

Unnaturally Cruel: Rolston on Animals, Ethics, and the Factory Farm

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In 2010, over nine billion animals were killed in the United States for human consumption. This included nearly 1 million calves, 2.5 million sheep and lambs, 34 million cattle, 110 million hogs, 242 million turkeys, and well over 8.7 billion chickens (USDA 2011a; 2011b). Though hundreds of slaughterhouses actively contributed to these totals, more than half of the cattle just mentioned were killed at just fourteen plants. A slightly greater percentage of hogs was killed at only twelve (USDA 2011a). Chickens were processed in a total of three hundred and ten federally inspected facilities (USDA 2011b), which means that if every facility operated at the same capacity, each would have slaughtered over fifty-three birds per minute (nearly one per second) in every minute of every day, adding up to more than twenty-eight million apiece over the course of twelve months.¹

Incredible as these figures may seem, 2010 was an average year for agricultural animals. Indeed, for nearly a decade now the total number of birds and mammals killed annually in the US has come in at or above the nine billion mark, and such enormous totals are possible only by virtue of the existence of an equally enormous network of industrialized agricultural suppliers. These high-volume farming operations – dubbed “factory farms” by the general public, or “Concentrated Animal Feeding Operations (CAFOs)” by state and federal agencies – are defined by the ways in which they restrict animals’ movements and behaviors, locate more and more bodies in less and less space, and increasingly mechanize many aspects of traditional husbandry. As a recent report of the United States Department of Agriculture put it, this form of animal agriculture “concentrates large numbers of animals in relatively small and confined spaces, and [...] substitutes structures and equipment (for feeding, temperature controls, and manure management) for land and labor” (USDA 2009, 3).

Although notions of what is “humane” surely vary, few people who confront these facts live under the illusion that nine billion animals can be bred, housed, raised, fed, transported and killed humanely. Until recently, though, those who have brought such ethical concerns about the treatment of agricultural animals to the writings of Holmes Rolston, III are likely to have been somewhat dissatisfied, mostly because his now-classic *Environmental Ethics: Values in and Duties to the Natural World* mentions “modern industrial farming” only once, and only in a parenthetical reference that promises to treat the subject elsewhere (Rolston 1988, 79). Rolston’s *A New Environmental Ethics*, however, pays considerably more attention to questions about the ethical treatment of captive and domesticated animals, and even devotes several pages specifically to a discussion of factory farming. But while this text clearly identifies industrialized animal agriculture as a pressing moral problem, its approach to this problem is primarily descriptive: it conveys important data and highlights potential controversies, but never explicitly

condones or condemns the phenomenon that it documents. In this way Rolston's latest work takes long-standing questions about his assessment of contemporary animal agri-business and, rather than answering them, raises them anew.

The appearance of *A New Environmental Ethics* thus presents us with an opportunity: the occasion to ask again about Rolston's views on animals and the ethics of industrialized animal agriculture. Where does Rolston ultimately stand on this timely issue? Perhaps more importantly, is there room within the philosophical framework that he articulates for a robust critique of factory farming, one that is rooted not only in environmental concerns, but also in concern for the welfare of animals? The goals of this essay are, quite simply, to try to offer some further insight into these questions, to take another look at what Rolston says and why he says it, and to assess whether or not his texts provide us with the resources to say anything else. Given the general orientation of Rolston's writing, though, this investigation does not begin close to home with domesticated animals in agriculture, but farther afield with his views on animal suffering in wild nature.

Rolston on Animals, Predation, and Eating

Rolston's views on animals and ethics are the product of an interesting array of premises, among which is a thoroughly evolutionary outlook that emphasizes the importance of predation in the wild. "Environmental ethics accepts predation as good in wild nature" (Rolston 1988, 56), he says straightforwardly, and in both *Environmental Ethics* and *A New Environmental Ethics* he mentions two closely-related reasons why this is the case. The first, perhaps more obvious reason is that while predation undoubtedly involves suffering for prey animals, it also secures the well-being of predatory ones. "In the trophic pyramid the omnivores and carnivores regularly and necessarily capture values by imposing pain on others," he explains, and hence to object to the suffering that predation entails would be to overlook the fact that, in nature, food chains link the painful sacrifice of one organism's good to another organism's gain (Rolston 1988, 57).

The second and arguably more important reason that Rolston cites for embracing wild predation has to do with the pivotal role that predators play in larger ecosystemic and evolutionary processes. On the one hand, predators eliminate weak, sickly, and otherwise less fit individuals from populations of prey organisms, thereby contributing to the overall integrity of those species.² On the other hand, the routine culling of unfit organisms by predators is one of the primary mechanisms of natural selection, making predation vital to an evolutionary processes that Rolston believes trends towards more diverse and complex life forms. Rolston thus views predation as an integral part of the way in which nature "yields a flourishing of species" (Rolston 1988, 58), a biological force that has helped make possible some of the most significant achievements in natural history. Without predation, and the pain and suffering that comes with it, life on Earth would be greatly impoverished.

Against this background, Rolston argues that when humans encounter wild nature, we are under no obligation to try to alleviate the suffering found there. In fact, he contends that we

ought actively to refrain from doing so in a variety of circumstances, including many in which exercising such restraint may seem callous or cruel. He also argues that, since animals in the wild have no special claim to a pleasant life free of pain, humans have no special duty to provide them with one, even when we come to make instrumental use of them. This moral rule holds true, moreover, not only in the case of wild animals, but also in regards to animals that have been taken out of their natural environments and placed under conditions of domestication. Rolston discerns no particularly forceful obligation, then, to advance the welfare of domesticated animals, and this is because, as Clare Palmer has pointed out, though he recognizes that they have been brought under the care of humans in culture, he still situates their origins in wild nature, such that the appropriate comparison class for assessing our conduct towards them is not other human beings, but other animals (Palmer 2007, 190). Therefore domesticated agricultural animals, like their wild cousins, have “no right or welfare claim to have from humans a kinder treatment than in nonhuman nature” (Rolston 1988, 59).

Consequently, rather than advocating that animal agriculture be made to adhere to some ostensibly more humane ethical standard, Rolston believes that it should be made to “fit [...] into the natural givens, where pain is inseparable from the transfer of values between sentient lives.” He thus rejects the idea that we are required to promote to the greatest extent possible the psychological welfare of agricultural animals, and suggests instead that our moral reflections in this area be guided by a “homologous principle” (Rolston 1988, 61). This principle, which he refers to as a rule of “nonaddition” as opposed to subtraction of suffering (Rolston 1988, 60), urges us to tolerate the pain inflicted upon agricultural animals while being careful not to cause them to suffer in excess of what might have been their lot in the wild. The homologous principle asserts, in other words, that although we should not make agricultural animals suffer excessively, we have no strong duty to ensure that they suffer only minimally.

An important part of Rolston’s thinking on this issue, and one that has attracted the attention of many commentators, is that meat-eating is a basically “natural” human activity, something roughly analogous to predation in the wild that, as such, ought to be viewed in a comparable ethical light. This is, to be sure, a contentious claim, but Rolston’s logic here seems understandable enough: if one adopts an accepting attitude towards the animal suffering caused by predation in the wild, then one ought to adopt a similar attitude toward that which occurs in agricultural contexts, since eating animals is a typical feature of trophic webs and this basic pattern of interaction is still evident in the human use of domesticated animals for food. “Human predation on nature,” we are told, “more or less within the natural patterns, cannot be condemned simply because humans are moral agents, not if nonhuman predation has been accepted as good in the system” (Rolston 1988, 59).

Of course, Rolston is well aware that, of the reasons he advances for accepting the suffering of wild animals, one has little if any relevance to a discussion of agricultural animals. The latter, he observes, “have been removed from the environment of natural selection” (Rolston 1988, 60), and thus while their suffering still occurs “in the context of the transfer of ecological goods, inherited from the wilds,” it is nevertheless no longer situated in the larger context of the

evolutionary development of a species (Rolston 2012, 77). Because of this, he suggests that in agricultural settings there may indeed be some need to employ a “hedonist principle” of minimizing pain (Rolston 1988, 79). “[W]here pain in agricultural or industrial animals has become pointless,” he writes, “because they too have been removed from the environment of natural selection, humans have a duty to remove that pain, as far as they can” (Rolston 1988, 60).

This expression of heightened concern for the welfare of agricultural animals is noteworthy, and it certainly could be taken to suggest that Rolston’s position ultimately stands opposed to some of the more intensive types of animal agriculture that currently exist. Yet the actual import of the hedonist principle in Rolston’s thinking about animals in agriculture, while not entirely clear, appears somewhat minimal. He says, for example, that the principle is “significant,” but refers to it as a “weak ethical rule” (Rolston 1988, 61, 79). He also claims that efforts to minimize pain are a matter of “benevolence” rather than “justice” (Rolston 1988, 61) and that reducing animal suffering below natural, ecosystemic levels “can be commended, but not required” (Rolston 2012, 77). Such statements surely restrict the practical role of the hedonist principle in Rolston’s philosophy, and indicate the priority he typically accords to the homologous principle when assessing the uses to which domesticated and agricultural animals are commonly put. It seems, therefore, that if the hedonist principle adds to a condemnation of any of these practices, its contribution is not very great. But why, we might ask, is this so, and does Rolston’s work really foreclose the possibility of a more substantial critique of animal agriculture’s increasingly mechanized and industrialized forms?

Animal Welfare in the Wild?

We can begin to work towards answers to these questions by examining briefly the relation between Rolston’s views on animals and ethics and those espoused by Peter Singer in his well-known book *Animal Liberation*. First published in 1975, Singer’s text had been in circulation for over a decade before the appearance of Rolston’s *Environmental Ethics*, and although Rolston references Singer somewhat sparingly in the course of his writing, it is clear that his position is developed in large part as a response to the one that Singer helped to popularize.

As it is elaborated in *Animal Liberation*, Singer’s argument rests on two main points. The first, drawn directly from utilitarian moral theory, is that pleasure is a good that ought to be promoted, and pain, as the negation of pleasure, ought to be minimized. The second is that many animals are, like most humans, sentient beings capable of experiencing pleasure and pain. Since most of us readily accept that we should keep to a minimum the pain that we might cause other people, Singer believes that once we recognize that animals too can suffer, it is only logical to include them in our moral calculations. An egalitarian “principle of equal consideration of interests” (Singer 1993, 21) tells us that if animals have welfare-interests, then there is no excuse not to take those interests into account when deciding what to do. “If a being suffers,” he says, “there can be no moral justification for refusing to take that suffering into consideration. No

matter what the nature of the being, the principle of equality requires that its suffering be counted equally with the like suffering [...] of any other being” (Singer 1990, 8).

In keeping with the stress that utilitarians typically place on the need for moral agents to weigh alternatives, Singer adds to this broad moral outline a number of premises relevant to an analysis of animal agriculture, including that humans do not need to eat animals to be healthy, that animals often suffer significantly when we do, and that becoming a vegetarian helps to disconnect us from the vast agricultural system that all too often leads back to the factory farm. Taking these factors into account, Singer argues that we ought to cease supporting animal agribusinesses with our dietary choices. He argues, that is, that a commitment to reducing suffering obliges us to abandon the heavily meat-based diets that, in the modern industrial context, give every indication of bringing us much closer to maximizing pain than to minimizing it.³

As one might expect, among Rolston’s leading criticisms of this approach to animal ethics is that it applies the principle of minimizing pain too indiscriminately, and that those who embrace it are therefore likely to object not only to the pain endured by domesticated and agricultural animals, but also to that undergone by animals in the wild. In *Environmental Ethics*, for example, he says that “if all suffering introduces rights or welfare claims when moral agents come on the scene, a really consistent animal ethics will dislike predation and seek to eliminate it,” and to illustrate this point he cites Steve Sapontzis, who claims that “[w]here we can prevent predation without occasioning as much or more suffering than we would prevent, we are obligated to do so” (in Rolston 1988, 56; Sapontzis 1984, 36). Similarly, in *A New Environmental Ethics* Rolston questions animal activists who condemn hunting on the grounds that it is neither necessary nor humane, asserting that environmentalists will rightly worry that “these activists, though they may love animals, also hate real nature, the wild, raw world in which these animals live” (Rolston 2012, 69).

Remarks like these underscore the connections Rolston regularly draws between a lack of appreciation for natural predation, an inclination to interfere in the fates of wild animals, and the sort of philosophical emphasis on minimizing pain that animates Singer’s work. With these connections in place, it is understandable that he would conclude that the “obligation to universal benevolence is too strong” because it “fails to incorporate any moral tolerance of the processes of wild nature” (Rolston 1988, 54).⁴ But while there is no doubt that Rolston is sharply critical of animal ethicists who over-emphasize, and consequently over-extend, the moral ideal of minimizing suffering, it is not the case that he censures all efforts to safeguard the welfare of animals in the wild. In fact, he provides several notable examples in which he does just the opposite.

In *A New Environmental Ethics*, for instance, he cites the case of a grizzly bear that had been struck and mortally wounded by a truck in Glacier National Park. Fearing that the bear was suffering excessively, park officials elected to mercy-kill it, a decision that Rolston praises on the grounds that “encounter with a truck (an artifact) is no part of the forces of natural selection that have operated historically on bears.” “Where humans cause the pain,” he explains, “they are under obligation to minimize it” (Rolston 2012, 75). Elsewhere he references a case in which

bighorn sheep in Colorado had contracted lungworm and were subsequently dying of pneumonia. Most people believed that the lungworm species in question had come into the area by way of domesticated sheep; others held that it was a native species, but that the bighorns had become more susceptible to it because their winter range had been compromised by human development (Rolston 1988, 53–4; Rolston 2012, 72, 74–5). But since by all accounts the driving force behind the bighorns' plight was human interference rather than natural selection, Rolston commends the actions of wildlife veterinarians to provide them with medical treatment. "Letting the lungworm run its course really was not letting nature take its course," he observes, and thus "both in concern for the species and in concern for suffering individuals, treatment was required" (Rolston 2012, 74–5).

In addition to reinforcing several themes we have already touched upon, what makes these examples especially noteworthy here is that they neither marginalize nor downplay concerns about reducing unnecessary animal suffering. Quite the opposite, they bring such concerns to the fore, thereby providing us with relatively forceful expressions of the idea encapsulated in Rolston's hedonist principle, namely that there is a moral obligation to minimize pain that has lost its ecological or evolutionary functionality. Indeed, these commentaries depict the hedonist principle as obligatory rather than supererogatory, and promote its consistent application even in circumstances involving wild animals in natural settings. Of course, to point this out is not to suggest that Rolston's writing advocates reducing pain to the same extent that a really thoroughgoing animal welfarism arguably would. It is, rather, to indicate that his position is capable of placing more stress on minimizing human-inflicted animal suffering than his discussions of animal agriculture tend to do – enough stress, in fact, that one might very well surmise that a fairly sharp critique of animal agriculture is not only possible within the confines of his eco-philosophy, but actually necessitated by it.

Unnaturally Kind, Unnaturally Cruel

Still, it is not true that one could simply transfer Rolston's prescriptions for the bighorns or the grizzly bear to animals in agriculture, the reason being that the suffering in the former cases was not just human-caused, but also "unnatural." Now, this brings us to one of the more complicated dimensions of Rolston's views on animals and ethics – his reliance on conceptions of what is or is not natural – the full consideration of which falls outside the scope of this essay.⁵ For present purposes, however, it suffices to say that Rolston believes that animal suffering can be unnatural in at least two ways: either by exceeding ecological norms, or by occurring for ecologically atypical reasons, and it is clear from the remarks above that what he finds morally objectionable in the examples cited is not that animals were experiencing pain in unusual amounts, but that their pain was caused by forces foreign to their ecological niches.

The suffering of agricultural animals, by contrast, remains "quasi-ecosystemic" (Rolston 1988, 80), meaning that although it is no longer situated in an evolutionary context, it does occur for a reason commonplace in wild nature: the predation of one organism upon another. Rolston

sees an important difference, then, between the suffering of animals in agriculture and that of bears hit by trucks or bighorns plagued by introduced parasites, a difference that leads him to judge that the suffering of wild animals in such circumstances is less justified than that of domesticated cows and chickens slaughtered for food. Against thinkers like Singer, therefore, who place little moral stock in such considerations, Rolston finds that because the human consumption of agricultural animals represents an ecologically ordinary way in which organisms interact, and is in that regard “natural,” our obligation to minimize the pain that it causes is significantly weakened, if indeed we have any obligation of this sort at all.

Not surprisingly, in opening up the question of what constitutes a natural human use of animals, Rolston’s thinking on this issue has sparked much dialogue and debate, and commentators have found his line of reasoning problematic for a number of reasons. Prominent among these is that, as thinkers like Victoria Davion (2007), John Mizzoni (2002), and Peter Wenz (1989) have all pointed out, human dietary practices have pronounced socio-cultural components, yet if our consumption of animal foods is as much a cultural as it is a biological or ecological phenomenon, then it may be that Rolston’s justification for the suffering it causes fails on its own terms. More immediately pertinent to the topic of this essay, though, is that Rolston’s contention that eating animals is natural often seems to be the result of looking narrowly at the act of eating itself, rather than at the means by which animal products are made available for human consumption.⁶ That is, Rolston usually focuses more on the fact *that* humans eat animals than on *how* we make them available to be eaten, and this not only leads him to write as if establishing the naturalness of eating animals settles the matter of how one justifies their suffering in agriculture, but also causes him to miss what is arguably the most important dimension of this issue in the eyes of many critics of factory farming – critics who, as a general rule, focus less on the practice of consuming animals than on the increasingly industrialized means employed to mass-produce the billions of animals actually consumed.

If we concentrate on how agricultural animals are produced, however, and not just how they are used, what we find is that there are a number of key differences between natural predation and the eating of factory-farmed agricultural animals that, if taken seriously, would require us to temper Rolston’s moral ruling in this case rather substantially. Perhaps the most notable of these is that, while there is a plausible sense in which the use of animals in agriculture parallels predation, there is no doubt that the specific sorts of interactions between humans and other-than-human animals that occur in factory farming bear little resemblance to the trophic interactions between predators and prey in the wild.⁷ Hence, even if the consumption of factory-farmed animals is, in some extremely broad sense, “natural,” the process by which it occurs is, to borrow Rolston’s phrasing, decidedly culturally novel.

Closely connected to this is the further issue that, in contradistinction to what occurs in spontaneous nature, high-volume animal agri-businesses create a number of unique problems for, and usher in an array of maladaptive strategies among, the animals that are subjected to them. These problems, which are well-documented in the literature on factory farming and reviewed in both Singer’s *Animal Liberation* and Rolston’s *A New Environmental Ethics*, stem from the fact

that the husbandry and manufacturing techniques of factory farms elevate animals' levels of stress, decrease their resistance to disease, and increase their aggressive and self-destructive behaviors. All of this, in turn, prompts farm and facility operators to try to mitigate the negative impacts of such things through a variety of preventative measures, including "de-beaking" chickens, docking the tails of pigs, and greatly increasing the use of antibiotics – practices that are, without question, artificial solutions to equally artificial problems.⁸

Finally, we might consider that factory farming, unlike predation in the wild, involves domesticated agricultural animals that are deliberately bred for dependence on humans, something that many would argue generates duties to them beyond those that we might have to animals in the wild. Indeed, that we have heightened obligations to domesticated animals is an idea with which even Rolston apparently concurs: in the essay "Living on Earth," for instance, he replies with a simple "Amen" to Palmer's claim that the domestication of animals "can be seen as a process such that, in creating relationships that close down domestic animals' abilities to live independent lives, creates special human responsibilities to provide for them" (Rolston 2007, 241; Palmer 2007, 199).

Taken in conjunction with the various dimensions of Rolston's philosophy that we have been examining, the conclusion towards which these reflections are leading is not terribly difficult to see. What we have said to this point does not go so far as to support the more sweeping claim that eating animals is absolutely morally prohibited because it is absolutely unnatural; it indicates, rather, that despite whatever parallels Rolston might want to draw between them, what goes on in factory farming is dissimilar enough from predation in the wild that our obligation to eliminate the suffering it causes would have to be far greater than he ever really admits, and for reasons that are essentially his own. Expressed in terms closer to Rolston's, we could just say that our commentary thus far shows that even if wild animals ought only to be spared unnatural suffering, we still have every reason to posit that domesticated agricultural animals ought to be spared highly artificial forms of suffering that only very loosely conform to some presumably natural or ecological pattern. While there may indeed be no need for us to be "unnaturally kind" to wild animals, neither ought we to be unnaturally cruel to domesticated ones, and nowhere is such cruelty more apparent than in factory farming.

Eating in Place

As is often the case in philosophical treatments of morally complex issues, we have had to follow a somewhat circuitous path to arrive at the conclusion just stated. But given that this conclusion has been drawn in large part from resources in Rolston's own writings, one might wonder why he himself never formally drew it, particularly after taking such explicit care in *A New Environmental Ethics* to chronicle what happens down on the modern factory farm. To be sure, this is not meant to imply that Rolston has ever claimed that factory farming is morally laudable or humane, and in fact he says quite frankly in at least one place that he believes it is not (Rolston 2007, 240). As we bring our analysis to a close, though, it may be worthwhile to

consider why he appears not to have integrated this insight more fully into his thinking about animals and ethics, despite the fact that his writings seem to contain most of the elements necessary to do so.

Although this query is admittedly somewhat speculative, there are several things that we might initially suggest in response to it. There is, for example, Rolston's own candid admission that his view of factory farming may have been skewed by his experiences with agricultural animals growing up in rural West Virginia (Rolston 2007, 240). We might also point to his apparent acceptance of the idea that, since domesticated agricultural animals are bred and raised for human consumption, we are somehow justified in compromising their individual welfare when using them to this end.⁹ Additionally, there is the marked preference that he displays for wild animals, and his corresponding tendency to view domesticated animals as inferior or "degraded."¹⁰

As the line of argument taken in this essay already indicates, however, it seems likely that more important than any of the explanations just offered is that Rolston's work has always sought to affirm the value of both natural processes and our human participation in them, and he clearly views eating meat as a primary way in which we do both: to eat animals is, in Rolston's estimation, at one and the same time to embrace the role of predation in nature, and to accept our own place in the ecological order that includes it. But while Rolston is absolutely right to stress the need to affirm our human belonging to nature, including our places in the trophic webs that are such a vital part of the way in which the world works, the more one studies this particular issue the less clear it becomes why the eating of domesticated animals that have been born and raised under conditions of confinement agriculture would be regarded as a way of doing so.

Of course, one need not reject all meat-eating in order to condemn factory farming. But by the same token, one surely need not accept all meat-eating in order to accept one's standing in a world in which suffering plays its part. In fact, it would seem more accurate to say that to embrace the ecological realities in which we are always implicated would be, at the same time, to reject any ecologically naïve vision of ourselves as indiscriminate consumers of sentient beings, or a morally empty and dominionistic commodification of some of our closest biological kin. Indeed, surveying Rolston's many invaluable contributions to the field of environmental ethics, it could easily be argued that, on the whole, his works not only convey these very messages quite powerfully, but that they are among the leading intellectual and cultural forces that have helped us to understand their true significance. One can only hope, therefore, that his reply to our expression of them would be another "Amen."

Notes

1. US slaughter statistics for the year 2011 appeared only days before this essay was submitted for publication, and are consistent with the data for 2010. They can be found on-line at the USDA web addresses provided for the 2010 figures.

2. See, e.g., Rolston 1988, 58; Rolston 2012, 73.
3. Chapters 3 and 4 of Singer 1990 – titled “Down on the Factory Farm” and “Becoming a Vegetarian,” respectively – cover these points in detail.
4. Rolston’s ecologically-oriented attitude towards predation and the suffering it causes does diverge from the attitudes of some animal ethicists, yet we should make clear that the latter are not wholly ecologically un-informed in the way that Rolston’s comments sometimes seem to suggest. Jennifer Everett, for example, says that it is reasonable to believe that there are “indirect, instrumental benefits of predation to aggregate animal welfare,” and hence the trophic asymmetries we have been discussing “will be valued by animal welfarists because they conduce ultimately, albeit indirectly and via complex causal chains, to the well-being of individual animals” (Rolston 2001, 48). Steve Sapontzis, too, is unambiguous in his claim that interference with predation often would produce more suffering than predation itself, and he argues that because of this animal activists would do more good by concentrating on “alleviating the unjustified suffering humans cause animals than by attempting to prevent predation among animals” (Sapontzis 1987, 247). In his essay “Sentientism,” Gary Varner notes this aspect of Sapontzis’s argument, and suggests that it points to something of a reconciliation between animal ethicists and other environmental philosophers. “To the extent that it is factually correct,” says Varner, “that prey species ‘need’ their predators to stabilize the ecosystem on which they depend, even predator reintroduction can look good from a sentientist perspective” (Varner 2003, 200).
5. For more extensive discussions of Rolston’s conception of “natural” human uses of animals, see: Rolston 1989; Palmer, 2007.
6. This focus is evident in many of Rolston’s remarks, ranging from his assertion in the early essay “Treating Animals Naturally?” that humans are “naturally omnivores” (Rolston 1989, 134), to his claim in *A New Environmental Ethics* that “[m]eat eating in culture exploits animals but this also fits into the natural givens” (Rolston 2012, 77). Marti Kheel (2008), as well as Paul Veatch Moriarity and Mark Woods (1997), has also noted this feature of Rolston’s arguments in favor of eating animals.
7. That is, while factory farming may function to serve some human *ends* comparable to the ends served by the actions of predatory animals, it diverges quite sharply from the *behaviors* in which other-than-human animals engage in order to do so.
8. These problems and practices are discussed in Rolston 2012, 77–81, and more extensively in Singer 1990, chapters 3 and 4.

9. As evidence of this, we might cite Rolston's claim that a "main problem with that concern about causing domesticated food animals pain is that all these food animals would cease to exist if they did not live to be eaten" (Rolston 2007, 241). See also: Rolston 1988, 78.
10. This tendency can be seen in much of Rolston's writing about domesticated animals, though the specific reference here is to Rolston 2007, 240. Palmer claims that since Rolston is "[p]rimarily interested in the context of the wild, concern for the context of domestication is slight and engagement with it minimal (and there is a persistent sense that the domesticated and rural, tainted by human contact, are inferior contexts to the wild, as are the animals within them)" (Rolston 2007, 193).

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