

## *Living On Earth, Online Notes*

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### **Chapter 7. Other Lives**

194 *I'm going to begin by thinking about this in terms of the biomass:* Here, and often below, I use this fascinating paper: Yinon Bar-On, Rob Phillips, and Ron Milo, “The Biomass Distribution on Earth,” *PNAS*, 2018.

195 *I am going to use “ethical” and “moral” nearly interchangeably:* Some people use “ethical” about issues that involve harm to others, equality, and so on, and “moral” for more personal questions (sexual morality). But I’ve seen people distinguish them with those two meanings switched. The terminology is all over the place.

195 *Behind many of these debates lies a deeper division:* In this area I have been influenced by Simon Blackburn’s *Ruling Passions* (1998), though Blackburn’s view is closer to traditional “expressivism” than mine. That is the view that ethical claims express an emotional response, or something like a preference, in the speaker, rather than making a claim that might be true or false. Christine Korsgaard’s work has also influenced me, though more as a foil, as here the disagreements are larger. See her *The Sources of Normativity* (1996) and *Fellow Creatures* (2018). The literature here is enormous.

196 *A picture like this is seen in historical sketches:* See Philip Kitcher’s *The Ethical Project* (2011); Kim Sterelny and Ben Fraser, “Evolution and Moral Realism,” *British Journal for the Philosophy of Science*, 2017; Kyle Stanford, “The Difference Between Ice Cream and Nazis: Moral Externalization and the Evolution of Human Cooperation,” *Behavioral and Brain Sciences*, 2018.

196 *The social psychologist Jonathan Haidt:* See Jonathan Haidt and Jesse Graham, “When Morality Opposes Justice: Conservatives Have Moral Intuitions That Liberals May Not Recognize,” *Social Justice Research*, 2007. This is one of many discussions of these ideas, recommended by Haidt as an accessible introduction. Here they use these five categories: harm/care, fairness/reciprocity, in-group/loyalty, authority/respect, purity/sanctity. In recent work Haidt and his colleagues have sometimes recognized six

“moral foundations”: care, equality, proportionality, loyalty, authority, and purity. (See <https://moralfoundations.org>.)

198 *Ethical claims are a kind of valuation*: Back in chapter 4, I talked about “evaluation” when we looked at communication and sender-receiver systems. Evaluation there was a category of behavior seen in receivers of signals and displays. Here we’re looking not at communication, but at a more general phenomenon.

199 *This view is closer to the made side*: I say a little more about this view in “Philosophers and Other Animals,” *Aeon*, 2021. It’s around here that I depart from Blackburn, whom I acknowledged above, as I see his view as too close to “expressivism” or “sentimentalism.” My unpublished Whitehead Lectures (Harvard, 2022, available on my website at <https://petergodfreysmith.com/philosophy/mind>) also discuss the topic.

201 *About 73 million pigs are alive at any time in the United States alone*: The numbers are always changing, and some are contested. The USDA’s figure for 2022 was 73 million pigs. I make use of reports from the Humane Society, available here:

<https://www.humanesociety.org/resources/pigs>, and

<https://www.humanesociety.org/resources/poultry/>, along with some others:

<https://sentientmedia.org/u-s-farmed-animals-live-on-factory-farms/>

<https://www.sentienceinstitute.org/us-factory-farming-estimates>

202 *On questions about intensive farming of these*: A classic defense of utilitarianism is John Stuart Mill’s *Utilitarianism* (1861). Peter Singer’s *Animal Liberation* (1975; recently updated as *Animal Liberation Now*, 2023) is written from a utilitarian perspective. For the updated Kantian view, see Christine Korsgaard’s *Fellow Creatures* (2018). For an introduction to all these issues, see Lori Gruen, *Ethics and Animals* (2011).

203 *Imagine that after you die*: This reincarnation test is also discussed in my article “If Not Vegan, Then What?,” *Aeon*, 2023.

208 *A welfarist can approve of humane farming*: Welfarism, in this sense, has features in common with both utilitarianism and Kantianism, but it departs from both. Welfarism is akin to utilitarianism in its focus on experienced well-being, but it does not follow utilitarianism in its willingness to justify harm to one through benefits to another. In its focus on the individual rather than the total sum of an action's effects, welfarism sounds a bit like the Kantian view. But the Kantian and the welfarist may diverge about humane farming. Welfarism allows a kind of paternalism toward animals: controlling them can be acceptable when their lives are peaceful and good. That kind of paternalism is at odds with the Kantian respect for autonomy. As emphasized in the main text, welfarism in this sense is not an ethical theory that stands alongside utilitarianism and Kantianism, as it does not (yet) have anything to say about clashes of welfare, and trade-offs.

In relation to the "two rounds" used in my discussion, these passages from Peter Singer's *Animal Liberation Now* (2023) are interesting:

[Sidgwick] discussed the question of whether it is good to bring more people into existence if they can be expected to live happy lives and will not reduce the happiness of others so much that the total amount of happiness in the world will be lower. He thought that under these conditions, bringing more people into existence would be a good thing to do. He may therefore have supported the views of Scruton and other conscientious omnivores, for if it is good to bring happy humans into the world, other things being equal, the same should hold for bringing happy animals into existence.

Given the difficulties that I and many other philosophers have with these issues, I remain in doubt whether it is good to bring into existence beings who can be expected to live happy lives and whether this can justify killing them. Somewhat to my chagrin, I admit, I am unable to provide any decisive refutation of the conscientious omnivore.

Accepting and acting on the simple general principle that we should avoid killing animals for food except when it is necessary for our health or survival may have a better outcome in the long run, even if it means that fewer animals come into existence to have short but good lives.

209 *That is the concept of betrayal*: On this topic, see Steve Cooke, "Betraying Animals," *The Journal of Ethics*, 2019.

209 *Quite a few philosophers find themselves*: For a discussion of abolitionist and various welfarist views, see Gruen, *Ethics and Animals*. Gary Francione is a prominent abolitionist. See, for example, “Are You a Vegan or Are You an Extremist?,” *Think*, 2023.

210 *Animal advocates often contrast life*: I discuss an example in “If Not Vegan, Then What?”

213 *The idea of inner maps had been conjectured in the 1940s*: The early work was by E. C. Tolman, “Cognitive Maps in Rats and Men,” *Psychological Review*, 1948. Central to the next round was John O’Keefe and Lynn Nadel, *The Hippocampus as a Cognitive Map* (1978). Recent work includes H. Freyja Ólafsdóttir et al., “Hippocampal Place Cells Construct Reward Related Sequences Through Unexplored Space,” *eLife*, 2015.

213 *how bad this experience would be for the rats*: At a recent conference in New York City (ASSC 2023), May-Britt Moser, who won a Nobel Prize for her contribution to the “inner map” work, gave a talk in which, at several stages, she emphasized her lab’s concern with their animals’ welfare, and suggested, from their behavior in videos, that they were not in a traumatic situation.

214 *I won’t go through horror stories here in this chapter’s main text*: Here are a few examples. Tens of thousands of dogs are used in the United States each year in the testing of potentially harmful substances such as industrial chemicals, which they are forced to ingest in various ways, and also in the investigation of diseases, which are induced. In 2019, the USDA’s number was about 58,000 dogs, most of which are beagles. Some of these studies involve many months of daily forced administration of harmful substances. The dogs are kept in small cages. A dog thirty inches long, for example, can be legally kept in a cage whose floor space is three feet by three feet. If the cage is a bit larger (4.25' × 4.25', doubling the floor area), the dog need never be let out of the cage for exercise.

For more detail, see Glenn Greenwald and Leighton Woodhouse, “Bred to Suffer: Inside the Barbaric U.S. Industry of Dog Experimentation,” *The Intercept*, May 17, 2018.

<https://theintercept.com/2018/05/17/inside-the-barbaric-u-s-industry-of-dog-experimentation/>

Regarding the theme of betrayal, see the *Intercept* article and also this news story: Maya Trabulsi, “Used, Reused or Euthanized: A Dog’s Life in Animal Research,” *KPBS*, August 12, 2022. “‘The docile nature of beagles is what makes them the victim here,’ said Kathleen Conlee, a former animal researcher.”

The rules about dog cage sizes are here:

[https://www.aphis.usda.gov/animal\\_welfare/downloads/canine-care/minimum-space-requirements-for-dogs.pdf](https://www.aphis.usda.gov/animal_welfare/downloads/canine-care/minimum-space-requirements-for-dogs.pdf)

Regarding exercise:

"(a) Dogs housed individually. Dogs over 12 weeks of age, except bitches with litters, housed, held, or maintained by any dealer, exhibitor, or research facility, including Federal research facilities, must be provided the opportunity for exercise regularly if they are kept individually in cages, pens, or runs that provide less than two times the required floor space for that dog, as indicated by § 3.6(c)(1) of this subpart. (Sect. 3.8 (a))"

<https://www.nal.usda.gov/animal-health-and-welfare/animal-welfare-act-quick-reference-guides#toc--exercise-of-dogs>

I very much hope that these parts of the online notes will need to be revised soon.

In mice and rats, the “forced swim” is widely used to test antidepressants. The animal is put into a water-filled cylinder with no escape and watched as it tries to keep itself afloat and able to breathe. Eventually, it reaches what is sometimes called “behavioral despair” and gives up. Antidepressants tend to make the animal swim for longer.

A pair of studies looked at the creation of “nightmares” in rats, caused by either experiencing an electric shock to the feet or perceiving other rats experience the shock (a shock strong enough to make the rats scream). Well after this experience, rats froze when they were returned to the site of the trauma, and some exhibited sleep patterns suggesting nightmares. See Bin Yu et al., “Different Neural Circuitry Is Involved in Physiological and Psychological Stress-Induced PTSD-Like ‘Nightmares’ in Rats,” *Scientific Reports*, 2015; and see David Peña-Guzmán, *When Animals Dream* (2022), for more detail on this work.

Margaret Livingstone’s laboratory at Harvard studied the development of visual parts of the brain by suturing shut the eyelids of two baby macaques for their first year, and raising four more apart from their mothers in a way that gave them almost no experience of faces—their human keepers all wore welding masks. See Michael Arcaro et al., “Anatomical Correlates of Face Patches in Macaque Inferotemporal Cortex,” *PNAS*, 2020. Controversy arose around this project in 2022, when Livingstone published some observations on maternal bonding, also in *PNAS*, and several hundred scientists called for the work to end; see David Grimm “Harvard Studies on Infant Monkeys Draw Fire,” *Science*, October 2022. (<https://www.science.org/content/article/harvard-studies-infant-monkeys-draw-fire-split-scientists>)

For more on this case, see: <https://animal.law.harvard.edu/news-article/cruel-monkey-experiments/>. Harvard primatologist Richard Wrangham is quoted: "Taking infant monkeys from their mothers to use in invasive brain experiments could only be justified by expectations of extraordinarily important benefits for the monkeys themselves, or for humans. Because that high ethical bar has not been met, I see no legitimate need for any such research."

214 *Let's focus on animals that are pretty clearly sentient*: Which animals can feel pain and can suffer? These are distinct — stress is suffering that need not involve physical pain, and, more tendentiously, some physical pain might not be minded much. In the food discussion in this chapter, all the animals discussed probably feel physical pain (and at least in many cases, other forms of suffering). There we were looking at mammals, a few birds, and fish. A longer discussion would include crustaceans. In the case of experiments, a lot of work takes place in the uncertain area populated by flies, worms, and others. People tend to look for a cutoff, a border. Who is sentient and who is not? Which side of the line are flies on? That question is understandable as a first move, but the more likely situation is one with no sharp border. The presence of sentience will be not a simple yes-or-no matter, but one with graded and indefinite cases. Papers about animal pain often use fairly similar charts and tables with lists of features that are taken to be relevant to the question—not decisive, but relevant. A list from Lynne Sneddon (“Comparative Physiology of Nociception and Pain,” *Physiology*, 2017) includes features like avoidance learning, making trade-offs between different kinds of benefits and harms, wound tending, responsiveness to analgesic chemicals, and some others. In many cases,

though, these capacities are found both in clear forms and also in borderline, just-barely-visible, or semi-visible versions. The traits involving learning are very much like this. Flatworms, with small and simple nervous systems, can show “conditioned place preference,” avoiding locations where they’ve encountered adverse conditions, and so on. I doubt that a sharp line between *yes* and *no* cases will appear as we learn more.

215 *early-twentieth-century work on the role of insulin in diabetes*: Examples include Philip Kitcher, “Experimental Animals,” *Philosophy and Public Affairs*, 2015, and Korsgaard in *Fellow Creatures*.

217 *The philosopher Philip Kitcher wrote an article*: This is also in his “Experimental Animals.”

217 *Macaques, which are small monkeys*: In 2018, more than 70,000 nonhuman primates were used in research in the United States, according to the USDA. Most of these would be macaques.

218 *A few initiatives have built and supported retirement facilities*: In the United States, these include Chimp Haven, Chimpanzee Sanctuary Northwest, and Primates Incorporated. Thanks to Lori Gruen for information about these initiatives.