

Facing Animal Complexity

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There are many ways to begin talking about animals. It has been common, in recent political philosophy on this topic, to begin with descriptions of the horrible suffering of animals under conditions we humans have created for them to live in. And that is indeed one very important way to begin: by asking ourselves to face up to our own active or passive complicity in horrible suffering. There are so many places where this suffering is inflicted. It is inflicted in the “gestation crates” in which young pigs are housed in preparation for a life of confinement, pain, and early death; in similarly confining and painful conditions experienced by other animals raised in the food industry, such as chickens and calves. It is inflicted in the tiny wire cages where minks are kept to be raised just long enough so that they can be skinned so their fur can be used for human luxury. It is inflicted outside, in the pleasant fields and woods, where foxes and deer are terrorized by dogs and gunned down for sport. It is inflicted in circuses where animals are beaten savagely and made to perform undignified tricks; in unregulated workplaces where cruel treatment of oxen, elephants, and other powerful working animals is often the norm rather than the exception; in research facilities, where animals are routinely infected or in other ways poisoned and left to suffer long, agonizing deaths, often in dark urine-soaked facilities where they have no contact with other members of their species.

Instead of pursuing this all too real account of what we do and tolerate—and, insofar as we turn our thoughts away, aid and abet—I want to begin instead with a happier story of humans learning about the complexity of animals and making the whole world aware of that complexity. I'll begin with some new research about the complexity of animal minds and animal lives, and ask what these examples mean, first, for the choice of a theoretical approach to the ethics of animal treatment, and, second, for the practical tasks ahead of us. So, my opening story will be a happy story—but also, as it turns out, it is a story about Happy.

Happy is an adult female Asian elephant who lives in the Bronx Zoo, one of the most humane of American zoos in providing large animals with a rich diverse natural habitat and a wide range of social interactions. Like adult females in the wild (though, as I shall later say, there are very few Asian elephants in the wild today, and whether there is such a thing as “the wild” is subject to doubt), she lives in a group with other adult females who enjoy one another's company and share rich social relationships. During several days this past fall, researchers Joshua Plotnik, Frans de Waal, and Diana Reiss set up a large mirror in the enclosed area shared by these three females as the nighttime “home” from which they roam outward during the day. All three females immediately took quite an interest in the mirror. They walked back and forth in front of it, and then walked up to it. All showed a marked interest in facing the mirror with open mouths, apparently studying their own oral cavities and poking their teeth. (Elephants lose at least four sets of teeth during a lifetime, and they are thus often in a state of dental discomfort.) In one case, Maxine put her trunk into her

mouth, in front of the mirror, using it to touch parts of her teeth and mouth; she later used her trunk to pull her ear forward so that the inside of her ear cavity could be seen in the mirror. Maxine, Patty, and Happy also explored the back of the mirror with their trunks to see whether there was something over on the other side of it, quickly ascertaining that there wasn't.

On the second day, a visible large X mark was applied to the right side of each elephant's head, and an invisible sham mark was applied to the other side of the head, to forestall the possibility that the tactile sensation of applying the mark would account for the experimental result. The mark was visible only in the mirror. Maxine and Patty did nothing unusual; by that time they had become somewhat bored with the mirror. But Happy, still engaged, went up to the mirror and studied the reflection of her own head. Repeatedly she took her own trunk and scrubbed the mark with it, as if she were perfectly aware that what she saw in the mirror were a part of her own head, and she wanted to wipe away the unusual mark. (You can see the films of all this on the internet, by Googling "Self-Recognition in an Asian Elephant" and then clicking on the link for supplementary materials. The article, published in *Proceedings of the National Academy of Sciences*, is also available online.¹) On the basis of this experiment, De Waal and his fellow researchers conclude that the Asian elephant is capable of forming a conception of the self; until now this level of complexity has been found only in apes and humans, though there is one ambiguous experiment with dolphins.

¹ *PNAS*, published online October 30, 2006.

We have long been learning that elephant society is highly complex. Elephants exhibit complex forms of social organization, in which child care is shared among a group of cooperative females. Elephants also have rituals of mourning when a child or an adult member of the group dies, and appear to feel grief. Even when they come upon the corpse of a fellow species member that has been dead for a long time, they explore the body or bones for signs of the individual who has inhabited them.² All of this we have increasingly understood through the work of researchers working both in the field and in the better research zoos.

We might think, well, so now we know that there are a few species that have complex forms of social behavior. We have also, however, been learning recently about unexpected complexity in quite another region of the animal kingdom, a part of it that we're accustomed to think of as "lower." In June 2006, *Science* published an article entitled "Social Modulation of Pain as Evidence for Empathy in Mice" by a research team at McGill University in Montreal led by Jeffrey Mogil.³ This experiment involves the deliberate infliction of mild pain, and is thus ethically problematic. Nonetheless, I ask you to forgive me for describing what we learn from it. The scientists gave a painful injection to some mice, which induced squealing and writhing. (It was a weak solution of acetic acid, so it

² Good discussions of these matters can be found in Cynthia Moss, *Elephant Memories: Thirteen Years in the Life of an Elephant Family* (Chicago: University of Chicago Press, second edition 2000) and Katy Payne, "Sources of Social Complexity in the Three Elephant Species," in *Animal Social Complexity: Intelligence, Culture, and Individualized Societies*, ed. Frans B. M. de Waal and Peter L. Tyack (Cambridge, MA: Harvard University Press, 2000), 57-86. (The latter book also contains valuable articles on many other species.)

³ Dale J. Langford, Sara E. Crager, Zarrar Shehzad, Shad B. Smith, Susana G. Sotocinal, Jeremy S. Levenstadt, Mona Lisa Chanda, Daniel J. Levitin, Jeffrey S. Mogil, *Science* 312 (2006), 1967-1970.

had no long-term harmful effects.) Also in the cage at the time were other mice who were not injected. The experiment had many variants and complexities, but to cut to the chase, if the non-pained mice were paired with mice with whom they had previously lived, they showed signs of being upset. If the non-pained mice had not previously lived with the pained mice, they did not show the same signs of emotional distress. On this basis, the experimenters conclude that the lives of mice involve social complexity: familiarity with particular other mice prepares the way for a type of emotional contagion that is at least the precursor to empathy.

Human beings have gone through many phases in their understanding of the complexity of animal lives. The ancient Greeks and Romans believed that there were large areas of commonality between humans and animals, and many of them used their observation of these complexities to argue against the eating of meat and against other cruel practices toward animals.⁴ When Pompey the Great introduced elephants into the gladiatorial games, there was a public outcry, described by Cicero, who notes that the people who saw elephants in the ring had no doubt that there was commonality between them and the human species.⁵ Large sections of the ancient Greco-Roman world were vegetarian. Meanwhile, in India, the Buddhist emperor Ashoka, in the third century B. C., made a long list of animals that should not be killed, and he said that he himself was

⁴ See Richard Sorabji, *Animal Minds and Human Morals: The Origins of the Western Debate* (Ithaca, Cornell University Press, 1993).

⁵ The incident is discussed in Pliny *Nat. Hist.* 8.7.20-1, Cicero *Ad Fam.* 7.1.3; see also Dio Cassius *Hist.* 39, 38, 2-4.

attempting, with increasing success, to live a completely vegetarian life.⁶ This tradition continues: India is one of the world leaders in legal protection for animals, and close to fifty percent of Indians are vegetarians.⁷ Europe and North America have lagged behind, partly because we have lost the vivid awareness of the complexity of animal lives that human beings in other times and places have had, and partly because we have an ethical sensibility that is only weakly and inconsistently developed in this area.

Why is the complexity of animal lives important, and what does it mean for ethical thought and for action? The most influential approach to the ethics of animal treatment in the modern Euro-American debate has been that of classical Utilitarianism. Both Jeremy Bentham and John Stuart Mill were passionately interested in the lives of animals and both thought that human treatment of animals was ethically unacceptable. Bentham famously predicted that a day would come when species difference would seem to all as ethically irrelevant, in the context of bad treatment, as race was by then beginning to be agreed to be. Both felt not only that large conclusions for our treatment of animals followed from their Utilitarian principles, but also that the ability of those principles to generate acceptable conclusions in this area was a point in favor of those principles—by contrast, for example, with the principles of vulgar Christianity, which made species difference all-important. There is no doubt that Utilitarian thought has made valuable and courageous contributions

⁶ See D. N. Jha, *The Myth of the Holy Cow* (London/New York: Verso, 2002).

⁷ For an impressive court judgment, holding that animals are entitled to a life in accordance with dignity as protected by Article 21 of the Constitution of India, see *Nair v. Union of India*, Kerala High Court no. 155/1999, June 2000. The case involved circus animals who were being ill treated and made to perform undignified tricks.

in this area, and that it still does so today, in the work of preference-Utilitarian Peter Singer. I now want to argue, however, that Utilitarianism cannot meet the challenge of animal complexity, as we currently understand it (as indeed it fails to give an adequate account of human complexity).⁸

Utilitarianism can be usefully analyzed, as Bernard Williams and Amartya Sen have analyzed it, as having three parts.⁹ The first is consequentialism: the best choice is defined as the one that promoted the best overall consequences. The second is “sum-ranking,” a principle of aggregation: we get the account of consequences by adding up all the utilities of all the creatures involved. Third, the theory invokes some specific theory of the good: pleasure in the case of Bentham and Mill, the satisfaction of preferences in the case of Peter Singer. Looking at animals, Utilitarians begin from the understanding that they, like human beings, feel pleasure and pain, and they argue that the calculus of overall pleasure cannot consistently exclude them. The right choices will be those that produce the largest aggregate balance of pleasure over pain—or, in Singer’s case, the largest net balance of satisfaction over dissatisfaction.

The Utilitarian approach has the merit of focusing attention on something of great ethical importance: suffering. Humans cause animals tremendous suffering, and much of it is not necessary for any urgent human purpose. Animals would suffer a great deal without human intervention, but there is no doubt that much of animal suffering in today’s world is

⁸ Here I am summarizing some of the arguments of my *Frontiers of Justice: Disability, Nationality, Species Membership* (Cambridge, MA: Harvard University Press, 2006).

⁹ See their “Introduction,” *Utilitarianism and Beyond* (Cambridge: Cambridge University Press, 1982).

caused, directly or indirectly, by human activity. So the focus on animal suffering is valuable, and these philosophers deserve respect for the courage with which they put this issue on the agenda of their nations.

Four problems, however, can be seen, if we hold this theory up against the complex lives of animals. The first point is that pleasure and pain are actually not the only things relevant to animal lives. These lives consist of complex forms of activity, and many of the valuable things in those lives are not forms of pleasure. Happy's self-recognition in the mirror, the mourning of elephants for their dead, are not pleasures; the latter may even be deeply painful. Nonetheless, such meaningful elements in animal lives should, we intuitively feel, be fostered and not eclipsed – for example, eclipsed by raising animals in isolation so that they don't have contact with fellow group members and so are unable to mourn. Animals want much more than pleasure and the absence of pain: free movement, social interactions of many types, the ability to grieve or love. By leaving out all this, Utilitarianism gives us a weak, dangerously incomplete way of assessing our ethical choices.

Second, animals, like human beings, can adjust to what they know: they can exhibit what economists call "adaptive preferences".¹⁰ Women who are brought up to think that a good woman does not get very much education may not feel deprived if they don't get an education, so Utilitarian theory would conclude that education is not valuable for them. This means that the theory is often the ally of an unjust set of background conditions. Much the same sort of thing can be said about animal preferences. If animals are given a

very confined life, without any access to social networks characteristic of their species, they may not actually feel pain at the absence of that which they haven't experienced, but this does not mean that there is not an absence or that it should not be taken seriously. By refusing to recognize value where there is not pleasure or pain, Utilitarianism has a hard time criticizing bad ways of treating animals that have so skewed their possibilities that they don't even hope for the alternative.

Third, a familiar point in criticism of Utilitarian theories of human life, Utilitarianism's way of aggregating consequences doesn't treat each individual life as an end; it allows some lives to be used as mere means for the ends of others. If it should turn out that the pleasures of humans who exploit animals for their use are great and numerous, this might possibly justify giving at least some animals very miserable lives.

Finally, all Utilitarian views are highly vulnerable in respect of the numbers. If the goal is to produce the largest total pleasure or satisfaction, then it will be justified, in the terms of the theory, to bring into existence large numbers of animals whose lives are extremely miserable, and way below what would be a rich life for an animal of that sort, just so long as the life is barely above the level of being not worth living at all.

Seeing these problems helps us think: it informs us, I believe, that we need a theoretical approach that can do two things. First, the approach must have what I'd call a Kantian element, that is, it must have as a fundamental ethical starting point a view that we must respect each individual creature as an end in itself, not a mere means to the ends of

¹⁰ I discuss the question of adaptive preferences in *Women and Human Development: The Capabilities Approach*

others. (I'm simply drawing on Kant's approach to human beings here, and I am not offering any story about how one might use Kant's own actual views to generate obligations to animals. That's Prof. Korsgaard's achievement!.) Second, the approach must have what I would call a neo-Aristotelian element, the ability to recognize and accommodate a wide range of different forms of life with their complicated activities. I've suggested in writing about this that for this part of the view we can turn to a version of the Aristotelian idea that each creature has a characteristic set of capabilities, or capacities for functioning, distinctive of that species. But of course that observation only goes somewhere in ethics if we combine it with the Kantian part, the idea that we owe respect to each sentient creature considered as an end. Putting these two parts together, we would argue that what we owe to each animal is to support its efforts to live a characteristic life as a member of its species.

Now let us turn to practice, and to elephants. Elephants are highly endangered. Because an adult elephant needs to eat about 200-250 pounds of vegetation per day to stay healthy, elephants have to cover a lot of territory, and there can't be too many elephants in one territory. South Asia and Africa, where most elephants live, have rapidly growing human populations, and this growth has diminished the space where elephants can roam free. When they get too close to human habitations, moreover, things do not go well: groups of young males, particularly, mix badly with human villages. Added to these problems is the terrible problem of poaching: hundreds of elephants are killed every year for the ivory market, despite domestic laws and international agreements against this practice.

In 1930 there were between 5 and 10 million African elephants, and somewhere around a million Asian elephants. Today, there are probably only about 35,000 to 40,000 Asian elephants left in the wild, and only about 600,000 African elephants.

If we were Utilitarians we might think that all we need to do is not to inflict pain on elephants. Many zoos manage something like this. But if we adopt my more complex approach, we will think that what we should support is something much more complicated, a whole form of life that includes love, grief, self-recognition, and much more. This makes our practical task very complicated. It means that we must think much harder than we have so far about the habitat of elephants in the wild, trying to protect large tracts of land indefinitely for this purpose. Insofar as we do permit elephants to be confined in zoos—and I'm not totally against this, because I think that some excellent zoos, such as Bronx, St. Louis, and San Diego, do a very good job with breeding and habitat—we need to think very carefully about the need of elephants in confinement for wide space, motion, and, above all, for complex social networks characteristic of elephant life.

The same sort of thing holds across the board, so let me end by talking about mice. The level of complexity of a sentient creature does not, I believe, make one species “higher” and one species “lower,” meaning that it's more ok to inflict damage on one than on another. Each form of life demands respect, nor do we respect lives simply because they look somehow like our own. Level of complexity does, however, affect what can be a damage for a creature. For a mouse not to have the freedom of religion is not a damage for a mouse, as it is for a human. However, new research on mice shows that even here the

Utilitarian approach, regarding them simply as sites of pleasure and pain, would be incomplete. Social bonds and the ability to recognize individuals play a role in their lives too. So when we think how we should treat them, we have to think of all that.

Each type of animal has its own complexity; each type has a story including at least some emotions or preparations for emotion, some forms of social bonding, often very complex, and complex forms of activity. We should learn a great deal more about these complexities, and we should test our ethical views to see whether they are adequate to them. We should then try to imagine ways of human life that respect these many complex forms of animal activity, and that support those lives—all of which are currently being damaged, almost beyond rescue, by our interference and our greed.