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Beyond Conspecifics: Is Brer Rabbit Our Brother?

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> Every one has heard of the dog suffering under vivisection, who licked the hand of the operator; this man, *unless the operation was fully justified by an increase of our knowledge, or* unless he had a heart of stone, must have felt remorse to the last hour of his life. (Darwin 1871, ch. 2; words in italics were added in the second edition, 1874).

THE REVOLT AGAINST THE STATUS QUO

Today, on many fronts, there is renewed interest in our relationship with nonhuman animals. Many factors have contributed to this concern. Environmental and ecological awareness has drawn public attention to the near extermination of many species and the detrimental effects of pollution, pesticides, and habitat destruction. The inefficiency of transmuting vegetable protein to meat has added to the traditional moral arguments of vegetarians. The widespread questioning of government support for basic research has been intertwined with suspicions about the use and worth of any studies on animals, even those purporting to help understand human medical and behavioral problems. New evidence of higher cognitive faculties in some animals including reason, language, and emotional sensitivity have resonated throughout the scientific and lay press (e.g., Gallup 1977, Lawick Goodall 1971, Griffin 1976, Lilly 1975). Ethological work on animal and human behavior has thus eroded the key foundation for the age-old rigid distinctions between human and nonhuman (see Regan and Singer 1976 for an excellent anthology). The "study of the animal mind" is again fashionable (Burghardt 1978), as evidenced by the highly technical contributions constituting an entire 1978 issue of *The Behavioral and Brain Sciences* (Vol. 1, no. 4). Philosophers, theologians, scientists, and many organizations are now grappling with the issues involved in our treatment of animals (e.g., Allen and Westbrook 1979, Curtis 1978, Henig 1979).

We think the issues are basic ones that have serious implications for research (see Broad 1980). Furthermore, we see little consensus on them within the biomedical, psychological, and animal behavior communities. When Aronson's work at the American Museum of Natural History on sexual behavior in cats was under serious assault (Wade 1976), differences within the scientific community itself on both the procedures used and the value of the studies prevented strong support for him. The controversy was surely a factor in the abolition of the Animal Behavior Department, of which he was the last head, by the museum authorities earlier this year.

Similarly, Hutchinson's studies on electric shock-induced aggression in animals (including monkeys and people) led to Senator Proxmire's ridicule and '"Golden Fleece" award, resulting in a celebrated suit (Holden 1976) and Proxmire's eventual public apology. Although the research community seems pleased with the outcome, many animal behavior researchers are clearly ambivalent about the scientific and ethical aspects of this kind of work. Indeed, Ulrich (1978), who had performed similar work in the same laboratory, published an apologetic disavowal of his efforts in this field on moral grounds. The research establishment is going to have to formulate a thoughtful response, or it may lose the respect of a new generation of students, researchers, and politicians even when it wins in the courts. Alienation has begun: Already eminent researchers have complained to us that students, particularly in Europe, are becoming "too moral."

These issues are integral to a larger movement, revealed by a conference held last year at Virginia Polytechnic Institute and State University on '"The Moral Foundations of Public Policy: Ethics and Animals." The conference brochure featured a pictorial comparison between crowded slave ships and factory farming of chickens. The Society for the Study of Ethics and Animals has just begun publication of a journal, *Ethics and Animals,* edited in the Department of Philosophy and Religion at the same institution. In March of this year, Bates College in Maine held a symposium on "The Ethics of the Use of

Animals in Research." And a division of the United States Humane Society has just initiated the *International Journal for the Study of Animal Problems.* The announcement brochure specifically lists veterinarians, biomedical researchers, animal scientists, and wildlife biologists among the audiences the journal seeks to reach, and several respected scientists are involved as editors and advisers. Even the U.S. government research establishment is now concerned, as indicated in a brochure recently published by NIH (Anon. 1979).

Although indictment of animal research and other uses of nonhumans is essentially moralistic, it is supported by scientific evidence. This tradition extends back at least into the last century (e.g., Evans 1898), but has received new impetus in recent decades (e.g., Russell and Burch 1959), particularly the last (Carson 1972, Godlovitch et aL 1973, Morris and Fox 1978, Ruesch 1978, Ryder 1975, Singer 1975, Smyth 1978). Ironically, radical new restrictions on work in the laboratory, zoo, and field are based in part on data derived from the very research that is being criticized.

Furthermore, although the question of animal rights and human obligations is charged with emotion and sentiment, the major theoreticians do not restrict their arguments to either appeal-something that defenders of the status quo in agriculture and research have been slow to appreciate (see e.g., Curtis 1978). Indeed, Singer (1975) claims neither to "love" animals nor to be especially interested in them. In sum, the goal of the "new" animal protection movement is no less than the development and acceptance of a consistent, logical, and scientifically acceptable ethical treatment of animals (e.g., see the interchanges in *Ethics* 1978, vol.88 no.2, and Fox 1978). Throughout the ages a prime argument for kindness to animals has been the prevention of cruelty to other humans by humans, rather than from a concern for animals *per se.* Moreover, for those who suggest that people concerned with animals are blind to human misery (e.g., Rensberger 1977), the first child abuse case in America could only be brought under statutes related to cruelty to animals (Carson 1972).

Implicitly or explicitly, many serious advocates of a new animal ethics consider their views to be the logical and necessary extension of the movement toward equality and nondiscrimination in the treatment of various human groups by one another (see also the older writings in Regan and Singer 1976). Just as awareness of the abuses and illogic of discrimination by race, sex, and age has led to efforts on the educational, political, and economic fronts to ameliorate. if not eliminate, such discrimination, so is the struggle joined on behalf of other species to combat what is now termed "speciesism." In other words, if we are all brothers and sisters under the skin, deserving of equal dignity and opportunity in spite of vast differences, then do not other animals, many of whom seem much closer to us than we dared to think but a few years ago, deserve equal consideration if not equal treatment (Singer 1979)? Certainly they should not be flagrantly abused physically and mentally for reasons so apparently trivial as producing gourmet delicacies (e.g., goose pate, veal) or evaluating new cosmetics (e.g., testing the irritability of mascara on the tearless eyes of rabbits). Ethologist E. M. Banks (1979) responded to Singer's (1979) charges with a solid but traditional reply incorporating the "don't throw out the baby with the bathwater" and the "scientists are nice people" defenses (see also the exchange between Bowd 1980 and Gallup and Suarez 1980). But even scientifically educated persons are increasingly unimpressed with the use or value of much research, and they may question the motives of scientists; "Half are sadists," a highly placed Harvard Ph.D. conservationist recently told one of us. Assertions of good intentions and appeals to the "greater good" thus seem insufficient to answer the critics.

Much of the debate in this area is at cross purposes, and the criteria! Values to which the protagonists adhere are often only implicit or embedded in sophistry. Our analysis of the issues surrounding animal liberation is descriptive rather than proscriptive. We hope it will sharpen discussion rather than provide simple answers to complex questions.

PARADOXES AND ETHICAL INCONSISTENCIES

Our tabulation (see the box) lists 26 considerations that seem to be involved in making judgments about the acceptability of a given "use" of animals. These are not meant to be exhaustive, of equal significance, or incapable of being subdivided. Interrelations among multiple criteria in an ethical judgment almost always occur, and differences in people's views result from differential weighting of them. An extensive

treatment is beyond the scope of this paper; here we can only allude, perhaps too casually, to some of the paradoxical situations. We do not specifically discuss the benefits of scientific research (A-5 in the tabulation); we know they are great but we feel equally strongly that they cannot be the only consideration taken. We have grouped the criteria into four categories: human costs or benefits, anthropomorphism, ecology, and psychology.

Human Costs or Benefits

Some of the foremost conflicts involve using animals for food (A-I) and clothing (A-2). Culture influences these matters greatly, as in the acceptability of eating pigs, dogs, and shellfish. Some vegetarians try to make a strong moral argument although they may be wearing leather shoes and belts. Humans will even impose their morals on other species, as in the periodic outcries against feeding live animals to predators in captivity.

Considerations Entering into Ethical Evaluation of Relations with Other Species

A: Human Benefit

1. Food
2. Clothing
3. Transportation
4. Recreation
5. Research
6. Pests and competitors
7. Danger and disease
8. Domesitication

B: Anthropomorphism

1. Pain and suffering
2. Goriness
3. Phylogenetic similarity
4. Humanoid appearance
5. Mental similarity
6. Cuteness
7. Size
8. Longevity
9. Disgusting habits

C: Ecology

1. Rarity
2. Diversity
3. Ecological balance

D: Psychology

1. Habituation
2. Aesthetics
3. Spiritual and religious
4. Call of the wild
5. Individual variability
6. Behavioral plasticity

Recreational use (A-4) of animals is also controversial. Some people oppose pet-keeping, zoos, circus acts, rodeos, and horse racing, but fighting brings out the greatest conflicts. Throughout urban areas of the United States, cockfighting is often condemned as brutal, painful bloodletting, yet it is widespread throughout the world. Bullfighting is also a source of ire. Bear baiting was a Northern European preoccupation that disappeared along with the bears. Man fighting (e.g., boxing) unlike cockfighting, which it resembles in many ways (e.g., rounds, referees, conditioning, diet, and weigh-ins), is often considered a noble manly sport, as the status of Muhammed Ali and "Rocky" still indicate. In fact, cockfighting is instructive here, as cockfighters have a series of ethical rationalizations not any less sophisticated and often more complex than those of their opponents (Herzog and Cheek 1979, McCaghy and Neal 1974).

There is always controversy over hunting, trapping, and fishing. Many will accept these sports if the animal is eaten (A-I}; trapping wild animals for furs (clothing, A-2) seems less acceptable, perhaps because substitutes are readily available and lingering suffering of the animals may occur.

Labeling a species a "pest" (A-6) often removes much of the stigma from killing it ("pest control"). We suspect that few of those who protest research on animals have moral doubts about treating their homes for termites and rats, slapping mosquitos, pulling off ticks, or using a flea collar on a dog. The argument that poison control (as in strychnine baits) is bad only because it injures non target organisms (e.g., people and "good" animals such as pets, songbirds, eagles, and fish) rather than the "bad" targets (e.g., insects, coyotes, and rats) makes the point clear. "Biological" control in pest management really means more precise killing or, at the least, interference with reproduction.

Size (B-7) enters into the labeling process. Small animals are easier to label as pests, and less protest is usually found in the control of "vermin" such as lice, intestinal parasites, and small rodents. Larger animals ("varmints"

such as coyotes, prairie dogs, beaver) are more controversial, often interfering with human resources. Another overlapping category includes species that can pose an actual physical danger to humans (A-7), such as poisonous snakes, sharks, some spiders, grizzly bears and disease-bearing animals of whatever size. Here deep-seated nonintellectual fears are most certainly at work.

Furthermore, different human groups often have different interests in labeling certain as pests. For example, Japanese fishermen kill dolphins as pests because they become entangled in and destroy nets as well as compete for increasingly scarce fish, whereas many conservationists believe that dolphins should be respected as an advanced life form. Similarly, the controversies between ranchers and conservationists over such animals as mustangs, coyotes, and eagles involve competing interests, as do conflicts involving animals that generally invoke good feelings, such as birds. Some people are outraged by attempts to decrease numbers of very common, often alien, species such as "blackbirds" and pigeons (food competitors and disease vectors, respectively).

Animals that have been domesticated by humans (A-8) for specific purposes seem to fall under a separate category from "wild animals." The eating of a beef-burger necessitates the slaughter of a cow; yet the killing of a cow and the shooting of a deer are not psychologically equivalent operations, although both involve the exploitation of an animal for human consumption. The use of domesticated animals is often justified because they ·'were created for human use" or "wouldn't exist without us." Moreover, the general public's unfamiliarity with intensive farming and slaughterhouse techniques keeps most guilt and concern suppressed.

Domesticated animals used for research (A-5) rather than for food or clothing are in yet another category. However, all lab animals, even among mammals, are not considered morally equivalent, such as shown by the outcry over the use of beagles in U.S. Army chemical warfare experiments or over Aronson's use of cats (not rats) in his sex research at the American Museum. The beagle and cat flaps show that what researchers and others forget is that some domesticated animals can be exploited only for certain ends (e.g., as pets). But it is not enough to think that it is always acceptable to use an animal for the purpose for which it was domesticated. Most people in U.S. society are against cockfighting, even though the roosters have been selectively bred for that purpose. And a small but vocal group is protesting many traditional ways of using domestic food animals. Thus, domestication is far from a straightforward consideration and raises some of the most disturbing issues.

Anthropomorphism

Hunting, trapping, and fishing can introduce the factor-discussed for years by moralists and philosophers-that is still the major preoccupation of current theoreticians and animal welfare activists. Killing or otherwise using animals is often considered acceptable only if care is taken to reduce suffering (B-l). Sometimes researchers are needlessly insensitive and cruel (see, e.g., Diner 1979, Ruesch 1978); the problem is where to draw the line. Fishermen often draw it between their prey and those of other game hunters. Singer (1975), the animal liberation guru, will eat oysters but nothing "higher" because he believes such animals feel pain, while oysters don't. The element of anthropomorphism is obvious: How many people would eat raw-that is, live-oysters if they screamed or whimpered at one's first bite?

In actuality, much of the concern expressed in terms of the pain and suffering experienced by an animal is more accurately viewed in terms of its assault on the sensibilities of the human observer. Thus, "goriness" (B-2)-spilled blood as perceived by people is, in our view, a more relevant factor than "pain." Certainly, attacks on medical research even short of vivisection make ample use of the often nauseating procedures employed. Comparisons with Nazi pseudoscience carried out on concentration camp inmates are not uncommon (e.g., Ruesch 1978). Similarly, Bekoff (1976) points out the visual bias we employ in ethical responses to animal research. What if oysters had red blood?

The consideration of human sensibilities leads to the concerns that are most important in our essentially gut-level evaluations of whether a given use of an animal is right, proper, or necessary. As with the acceptability of various food items, cultural factors often mediate ethical judgment, but we think some deeply ingrained biological mechanisms are also operative.

Phylogenetic and morphological similarities (B-3 and B-4) are clearly important, as indicated by our interest in nonhuman primates and the great apes. Many primatologists view their clientele as behaviorally far closer to humans than to other mammals; circus trainers and their audiences share this view. The evolutionary relatedness of primates to humans often does make them the most appropriate nonhuman animals for use in medical research. This leads to intense conflicts. The International Primate Protection League (P.O. Drawer X, Summerville, SC 29483) has arisen to counter demands of the medical and defense research establishments for more wild primates, and its newsletter has documented considerable evasion of laws and humane standards in the unseemly, desperate means used by governmental agencies and established scientists to procure wild primates. Even behavioral workers have been caught in this conflict, for the critics of primate research equate the production of mentally disturbed abnormal monkeys (e.g., by social deprivation) with actual physiological intervention in medical laboratories.

The concern for whales and porpoises (mental similarity, B-5) is obviously not based on a structural similarity to humans since their large brain is unseen. Yet popular sentiment and action clearly favors the Cetacea as deserving of better treatment than sharks, their structural analogues (e.g., "Flipper" vs. "Jaws," the outrage over whaling, and the dashed hopes for conversations with dolphins). Paradoxically, sharks have enormous brains compared to other fish.

The size (B-7) of an animal also significantly affects human responses to it. Consider small animals such as insects. Each day we may step on hundreds of ants or find many bugs squashed on our windshields. How many persons feel sorrow, remorse, or revulsion at killing these animals? How many empathize with a writhing poisoned cockroach or feel that a sentient being is being slaughtered? If ants or bees were as big as dogs, we might react differently. In short, large animals are more respected.

The honey bee, however, has been shown by von Frisch (1966) to have "language"--a complex symbolic communication ability apparently unique in the animal kingdom outside of ourselves. Griffin (1976) has ably argued the implication of such findings for our evaluation of animal mentality. But there is considerable prejudice against allowing such a tiny animal this ability or considering the implications seriously. Larger animals usually live longer than related smaller species, but longevity (B-8) seems a consideration in itself, albeit a minor one, that favors those that live a long time.

Beautiful animals are valued over "ugly" ones (D-1), although beauty as an attribute of animals is not agreed upon by everyone. Apparently it is not just a matter of individual preference (the "beauty in the eye of the beholder" view), since most people would probably rank a butterfly above a cockroach.

However, anthropomorphism plays another role here since many baby animals, particularly mammals, have an appeal separable from that based on aesthetics (D-2). Newborn or juvenile animals frequently share features that are the constituents of the almost universal "cuteness" response (B-6). Lorenz (1943) listed the facial characteristics that make baby animals irresistible to adults, such as foreshortened snout, lwge eyes, high forehead, and rounded features. As these characters are also possessed by human babies, the response to young of other species (and animal cartoons, Gould 1979) is clearly one of generalization. Again, an irrational process is at work. A recurring example of the effectiveness of this factor is the outrage expressed at the baby harp seal clubbing on arctic ice floes each year. Opponents of such killing invariably use photographs of irresistible baby seals in their propaganda.

Our culturally based anthropocentric notions of decent behavior (B-9) frequently color our judgments, often erroneously, as with pigs, rats, vultures, hyenas, and certain predators. Positive attitudes may be similarly misplaced.

Ecology

We assign to individuals of an endangered species more intrinsic worth than common ones. One can make a rational case for this, but rarity is seldom sufficient. Many endangered species enthusiasts were uninterested in, and some were opposed to, saving the beautiful fish that news reports always characterized as the *"3 inch* snail darter." Did its small size and lack of recreational value outweigh its

other qualities and value as a life form to many "dedicated conservationists?" On the other hand, rarity *is* a potent factor in discussions of whaling or capture of wild chimpanzees for research (e.g., hepatitis vaccine production, Wade 1978). But rarity and all other considerations become secondary when just a few human lives (e.g., chimps and hepatitis) or cultural survival (e.g., Eskimos and bowhead whales, Bockstoce 1980, Morgan 1979) are at stake. Even Scheffer (1974), a member of the board of trustees of the new Scientists Center for Animal Welfare (P.O. Box 3755, Washington, DC 20097), feels that humans should always take precedence when rights collide:

> As a biologist, I believe that, where one must be sacrificed for the other, the animal has to go. Though man, too, is an animal, he is the only one for which important further evolution is open. He is the only one that can plan, and therefore the only one that can take action to preserve that richness. (Scheffer 1974, p. 215)

But with billions of people extant and their numbers increasing, the second half of Scheffer's statement means, in effect, that we cannot escape balancing the survival of wild chimpanzees, African elephants, or West Indian iguanas against human numbers or human comfort. The relevance of the other two ecological criteria, diversity (C-2) and ecological balance (C-3), should be readily appreciated, although they are seldom invoked by the general public.

Psychology

The closely related phenomena of habituation (D-1), familiarity, and desensitization are of great import in setting values. Children raised on farms are generally far more accepting of the slaughter of animals for food than urban children. Many scientists who cringed at their first dissection or "sacrifice" of a lab animal but soon learned to be unsentimental are now criticized as being callous, insensitive, and imbued with their own self-importance.

Other psychological criteria seem to favor animals that are variable in their behavior or morphology (D-5), or those that show greater plasticity and adaptability ("intelligence") (D-6). Anthropomorphic filters are involved here. Similarly, religious reasons (D-3) often justify our treatment of nonhumans, both pro (Linzey 1976) and con (Regan and Singer 1976). A "call of the wild" (D-4)-increasingly common among the middle class faced with a jaded, sterile, urban future-has been countered by Rensberger {1977) in an angry polemic that points out some of the paradoxes and anthropomorphisms involved.

IS A RESOLUTION POSSIBLE?

Several of the 26 considerations and their many manifestations are usually involved in the determination of the value, worth, and ethical stance in the use of animals for any purpose, thus providing the peculiar difficulties faced by the ethicists. The considerations conflict with and compound each other. For instance; cockfighters often use artificial gaffs of steel to replace the natural spurs of their chickens; but Panamanians use the shell of the endangered hawksbill turtle (personal observations).

We suspect that currently it is impossible to derive from science, theology, philosophy, or any conceivable source a consistent, universal set of principles to guide humans in dealing with members of other species. But then, no ethical system has been universally accepted for our dealings with conspecifics. And interspecific ethical problems are qualitatively different. There are too many competing biological and economic factors involved, and, more significantly, psychological demands often preclude rational resolution of the issues. Some of our decisions are based on irrational but often understandable preferences (e.g., cuteness: baby features). That there are serious difficulties in simple or sophisticated extensions of arguments extending .. human rights" to other animals does not invalidate the recognition that immense and largely unnecessary mistreatment of other animals is occurring worldwide and especially in modern technological societies. Constructive approaches are possible (e.g., Kilgour 1978) and should be aggressively applied.

Perhaps the best we can do is to assign numbers to the various costs and benefits involved for given types of animal exploitation and misery, as we attempt to do when we weigh the amount of human death

and environmental degradation that is "'justified" by the benefits caused by high levels of air pollution, energy consumption, and so on, and then allow the "democratic process" to determine acceptable usage. This culture-bound approach may be the only path to follow, and the extensive surveys by Kellert (1980) can lead the way. It may be necessary, but many will find this prospect depressing. Are not, some may argue, "moral calculus" games that would have values determined by polls and computer simulations of costs and benefits absurd? Can we weigh the pain suffered by a hooked fish or measure degrees of freedom for a wolf? Is it all just a matter of whose ox is gored?

In any event, biological and behavioral research will surely be affected by the outcome. As scientists, we must educate, articulate, and lobby for our points of view. We must not discredit ourselves by ignoring, in self-interest, the grounding of "animal rights" in an evolutionary continuity among all living things, while using the same continuity to justify our research.

We need to develop an "ethological ethics" divorced from the self-serving apologetics and *ad hominem* counterattacks so often typical of agribusiness, drug, and cosmetic companies, the "anything is justified to save one human life" emotionalism too often found in medical circles, and the ignorance of behavioral needs of animals found even in veterinarians and animal care specialists (e.g., Anchel 1976). Rhetoric is often cheap, simplistic, often irrational, and a cover for not thinking through complex issues that strike deep at who we are and how we live. Reread our opening quotation. It may or may not be comforting to know that Darwin later hedged on his initial and sometimes more correct ideas. All of us should personally address the difficult challenge of "Brer Rabbit" both as scientists and as human beings.

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