Abnormal Behavior as an Indication of Immaterial Suffering

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**Recommended Citation**
application of open heart surgery to human beings by several years.

Perhaps pound seizure is an economic issue. The purchase price of pound animals is small compared to the cost of a conditioned animal obtained from a dealer or to the cost of a purpose-bred animal. The apparent economy of using pound animals in research is just that, apparent. In 1977, Bristol Laboratories (New York) reported that 59% of the 558 dogs and 75% of the 163 cats requisitioned from pounds proved unsuitable for research. Another study (Lab An Care 19:506, 1969) produced the following data: In an experiment involving open heart surgery to replace heart valves, 79 out of 85 purebred labrador retrievers survived whereas only 55 of 75 conditioned mongrels survived. If one were to extrapolate this to 100 animals surviving the experiment, one would have to start with 108 purebreds or 137 mongrels. The extra cost involved in performing surgery on 137 mongrels as opposed to 108 purebreds would have been the equivalent (in 1969) of the cost of sixty purebred dogs, and this does not even include the surgeon’s and technician’s time, nor institutional overhead.

It has also been argued that the number of pound (random-source) animals required by research is very small compared with the number of animals that are euthanized annually. Dr. Andrew Rowan (Institute for the Study of Animal Problems, Washington, DC) testing at the Los Angeles City Council May 27, 1981, made it clear that a very similar argument could be made for the millions of sewer rats that are exterminated every year. Instead of poisoning them wastefully, they could be trapped and used in research laboratories, but research scientists would not welcome this idea because sewer rats (random-source rats) are not standardized or characterized and are carriers of all sorts of diseases.

The Los Angeles Times accused City Council members of sentimentality when a Council subcommittee unanimously voted to rescind the pound seizure ordinance. Dr. Rowan, responding to this statement, told the City Council that if our decisions are made without sentiment and compassion we have no right to call ourselves human beings.

The deeper implications of this issue are revealed in the myopic irrationality which motivates the advocates of pound seizure, for this sort of irresponsible behavior also perpetuates a number of negative practices which can have global consequences. Nature’s love is unconditional, but her secrets are given only to those who have earned her trust, yet look how we have abused that trust in the application of our knowledge of the atom. Therefore, as we go about trying to learn Nature’s secrets, whether in medicine or in physics, it might behoove us to remember the words of Albert Schweitzer when he spoke of the progress mankind could be making if we had only a little more respect for life. He also said that it is the duty of those (that use animals for research) to ponder in every separate case whether it is really and truly necessary thus to sacrifice an animal for humanity.

On June 30, 1981, the Los Angeles City Council voted 10-3 in favor of rescinding the pound seizure ordinance, but added a codicil regretting that purpose-bred animals would now be doomed to the fate that pound animals had spared.
Many scientists question the legitimacy of analogical reasoning with respect to animals. The argument is founded on the attitude that humans and animals are basically different. But this is surely an outdated concept. There is constant confirmation and widespread agreement in the fields of morphology, histology and physiology that the differences between humans and “higher” vertebrate animals are slight. The same holds true for behavioral patterns. The pharmaceutical industry tests drugs intended for use on humans (including psychopharmacologicals) on animals first. In the field of psychology one has arrived at much basic knowledge about the human psyche through research on animals. These procedures are only permissible and meaningful if analogies exist.

I do not want to exclude the possibility that one occasionally arrives at false interpretations when making judgments about pain and suffering in animals. But where in the field of biology does one completely avoid error? Scientists attempt to proceed as carefully as possible in their experiments, finally dealing with their findings statistically. It is possible that the results arrived at are significant, in which case one acts as though the facts had been definitely explained. But this is seldom the case. A certain probability of error is always present. Why should we apply more stringent standards to questions concerning an animal’s reaction to fear, suffering or lack of well-being?

To this point I have spoken of pain and suffering. It is not generally doubted that animals can experience pain although no one can objectively prove it. The case in which symptoms of pain are registered while corresponding feelings of pain are denied is certainly an exception. If an animal had just broken its leg, only a very few people would fail to notice more than the fact that it cries, tends its leg and tries to run away. Later one would ascertain a dull look, loss of appetite and lack of bodily care. Every well-meaning person would conclude from these symptoms that the animal is in pain and see to it that it is cared for so that the pain will pass. In this respect the evaluation of “technopathies” is relatively simple. These are considered to be diseases or disorders which are the result of poor husbandry. One could therefore pass legal guidelines as quickly as possible permitting only those systems of animal husbandry which cause the slightest amount of technopathies.

But there is also suffering that is not morphologically or physiologically ascertainable. This “immaterial” suffering is considered only fleetingly, if at all, in questions of animal welfare. It is true, for instance, that German and Swiss animal welfare laws call for species-specific diet and care as well as appropriate shelter, and state that the activity requirements (Bewegungsbedürfnisse) may not be limited so as to cause suffering. These laws show a basic recognition of immaterial suffering, as suffering which arises from an animal’s inability to do something in its natural behavioral repertoire. The difficulty is that there is nothing obviously clinically identifiable about this kind of suffering — and only this kind of measure seems to count. Lorenz also regretted this insufficiency: “The heresy exists in the opinion that the real has existence only as that which can be expressed in exact, scientific terminology and mathematically quantified. In so doing one explains away the emotional as unreal illusion.” It is in no way sufficient that scientists committed to animal welfare are convinced that immaterial suffering exists. The ethological signs of immaterial suffering must be made clear for others as well if animal welfare is to continue its progress.

Reactive abnormal behavior is the convincing proof of immaterial suffering for the ethologist. We consider abnormal that behavior which does not correspond to, or is without object, which appears with sharply increased or decreased frequency, or which is abnormal in its motor pattern. Moreover, much reactive abnormal behavior manifests itself in stereotypes, i.e., the movement is repeated continuously in the same way. Among wild animals and in traditional forms of animal production abnormal behavior is unknown. However, it is encountered often in animals in intensive husbandry systems, and it can be demonstrated that abnormal behavior is actually brought about by conditions of husbandry. It first appears when animals are transferred from good to poor conditions of husbandry. When the conditions are improved the abnormality declines. Often, however, it remains to some extent for a prolonged period even after conditions have been improved. Abnormal behavior is then characterized as residual-reactive. The obstinacy with which the abnormality remains is a further indication that the animal is highly neurotic.

Abnormal behavior appears frequently in two areas: feeding and locomotion. Search for fodder, fodder intake, mastication and swallowing of food all belong to feeding behavior. Abnormality can appear in each of these stages, be it empty chewing or bar-biting in sows (Fig. 1), cannibalism in fattening pigs, tongue rolling in cattle, sucking wind in horses or feather pecking in poultry. All these behaviors show that the animal is frustrated. Similar to the above are “weaving” and mouth movements which appear in numerous species. These are stereotypes of locomotion in animals that want to move forward but are prevented by confinement from doing so.

Figure 1
Sow biting the bar of her box stall.
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Figure 1
Sow biting the bar of her box stall.
Some abnormal behavior is prevented through force. Tongue-rolling cattle receive a ring in the frenulum under the tongue which causes pain, resulting in reduction of the abnormal activity. The muscles of the pharynx are severed in horses to prevent them from sucking wind. Intervention of this sort is unsatisfactory from the ethologist’s point of view. It eliminates the symptom only; the cause of the ailment remains. The animal has the right to an alteration in the conditions that provoke abnormal behavior. In some cases a prevented abnormality is replaced by another. The conditions of husbandry for fattening pigs are generally so poor that cannibalism is almost unavoidable. That is why the piglet’s tail is docked. Economic losses are thus prevented, but not the active animal’s tendency to bite. A frequent result is that the pigs begin biting the joints, ears or vaginas of animals in neighboring stalls. In some cases the tendency to bite and root up leads to anal massage of other pigs (Fig. 2). This results in a bloody, inflamed anus of the affected pig, which loses its appetite and does not grow in the desired manner. Economic losses still occur although abnormal behavior, namely tail biting, has been prevented. It is a mistake to believe that only the animal whose tail is bitten suffers; the active animal also suffers.

As early as 1968 M. Fox wrote a book entitled Abnormal Behavior in Animals. In spite of this valuable and highly respected work we still know very little of the relevance of abnormal behavior to animal welfare. Animal welfare means helping suffering animals. But we can only help them if we know exactly when they are suffering. Abnormal behavior is a key to recognizing suffering in animals. We still have a long way to go before we can more closely describe and understand the significance of all abnormal behavior. We have only a longer way to go to convince producers and legislators that conditions of animal husbandry leading to immaterial suffering too must be changed.

![Figure 2](image)

**Figure 2** Anal massage of a fattening pig kept under poor housing conditions.

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**Where to Put Your Choker**

**Dr. Roger A. Mugford**

The choke chain has come to be regarded as an indispensable aid to training dogs, but even the most time-hallowed practices deserve an occasional critical review. The author has recently completed an investigation into the uses and abuses of choke chains, and failed to find any benefit from using a choke rather than a conventional leather collar. Indeed, there are some very considerable dangers and disadvantages associated with the device. These charges may sound heresy to many dog-trainers, but to others, it may strike a sympathetic chord.

**Canine Body Language**

In nature, the wolf does not adorn itself with a collar, so we must presume that the body postures and sensitivities of the dog have evolved without collars in mind. Wolves and dogs communicate by the position and hair cover on the body and tail, by facial expressions and chemical signals. They are not particularly vocal; thus their response to complex voice commands from human beings does not come easily or naturally. One can conclude therefore, that the traditions of spoken commands and tugs at the neck of a dog do not exploit the natural response tendencies of the species.

**Leash Pulling**

There are some very good reasons why a dog should not be allowed to walk in front of its owner: it is an expression of leadership or dominance over the owner, the dog is exposed to potential danger and the owner could get very tired arms. In practice, very many owners fail to train their dog not to pull on the leash, despite making conscientious efforts to do so. Why should this be so? Perhaps it is because the objectives of training have been wrongly stated or are misunderstood by the dog owners.

In idealistic terms, the behavioral objective of leash-training is to teach the dog that proximity to the body or the legs of the owner is rewarding and being out in front of the owner is unrewarding. The objective should most certainly not be for the dog to learn an association between a vocal command ‘HEEL’ and a painful sensation to the neck, but of course that is the approach most commonly taken by many dog trainers. There is an important distinction between the two.

In practice, the proximity-training approach to stop leash pulling proceeds as follows:

1. Use a leash which is sufficiently long for the dog to pass its headquarters beyond the feet of its owner.
2. Use a broad collar which physically stops movement of the dog forward, but without causing undue pain.
3. Command ‘HEEL’ while bracing the dog with its collar and moving alongside and in front of the dog.
4. Reward it with praise, food or other positive reinforcement when the dog has been passed by the owner.

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