Mr. Fred Myers, Editor The National Humane Review 135 Washington Avenue Albany 10, New York

Dear Mr. Myers:

Thank you for your letter of November 11. I am sorry about the delay in answering it; I have been away on a trip. You were right about my ignorance of the American Humane Association, and its scope and understanding as exemplified by the National Humane Review came as a pleasant surprise to me.

We have no other publications to date in the scientific literature, other than the one you mentioned, but you might find of interest the enclosed offprints of a popular account currently (November and December) appearing in Popular Mechanics.

In general, our methods flow directly from modern behavior theory as it has been developed in the psychology departments of American universities during the past 15 years. One of the primary concepts of this theory is that of reinforcement: desired responses are strengthened by administering positive rewards—food, tidbits, praise, petting (depending on the animal). Undesirable responses are simply allowed to drop out through extinction (non-reinforcement), instead of being suppressed by punishment.

Modern reinforcement theory, with the empirical relationships among its conceptual variables, when properly applied, gives a control over animal behavior that far exceeds anything commonly believed possible. In our business, for instance, the behavior of the animals is more reliable than the performance of the human handlers and indeed more reliable than that of the mechanical props used by the animals in their performance. Furthermore, all this control is achieved without punishing the animals in any way.

A great deal of important escientific information is being accumulated daily in the psychological laboratories which is being published only obscurely in scattered publications, and very little has been done in the way of summarizing this material and making it generally available. Indeed, many psychologists do not see the application of their work to everyday problems.

The excellent effectiveness of positive reinforcement when scientifically handled would seem to have considerable implications for the humane movement along the lines of radically reducing the necessity of using punishment in training and handling animals. The whole science of animal behavior as now being developed in the universities would seem likewise to apply to those interested in the humane movement by showing that animals are not as limited as once thought and that

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given a chance under proper whthods, can abhieve a great deal more than was formerly believed possible.

You will notice that in the last paragraph I used the words "radically reducing the necessity of using punishment". While the new methods greatly extend the possibilities for control of behavior by positive reinforcement, there are a few behaviors which cannot usually be controlled by administering the reinforcements available to a human being because they carry a far more effective self-reinforcement -for example, dogs who chase cars are powerfully reinforced by the sight of the car disappearing down the road; killing chickens is natively reinfracing; so is the behavior of cats who kill birds. However, a great deal has been learned in recent years about the nature of punishment, and while it can definitely be said that it is not as effective as once thought in the elimination of behavior, and that it is known to have unfortunate side effects, the knowledge is now at hand to make it much more effective than before in those few cases where it must be used for the protection of the animal and of society.

If you are interested and think it might be fruitful, we might write an article for the National Humane Review explaining why the new scientific techniques make training and handling easier, quicker, and more pleasant for animals, and how science shows that punishment is an undesirable control technique. Or perhaps, a more specific "how-to-do-it" article on some particular problem of interest to your readers.

In conclusion, we feel very strongly that animal psychology and the humane movement need to get together. Perhaps this is not the proper way to approach the problem, but we are interested in tackling it. We would welcome any suggestions you might have on this subject.

Very truly yours,

Keller Breland