

MARIAN STAMP DAWKINS, ANIMAL SUFFERING: THE SCIENCE OF ANIMAL WELFARE (LONDON: CHAPMAN AND HALL LTD.) (DISTRIBUTED IN THE UNITED STATES BY METHUEN) 1980, 149 PP, £7.50, \$19.95 (Hardback) £3.95, \$9.95 (Paperback).

If you know that practices like factory farming are cruel, and don't want to be bothered with the evidence, you won't be interested in this book; on the other hand, if you want to be able to argue with hard-headed scientists and agriculturalists who demand evidence for claims that chickens suffer when confined in battery cages, don't hesitate: order your copy of Animal Suffering today.

When the book comes, it may not be quite what you expect. It is not a crusading polemic against the now-familiar targets of factory farming, experimentation and hunting. Nor is it a philosophical argument about animals and ethics. Instead it is something quite new: a sober, scientific investigation into ways in which we can assess whether an animal is suffering. The only book at all like it that has appeared in recent years is Donald Griffin's The Question of Animal Awareness (New York, 1976), but where Griffin limited himself to the modest aim of persuading scientists to take account of the fact that animals other than humans may be conscious, Dawkins tackles the bolder task of detecting suffering.

Thus Dawkins' aim is not to argue that battery cages, for example, do or do not cause suffering to hens. She is interested rather in how we can set about to answer such a question. Should we accept the views of the farmers who say that the hens must be happy, because otherwise the farm wouldn't be profitable? Or should we be satisfied with thinking about how we would hate to be cooped up in a small cage all day? Dawkins' says that neither of these approaches will do, and there is a need for something better.

Those who lobby in defense of factory farming often argue that productivity is the only 'scientific' measure of animal welfare. They seek to portray their animal liberationist opponents as emotional, unscientific sentimentalists who commit the notorious fallacy of anthropomorphism. Of course, this kind of argument finds willing ears among those who don't feel inclined to alter their diet in order to avoid factory farm produce. Perhaps the chief significance of Dawkins' book, therefore, is that she believes there can be scientific and objective ways of assessing animal welfare which are not based on productivity. Moreover she sets out in some detail the ways in which this can be done.

The methods of assessing welfare that Dawkins discusses are--in addition to 'productivity'--observations of the animal's physical health, study of the degree to which its living conditions are unnatural, physiological observations of hormone changes associated with stress, observation of behavior, especially abnormal or stereotypic behavior, analogies with ourselves, and tests in which animals are allowed to choose for themselves. In each case she sets out the difficulties that lie in the way of getting an insight into the subjective experiences of another creature, but she also makes it clear that these difficulties are not in principle insuperable. While no method is adequate on its own, a combination of several methods can give us a good indication of whether an animal is suffering.

Of these methods the most interesting is the method that allows the animal to choose for itself. Dawkins' own work has been in this area. She has, for example, placed hens in the middle of a corridor, one end of which leads to a battery cage and the other to an open run. Even when the birds have been raised in a cage environment and have never seen an open run, they need only a few minutes exposure to it before they will choose it consistently over the cage.

which one the hens are happier in. But that kind of casual observation is not always reliable, and a careful test of the animals' actual preferences can provide valuable confirmation. Sometimes it can even provide evidence for rejecting the opinions of careful observers. A striking instance of this was a test of the recommendation of the British Government's Brambell Committee that fine gauge wire mesh should not be used for the floor of battery cages. The Committee thought that the birds were more comfortable on a heavier metal mesh. In fact, when given a choice, hens spend much more time on the finer wire, so presumably they prefer it.

The possibilities of this method are limited only by the bounds of our imagination in devising ways of letting animals choose. Pigs can be trained to adjust lighting and heating with their snouts; in this way they tell us that they don't like the semi-darkness that prevails in many intensive farms. As Dawkins says:

Animals may not be able to talk, but they can vote with their feet and express some of what they are feeling by where they choose to go. If they were to be provided with the right electronic gadgetry, who knows what they could tell us, by voting with their snouts or their paws or their beaks?

(In Animal Liberation I said that since animals can't vote, it is meaningless to talk of their right to vote. Perhaps I was too hasty.)

In addition to being a careful scientist and a lucid writer of jargon-free prose (already an unusual combination) Dawkins reveals a breadth of understanding rare in scientists working in animal behavior. In addition to the obviously relevant books like Richard Ryder's Victims of Science and my own Animal Liberation, she refers to Jonathan Glover's Causing

Death and Saving Lives, and even Tom Nagel's 'What is it like to be a bat?' (Phil. Review, 1974). I found only one point to criticise: she is unfair to Richard Ryder when she asserts (on p. 3) that he claimed that two-thirds of all experiments in Britain are for non-medical purposes (a claim which she then shows to be erroneous). In fact what Ryder actually said was that less than a third of experiments 'can be seen to be medical.' He was making no claim as to the actual figures but a point about what can be seen by the statistics provided by the government.

All in all, though, a splendid book which may well prove to be the foundation stone of a new science of animal welfare.

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