Beyond Conspecifics: Is Brer Rabbit Our Brother?

Gordon M. Burghardt and Harold A. Herzog, Jr.

Every one has heard of the dog suf-
ferring under vivisction, who kicked
the hand of the operator; this man, un-
less the operation was fully justified by
an increase of our knowledge, or un-
less he had a heart of stone, must have
felt remorse in 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 re-
newed interest in our relationship with
nonhuman animals. Many factors have
contributed to this concern. Environ-
mental and ecological awareness has
drawn public attention to the near exter-
nation of many species and the detri-
mental effects of pollution, pesticides,
and habitat destruction. The inefficiency
of transmitting vegetable protein to meat
has added to the traditional moral argu-
ments 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 pur-
porting to help understand human medi-
cal and behavioral problems. New evi-
dence of higher cognitive faculties in
some animals (including reason, lan-
guage, and emotional sensitivity have
resonated throughout the scientific and
lay press (e.g., Gallup 1977, Lawick

Ethological work on animal and human
behavior has thus eroded the key foun-
dation for the age-old rigid distinctions
between human and nonhuman (see Re-
gan and Singer 1976 for an excellent an-
thology). The "study of the animal
mind" is again fashionable (Burghardt
1978), as evidenced by the highly techni-
cal contributions constituting an entire
1978 issue of The Behavioral and Brain
Sciences (Vol. 1, no. 4). Philosophers,
theologians, scientists, and many organi-
zations are now grappling with the issues
involved in our treatment of animals
(e.g., Allen and Westbrook 1979, Curtis

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 bio-
medical, psychological, and animal be-
behavior communities. When Aronson's
work at the American Museum of Natu-
ral History on sexual behavior in cats
was under serious assault (Wade 1976),
differences within the scientific commu-
nity 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 au-
thorities earlier this year.

Similarly, Hutchinson's studies on
electric shock-induced aggression in an-
imals (including monkeys and people) led
to Senator Proxmire's ridicule and
"Golden Fleece" award, resulting in a
celebrated suit (Holden 1976) and Prox-
mire's eventual public apology. Al-
though the research community seems
pleased with the outcome, many animal
behavior researchers are clearly ambiva-
 lent about the scientific and ethical as-
pects of this kind of work. Indeed, Ul-
rich (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 formu-
late a thoughtful response, or it may lose
the respect of a new generation of stu-
dents, researchers, and policymakers
when it wins in the courts. Alienation
has begun: Already eminent researchers
have complained to us that students, par-
ticularly in Europe, are becoming "too
moral."

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University of Arizona. This article is a revised version of a paper entitled "Beyond Conspecifics: Ethology and Animal Rights," read at the June 1979 meeting of the Animal Behavior Society at Tulane University. The work was supported, in part, by NSF Research Grant
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These issues are integral to a larger movement, revisited by a conference held last year at Virginia Polytechnic Institute and State University on "The Moral Implications of Animal Ethics and Animals." The conference brochure featured a potential symposium between the National Academy of Sciences and the Society for the Study of Ethics and Animals and was published by the Ethics and Animals, edited by the Department of Philosophy and Religion in the University of Maine College of Arts and Sciences. The symposium is intended to be a Teaching and Learning Instrument for the Study of Animal Ethics. The symposium will be held this year at the University of Maine, College of Arts and Sciences, and will be attended by hundreds of students and faculty from the University of Maine and the University of Vermont. The symposium will be open to the public and will be held on the University of Maine campus.

Albright's report on animal research and other uses of nonhuman animals is extensively moribund, it is supported by scientific evidence. The reports by Albright et al. in 1986, 1988, and 1990 have received much attention in recent decades (e.g., Ross, 1990; and Burch, 1990). The reports have been widely cited, but they have not been widely accepted. However, the reports have been widely cited, but they have not been widely accepted. Albright's personal and professional work has been widely cited, but they have not been widely accepted. Albright's personal and professional work has been widely cited, but they have not been widely accepted.

Furthermore, although the question of animal rights and human obligations is discussed with emotion and sentiment, the major positions do not rest on either legislative or judicial arguments in the way they are presented. Any position that defends the status quo in agriculture and research has been slow to be appreciated (see, e.g., Curfus, 1978). Indeed, the question remains to be "lived" in a way that can be especially important in the United States. In sum, the goal of the "new animal protection movement's" legitimacy is not to change the development and acceptance of a consistent, logical, and scientifically acceptable ethical treatment of animals (see the recommendations in Albright, 1978, Vol. 30, no. 1, and Fox, 1978).

The meat industry's argument for hominization has been the greatest obstacle to the movement.反对者的主要论点是，动物福利的进展是不充分的，因为这些改变没有得到广泛的接受。换句话说，这个运动的目标是改变农业和科学研究中的现状，而这些观点没有被充分地接受。然而，这些观点没有被充分地接受。
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Considerations Entering Into Ethical Evaluation of Relations with Other Species

accept these spots if the animal is eaten (A-1); 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, stopping mosquitoes, pulling off ticks, or using a flea collar on a dog. The argument that poisoning control (as in strychnine baits) is bad only because it injures nontarget 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. "Biolog- ical" 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 involves 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 species as pets. For example, Japanese fishermen kill dolphins 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-9) 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 tech- niques makes most guilt and concern suppressed.

Domesticated animals used for re- search (A-9) 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 Aoron's use of cats (not rats) in his sex research at the American Museum. The beagle and cat furore show what research 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 protest- ing many traditional ways of using domestic food animals. Thus, domes- tication is far from a straightforward con- sideration and raises some of the most disturbing issues.

Anthropomorphism

Hunting, trapping, and fishing can in- troduce the factor.—discussed for years by moralists and philosophers—that is still the major preoccupation of current theoreticians and animal welfare activis- ts. Killing or otherwise using animals is often considered acceptable only if care is taken to reduce suffering (B-1). Some- times researchers are needlessly in- sensitive and cruel (see, e.g., Diner 1979, Roesch 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 notth- ing "higher" because he believes such animals feel pain, while oysters don't. The element of anthropomorphism is ob- vious; 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 ex- pressed in terms of the pain and suffering experienced by an animal is more accura- tely viewed in terms of its assault on the sensibilities of the human observer. Thus, "gurriers" (B-3) —applied bleed— as perceived by people is, in one view, a more relevant factor than "pain." Cer- tainly, a sports or medical research even short of vivisection make ample use of the often nauseating procedures em- ployed. Comparisons with Nazi pseudo- science carried out on concentration camp inmates are not uncommon (e.g., Hersch 1979). Similarly, Bokhoff (1976) points out the visual bias we employ in ethical responses to animal research. What if oysters had red blood?

The consideration of human sensi- bilities leads to the concern that are most important in our essentially gut-level evalua- tions of whether a given use of an animal is right, proper, and necessary. As with the acceptability of various food items, cultural factors often mediate eth- ical judgment, but we think some deeply

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ingrained biological difficulties are also operative. Phylogenetic and morphological similarities (B3-8 and B-4) are clearly important, as indicated by our interest in nonhuman primates. Many mammalogists view their clientele as behaviorally far closer to humans than to other nonhuman primates, 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 ethical conflicts. The American Primates Protection League (P.O. Drawer X, Summerville, S.C. 29483) has arisen to counter demands for medical and defense research establishments for more wild primates, and this newsletter has documented considerable opposition to laws and humane standards in the legislature. General means used by governmental agencies and established scientists to procure wild primates. Even behavioral workers have been caught in this conflict, for the ethics of primate research equate the protection of mentally disabled abnormal monkeys and, if so social deprivation, with actual physical and psychological intervention in medical laboratories. The concern for whites and poppies (cerebral similarity, B3-5) is obviously not based on a structural similarity to humans since they lack large brains in common. Yet popular sentiment and action clearly favors the Ceratina as deserving of better treatment than sharks, their structural analogues (e.g., "Slippery... Jaws", the catchphrase over whaling, and the dashed hopes for conversations with dolphins). Paradoxically, sharks have enormous brains compared to other fish. The behavior (B-7) of an animal also significantly affects human response to it. Consider small animals such as insects. Each day we may step on hundreds of ants or find many bugs languishing on our windshield. How many people feel sorry, remorse, or revulsion at killing these animals? How many compare with a writhing poisoned cockroach or feel that a serpent is being destroyed? If ants or bees were as big as dogs, we might react differently. In short, large or small, respect is more prevalent. The honey bee, however, has been shown to von Frisch (1946) as having "buzzing"--an entropy minimizing communication ability apparent uniquely in the animal kingdom outside of ourselves. Griffith (1990) has also argued the implication of such findings for our evaluation of animal mentality. But there is consider-

erable 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 concern to us because it is a major taxon that favors those that live a long time. Beautiful animals are valued over "ugly" ones (B-6), though beauty as an attribute of animals is not agreed upon by everyone. Apparently it is not just a matter of individual or even race (the "beauty in the eye of the beholder" view), since most people would probably rank a but
terfly above a cockroach.

However, anthropomorphism plays another role here since many baby ani-

mals, particularly mammals, have an ap-

peal separable from that based on aesthet-
icity (D-2). Newborn or juveniles animals frequently share features that are the concomitants of the almost universal "cuteness" response (B-6). Lorenz (1943) listed the facial characteristics that make baby animals irresistible to adults, such as overdeveloped snout, large eyes, high forehead, and rounded features. As these characteristics are also possessed by human babies, the re-

sponse is that of young of other species (and an
certain cartons, Gould 1979) is clearly one of generalization. Again, an emotional process is at work. A recurring example is the effectiveness of this factor in the outcome expressed in the baby 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 anthropomorphic notions of human behavior (B-9) equa-

tly color our judgments, often irre-

gularly, as with pigs, rats, vultures, hawks, and certain predators. Positive attitudes may be similarly misplaced.

Ecology

We assign to individuals of an endan-

gered species more intrinsic worth than common ones. Out (C) make a rational
case for this, but rarity is seldom suf-

ficient. Many endangered species enthu-

siasts were interested in, and were opposed to, saving the beautiful
taxa that news reports always characterize as the "Icky small summer". Dari (its small size and lack of recreational value outweigh its other qualities and value as a life form to many "dedicated con-

servativists"). On the other hand, rarity is a potent factor in discussions of what-

ing or capturing of wild chimpanzees for research (e.g., hepatitis vaccine produc-

tion, Wade 1978). But rarity and all other considerations become secondary when few other humans (e.g., chimps and hepatitis) or cultural survival (e.g., Eskimos and bowhead whales, Root 1970, Morgan 1979) are at stake. Even Schell (1974), a member of the Board of Trustees of the New Scientists Center for Action on Welfare, DC, 20775, Washington, DC 20097), feels that hu-

man should always take precedence when rare.

As a biologist, I believe that, where one may be sacrificed for the other, the animal has to go. Although man, too, is an animal, he is the only one for which important future evolution is open. He is the only one that can plan, and therefore the only one that can take action to preserve that richness. (Schell 1975, P. 217)

But with billions of people extirpate and their numbers increasing, the second half of Schell's statement means, in effect, that we cannot escape balancing the surv-

ival of wild chimpanzees. African ele-

phants, or West Indians against human numbers or human comfort. The relevance of the other two ecol-

ogical criteria, diversity (C-2) and ecol-

ogical balance (C-3), should be readily ap-

preciated, although they are seldom invoked by the general public.

Psychology

The closely related phenomena of hab-

itation, melancholy, and dementia are of great importance in setting val-

ues. Children raised on farms are generally far more accepting of the slaughter of animals for food than urban children. Many scientists who cringe at their first discovery or "sacrifice" of a lab animal but soon learned to be un-

sentimental are now criticized for being callous, insensitive, and imbued with their own self-importance.

Other psychological criteria seem to favor animals that are variable in their behavior (morphology B-2), or those that show greater plasticity and adaptability ("liftable"") (B-0). Anthropo-

morphic filters are involved here. Simi-

larly, religious reasons (D-2) often justify our treatment of nonhumans, both pro (Linen 1970) and con (Blegen and Singer 1976). A "call of the wild" (D-4) may also operate, especially among the middle-

class faced with a jaded, sterile, urban family have been countered by Root (1977) in an опопние that points out some of the paradoxes and anthropo-

morphisms involved. BioScience Vol 30 No. 11
A RESOLUTION POSSIBLE?

Several of the 26 considerations and their many manifestations are usually involved in the determination of the value and ethical status of 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, cockfighting often uses artificial guilts or steel to replace the natural spurs of their chickens; but Panamintans use the shell of the endangered bactus turtle (personal observation).

We suspect that currently it is impossible to derive from accepted theological, philosophical, or other conceivable sources 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 specific species. And in the specific ethical problems are qualitatively different. Those are too many complex 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., the use of cow's milk).

That there are serious difficulties in simple or sophisticated extensions of many ethical and scientific values to other animals is undeniable. The recognition that the natural and largely unnecessary misfortune of other animals is occurring worldwide and especially in modern technological societies. Constructive approaches are possible (e.g., Kigore 1970) 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 health, and environmental degradation that is "justified" by the benefits caused by high levels of air pollution, energy consumption, and so on, and then allocate the "democratic process" to determine acceptable usage. This culture-bound approach may be the only path to follow, and the extensive surveys by Kellor (1980) can lead the way. It may be necessary for many will find this proposed deterring. Are there, some may argue, "offical calculus" games that would have values determined by polls and computer simulations of costs and benefits absurd? Can we wean the pain suffered by a hooked fallible measure degrees of free?