A CRITICAL ANALYSIS OF THE GUIDE FOR THE CARE AND USE OF LABORATORY ANIMALS

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ABSTRACT

The Guide for the Care and Use of Laboratory Animals, prepared by the National Institutes of Health, provides an interpretation of the Animal Welfare Act. The Guide is the most stringent of the regulatory documents concerning animal welfare. Because the Guide provides the clearest and most humane guidelines and is willing to adopt changes to become a more efficient document, I believe that it has the most potential to incorporate within it the policies of humane stewardship. Animals and humans share many characteristics such as the abilities to perceive through the senses, and experience pain. In fact, as Kant suggested, animals and humans hold so many traits in common that one can transpose the way one treats one group to the way one treats the other. Kant wrote, "tender feelings towards dumb animals develop humane feelings towards mankind" (Regan and Singer 1976, 123). The "formal principle of justice" asserts that it is impermissible to treat those who are not different differently. Although humans differ from animals in some respects, as they generally possess characteristics that allow them to function as moral agents, humans do extend moral consideration to members of the human community that do not possess these distinguishing characteristics (such as infants and the comatose) as a result of the recognition of the similarities between these humans and ourselves. Though these humans lack the ability to act as moral agents, we (who can act as moral agents) still extend moral consideration to them. Since humans can also recognize that animals possess similar characteristics, it follows through the application of the formal principle of justice, that humans should provide moral consideration for animals based upon the degree of similarity between the species of animal and humans. I believe that this moral consideration should be manifested in the form of humane stewardship and not in the form of animal rights. I believe that one must be able to act as a moral agent to have rights and that non-humans currently cannot act as moral agents. The implementation of humane stewardship involves "respectful" treatment of animals. By respectful treatment, I mean that animals should be treated with care and that the lives of animals should not be taken or treated lightly. Animals should be used only to fulfill needs. Most researchers believe that no alternative exists for the use of animals in investigational purposes. As research is needed, it ought to be carried out in accordance with humane stewardship. The Guide does not attain adequate guidance compared to the standard of humane stewardship. To achieve the level of guidance necessary, the Guide would need to implement several kinds of changes. It needs to provide more effective enforcement and motivation for researchers to comply with its recommendations. Research should be conducted to determine the appropriate conditions for each species; the new findings should be incorporated in the Guide. Finally, as it depends extensively upon the moral beliefs and ethical integrity of the individual investigator, it should assimilate a stronger expression of concern for animals. As a result of such changes, compliance with the Guide will foster humane stewardship.

"The humanizing, the bringing into one harmonious and truly humane life...that is what interests me."

Matthew Arnold

INTRODUCTION

Researcher Michiko Okamoto of Cornell University had been performing medical experiments concerning barbiturate addiction in cats. From these experiments, which involved force-feeding the drugs to the cats, much useful knowledge about these drugs ensued (Okie 1988). For example, Okamoto gained information about the mechanisms of drug addiction and explained how even prescribed doses of drugs can be addictive and also how death from drugs can result even when the user has developed tolerance. This research was well received by other pharmacologists but condemned by animal rights groups. Pressure from one such animal rights group, Trans-Species Unlimited, forced Cornell University to cease supporting Okamoto's work. Recently, more and more incidents such as this one have occurred in Western Countries. Many Americans, for example, have evolved a concern for animal welfare and the moral status of animals. Some have become so deeply disturbed about the treatment animals receive that they have formed groups to protect animals and to prevent certain practices. According to some scholars, more has been written on animal welfare in the past 12 years than in the previous 3,000 (Newsweek 1988). Presently there are approximately 7,000 animal-protection groups in the United States who possess 10

million members and 50 million dollars in funds. It seems that an outcry has expanded and become a potent force (Albright 1986). Many people's conception of the nature of animal suffering and animal consciousness is growing and changing. Since so much interest has centered upon this subject, it seems as though these concerns would be accurately reflected in legislation. In fact, the United States government maintains that current legislation does protect animals and that proper treatment of animals is both encouraged and required. Nevertheless, I wish to examine government documents that deal with the care and enforcement of existing legislation. The Guide for the Care and Use of Laboratory Animals is the central regulatory document detailing responsibility in animal research. This document, intends to guarantee care for animals and thus satisfy concerns about animal welfare, but, in my opinion, it does not do so.

THE HISTORY AND SCOPE OF THE GUIDE FOR THE CARE AND USE OF LABORATORY ANIMALS

The Guide for the Care and Use of Laboratory Animals (The Guide) was prepared by the National Institutes of Health (NIH) Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Resources (ILAR), and was first published in 1963 as the Guide for Laboratory Animal Facilities and Care. This was written as a result of the NIH Intramural Animal Welfare Policy which developed in response to rising interest in laboratory animal

welfare. Another result of this policy was the development of the independent American Association for the Accreditation of Laboratory Animal Care (AAALAC) which was established in 1965 (National Institutes of Health 1987). A legislative basis for animal research policy was established with the passage of the Federal Animal Welfare Act of 1966 (McPherson 1984). In the 1970s and 1980s, NIH issued a policy on extramural research assurance for animal care and use, and this policy and all subsequent policies cite the NIH Guide and recommend AAALAC accreditation. Subsequently, animal rights activism increased, as did congressional and public interest in laboratory animals, causing major revisions in Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals during the period from 1983 to 1985. These revisions ask that the Institutional Animal Care and Use Committee (IACUC) be established to review animal care and use sections of PHS applications and proposals, that an assurance statement be filed and contain a more complete description of institutional animal care and use facilities and programs, and that category II (Non-AAALAC) institutions with deficiencies regarding the NIH Guide and PHS Policy requirements file specific plans and schedules for righting those deficiencies (National Institutes of Health 1987).

The NIH's publication, The Guide, evolved independently of regulatory action and was published originally to provide standards within the profession. It presents an interpretation by the NIH of the Animal Welfare Act and compliance with the Guide therefore allows an institution to conform to the provisions of the Animal

Welfare Act. This document has undergone many revisions since 1963; these occurred in 1965, in 1968, in 1972 when the title was changed to the current title, in 1978, and finally in 1985. It received the new, more encompassing title in 1972 to reflect the broadened field of its regulations. Recently an increased level of Congressional interest and public examination has developed with respect to issues involving laboratory animals. A series of committees at NIH have been established by James B. Wyngaarden, the director of NIH, to make recommendations for more effective reviews of animal care and use, for improved security, and for meeting accreditation standards within all NIH intramural animal facilities. These measures express the view of NIH that excellence in biomedical research is closely linked to the proper maintenance of laboratory animals (National Institutes of Health 1987, i).

In addition to the NIH, many scientific institutions and government policies routinely make use of the Guide as an important source of recommendations for animal care and use. Over 300,000 copies of the Guide had been distributed by 1985 and requests for copies continue to be heavy. The Guide has now been adopted by accreditation groups as an alternate plan of accreditation, and regulatory government requirements refer to the Guide asking for compliance with its recommendations. The Public Health Service (PHS) also requires compliance with the Guide for government funding (National Institutes of Health 1986). As the Guide is meant to be a living document, growing with the acquisition of new information relevant to the Guide's purposes, it is intended to be continually

modified in an attempt to keep up with these advances.

The purpose of the Guide "is to assist institutions in caring for and using laboratory animals in ways judged to be professionally and humanely appropriate" (Guide 1985, v). The Guide states that the advice provided within it has been derived from "published data, scientific principles, expert opinion and experience with methods and practices that have proven to be consistent with high quality humane animal use and care" (Guide 1985, v).

The scope of the Guide includes basic laboratory concerns for common laboratory animals; it does not provide an "exhaustive review" of all facets of animal care, and it admits that it omits many species of animals that are used less frequently in laboratory research and does not address the problem of endangered species used in research.

Enforcement of governmental policies and the attendant documents is problematic. For example, research practices are enforced by two separate agencies. The NIH demands compliance with its Guide, but this is attested only by written assurances from the reporting institutions, and these are not reviewed extensively. The United States Department of Agriculture makes veterinary inspections of animal facilities, noting violations, but does not provide any guide for researchers to follow. Both have different requirements and interpretations of the Animal Welfare Act. Enforcement by these agencies also differs; penalties for non-compliance may range from total withdrawal of funding to suspension of activities, or, simply, a citation requesting a correction of a deficiency. Researchers are

presented with much confusion. There are other restraints external to the institutions conducting research with respect to the care and use of laboratory animals; however, the Guide is the most stringent of the regulatory documents providing the clearest and most humane guidelines. In my opinion the Guide comes closest to providing the kind of care laboratory animals ought to have; thus, I believe that an examination of the nature and extent of the Guide will provide the most relevant information concerning the more recent conceptions of animals and how they should be treated. The Guide could become a document which demands humane stewardship and serve as a point of departure from which the regulatory problems could be resolved.

I wish to discuss what sort of entity an animal is and what sort of treatment such an entity deserves. I then wish to present a critical review of the Guide, outlining the conception of animals implicit in its regulations and language, and the problems/insufficiencies which exist in the Guide as a result of the differences between the Guide's conception of animals and the conception I have outlined. From these observations, I would like to suggest what changes could/would be made in the Guide were such a view of animals to be held by the creators of the Guide and mankind in general. (When I refer to animals, I am discussing animals covered in the Guide, vertebrates).

DETERMINATION OF A MORAL BASIS FOR ANIMAL RESEARCH

To determine the moral basis for the treatment of animals, I

wish to consider several questions: What natures do animals and humans have? What capacities do animals possess in relation to those of humans? Do humans have moral obligations to animals? Do animals have rights?

Animals and humans share many characteristics. The works of Charles Darwin have discredited the theories of discontinuity between humans and animals and recognized the concept of the human animal. Both humans and animals share the capacities to reproduce, to nourish themselves, to sleep, to move about, to perceive the world through the senses, and to experience pain. The list of similarities in physical capacities is extensive. Some animals may also share with humans the abilities to remember, to demonstrate linguistic ability, and to solve problems. There exist, however, several generally recognized qualitative differences between humans and animals. Humans possess rationality (the ability to reason which "involves being able to recognize that certain things support or necessitate certain other things" as in deductive reasoning, or to see how some things make other things more likely, as in inductive reasoning (Regan and Singer 1976, 5)), symbolic thought and language, self-consciousness (Young 1984), the ability to recognize a past, present, and future, and will (the ability to make goals and policies). These differences allow humans to act as moral agents, beings who can both possess and respect rights, and to recognize that they have rights. Though animals lack the necessary capacities to act as moral agents, this does not exclude them from moral consideration by other moral agents.

One must also contemplate the nature of human obligation to animals, or whether moral consideration for animals is justified. Here, I do not use the term 'obligation' as the reciprocal aspect of a right, as when one person has a right to something and against someone. That use of the term obligation implies that someone is obligated when and only when someone else has a right. In this determination of human obligations, I wish to employ the terms 'obligation' and 'duty' to mean actions which should be undertaken to the best of one's ability but not resulting from a rights requirement. Human obligations to animals could range from no obligations, to humane stewardship, to moral and or legal rights. From the capacities that animals can be seen to possess and other criteria I will enumerate, I wish to demonstrate that humans do possess obligations towards animals and that these are best manifested in the form of humane stewardship. Proof of this necessitates the description of animal capacities which prevent them from deserving moral rights, the presentation of an argument suggesting that they do not deserve moral rights, but instead deserve humane stewardship, and an outline of the responsibilities that would result from this stewardship. Should this stewardship be understood as the necessary and correct treatment of animals, I believe that it would necessitate certain changes in the Guide.

ANIMALS DESERVE MORAL CONSIDERATION

Kant suggested that humans have no duties to animals because animals have no self-consciousness (Regan and Singer 1976). He did

maintain that one should not treat animals cruelly as this might dispose one to be cruel to humans. Kant believed that actions towards animals support us in our duties towards human beings. "Tender feelings towards dumb animals develop humane feelings towards mankind" (Regan and Singer 1976, 123). Kant's observations lead one to a very important reflection. Why would actions towards animals inspire similar actions towards humans? If animals were devoid of any capacities deserving moral consideration, how could treatment of such beings affect treatment of beings that do deserve moral consideration? Crushing a rock does not inspire one to crush other humans, yet some would state that mistreatment of animals can lead to mistreatment of humans. Perhaps this is because "the essential or principal thing in the animals and man is the same" (U.S. Department of Health and Human Services 1984, 127). Humans and animals hold so many traits in common that one can easily recognize the similarities between the two, and can transpose ways one treats one group to the way one treats the other. Humans only differ significantly from animals in areas related to the intellect; humans can reason, will, and act as moral agents. Such characteristics allow humans to recognize capacities in other species and accord moral consideration to others. We recognize that animals can eat, reproduce, breathe, and suffer as we do, and this recognition provides the basis for humans to extend moral consideration to beings other than humans, who share some characteristics with humans or who possess equivalent characteristics.

THE FORMAL PRINCIPLE OF JUSTICE

The "formal principle of justice" asserts that it is impermissible to treat those who are not different differently (as if they were different) (U.S. Department of Health and Human Services 1984, 83). If certain capacities deserve certain consideration in some, similar capacities deserve similar consideration in others. This principle is no less applicable to animals than to humans. Whatever properties qualify humans for moral protection would, if possessed by animals, equally qualify them for protection (U.S. Department of Health and Human Services 1984, 83). Since humans extend moral consideration to members of the human community who do not possess rationality, will, or moral agency, (such as infants and the comatose), as a result of the recognition of similarities between these humans and themselves, and since humans can recognize that animals possess characteristics similar to those possessed by humans, through the application of the "formal principle of justice", it follows that humans should provide moral consideration for animals based upon the degree of similarity between the species of animal and humans. Once it has been determined that animals are beings that deserve moral consideration based upon capacities recognized by humans as similar to those capacities in humans which demand moral consideration, one must discern which capacities are necessary for moral consideration. Bentham stated "the question is not Can they reason? nor Can they

talk? but, Can they suffer?" (Rowan 1984, 286). Sentience, the ability to suffer, I believe to be an easily recognizable characteristic that humans and animals share. Humans can observe animals expressions of pain. Humans can relate to an animals pain in that humans can also perceive pain. Pain need not be exactly the same sensation to be recognized as pain. If pain were not similar between animals and humans, humans would have chosen a different word to describe such a sensation in an animal. As humans can so readily recognize pain and observe that it causes suffering, I believe that possession of sentience should be the baseline for beings which deserve moral consideration. It is self-evident that all sentient beings should have some level of moral consideration. After one has determined that an animal is sentient, the physical and mental capabilities of the animal should be regarded to determine how one should treat such an animal to avoid causing it to suffer or experience pain. One could recognize that as a human is uncomfortable in cramped quarters and needs to exercise or else suffer, so might an animal. Lastly, one should consider whether the animal is rational and capable of moral agency. If an animal possessed these capacities, as humans do, it ought to be treated as a moral agent and would deserve full moral consideration.

THE NATURE OF OUR MORAL OBLIGATION TO ANIMALS

Many animal welfare proponents have suggested that animals deserve moral and/or legal rights. I wish to argue that the moral

issues concerning our treatment of animals are not issues involving rights. An important distinction in my considerations is the difference between a moral agent and a moral patient. Much debate has revolved around these concepts. Some, such as Regan, believe that moral patients deserve rights (Regan 1983, 295). Others, such as McCloskey, suggest that "without a moral capacity, actuality, or potentiality, there can be no moral entitlement, no moral authority, no moral exercise or waiving of a moral right, and hence no moral rights possessed by mammals that lack moral autonomy, actually and potentially" (McCloskey 1987, 79).

An argument dealing with these topics which expresses many of my basic concepts has been developed by philosopher, Beth Singer. The rights she refers to are operative rights, rights that actively operate in social life. Singer states that if one has a right that is not operative, it ought to be operative. Operative rights should exist for every member of every community. A right becomes operative not when formally conferred, but when members of the community respect them. She asks "are animals the kinds of beings that can have rights?" (Singer 1986, 391) She suggests that questions regarding the qualifications necessary to have rights presuppose "a concept of the nature of rights and what is involved in having them" (Singer 1986, 392). She reexamines this concept within a theoretical framework which she derived largely from philosopher, George Herbert Mead.

Singer defines a right as a claim on the community. The definition a claim for something and against (or on) someone works

as well with her argument. The claim that is a right is an entitlement to act or be treated in a certain way or to possess some good. Some entitlements are not rights, merely deserts. The case of praise exemplifies this, as it may be warranted but not owed. If one has a right, respect for entitlement is owed to the one who has it and failure to respect it would be morally wrong.

Every entitlement that qualifies as a right has a "correlative obligation to respect it" (Singer 1986, 394). A right is only relevant in terms of the corresponding obligation. In other words, the right is a relation (a rights-relation) which Singer symbolizes as "eRo" (e=entitlement, R=right, o=obligation), and defines; "Where a right exists, where this relation is exemplified, there is a relation between a being (or beings) that is (are) entitled and beings that are obligated to respect the entitlement" (Singer 1986, 394). She suggests that we do not only "have" rights. We participate in them.

The important feature of this relation is its asymmetry. It involves two roles which can only be understood in relation to one another. Many who have argued for animal rights, such as Regan, believe that a being can fill the role of entitlement but not obligation. A being can be known as a "moral patient" and be owed rights while not owing others rights (Regan 1983, 154).

Ost discusses this view (as presented by Regan 1983) in detail. He maintains that moral patients cannot be accorded rights and provides an example of a man faced with a wolf attacking him. Ost shows that if one maintains that moral patients have rights, as a

right to life, the wolf is not obligated to save the man, but the man is obligated to protect the life of the wolf. The man must allow himself to be attacked by the wolf. Regan presents the "miniride principle" and the "worse-off principle" to deal with problems of this sort. These same principles also must be called into play when people are threatened by other people. The miniride principle basically allows that if one threatens the safety of many, the many should be protected. The worse-off principle demands that one consider who would be worse-off if he were killed (or injured). Who has the most to lose by death? According to Ost, using Regan's principles the human always has the most to lose when compared with an animal (Ost 1986, 369). The principle becomes even more problematic when one must employ it to decide between the lives of two humans. Ost uses the example of two men who are drowning; only one can be saved. One must choose to save the one who will be worse-off by his death. What criteria can one use here? intelligence, physical ability, age? These seem to be discriminatory. Ost states that all who have a right have it equally. One ought to choose who to save only by random choice (Ost 1986, 371-373). Thus, I believe that Regan's argument is not valid.

Philosophers do not hold animals as obligated to respect rights. Many, such as Ost and McCloskey, believe that one who cannot have obligations cannot have rights. A.I. Melden presents the idea that rights can only be held by members of the "moral community" (Singer 1986). This, a community of moral agents, consists of individuals who have the obligation to respect one anothers rights. Singer

suggests that we grant that moral agents "do respect one another, do have mutual rights and obligations, and that the existence of rights requires a framework of concepts in terms of which they are intelligible and the conditions under which entitlements can be exercised and fulfilled" (Singer 1986, 395). She further asks if it would be possible under these conditions for moral agents to grant others entitlements, and she answers that, according to Melden, the lives of moral agents are social, joined with those of others, and characterized by certain traits. By the nature of these traits we ascribe moral status to beings in moral communities. Currently, Melden believes that persons alone possess these traits, such as interests which are pursued to achieve goods for selves and others, the awareness of those interests, the recognition that other moral agents have lives similar to our own, concern for the well-being of others.

Although according to Melden's analysis, animals cannot be granted rights, it does not exclude animals from being granted some form of respect. Respect may arise, as Singer suggests, from the recognition that animals possess some of the characteristics present in a moral agent. It might also arise from the concept "subject-of-a-life" discussed by Peter Singer (Singer 1975). Beth Singer also concludes that animals cannot have rights since an intrinsic connection exists between being entitled and being obligated to respect these entitlements. She uses a variation of Mead's concepts, rather than Melden's, to express this. Mead proposes that the existence of rights is a social institution. From the analysis

of this, Singer demonstrates that to take the role of one who is entitled is also to take the role of one who is obligated to respect the entitlement (Singer 1986, 396).

Mead uses a game, such as checkers, as a model of a rights relationship. In such a game each player has the same set of rules, the same choices, the same goals. In other words, each has the same role. Each move the players make according to the rules has the same meaning and thus becomes a "significant symbol". In social interaction examples of such symbols are linguistic symbols and non-linguistic symbols (such as gestures). When individuals involved in a game internalize the rules as a set of norms, these norms become a common attitude. Each player who possesses this generalized attitude can place himself in the position of the other. Having the generalized attitude allows each player to take the attitude appropriate to each role. To play the game each must be able to take the attitude appropriate for any of the roles in the game. Mead holds that "the players of a game constitute a community" (Singer 1986, 400). In the actual human role, Singer allows that some individuals may exist who have not fully assimilated the attitude of the generalized other. This may weaken the constructs and bonds of the community. Wherever a community exists, however, there is a community of attitude which where it prevails, "serves to govern the conjoint activities of its members, whose participation in any of the activities is hampered if they cannot adopt the attitude of the community" (Singer 1986, 401). Though all may not possess all the attitudes of the community, as

they enter into the activities of a normative community and engage in behavior covered by the norms, they thereby are bound to those attitudes and have an obligation to act according to the appropriate attitude.

According to Singer's view, the rights-relation is a social institution and is obtained only by virtue of belonging to a normative community. One can have rights only in relation with others who respect rights. Thus, anyone who had the capability to participate in both aspects of a rights-relation, entitlement and obligation, could enter into a rights-relation, and be a part of a community where rights are respected. This position allows that one possesses rights when one interacts in rights-relations in a community where others can do the same (Singer 1986, 400).

Singer also addresses the question concerning beings who do not belong to or participate in such a community. She suggests that the community could have norms of behavior that were not mutually reciprocated, such as acknowledged obligation to protect the helpless, or moral principles governing behavior toward non-members of the community, even toward non-human beings. A norm could even be established to treat certain non-humans as if they had certain rights entitlements. In this, however, a true rights-relation does not exist. All members of a community could take on this attitude, to grant these beings entitlements to be treated in a certain way, but as they do not share the perspective in which the entitlement is given, and thus do not respect the entitlement, they would have a benefit, not a right.(Singer 1986, 401)

Apparently, if one accepts these views, presented differently by B. Singer, Ost, McCloskey, and others, that moral patients cannot be holders of rights, one must return to the concept of humane stewardship and determine what specific benefits ought to be accorded to different kinds of animals. What needs must humans use animals to fulfill? How ought these needs be fulfilled by animals? How does this relate to animals in research and the contents of the Guide?

HUMANE STEWARDSHIP

What constitutes the essence and the practice of humane stewardship? Animals, including humans, are a part of a fragile world that depends on intricacies of balance to maintain itself. Although all animals appear to have some indispensable or at least unique role on this planet, not only is animal life necessary to maintain the balance, but it also deserves moral consideration. Humans possess the ability to recognize the capacities and qualities of the other components of the world, and are capable of according different considerations to these components. I believe that all life existing naturally deserves some respect as a result of its role in this balance. How one treats each component should relate to the levels of consciousness and sentience, but each component should be granted respect. I use the term respect to characterize the kind of treatment that results from care for and consideration of an animal (a living being). As some animals can be observed to

share characteristics with humans which are recognized by humans to be characteristics that inspire moral consideration, the lives of animals should not be taken lightly or treated lightly. Each aspect in our lives in which we take a living thing and use it, deserves careful thought. Animals should never be hurt or caused to suffer or killed without a respectful purpose. For example, they should not be killed solely for pleasure or sport. The animal must only be used to fulfill a need. If fulfilling a need coincides with other benefits, respect for the animal may be upheld. An animal ought not be used for luxuries alone. If a luxury results from an animal that has been used for a necessity, as an animal that has been used for food but provides oils for cosmetics, then the luxuries may result from respectful treatment of the animal.

If an animal is to be used, and presently the use of some animals seems unavoidable as we exist in the world with needs that must be fulfilled, it must be used in a manner as respectful as possible. The use must stem from necessity and be justifiable. The use must not involve any unnecessary pain in the animal. Anesthesia must be given if pain is caused. Extremely valid and substantive reasons must exist for the causing of pain in an animal and these reasons must be reviewed thoroughly. The decision to allow such a use must be determined by individuals other than those that determined that the infliction of pain was necessary. If killed, animals should not be left for waste, but used to fulfill as many needs as possible, thus reducing the number of animals being used and providing the most from one animal. Animals should not be

regarded as objects to be manipulated, but as other living beings. As much as possible, this respect for other beings should extend to letting as many animals as possible live as natural a life as possible. If animals must be excluded from these considerations in order to be used, their lives should be made as comfortable as possible. They should be recognized as providing for our needs, not casually consumed.

The main action that must be taken to develop awareness of the importance of animals and a broad respect for life is education. Programs should be initiated to elucidate the moral status of animals and the necessity for respect. Learning about the consideration for other beings could be incorporated into almost any course in any level of schooling. Animal welfare groups and other members of the public are aware in varying degrees that animals are being mistreated, but they do not always consider why they resent animal mistreatment. Many do not take any steps to act upon this resentment. As Regan mentions,

> the remains of animals are very much a part of our day-to-day life. Their pelts and skins are used in our dress in such articles as shoes, belts, vests, gloves, skirts, and watchbands; in sporting goods such as baseballs, footballs, and gloves of "genuine cowhide"; in home furnishings like rugs, chairs, sofas, and hassocks; in the chamois cloth used for polishing,, and in countless other items. Animal waste products are also used extensively. The feces of chickens, cows and other animals go into fertilizers, while animal urine finds its way into perfumes and body lotions. Even animal fats make contact with us; these are used in soap, lipstick, and chewing gum, to mention just a few of their many uses (Regan 1983, 1).

"The use of animal remains in these and other ways is so routine that few people are concerned or even think about it at all. Many

are unaware of the widespread use of animal remains...lack of knowledge or concern also characterizes our most intimate contact with animals-namely our eating of them" (Regan 1983, 1). Were more awareness generated concerning these uses of animals more steps would likely be taken to respect animals.

To maintain respectful treatment of animals, humans ought only to use animals to fulfill needs. Are animals needed in research? Most researchers believe that at present, no alternative to the use of animals for some investigational purposes exists (Orlans 1987, 8). There are areas in which animals can be replaced by other biological and mathematical systems, but these have limited applicability. In the past, many "advances" in health care have stemmed in whole or part from animal experimentation. Immunology in particular exemplifies this. Dependence on animals for the study of affliction of disease and the production of viral vaccines has produced control and in some cases eradication of disease, such as smallpox, measles, mumps, and polio (Newsweek 1988, 59). Animal models also play an important role in the study of animal health problems.(Newsweek 1988, 57) Raub, a research physician, has emphasized the need to study and use animals in research because of "the extraordinary complexity of living systems and our woefully incomplete understanding of them" (Orlans 1987, 10). He believes, however, that the social imperative for research involving animals does not provide a license to take animal lives or cause pain or suffering needlessly (Orlans 1987, 10).

ANALYSIS OF THE GUIDE

The Guide, although it has the opportunity to provide excellent instruction in many areas, does not attain an optimal level of guidance or even a level which we would consider adequate when compared to the standard of humane stewardship I have established. The growing numbers of groups concerned with animal welfare, increasing attention by the media and government activity all suggest that significant numbers of organizations and individuals have come to similar conclusions. I believe that the Guide falls short of its objectives for several reasons. The Guide does not document many of its recommendations with sufficient experimental data and does not focus on the care of animals but rather on the use of animals. Concerning the areas in which it might provide guidance, the Guide does not provide an enforcement mechanism to ensure compliance with its recommendations. In what it omits, the Guide also indicates that certain aspects of animal care were not determined to be important enough to be included in the Guide. Finally, the Guide relies most heavily on the sincere intentions and integrity of the experimenter to carry out its proposed recommendations. The Guide does not take into account the problem of varying moral beliefs and levels of compliance among members of the scientific community and the community at large. Individual experimenters, even those who believe that they have the best interests of animals at heart, may treat animals in a fashion which may be seen as mistreatment in the eyes of a layperson or the

government agencies since these groups may not have the same conception of animals as others have, or the creators of the Guide possess, or as those to whom the creators of the Guide directed their recommendations. Although it is not possible to accommodate all views in one document, the regulations of the document should consistently adhere to one view, and should ensure that its interpretation and enforcement are effective regardless of the differing attitudes of the individuals whose activities are regulated by the document.

To evaluate the areas where the Guide does is not instructive, I will begin by examining the general criticisms of the Guide by members of the scientific community and by interested citizens, and then I will discuss more specific examples of deficiencies, some of which have a qualitatively different nature than those stated previously.

PROBLEMS WITH ENFORCEMENT AND REGULATION

Examples of observed violations resulting from problems in the enforcement of the requirements in the Guide and of omissions of regulations that should be included in the Guide, allow a preliminary insight into the narrow scope of protection that the Guide actually provides. The Society for Animal Protection Legislation estimates optimistically, based upon the violations recorded by United States Department of Agriculture (USDA) inspectors, that only 24.2% of registered research facilities are regularly meeting the existing minimum standards of the Animal

Welfare Act. 23.7% of these research facilities have incurred major and repeated violations of the minimum standards of the Animal Welfare Act (U.S. Congress 1984, 211). 22% of these facilities have incurred less frequent major violations, and 28.5 have only minor violations, while 1.6% research facilities are still under inspection. Those reported to be abiding by minimum standards cannot be assumed to be in regular compliance with the law because USDA inspectors have been known to overlook serious violations in the past. Because of this, many have recommended unannounced inspections be increased to two to three times a year by the USDA to decrease lapses in the implementation of the Guide (U.S. Congress 1984, 211). The USDA, as does the Guide, bases its recommendations on the Animal Welfare Act. Although the USDA does not draw its enforcement regulations from the Guide, violations of the USDA's standards are often violations of the Guide, and one can gain an awareness of the level of non-compliance with the Guide from the violations recorded by the USDA.

Because many AAALAC accreditated facilities have major deficiencies, the NIH position that accreditation alone guarantees good animal care and treatment proves to be untenable (U.S. Congress 1984, 211). Charts indicate that both the level of NIH funding in two consecutive years and the numbers of dogs, cats, primates, hamsters, and guinea pigs used in those two years are higher in 40.9% of the 44 institutions in the second year, demonstrating that the often repeated statement that the use of animals is spontaneously decreasing is not accurate. 79% of these severely

deficient institutions were rewarded by an increase in NIH funds in the second year noted, and 25% got more money and used more animals despite inferior records with the USDA.(U.S. Congress 1984, 211)In terms of enforcement of the Guide, the fact that USDA inspectors have overlooked serious violations in the past (U.S. Congress 1984, 211) may have continuing detrimental effects. (Violations such as the failure to administer anesthesia during surgery are regarded as serious, whereas violations such as failing to keep an animal purchase receipt [an error of a more clerical nature] are regarded as minor violations.) It appears, however, that the government does not enforce its own provisions consistently. If they do not enforce these provisions consistently these provisions will have little impact upon the practices of the researchers who will learn not to take them seriously. Less reflection upon the nature of the experiments they perform will be stimulated as a consequence.

In terms of more specific examples of deficiencies in the Guide resulting from non-compliance with its own guidelines, many groups have expressed disappointment with the Guide, and they have provided specific examples of negligence that they believe ought to be prevented by the Guide. One such society, the Society for Animal Protective Legislation (SAPL), demonstrates through videotape and narrative that several points, which are not provided for or are not enforced currently (1984) by the USDA inspectors or the NIH, should be amended. If specific problems are addressed in the Guide but still persist in practice, then perhaps there is too much leniency in the enforcement procedures or too little understanding of the

purpose, procedures, and need of the Guide. SAPL has provided specific examples to illustrate this point. In one case, for example, a pup had been kept in a whelping box which he gnawed exposing a piece of loose wire which could cause injury. The whelping box was never repaired. Daily inspection of cage conditions are required and should be enforced. In another case, a dog following surgery had bitten off his bandage and bitten his skin, injuring it. A stringent requirement for post-operative care is obviously needed. Another dog suffered pain and heavy bleeding following surgery, while the necessary analgesics were not administered. SAPL argues that it should be required that either pain-relieving drugs or euthanasia be supplied to all suffering animals and that instruction should be required for the humane practice of animal maintenance. (U.S. Congress 1984, 211-3)

PROBLEMS WITHIN THE TEXT OF THE GUIDE

Apart from these criticisms of the animal protection mechanism and criticisms voiced by other agencies and groups, I would like to point out several further problems that need to be rectified in order that the Guide be as effective a document as possible in promoting humane stewardship.

The Guide opens by stating that the "ability of biomedical scientists to enhance the well-being of humans and animals depends directly on advancements made possible by research, much of which requires the use of experimental animals" (Guide 1985, 1) This statement contains many vague terms, which I wish to examine in

detail. "Well-being", for example, is synonymous with "welfare", which means a satisfactory state, health and prosperity. The exact nature of a satisfactory state remains unclear and difficult to define. In the Guide, the use of animals to enhance the well-being of humans seems to be qualitatively different from the use of animals to promote the well-being of animals. If the goal of research is to enhance such well-being and all research is assumed to be done only to enhance this well-being and for no other reason, then this difference belies a conception of inequality between humans and animals inherent in the Guide. Animals are used in research to test the toxicity of drugs and other products, to test the safety of cosmetics and beauty products, and these exercises apparently enhance the well-being of humans. Animals are also used to develop new medical techniques and gain medical information, which could be beneficial to both humans and animals. The information gained in these animal models, however, seems generally to be most applicable to the species involved in the testing, and only secondarily and partially applicable to humans. Further, the degree of applicability varies according to the similarities of the biological mechanisms of experimental animals and those of humans (Kuker-Reines 1984, 39). Despite this problem, the knowledge gained is generally applied to humans without concern. It appears that practically all the testing performed is designed and implemented specifically to advance the well-being of humans although benefits to animals may be a secondary by-product. Benefits to animals may be defined, however, in terms of how the animals can be nurtured to

render them more useful to humans. Although "well-being" must necessarily be achieved in different ways for different species depending upon their capacities and characteristics, should the term "well-being" possess different denotations and connotations when applied to animals and humans? Does a human's well-being include amenities as well as necessities whereas an animals well-being only includes those necessities relevant to its usefulness to humans? Should animals be destroyed or made to suffer to secure amenities for humans? According to my concept of humane stewardship, this inequality does not constitute respectful treatment of an animal.

The Guide states that it is "envisioned that it will encourage scientists to seek improved methods of laboratory animal care and use"(Guide 1985, 2). This vision, although a pretty one, seems unlikely to result from the current prescription of the Guide. Although the Guide has corrected many of its problems (such as the lack of requirements for veterinary consultation when conducting major operations, and for anesthesia during painful surgery) by providing such requirements, and it has become more stringent, but many weaknesses still exist. The Guide itself mentions that professional judgment is essential in the application of its guidelines. The judgment of what constitutes proper treatment of an animal differs widely among scientific researchers. The difference in judgment is especially evident among generations. Different age groups, educated and trained in different time periods, demonstrate dissimilar views concerning animals. Thus, researchers do not interpret the Guide in a similar manner. A

crucial problem arises here: the Guide both wishes to inspire these improved scientific judgments and methods, while at the same time requiring preexisting scientific judgment and methods for its proper interpretation. Neither can be realized without an awakening within the scientific community, within the entire scientific community, in terms of proper treatment of animals. This sort of awakening cannot result merely from quantitative changes -changes in the amounts of restrictions and recommendations presented to the scientific community- but will require qualitative changes -changes in the manner in which the Guide presents its recommendations. Requisite attendance of seminars which discuss the importance of proper animals care might contribute to this qualitative change.

The Guide consistently recommends adequate care, proper training, and avoidance of excessive pain, but it does not provide criteria by which to score efforts in these areas (determine what these terms mean). It asks, for example, that research be accomplished in a humane and scientific manner. But what sort of manner is this? Within the community of scientists performing research, a wide spectrum of individuals exist. It is plausible to assume that within this diverse group, composed of many not broadly exposed to the animal welfare and animal rights movements or their concepts, there are quite different interpretations of those terms. As I have explained above, different interpretations exist both within the scientific community and among this and other communities.

The Guide states that it is an institutional obligation to

ensure that professional and technical personnel who perform animal anesthesia and surgery be qualified through training or experience. It seems that this would allow one to develop skills through procedures performed without previous training. It implies the possibility of gaining knowledge required to perform such procedures as one is performing the procedures. I believe that the performers of such procedures should be formally trained beforehand. Animals should not be used for practice. Researchers should be trained in the procedure before they attempt the procedure. If a person can be considered to have been already "trained" as a result of his experience prior to the publication of this guide; then, after passing an evaluation by a trained individual, he may be considered trained. One who presently is not trained and does not have the experience should not be permitted to perform the procedures. Training should be both required and provided for such procedures.

The Guide discusses many practices involved in research without critically evaluating their use. Although the Guide may hope that such usages are being considered by committees and individuals performing the research, it does not express many reservations about certain practices. One such practice is the use of restraining devices. These devices are used to hold animals in a specific position so that they cannot move while they are being subjected to different procedures. The Guide begins by discussing how restraint can be accomplished, though later it suggests that the device be suitable in size and design for the animal restrained. It also asks that the device be used so as to minimize stress and injury to the

animal and that one avoid prolonged restraint. It does not discuss what is meant by "prolonged" or "suitable". The mention of these considerations is appropriate in that restraint devices are believed to cause stress, and in some cases suffering and injury, especially when such devices are used for long periods of time. In fact, the language of the Guide indicates that it is not possible to employ such a device without stress or injury. It seems that the expression of more reservations might cause the individual to question the need for this type of restraint. The Guide often appears, as in this case, not to question the need for certain practices, nor to discuss the nature of these practices and options, but rather to assume that these practices will be used and then suggest how best to implement such practices. Although it may be true that such practices are necessary, the frequency of use of these methods might be reduced were people to consider what is entailed by such practices and what alternatives exist.

The Guide suggests that exercise areas be "considered for animals that will be held for long periods" (Guide 1985, 12). For many animals, sufficient exercise may be available within the housing standards provided; however, for many others, especially dogs, exercise seems vital to the maintenance of their well-being. For animals in which exercise is recognized to be important on a regular basis, exercise allotments should be required. For others for which the benefit of exercise is unknown, research should be performed to determine what most benefits the animal. I do not mean that the animal necessarily benefit such that it develop into an

extraordinary specimen of its kind, one that would not be representative of the species. I suggest instead that the animal be maintained so that it does not suffer, become listless, or fail to flourish. For an experiment to be valid animals ought to be healthy and well-maintained or uncontrolled variables are introduced by the differences in the animals' physiology. The findings derived from research conducted to determine how to best maintain the different species should be incorporated into the Guide.

The Guide itself admits to many deficiencies in its information concerning animal use and care. It states "there are few critical and objective data on space requirements for animals" (Guide 1985, 13). The caging systems are based on successful experience. Here again, professional judgment must be utilized. It lists the minimum spaces recommended, but not required, according to the best available information. It also mentions that there is no unequivocal data relating the quality or quantity of an animal's activity to its physical or psychological well-being. Exercise is encouraged, not required. This imprecision and uncertainty continues. The Guide states that "precise lighting requirements for the maintenance of good health and psychological stability of animals are not known" (Guide 1985, 20). Admission of these deficiencies is important, but correction of them is more important. Currently, how can someone, even one with good intentions, provide the kind of care an animal ought to have?

The Guide does not consider certain methods or that would benefit animals in decreasing animal suffering and decreasing the

number of experiments using animals. It does not provide that euthanasia must be given to suffering animals. Situations where such a procedure might relieve suffering are not discussed. The Guide merely lists possible ways by which one can accomplish such an procedure. Such vague suggestions indicate that the Guide has perhaps not recognized the importance of considering which procedures are necessary. It also does not comprehend that it has circular expectations. The Guide depends upon the experimenter to interpret the guidelines according to his or her understanding, while it simultaneously expects to shape his or her understanding. Although to some extent policies and laws may guide us and shape us, the shaping and guiding should not be prerequisite to the interpretation of such documents. The Guide also does not require that a veterinarian be consulted in experiments which cause pain (Guide 1985, 37). Past experiments should not be repeated by mistake- an idea which is not addressed, but which alone could significantly reduce the numbers of animals used in experimentation. These observations suggest that the Guide considers only a few facets of the larger spectrum of possibilities concerning advancements in animal welfare. Alternatives to the use of laboratory animals in research should be developed, as the Guide admits, yet it does not address the need to develop techniques to reduce suffering or the use of statistical methods to limit the number of animals used to those genuinely necessary to establish a sound scientific result.

After such a close analysis of the Guide, one can recognize that

a key weakness exists in the constructs of the Guide. Its title states that animals are being "used". Its guidelines concentrate on the care and use of animals. It concentrates heavily upon the care needed for animals being used and how best to use animals. Both topics need to be clarified but perhaps more emphasis ought to be placed upon the care of animals. The concept of use is not discussed or qualified. It assumes the need for use, and, although it does make brief mention as to why the animals must be used, it does not mention how they are to be used. By this I do not mean the specifications of cage sizes or other such requirements, but the character of the use. In what manner will these animals be used? What sort of an entity is an animal? What sort of treatment does an animal deserve? With little concentration on these considerations and little experimental data regarding the actual physical and mental needs of an animal, the Guide makes many recommendations.

Perhaps because it fails to recognize its deficiency in analyzing the very entity which it wishes to protect, the Guide is very general; in fact it must be very general. Without a definite understanding of what it wishes to accomplish, it cannot be as effective. It only understands that it wishes to protect animals in some way, to care for them. It does not require much, but recommends much, although it states that steps have been taken to promote compliance with the recommendations, such as asking that institutions now comply with the attitude promoted by the guide. The Guide makes many recommendations concerning projects involving

pain, but it does not present an empirical basis for pain, or even a usable understanding of pain, allowing for abuse depending upon who is evaluating the animal's pain. This, as most of the recommendations in the Guide, places practically complete judgment concerning the animals' welfare in the hands of each individual experimenter. As I have disclosed, it also does not have enough experimental data concerning space allotments, exercise allotments, or basically any of the most fundamental requirements needed to insure humane treatment of animals. The data is lacking for each species as to what conditions would be optimal for the well-being of an individual of the species. If animals deserve some sort of consideration and their welfare is an issue, then too much variance exists in the interpretations possible from the guidelines presented. Ultimately, the moral status of animals must be evaluated and respected by the Guide. If, as I have suggested, the concept of humane stewardship is adopted, the deficiencies I have recognized in the Guide are obvious. This adoption would make it imperative to bring about changes in the Guide and to implement programs to enlighten or reinforce experimenters beliefs about animals and how they should be regarded.

APPLICATION OF HUMANE STEWARDSHIP

Of the animals covered in the Guide, I believe that each should be accorded respect. This entails treating the animals in certain ways based upon the extent of their mental and physical capacities.

I wish to demonstrate how one might determine what sort of treatment is necessitated by outlining two specific examples of laboratory animals and their abilities, and a more detailed evaluation what constitutes respectful treatment of them beyond the basic forms of respect I have outlined in my previous analysis. Monkeys, apes, and man belong to the suborder Simiae. The non-human species of this suborder possess many characteristics in common with man. The simians have a more or less naked face, with musculature in conjunction with facial expressions that is highly developed, although not as closely associated with nerves as in humans. Their hands and feet are capable of grasping as a result of the opposable thumb and first toe. They have true sweat glands. Their eyes are directed forward allowing them binocular vision. As in man, vision holds primary importance, and their eyes are essentially the same as man's. Tending towards a bipedal stance, they can free their hands for different tasks. They possess recognizable fingerprints, the ridges of which contribute to an advanced tactile sense. A well developed larynx associated with vocal chords allows production of a wide range of vocalizations. They can run, climb (structures for climbing are important), and brachiate. They have a spacious skull and a great range of brain formations of which the surface area is increased by folding. In the brain, association centers serve their learning and memory abilities. Compared to other orders of mammals, the brain is much larger, and the cerebellum is increased in complexity. They interact in socially complex fashions. It has been observed that monkeys prefer visual barriers to provide

"escape" possibilities, which lessens dominance fights. Chimpanzees have been observed to use tools. One example is their practice of taking sticks and picking off the leaves so that they may be prodded into insect homes to gather insects. If a stick becomes damaged, they "fix" it by breaking off the end. They may prepare these sticks in advance. They can pass traditions such as this on to other members of their groups and cooperate (Grzimek's Animal Life Encyclopedia 1972, 312-371).

Simians represent animals closely related to man. Chromosome content differs by only a small percentage (<3%) (Fox 1986). Animals with such high mental and physical capabilities should be provided with an appropriate atmosphere. Their physical needs should be satisfied, but as these are satisfied, their mental capacities should be considered. Cages should of course be equipped with enough space to run, brachiate, climb, and interact socially, but shall also be equipped with "interesting" diversions, such as visual blockades, food puzzles (as when food is placed in positions where the simians can find and reach it, but with some mental effort), or other mental stimulation. Simians have sufficiently complex brains that in stimuli-poor situations, or without social interaction, they can become withdrawn, listless, or abnormal (Holden 1988). Simians definitely should have enough space to exercise and perhaps should be frequently allowed to roam in a larger exercise cage to provide a change of scenery. Variety might play a key role in terms of the stimuli needed to maintain the well-being of a primate. Simians also can often recognize an instrument

or area that they associate with pain. If simians are involved in painful experiments, they should not be exposed to the instruments of pain while conscious. Response to primates' expressions and reactions may aid in obtaining respectful treatment of primates. As simians are considerably more conscious than other mammals, that is more aware of themselves, their actions, and the effect of their actions, they should be treated more carefully.

Considered to be primitive mammals, rodents generally possess a cylindrical body with short legs, the hind longer than the front. Their toes are clawed. They possess sebaceous glands and oil sacs. Whether herbivores or omnivores, rodents have a characteristic dentition, including continuous growth of rootless incisors. Their larynx is not associated with vocal chords, though they may squeal or chatter their teeth. Their eyes are at the sides of their head, which contains a simple brain with smooth surfaces, though some possess learning capabilities such as the ability to run a maze. Many are actively social, as the rats, which live in packs. Rats are also quite active, able to jump, run, climb, swim, dig, hold food, and build nests. Population density has a significant effect on rodent populations. If conditions are too crowded, changes occur in territoriality, and winter mortality rises; damage to hormonal adaptation mechanisms results (Grzimak's Animal Life Encyclopedia 1972, 191-196).

Rodents, which represent the most widely used laboratory animal, do not require as much mental stimulation as simians. Social interaction does not seem to be necessary, except perhaps for rats.

Population density should be monitored in laboratory situations to assure that overcrowding does not occur. Enough space should be provided for the rodents to perform any activity typically performed with ease. The inclusion of an exercise wheel might supply opportunity for exercise. Further observations should be undertaken to determine more closely what constitutes respectful treatment of a rodent; however, such treatment would not approach the complexity involved in the respectful treatment of a simian.

CONCLUSION

As animal research is currently necessary to fulfill some human needs, and it constitutes the use of an animal, I believe that it ought to be conducted with respect toward life. According to my criticism, the Guide does not provide sufficient guidelines for the care or the use of animals. As this document could and should reflect the recognition that animals deserve moral consideration, which has made us aware of the need to respect animals and concern ourselves with their well-being, changes in its structure and specifications to accomplish this ought to be incorporated in it. The Guide does provide some protection for animals and professes that it intends to change as new information is discovered. Thus it should not be discarded but amended. To remedy the problems of commission in the Guide, such as physical requirements for which there is insufficient data, research should be conducted to determine appropriate conditions for each species. As the new data

is acquired, it should be incorporated into the Guide. The solution of the deficiencies caused by omission, such as the lack of an exercise requirement, lies in the determination of what ought to be included in the Guide as a result of the developing understanding of what sort of an entity an animal is and the realization that they deserve humane stewardship. Respect must be emphasized in conjunction with any use and in consideration of any use of an animal. Lastly, the inherent problem in the Guide resulting from its circular desire both to provide the investigator with a new attitude towards the treatment of animals and to be interpreted according to this new attitude that it must first provide, must be resolved. The Guide relies heavily upon the moral beliefs and ethical integrity of the individual investigator. It demands personal interpretation in many areas in which animal welfare is at stake. I believe that the assimilation in the Guide of a stronger expression of concern for animals, an imperative to examine each aspect of the research undertaken, accompanied by educational requirements for both the physical procedures and the study of animal welfare, could bring about the resolution of this complex problem.

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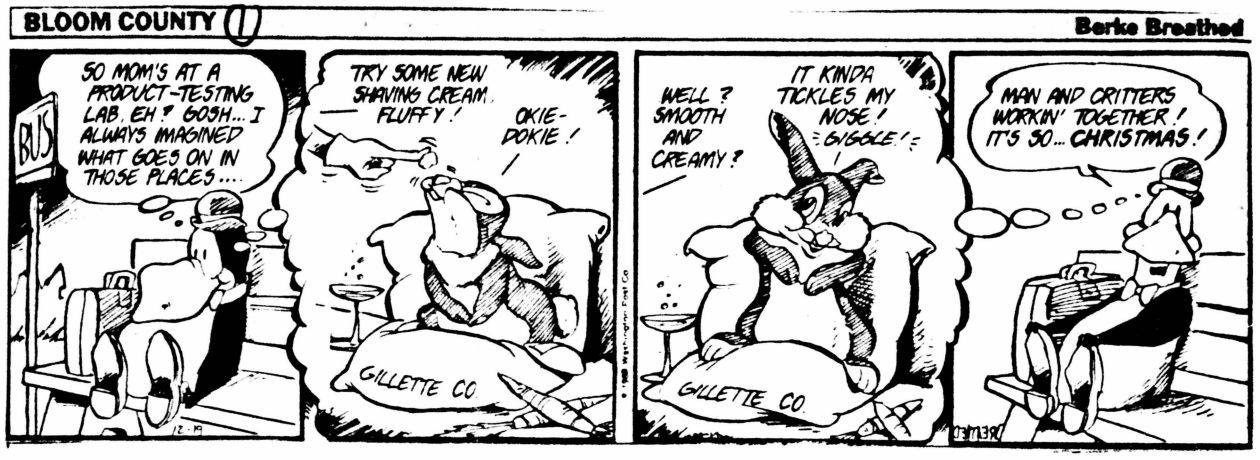
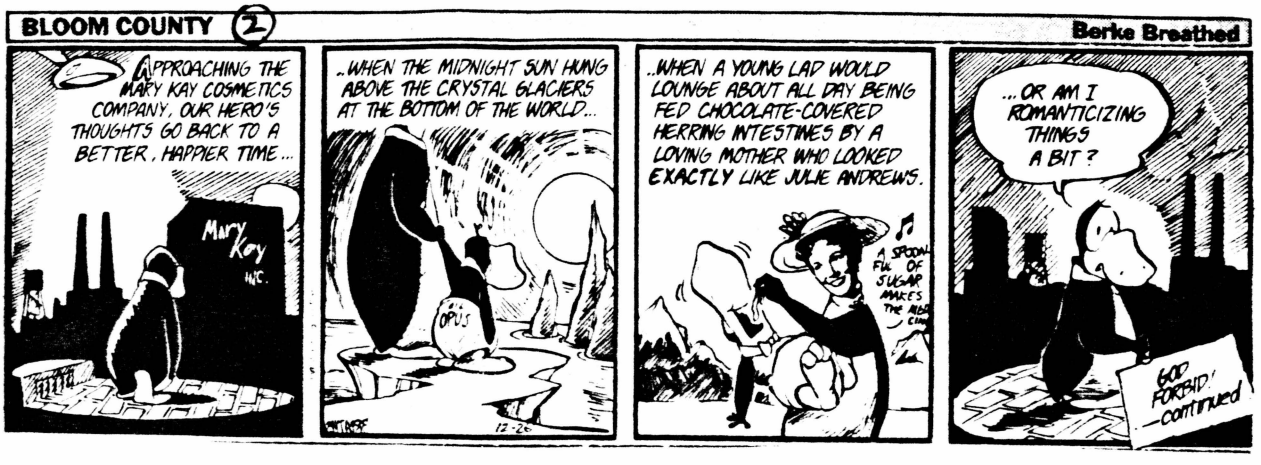
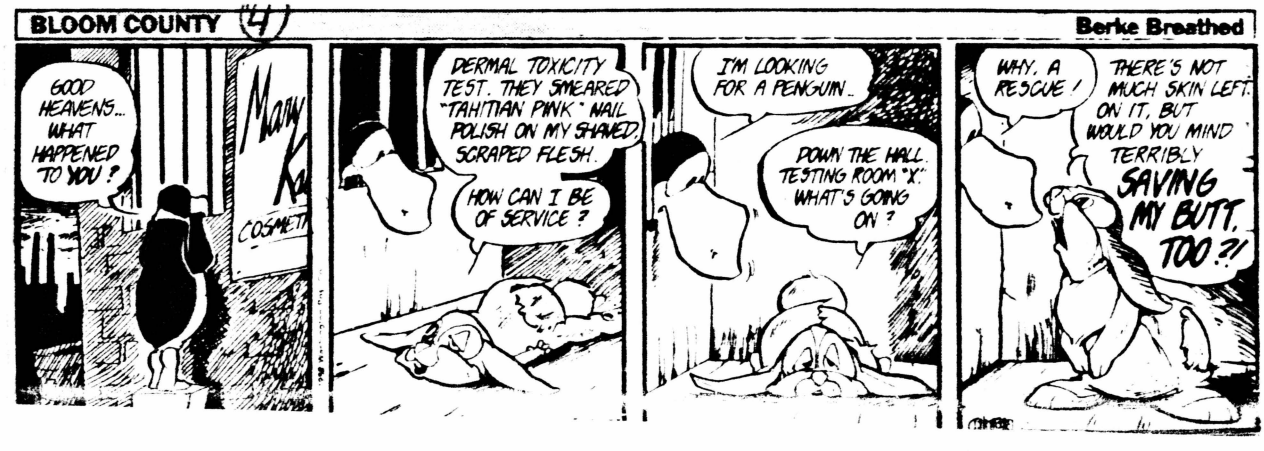
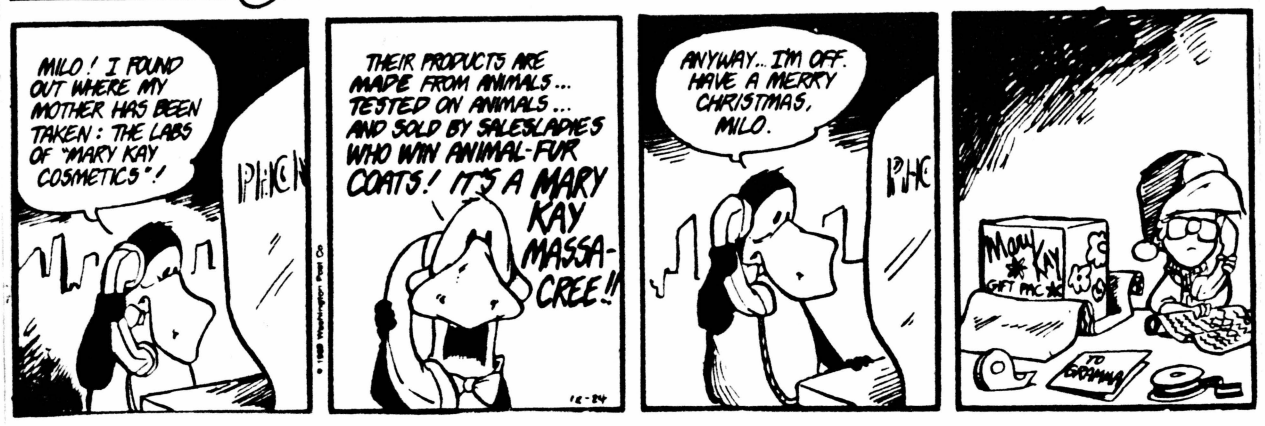

BLOOM COUNTY (1)
Berke Breathed
SO MOM'S AT A PRODUCT-TESTING LAB, EH? GOSH... I ALWAYS IMAGINED WHAT GOES ON IN THOSE PLACES....
BUS
TRY SOME NEW SHAVING CREAM, FLUFFY!
OKIE-DOKIE!
GILLETTE CO.
WELL? SMOOTH AND CREAMY?
IT KINDA TICKLES MY NOSE! =GIGGLE!=
GILLETTE CO.
MAN AND CRITTERS WORKIN' TOGETHER! IT'S SO... CHRISTMAS!


BLOOM COUNTY (2)
Berke Breathed
APPROACHING THE MARY KAY COSMETICS COMPANY, OUR HERO'S THOUGHTS GO BACK TO A BETTER, HAPPIER TIME...
Mary Kay
...WHEN THE MIDNIGHT SUN HUNG ABOVE THE CRYSTAL GLACIERS AT THE BOTTOM OF THE WORLD...
OPUS
...WHEN A YOUNG LAD WOULD LOUNGE ABOUT ALL DAY BEING FED CHOCOLATE-COVERED HERRING INTESTINES BY A LOVING MOTHER WHO LOOKED EXACTLY LIKE JULIE ANDREWS.
A SPOONFUL OF SUGAR MAKES THE MEDICINE
...OR AM I ROMANTICIZING THINGS A BIT?
GOD FORBID! —continued

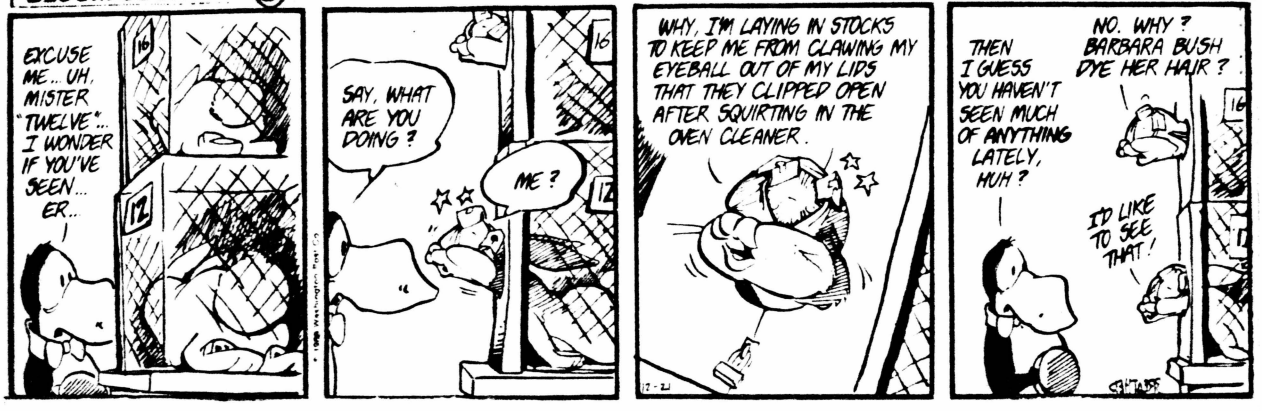

BLOOM COUNTY (3)
Berke Breathed
HELLO! COULD YOU PLEASE DIRECT ME—
ARE YOU ONE OF THOSE ANIMAL-RIGHTS NUTS?!
Gillette
Colgate
Clorox
Dow Cl
Clairol,
Faberge
Bristol
Procter
Revlon
ME?! I'M JUST LOOKING FOR MY MOTHER... AND IF YOU COULD—
DON'T THROW BLOOD ON ME!!
I JUST DO MY JOB! MY WORK IS IMPORTANT! I LIKE MYSELF! I'M SURE I DO!
I CAN'T HELP YOU.
EXTREMISM CAN MAKE THINGS SO INCONVENIENT
ANIMAL-TESTING ROOM
NO SCREAMING ALLOWED DURING LUNCH


BLOOM COUNTY (4)
Berke Breathed
GOOD HEAVENS... WHAT HAPPENED TO YOU?
Mary K
COSMETI
DERMAL TOXICITY TEST. THEY SMEARED "TAHITIAN PINK" NAIL POLISH ON MY SHAVED, SCRAPED FLESH.
HOW CAN I BE OF SERVICE?
I'M LOOKING FOR A PENGUIN...
DOWN THE HALL. TESTING ROOM "X". WHAT'S GOING ON?
WHY, A RESCUE!
THERE'S NOT MUCH SKIN LEFT ON IT, BUT WOULD YOU MIND TERRIBLY SAVING MY BUTT, TOO?!

BLOOM COUNTY 5 Berke Breathed

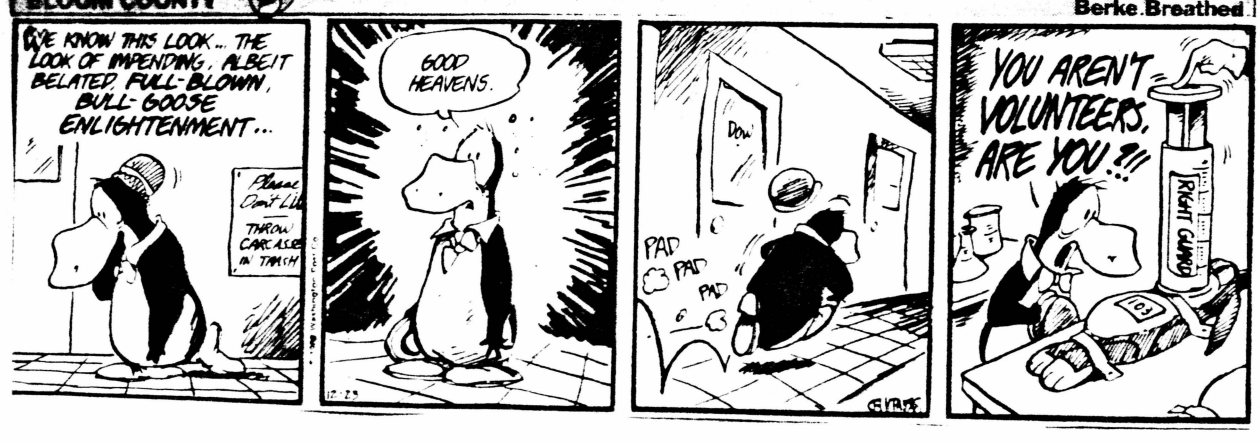


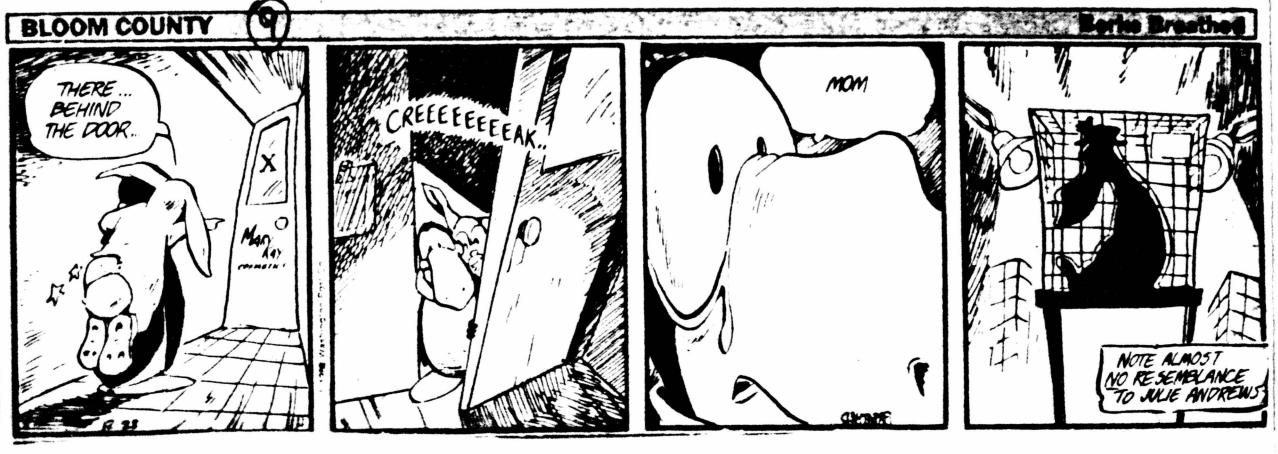
BLOOM COUNTY 6 Berke Breathed

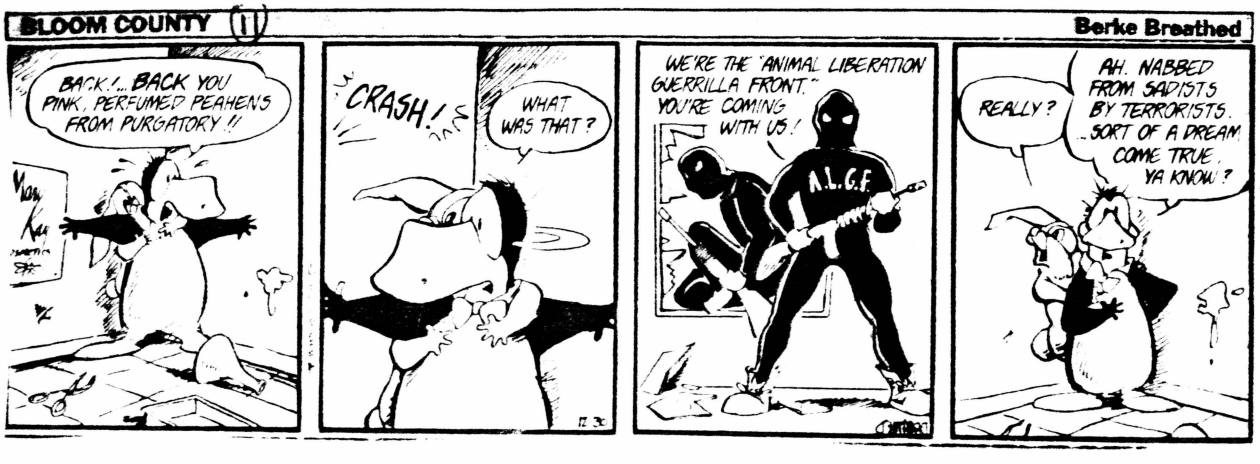


BLOOM COUNTY 7 Berke Breathed

BLOOM COUNTY 8 Berke Breathed







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