboratory animals, was cleared on appeal last week of all but one of the original 17 charges filed against him by the state. The jury's decision came at the end of a three-week trial that turned on technical veterinary testimony concerning the ability to experience pain and the medical condition of six experimental monkeys.

The Taub case has over the past several months become the focus of a broad and highly emotional debate between anti-vivisectionists and the biomedical research community over the need for animal research. Animal rights activists have expressed disappointment with the verdict, but they claim that the trial judge was unfair in prohibiting the introduction of important evidence of negligent care in Taub's laboratory, part of the Silver Spring-based Institute for Behavioral Research; they vow to pursue custody of the animals in civil court. For Taub, the verdict is a personal and professional vindication following nine months of what he calls persecution by zealots who do not understand the nature of scientific inquiry; Taub has filed a motion for a new trial in order to seek acquittal on the final charge.

The state's case against Taub began in May 1981 when Alex Pacheco, a George Washington University student and founder of People for the Ethical Treatment of Animals, infiltrated IBR as a laboratory volunteer. During his four months as a volunteer, Pacheco surreptitiously photographed the laboratory and the monkeys. He showed the photographs to the county police, who on the basis of the photographic evidence raided IBR in mid-September, seizing the animals and charging Taub under the state's animal cruelty statute.

In late October, Taub was brought to trial on 17 counts of animal cruelty—one for each of 17 experimental animals—and was found guilty on six counts; he was fined \$3,000. According to the Maryland statute, a conviction requires two things: that the defendant has failed to provide adequate veterinary care and that, as a result of that failure, the animals have suffered unnecessary physical pain. On appeal, the jury reversed five of the original convictions.

The scientific and legal issues that the jury had to weigh were made especially complex because of the nature of Taub's research, which involved "deafferented" monkeys—monkeys who have had certain nerve fibers cut to make one of their limbs insensate. According to the argument of state attorney Roger Galvin, the medical literature reveals a dispute about whether or not the laboratory operation—a so-called dorsal rhizotomy—actually eliminates all pain sensation. Taub says

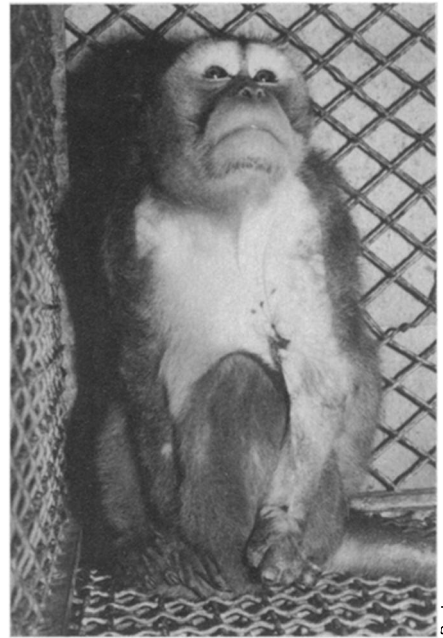
that debate has long been resolved and that the absence of pain can be conclusively demonstrated through lab tests. According to Galvin, the jurors themselves indicated, following the trial, that they were confused by the conflicting testimony about neuroscience and pain.

The issue of adequate veterinary care is also less than clear cut. Pacheco's photographs show a filthy laboratory and animals with mutilated limbs and open wounds; the photographic evidence was corroborated at the trial by veterinarian Michael Fox of the Humane Society of the United States, who visited IBR at Pacheco's request before the police raid. But Taub testified that the photographs were staged during his vacation from IBR and that he never permitted a filthy lab. An official inspection of Taub's laboratory in July by the Department of Agriculture—the federal agency charged with policing animal laboratories—revealed no violations, according to court testimony.

The wounds, Taub testified—and state witnesses agreed—are an unavoidable consequence of deafferentation. When an animal's limb loses sensation, the animal sees it as a foreign object and attacks it; in addition, deafferentation produces a condition much like leprosy, in which the sensory loss gradually causes the joints to dissolve. The point of dispute at the trial was whether or not the inevitable wounds were properly treated with antibiotics. David Renquist, the veterinarian for the National Institutes of Health, which now has custody of the monkeys, testified that five of the six monkeys were improperly cared for; he said that in the case of Nero—the one remaining conviction for Taub—the monkey's arm bone had become so badly infected that he was forced to amputate it to save the animal's life. Taub says he has evidence that the infection developed well after Nero was moved to NIH because of inappropriate veterinary care. Bandaging a deafferented limb, as a veterinarian would a normal limb, generally leads to additional self-mutilation and—in extreme cases such as Nero's—to infection, Taub explains.

The jury's verdict still leaves several important questions unanswered. The 17 monkeys currently remain in NIH custody pending instructions from the court. Sentencing is scheduled for August, and Galvin says he will petition for continued custody of Nero, the only animal for which the state is still responsible. But whether or not the remaining 16 animals will be returned to Taub for continued experimentation remains unclear.

NIH, in reaction to the news reports last fall, conducted its own site visit at IBR and found the laboratory out of compliance with minimum standards for animal care. According to NIH director of extramural research William Raub, NIH invalidated



Pacheco

Cruelty—or free scientific inquiry? This photograph and others like it have been used as evidence of animal cruelty in the trial of psychologist Edward Taub and in the public debate on the limits of animal research. Experts testified that self-mutilation is an unavoidable result of certain neurophysiological research but that such wounds, if properly treated, need not cause physical suffering. Taub was acquitted of animal cruelty in the case of the monkey shown above.

IBR's formal guarantee of compliance—the prerequisite for grant applications—and consequently canceled Taub's \$200,000 grant. IBR must make some significant improvements, including a new ventilation system, before it can reapply for research funds, Raub says. Only when the improvements have been made can the research be reconsidered for funding. And then, Raub adds, it must be determined whether or not intervening events have irreparably confused the behavioral research.

For Taub, the trial has implications that go far beyond one case. The public—including the jury—cannot understand the scientific questions involved, he says, and the state is incapable of resolving what are scientific issues. "It's a pernicious intrusion into freedom of thought," he argues. "The state is interfering in an area of inquiry that has been sacrosanct since the Inquisition." Taub's critics say that he has very cleverly twisted the case to make himself a martyr in a trial of all science. Already the case is having effects elsewhere: Maryland lawmakers narrowly defeated a bill that would have exempted scientists from the animal cruelty law (as almost all states do). In contrast, the U.S. Congress has been inspired by the Taub case to consider legislation that would significantly tighten regulation of federally funded animal research laboratories.

—W. Herbert