

Human Morality and Animal Research

Confessions and Quandaries

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THE ETHICAL COMPLEXITIES OF SCIENTIFIC RESEARCH using animals first hit me during my second year of graduate school. I had been assigned to work in the laboratory of a chemical ecologist who was studying the skin chemistry of animals. Part of my job was to make molecular extracts from earthworms. Live worms were immersed in distilled water that had been heated to 180 degrees. After two minutes, their bodies were removed and the remaining liquid centrifuged and frozen for later analysis. I had performed this procedure several times and had come to view it as another lab chore, one that I did not particularly enjoy, but that caused me no particular moral discomfort. The worms died almost instantly when dropped into the near-boiling water. And, after all, they were just worms.

One afternoon I was asked to do something different. A scientist at another university was undertaking similar studies on desert animals and had arranged for some of his chemical analysis to be done in our laboratory. Shortly thereafter a large cardboard box arrived air express from Utah containing a veritable menagerie: several kinds of insects, a pair of pale scorpions, a lizard about six inches long, a small snake, and a lovely gray mouse. The task of converting the animals to vials of clear liquid was delegated to me.

I had dumped more than a few live lobsters into boiling pots with nothing more than the slightest moral twinge, and I did not expect to be bothered by the procedures. For some reason, it made sense to start with the smallest and most primitive of the animals. I began with the crickets, which, like the worms, died almost immediately when I

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dropped them into the hot distilled water. No problem. Next, the arthropods. In the several days that they had been in the lab, I had come to like the scorpions. They had more body mass than the insects and took a little longer to die when I dropped them in the beaker. I began to wonder about what I was doing.

The lizard was the first vertebrate. My stomach turned queasy, I began to sweat, and my hands shook when I dropped it into the near-boiling water. The lizard did not die quickly. It thrashed about in the hot liquid for 10 or 15 seconds before becoming still.

The snake was an elegant racer probably about a year old. I have always been fascinated by snakes. I collected them as a kid, and I still deal with them as one of the handful of comparative psychologists who study ophidian behavior. I drank a slow cup of coffee between the lizard and the snake, putting off the inevitable as long as I could. More shaky hands, a sweaty brow, a queasy stomach. More thrashing reptile reduced to an inert carcass and molecules suspended in solution.

Something was clearly wrong. I was not upset by a logical pang of conscience telling me that I was doing something immoral; it was years later that I was drawn to philosophical treatises by animal advocates. No, my response was purely visceral, a physical nausea akin to the body's involuntary shudder in response to the odor of putrefaction.

Finally, the mouse. I weighed the mouse, poured the appropriate amount of distilled water into the beaker, and lighted the Bunsen burner. As the water approached the 180 degree mark, it dawned on me that I simply could not "do" the mouse. I turned off the flame and, with trepidation and relief, walked into the office of the laboratory manager, thinking that my career as a graduate student was over. I said that I had made almost all of the extracts, but that I would not do the mouse. Much to his credit, the supervisor did not ask me to continue. He wound up boiling the mouse.

I have thought about my predicament that day many times over the years. I am now struck by the similarity between my task that afternoon and the plight of the subjects in Stanley Milgram's infamous obedience experiments. The hapless participants in his studies were instructed to administer a series of electrical shocks of increasing intensity to other subjects in an adjacent room. As all introductory psychology students know, the majority of people in the experiment administered levels of shock that they thought would be extremely painful, if not lethal. Like Milgram's subjects, I was confronted with a series of escalating choice points, based on phylogenetic status rather than shock intensity. The difference between the Milgram experi-

ment and my situation was that in his study the shocks were a ruse; the subjects were really confederates of the experimenter. In my laboratory, the animals really died.

I was not the only member of my graduate school cohort who struggled with the moral consequences of their research. My friend Ron Neibor had a bigger problem than I did. He worked with cats. The focus of Neibor's dissertation was how the brain reorganizes itself after injury, a topic that was, unlike my explorations in chemical ecology, quite relevant to human health and well-being. Neibor did not choose cats because of any special curiosity about feline behavior. I suspect he would rather have worked with mice or rats. Cats, unfortunately, were the best model for the neural mechanisms that were his real interest. He employed a time-honored neuroscience technique; he surgically destroyed parts of the brains of his animals and observed the recovery of behavioral function over a period of months.

The problem was that Neibor liked his cats. His study lasted over a year, during which time he became quite attached to the two dozen animals in his control and experimental groups. Even on weekends and holidays he would drive to the lab, release his cats from their cages and play with them for hours. (This was long before federal regulations decreed that a few laboratory species be given the opportunity for daily exercise.) He thought of them as individuals. He talked about them, and he treated them more like pets than research animals.

His experimental protocol required that he confirm the location of the neurological lesions in animals in the experimental group through examination of their brain tissue. Part of this procedure, technically referred to as perfusion, is not pleasant under the best of circumstances. Each animal is injected with a lethal dose of anesthetic. Formalin is pumped through its veins via the heart, and the head is severed from the body. Heavy steel pliers are used to chip away the skull so that the hardened brain can be extracted and sliced into thin sections for microscopic analysis.

It took several weeks for Neibor to perfuse all of the cats in the experimental group. His personality changed. A naturally genuine and warm-hearted person, he became tense, withdrawn, shaky. Several graduate students working in his lab became concerned about his mental state, and they offered to perfuse his cats for him. Neibor refused, unwilling to dodge the moral consequences of his research. He did not talk very much during the weeks he was "sacrificing" his cats. Sometimes I noticed that his eyes were red, and he would look down as we passed in the halls.

These incidents provoked me to ask myself questions that I con-

tinue to struggle with two decades later. Is there really a difference between researchers who kill mice in the name of science and the legions of good people who smash their spines with snap traps or slowly poison them with D-Con because they prefer not to share their houses with small rodents? Why was it easy for me to plunge the crickets into hot water, hard for me to do the same with the lizard, and impossible for me to do it to the mouse? Was it a matter of size, phylogenetic status, nervous system development, or simply attractiveness (the mouse was really cute)? Would Neibor's plight have been any different if his experimental subjects had been rats? What were the relative roles of logic and sentimentality underlying the moral confusion that nagged Neibor and me?

The moral problems of animal researchers can be traced to Charles Darwin, who, incidentally, had personal qualms about vivisection. The Cartesian argument that humans and animals are fundamentally different was persuasive in the seventeenth century. To Descartes, animals were biological machines. Thus early physiologists interested in the mechanics of blood circulation had no more ethical qualms about nailing a live dog to a board prior to dissection than we might about ripping memory chips from a balky computer. Evolution, on the other hand, implies phyletic continuity—not just in anatomy and physiology, but also in behavior and mental experience. And, in the halls at the annual meeting of the Animal Behavior Society, there is serious talk these days of deception, intention, and consciousness among chickens and monkeys. (One of the ironies of the animal-research debate is that animal-rights activists often invoke recent discoveries about the mental capacities of animals when arguing against the very research that has uncovered these abilities.)

There are ethical implications to the notion of phylogenetic continuity of mental experience. An obvious paradox arises—the more a species is like us in its physiology, the more useful a model it is for human biomedical problems. But, precisely *because* a species resembles us biologically, the more likely it is that it experiences similar mental states. In short, the more justified the use of a species on scientific grounds, the less justified is its use on moral grounds.

There is a related problem that I struggle with as an animal researcher. I call my version "E.T.'s dilemma," though the central issue has been described under other labels by ethicists. At the end of Steven Spielberg's well-known film, E.T.'s mother returns to Earth to retrieve her errant son, a lovable alien who has spent several days running around southern California with his new friend, Elliot. There is a sentimental parting scene. Elliot pleads with E.T. "Stay?" he asks. E.T. wistfully shakes his head and croaks to Elliot, "Come?" But, both

know that each must return to his own world. E.T. and his mother take off back to Zork, and Elliot returns to life in the suburbs.

Suppose for a minute that the film ends differently. Again, Elliot declines the invitation to join E.T. The extraterrestrial, however, does not take no for an answer. He grabs the boy by the arm and drags him kicking and screaming into the ship. The doors close, and they zoom off to Zork. An AIDS-like epidemic has struck the home planet, and humans are the best animal model. The question is: Does E.T. have the right to abduct Elliot to be used as the subject of research aimed at developing a vaccine to protect the Zorkians? Clearly, they are intellectually and spiritually advanced over humans. (E.T. fashioned a phone out of junk to call home and made a dead flower blossom.) Research with animals is based on the premise that a "superior" species has the right to breed, kidnap, or kill members of "lesser" species for the advancement of knowledge. Though it violates my moral intuition, I see no way around the conclusion that E.T. has the right to abduct Elliot for his research. To do otherwise gives credence to the charge by animal-activist philosophers like Peter Singer and Tom Regan that our use of animals reflects self-serving speciesism, pure and simple.

The problem raised by E.T. is essentially that of ethical consistency. But, we do not have to turn to hypothetical space aliens to find inconsistencies associated with animal research. Take, for example, the moral status of mice in research facilities. Several years ago I spent a sabbatical year working in the Laboratory of Reptile Ethology at the University of Tennessee. The laboratory is located on the third floor of the Walters Life Sciences Building, a state-of-the-art facility that houses about fifteen thousand mice each year along with a smattering of other research animals. The mice are housed in antiseptic rooms in the basement and are cared for by a fully certified staff. As is standard practice at universities receiving federal funds, each project involving animal subjects is reviewed by the University of Tennessee Institutional Animal Care and Use Committee, whose members are charged with weighing the potential benefits and costs of the experiments. All of the mice in the building belong to the same species, and they appear virtually identical. In terms of moral status, however, they belong to quite different categories.

The vast majority of the mice in Walters are good mice, the subjects of the hundreds of biomedical and behavioral experiments conducted by faculty, postdoctoral researchers, and graduate students working in the building. I suspect that the bulk of this research is directly or indirectly related to the solution of biomedical problems that afflict our species. Though they do not have any voice in the

matter, these animals live and die for our benefit. They are now covered under the federal Animal Welfare Act and are entitled to a certain legal status not granted the mice in your home or even to your dog. (A judge in Oklahoma once threw out a charge against a cock fighter, ruling that roosters were not covered under the state animal-cruelty statutes because chickens were not animals. Lest we judge the judge too harshly, note that the Animal Welfare Act in essence also denies that mice and rats are animals, as they are excluded from coverage under the act. Recently a federal judge ruled that the exclusion of rodents under the law, while convenient for the research community, was arbitrary and illogical, although this matter is currently under appeal.)

There are also bad mice in Walters. The bad mice are pests, free-ranging creatures that can occasionally be glimpsed scurrying down the gleaming fluorescent corridors. These animals are a potential threat in an environment in which there is a premium on cleanliness and in which great care is taken to prevent cross contamination between rooms within the animal colony. These animals must be eliminated.

The staff of the animal facility has tried a number of different techniques to eradicate the bad mice. Household snap traps were found ineffective, and the staff was reluctant to use poison for fear of contaminating research animals. "Sticky traps" came to be the preferred method of rodent capture. Sticky traps are squares of cardboard coated with adhesive and imbued with a chemical mouse attractant, hence their alternate name, glue boards. The traps are placed in areas that pest mice frequent and are checked each morning. When a mouse steps on the trap, there is no escape; it only becomes more stuck as it struggles to free itself. Even though there is no poison embedded in the adhesive, over half of the mice found on the traps are dead, the result of struggle and stress. The rest are immediately killed by the staff.

Death by glue board is not humane, and I suspect that most animal-care committees would be reluctant to approve a study in which mice were glued to pieces of cardboard and left overnight. Thus there exists a peculiar situation in which treatment that is unacceptable for one category of animals is prescribed for animals of the same species that are of a different *moral* type. The irony of the situation is further compounded by the source of the bad mice. The building does not have a problem with wild mice invading the premises. The pests are virtually always good mice that have escaped, an inevitability in a facility housing many thousands of animals. As a staff member once said to me, "Once an animal hits the floor, it is a pest."

There is a third category of mice in the building, which is neither good nor bad. This category consists of mice that are food. The laboratory in which I worked specializes in the study of snake behavior. Most of the research animals were garter snakes, which thrive on a diet of worms and small fish. We did, however, keep some rat snakes and small boa constrictors, which need mammalian prey in order to thrive, and these mammals were mice ranging in size from newborns (“pinkies”) to adults. Animal-care committees do not typically regulate the use of mice as snake food. After all, many reptiles will only eat live prey. Not providing them with an adequate diet of live rodents would ultimately result in their starvation, a clear violation of our ethical responsibilities.

In some experiments the role of a mouse as food or subject becomes clouded. Suppose Professor X wants to study the anti-predator strategies of mice. She plans to introduce live mice into a rattlesnake’s cage and videotape the encounters between predator and prey. Now from the point of view of the mouse, there is little difference between being dropped into a rattler’s cage for the purpose of being eaten or for the purpose of a study of its defensive responses. From a legal point of view, however, these are quite different situations. If Professor X presents the mouse to the snake simply to provide her research animal with its weekly meal, she does not need to secure prior permission from the animal-care committee. If her motivation is to study how the mouse defends itself, she had best begin filling out the request forms. In this case, the moral and legal status of the animal hinges not on species, brain size, or even the amount of suffering it might be expected to experience, but on its label—pest, food, or research subject.

Animal-rights activists will no doubt take satisfaction in knowing that I am not alone in squirming when these issues come up over beers late at night at scientific conferences. But animal activists have their own problems with moral coherence. I suspect that it was my own unease with these issues that compelled me to venture out of ethology, my academic home territory, and foray into ethnology. I became interested in the lives and worldviews of animal activists—people who would like to put scientists like me out of business, people who change their lives because of an idea. For three years, I attended animal-rights demonstrations and meetings, accumulated philosophical treatises and political pamphlets, and, most important, interviewed several dozen activists in their homes.

This essay is not the place to describe the methods and results of these studies. Suffice it to say that the animal activists I interviewed

rarely fit the stereotypes in which they are sometimes cast by scientists, and I was impressed by their intelligence, sincerity, and dedication. One aspect of my findings, though, is germane here. For many activists the effort at consistency between belief and behavior affected almost all aspects of their lives—what they wore and ate, who their friends and lovers were, their thoughts during the day and dreams at night. This effort took many forms. Several spoke of feeling guilty when they drove their cars down the street, knowing that the tires were made from animal products and that bugs would inexorably be squashed on their windshields. One man told me of his love of softball. But, while he had found an adequate plastic glove, there was no getting around the fact that good softballs are covered with the skin of cattle and horses. In describing her attempts at consistency, one activist told me, “I don’t use toxic chemicals on my dog to get rid of fleas. Instead I try to pick them off and release them outside. I know they do not feel pain or anything, but I feel it is important to be consistent. If I draw the line somewhere between fish and mollusks, it isn’t going to make sense.”

But just like animal researchers, animal activists can rarely escape the moral ambiguities inherent in even seemingly benevolent relations with other species. Take pets. I was introduced to the moral problems of pet keeping in a curious manner. A friend of mine who is an animal activist told me that she had received a complaint about me from a fellow activist. She was told that I was procuring kittens from our local animal shelter and feeding them to Sam, my son’s pet boa constrictor. My first response was laughter at a groundless charge. Sam was just a baby snake, much too small to swallow even the slightest kitten. The incident did, however, provoke me to consider the ethics of feeding the animals we keep in our homes as pets.

The person who made the charge against me has four cats that wander at will in her house and in the surrounding woods. Domestic cats, no less than their larger cousins, are carnivores. Unlike humans and even dogs, they need meat to live healthy and happy lives. My accuser was a vegetarian for whom, in the language of the movement, “meat stinks.” Prisoners of their biological constitution, her cats did not share her personal aversion to flesh. Thus, while diligently avoiding the meat counter for herself, she was, nonetheless, obligated to ponder the relative merits of the flesh of cow, turkey, horse, and fish when selecting meals for her pets. Even bags of dried cat food are advertised as containing fresh meat. She was driven by love of her cats to become an unwitting participant in the factory farm system that she was fighting.

Feline dietary habits are related to another moral quagmire—the

predation problem. Cats like to kill things. They are inveterate hunters even if amply supplied with the tastiest of commercial fare. Two ecologists recently asked a group of English cat owners to record as best they could the number of mammals and birds that their pets killed over a period of months. They concluded that the five million domestic cats in Britain kill at least seventy million small animals each year, an average of fourteen prey animals per cat. There are about sixty-five million pet cats in the United States, and I do not have to spell out the dangers these animals represent to the birds, chipmunks, and lizards of America. It is even possible that more furry and feathered creatures die in the claws of cats owned by animal activists than in all of the research laboratories in the United States. The predation problem is particularly acute for cat owners who, with all good intentions, offer handouts to wild birds. With sunflower seeds and beef suet, they inadvertently lure their avian friends to within a pounce of their coldly efficient pets.

Other moral complexities confront animal advocates who choose to enjoy the comfort of “companion animals.” Like it or not, most pets are subservient creatures, ultimately maintained for the amusement and comfort they afford their owners. This fact has not escaped more sophisticated activists who struggle with the moral implications of *owning* a member of another species. This issue was addressed by one of the activists I interviewed.

QUESTION: Do you have pets now?

ANSWER: No

QUESTION: For philosophical reasons?

ANSWER: Yes. Absolutely. I would love to have a pet. I grew up with the companionship of a dog and a cat and know that it is a real special thing. But I also think that it is wrong. Animals are not here for our happiness. Up until recently I had a parrot. I would leave him free to fly around my room. One day I just looked at him and said to myself, This is wrong. It wants to be free. I just took it out in the backyard and let it go—even though it was hand-fed and trained and I knew it wouldn't survive in the wild. Since then I have thought that letting him free was not the best thing for the bird—though I felt really good when it flew up and into a tree for the first time it had ever been able to fly really high. It was great, amazing. I was really happy to see that. I assume that he probably starved to death. It may have been more something that I was doing for myself than for the bird.

Enough said.

Animal activists use the phrase “the dreaded comparison” when pointing out the similarity between the rhetoric used by nineteenth-

century advocates of slavery and twentieth-century defenders of animal research. But the animal-rights movement may have its own "dreaded comparison" in the issue of abortion. Several years ago I attended a public lecture given by Ingrid Newkirk, co-founder of People for the Ethical Treatment of Animals. Her formal presentation was followed by the obligatory question-and-answer period that was dominated by hostile challenges from animal husbandry students from a local agriculture college. Newkirk, as might be expected from one who spends considerable time in public forums, easily handled the questions and comments from the more skeptical members of the audience. Predictably, the issue of where one draws the proverbial line was thrown at the speaker ("Ms. Newkirk . . . Do you think flies and mosquitoes have rights?"). Her answer was direct: "We are concerned with *all innocent life*."

I thought about her answer while returning home that night. At some point during the long drive it occurred to me that there might be a natural affinity between the two social movements in our society that proclaim support for the rights of the innocent. I began to query my interviewees about their attitudes toward abortion. Of the two dozen animal activists I interviewed, all but two supported "a woman's right to choose." Some of the activists were completely comfortable with their stance on abortion; in some cases they simply denied that there is any association between the two issues. ("I simply fail to see the connection between abortion and animal rights.") Others found their own pro-choice views problematic ("Oh, please don't ask me about abortion. I am so confused about it"). In only one case did a person tell me that he had shifted from "pro-choice" to "pro-life" as a result of his beliefs about the moral status of animals.

I should not have been surprised at this pattern. There have been a half-dozen or so sociological studies of the animal-rights movement. All have reported two salient demographic facts. Somewhere between two-thirds and three-fourths of animal activists are women, and, as a group, they tend to identify with the liberal side of the political spectrum. Liberal women rarely ally themselves with the right-to-life movement.

The divisiveness of the abortion issue among animal activists is illustrated by the following exchange between animal-rights activists, which recently arrived in my office through the miracle of electronic mail. It was posted on AR-TALK, an animal-rights computer bulletin board:

Message: I'd be very surprised if there isn't a positive correlation between "in favor of animal rights and protection" and "pro-choice attitudes" for the simple

reason that intelligent, reasonable, and humane people will tend to support both.

Response 1: In other words, for intelligent, reasonable, and humane people, the unborn human child doesn't even count as much as an animal and thus deserves no protection?

Response 2: I would like to put in my own two-cents' worth. I agree with those who want to keep the abortion issue out of AR-TALK. I am not against open discussion of the issue of abortion, but it is *not* the same question as whether animals have "rights," whether humans are or are not to have pets, eat meat, experiment with animals, etc.

Though a pro-choice advocate myself, I find the supposition that a person and a pigeon share more in terms of moral status than a person and a six-month-old fetus troubling, if not bizarre. Some of the major philosophical thinkers behind the animal-protection movement such as Peter Singer, Tom Regan, and Steven Sapontzis do a reasonable job of arguing that there is a moral distinction between the interests of animals and those of a fetus. But the intellectual shucking and jiving of the philosophers notwithstanding, I would not be surprised to find that pro-choice animal activists sometimes feel the same nagging discomfort I experience late at night when contemplating the fate of Elliot in the scaly hands of E.T.

I once heard Andrew Rowan, the author of *Of Mice, Models, and Men*, say, "The only thing consistent about human-animal relations is paradox." Twentieth-century history offers a splendid example of "Rowan's Principle"—the Nazi animal-protection movement. Though not generally known, Adolf Hitler came close to being an animal-rights activist. A strict vegetarian, he objected to vivisection and once stated that hunting and horse racing were the "last remnants of a dead feudal world." His views on the treatment of animals were apparently shared by many of the Nazi ruling elite. Heinrich Himmler was "hysterical" in his opposition to hunting, and in one of history's great ironies, Hermann Göring wrote, "I will commit to concentration camps those who still think they can continue to treat animals as property."

This obscure historical footnote was brought to light in a remarkable paper published recently in the journal *Anthrozoös* by Arnold Arluke and Boria Sax, respectively an anthropologist and a linguist. In methodical and chilling fashion, Arluke and Sax chronicle the rise of the animal-protection movement that flourished in Germany in the 1930s and 1940s under the leadership of the Nazi party. Strict laws governing animal research and the slaughter of animals for food were enacted. An endangered-species act was passed by the German legisla-

ture. The Nazis sponsored an early international conference on animal protection. The list goes on.

What are we to make of a culture in which government officials were more concerned with the treatment of lobsters in restaurants than genocide, in which vivisection was abhorred, yet torturous medical "experimentation" on humans was condoned? Surely, Nazi animal protectionism is paradoxical. Not so for Professors Arluke and Sax. They argue that when one understands the cultural and intellectual milieu of pre-war Germany, the contradictions of Nazi animal advocacy become more apparent than real. They write, "Our analysis raises what is to most contemporaries a troubling and unsavory contradiction, namely, that Establishment concern for animals in Nazi Germany was combined with disregard for human life. This paradox vanishes, however, if we see that the treatment of animals under the Third Reich really tells us about the treatment of humans and the cultural rules and the problems of human society."

While I admire the elegance of their analysis, I beg to differ. We can indeed follow the twisted logic that enabled the Nazis to construct a moral taxonomy in which some animals were endowed with higher moral status than some people. But does this really cause the paradox of a humane Hitler to vanish? Not for me. I suggest that Nazi animal protectionism is the ultimate paradox, one that we *should not* explain away for it may be the central metaphor haunting all of our relations with other species. Is a vegetarian Hitler any more paradoxical than the pain physiologist who administers electrical shocks to devocalized beagles in the quest for a better analgesia during the day but who is met at the door by his faithful cocker spaniel when he returns home from his laboratory? Or the animal-rights/vegetarian cat owner?

Neither animal researchers nor animal activists inhabit a tidy moral universe. The different worldviews of animal-rights activists and scientists often make communication between scientists and activists about as productive as discussions between evolutionary biologists and creationists. In words that apply all too aptly to the animal-research issue, Mary Midgely described the difficulty of discussion between moral vegetarians and meat-eaters: "The symbolism of meat-eating is never neutral. To himself, the meat-eater seems to be eating life. To the vegetarian, he seems to be eating death. There is a kind of gestalt-shift between the two positions which makes it hard to change and hard to raise questions on the matter at all without becoming embattled."

Animal-rights supporters are often portrayed by their opponents among scientists as hyper-emotional and anti-intellectual Luddites

who value puppies and baby seals over healthy human children. Research with animals, says the scientist, is rarely more painful than the pervasive cruelty of nature. Besides, it is our only avenue for alleviating the disease and pestilence that afflicts our own and other species.

Not so, claims the activist. Scientists are cold and unfeeling, so blinded by years of socialization in laboratories and classrooms that they cannot see the suffering before their eyes or hear the cries of their innocent victims. For researchers, animals are Cartesian automata, objects to be used in the unending quest for fame, federal funds, and trivial knowledge. Biomedical research does not relieve suffering. It causes it. Further, animal research doesn't work—you cannot generalize from mice to men. And the scientific use of non-consenting individuals, be it animals or humans, is an ill-gotten gain. Whether it works or not is irrelevant.

In reality, both are right—and wrong. True, most biomedical scientists I know aspire to tenure, full professorships, editorial boards, and a share of federal research funds. But they are drawn to animals from curiosity (not a trivial motive for scientists), a desire to make human life better, or a genuine reverence for the natural world.

True, too, many animal activists tend to empathize viscerally with the suffering that they see as the result of situations unfairly perpetrated on the innocent. It is also true that experiments on kittens and dogs are more likely to bring out the protesters than research on snakes. But in my view it is a mistake to dismiss the moral sensibilities of animal activists as “mere emotionalism.” The philosophical underpinnings of the movement are rooted in cold, rigorous logic and are not as easy to refute as many scientists like to think. Contrary to stereotype, most activists do not scarf down cheeseburgers at McDonalds between demonstrations or wear leather shoes. Indeed, they labor under a particularly heavy personal moral burden.

Disagreements about the treatment of animals in research ultimately stem from our tendency to think simply about complex problems. Decisions about the use of other species are extraordinarily intricate, rooted more in the peculiarities of human psychology than in pure reason. Inevitably, the result is paradox and inconsistency. It is a complicated world for all but the true believers.

When asked where I stand on the animal-research issue, I have taken to responding with Strachan Donnelley's phrase, “the troubled middle.” Granted, the troubled middle is not a comfortable place to be. But, for most of us, neither are the alternatives.