

## ANIMAL RESEARCH ARGUMENTS

**Utilitarian argument** uses the principle of equality to oppose the use of animals in research. Peter Singer maintains that just as differences in intelligence, race, and gender are not valid criteria to exploit other humans, a creature's species is equally irrelevant. He claims, "From an ethical point of view we all stand on an equal footing—whether we stand on two feet, or four, or none at all." The only relevant moral criterion for discrimination for or against a species is the capacity to suffer. By definition, all sentient animals have the capacity to suffer, and thus are the subject of equal moral consideration. Speciesism (prejudice toward the interests of one's own species and against the interests of another species) is as morally repugnant as racism or sexism. Research with animals is permissible only if we would also consider using human participants for the same experiments.










The second argument is that at least some creatures have **fundamental rights** (for example, the right not to be harmed). Many philosophers have answered the question "Who is entitled to hold rights?" by establishing criteria such as language, or self-consciousness. These criteria presumably eliminate nonhuman animals. However, some humans (the severely retarded, infants, the mentally ill) do not meet the criteria, and some animals (primates, cetaceans) do, creating problems for this position. Animal rights theorists resolve the dilemma by broadening the criteria. For example, Tom Regan argues that "inherent value" is the criterion for having rights and that animals must therefore be included. Like humans, they have the right to be treated with respect and the right not to be harmed. When science treats animals as renewable resources rather than creatures with inherent values, it violates the respect principle. The fact that animal research could benefit hundreds of thousands of human lives is morally irrelevant.

# Tom the Dancing Bug

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BOLLING

THERE'S BEEN A LOT OF CONFUSION RECENTLY ABOUT MORAL BEHAVIOR. IT'S ACTUALLY A MATTER OF ONE SIMPLE RULE: *THE MORE A LIVING BEING IS LIKE YOU, THE NICER YOU MUST BE TO IT.* CARRY AROUND THIS HANDY CHART, CONSULT IT AS YOU COME ACROSS ORGANISMS, AND ACT ACCORDINGLY.

HUMAN MORALITY MADE SIMPLE				KEY Y = YES, ALWAYS S = SOMETIMES, DEPENDING ON CIRCUMSTANCES M = IF YOU'RE IN THE MOOD N = NO, NEVER			
CATEGORY	EXAMPLE	HOW MUCH LIKE YOU?	APPROPRIATE MORAL RESPONSE	SHOULD YOU HELP IT?	CAN YOU HARM IT?	CAN YOU KILL IT?	CAN YOU EAT IT?
IMMEDIATE FAMILY MEMBERS	DAUGHTER 	ALMOST EXACTLY LIKE YOU	MUST BE UNBELIEVABLY NICE AND GENEROUS. GIVE IT MONEY. DEVOTE YOUR LIFE TO ITS WELL-BEING				
EXTENDED FAMILY MEMBERS, FRIENDS	COUSIN 	VERY MUCH LIKE YOU.	MUST BE VERY KIND. HELP IT IF NOT TOO COSTLY TO YOURSELF. MAKE SURE NEVER TO HARM IT.				
COMMUNITY MEMBERS	FELLOW AMERICAN 	SAME CUSTOMS, VALUE SYSTEM, T.V. SHOWS	MAY ONLY HARM IF YOU CAN GAIN BY IT (EG. IN BUSINESS DEALS). NO NEED TO HELP IT.				
OUTSIDERS	FOREIGNER 	LOOKS DIFFERENT, ACTS WEIRD	NOTE: THIS LINE NEED NOT BE DRAWN GEOPOLITICALLY ONLY. FOR EXAMPLE, IF YOU VIEW YOUR RACIAL GROUP AS YOUR 'COMMUNITY, DROP MEMBERS OF OTHER RACES TO 'OUTSIDER' STATUS. CAN BE MEAN TO, IF NECESSARY. MAY KILL, IF WARTIME.				
PETS AND PRIMATES	DOG 	NOT HUMAN, BUT ANTHROPO-MORPHIZED	CAN HARM, IF FOR RESEARCH. CAN PUT IT TO SLEEP, IF NECESSARY. CAN'T EAT IT.				
OTHER MAMMALS	DEER 	DIFFERENT	CAN KILL, CAN EAT. PAT IT ON THE HEAD.				
OTHER ANIMALS	FISH 	VERY DIFFERENT	CAN KILL, CAN EAT. DON'T PAT IT ON THE HEAD.				
INVERTEBRATES	LADYBUG 	GROSSLY DIFFERENT	STOMP ON IT, FEEL A LITTLE GUILTY.				
PLANTS	RADISH 	ABSOLUTELY DIFFERENT	DESTROY WITHOUT A TWINGE OF GUILT.				

## HANDOUT 1–15

*Instructions:* Your group is the Animal Care Committee for your university. It is the committee's responsibility to evaluate and either approve or reject research proposals submitted by faculty members who want to use animals for research or instructional purposes in psychology, biology, or medicine. The proposals describe the experiments, including the goals and potential benefits of the research as well as any discomfort or injury that they may cause the animal subjects. You must either approve the research or deny permission for the experiments. It is not your job to suggest improvements on technical aspects of the projects, such as the experimental design. You should make your decision based on the information given in the proposal.

### CASE 1

Professor King is a psychobiologist working on the frontiers of a new and exciting research area of neuroscience, brain grafting. Research has shown that neural tissue can be removed from the brains of monkey fetuses and implanted into the brains of monkeys that have suffered brain damage. The neurons seem to make the proper connections and are sometimes effective in improving performance in brain-damaged animals. These experiments offer important animal models for human degenerative diseases such as Parkinson's and Alzheimer's. Dr. King wants to transplant tissue from fetal monkey brains into the entorhinal cortex of adult monkeys; this is the area of the human brain that is involved with Alzheimer's disease. The experiment will use 20 adult rhesus monkeys. First, the monkeys will be subjected to ablation surgery in the entorhinal cortex. This procedure will involve anesthetizing the animals, opening their skulls, and making lesions using a surgical instrument. After they recover, the monkeys will be tested on a learning task to make sure their memory is impaired. Three months later, half of the animals will be given transplant surgery. Tissue taken from the cortex of monkey fetuses will be implanted into the area of the brain damage. Control animals will be subjected to sham surgery, and all animals will be allowed to recover for 2 months. They will then learn a task to test the hypothesis that the animals having brain grafts will show better memory than the control group. Dr. King argues that this research is in the exploratory stages and can only be done using animals. She further states that by the year 2004 about 3 million Americans will have Alzheimer's disease and that her research could lead to a treatment for the devastating memory loss that Alzheimer's victims suffer.

### CASE 2

Dr. Fine is a developmental psychobiologist. His research concerns the genetic control of complex behaviors. One of the major debates in his field concerns how behavior develops when an animal has no opportunity to learn a response. He hypothesizes that the complex grooming sequence of mice might be a behavior pattern that is built into the brain at birth, even though it is not expressed until weeks later. To investigate whether the motor patterns involved in grooming are acquired or innate, he wants to raise animals with no opportunity to learn the response. Rearing animals in social isolation is insufficient because the mice could teach themselves the response. Certain random movements could accidentally result in the removal of debris. These would then be repeated and could be coordinated into the complex sequence that would appear to be instinctive but would actually be learned. To show that the behaviors are truly innate, he needs to demonstrate that animals raised with no opportunity to perform any grooming-like movements make the proper movements when they are old enough to exhibit the behavior. Dr. Fine proposes to conduct the experiment on 10 newborn mice. As soon as the animals are born, they will be anesthetized and their front limbs amputated. This procedure will ensure that they will not be reinforced for making random grooming movements that remove debris from their bodies. The mice will then be returned to their mothers. The animals will be observed on a regular schedule using standard observation techniques. Limb movements will be filmed and analyzed. If grooming is a learned behavior, then the mice should not make grooming movements with their stumps as the movements will not remove dirt. If, however, grooming movements are innately organized in the brain, then the animals should eventually show grooming-like movement with the stumps. In his proposal, Dr. Fine notes that experimental results cannot be directly applied to human behavior. He argues, however, that the experiment will shed light on an important theoretical debate in the field of developmental psychobiology. He also stresses that the amputations are painless and the animals will be well treated after the operation.

### CASE 3

The Psychology Department is requesting permission from your committee to use 10 rats per semester for demonstration experiments in a physiological psychology course. The students will work in groups of three; each group will be given a rat. The students will first perform surgery on the rats. Each animal will be anesthetized. Following standard surgical procedures, an incision will be made in the scalp and two holes drilled in the animal's skull. Electrodes will be lowered into the brain to create lesions on each side. The animals will then be allowed to recover. Several weeks later, the effects of destroying this part of the animal's brain will be tested in a shuttle avoidance task in which the animals will learn when to cross over an electrified grid. The instructor acknowledges that the procedure is a common demonstration and that no new scientific information will be gained from the experiment. He argues, however, that students taking a course in physiological psychology must have the opportunity to engage in small animal surgery and to see firsthand the effects of brain lesions.