

Animal Ethics and Public Expectations: The North American Outlook

Paul B. Thompson

ABSTRACT

Recent social science research on the American public's attitudes toward the welfare of food animals tracks closely with a difficult-to-resolve philosophical issue. One side interprets welfare in terms of the way that a given animal is faring in a production setting. This view emphasizes the animal's medical condition and cognitive well-being. The other view derives norms for welfare from a conception of what is natural for an animal of a given species. This view presumes that an animal does well when it is living according to its nature. Both of these approaches reflect traditions of ethical thinking that have long histories of application to human and non-human animals, and each appears to have a significant constituency among the public. Each view implies a different approach and different standards for livestock welfare. The fact that this philosophical debate has a history dating back to ancient times suggests that it will not be resolved easily.

Key words: animal welfare, ethics, public attitudes, ethology, philosophy

In this article, I explore a very difficult and unsolved problem in conceptualizing animal welfare. Succinctly, the problem arises in practical contexts because evaluations of how animals are faring depend on the way that behaviors typical of a given species are understood to contribute to the animal's well-being. People who see health and affective states as the whole of animal welfare will not reach the same conclusion as those who see the animals' ability to behave in a natural way as a key component of welfare.¹ It is a philosophical problem because the difference between these views hangs on a normative or ethical judgment, and it is a policy problem because mutually incompatible ways of making the judgment each appear to have significant support in public opinion. It does not appear to be a problem that will yield to better science. It is, however, a problem that is nested within the assumptions of specific contexts in which animals will be used by humans (i.e., the question of whether animals will be used is not at stake) and in which cost considerations are relevant. Although these assumptions are operative within most of the situations in which practicing veterinarians do their work, they are not typical of the wide-ranging reflections that philosophers conducted on human-animal relations over the past century. As such, it is useful to begin by situating the problems that are the focus of this article within a broader context of philosophical thought on non-human animals.

PHILOSOPHERS ON THE SIGNIFICANCE OF ANIMALS: SETTING THE SCENE

People have reflected on the relationship between human beings and other species for seemingly innumerable distinct purposes. Debates over whether other non-human species' behavior was indicative of rational thought raged among the ancient Greeks. Aristotle thought not, but some Stoics disagreed forcefully, yet without making the further inference that rationality in non-humans provides

a persuasive reason to regard their interests as having significant moral weight.² In the twentieth century, the notoriously difficult German thinker Martin Heidegger undertook an extended meditation on the comparative difference between a stone, an animal, and a person to better understand the nature of being-in-the-world. The stone, he thought, lacks world entirely, whereas the animal is "poor in world." A person's sense of being-in-the-world is circumscribed by the foreknowledge of death. Death limits that form of being Heidegger thought unique to humans because our experience of being alive is pervaded by cognizance of its ultimate contingency. Unlike the stone, animals die; like humans they have contingent being, but they cannot, thought Heidegger, come to have an awareness of their being as such: They are not aware that their experience of the world is circumscribed by death.³ Not long before his death, the French post-modernist Jacques Derrida undertook a lengthy reflection on the way that our idea of humanity has been shaped by the unquestioned assumption that the human and the animal are discrete categories defined in opposition to one another. He noted that most philosophers wrote as if it were obvious that humans are other than animals.⁴ His point was that our understanding of what it is to be human would be different today if this counterfactual assumption had been less prevalent in the past. Quite recently, a quintet of some of the twenty-first century's most distinguished thinkers have engaged in an exchange of views on similar animal-related themes to query the role of philosophical thinking itself.⁵

These musings on rationality, being, and philosophy point to the intellectual potency of reflecting on non-human animals, and they remind us that there is much more to thinking philosophically about animals than one typically encounters in animal ethics. Yet it is also true that a surge of ethical reflection on the norms that humans should follow with respect to non-humans has been

influential both within the academy and beyond. The upturn of philosophical interest in animal ethics began at Oxford University in the 1960s, when a group of faculty and students read Ruth Harrison's book *Animal Machines*⁶ and began experimenting with vegetarianism. The Australian philosopher Peter Singer, then a student at Oxford, brought some of the thinking behind these experiments to widespread public attention with an article in the *New York Review of Books* in 1972⁷ and then developed these ideas at some length in his book *Animal Liberation*,⁸ originally published in 1975. Singer's approach emphasized animal suffering. Soon afterward, Tom Regan⁹ developed an importantly different approach to animal ethics with an emphasis on animals as the subject of moral rights. Sociologists James Jasper and Dorothy Nelkin¹⁰ credited Singer and Regan with providing an important source of validity and gravitas for a social movement to reform various human practices that use or affect non-human animals. At the same time, however, no one—not Jasper and Nelkin nor Singer or Regan themselves—actually thought that participants in this social movement were motivated by an understanding of the philosophical arguments.

It is very unlikely that more than a fraction of the public actually thinks about these issues in a manner consistent with Singer's^{7,8} conception of animal welfare or Regan's⁹ conception of animal rights. Yet this work by philosophers seems to have been important for legitimizing more extreme positions such as the call for an abolition of using animals in research or for food, and righteous minorities can have political clout. In such an environment, it seems entirely reasonable to call for a justification of existing practices. Given the American cultural proclivity for negotiation and compromise, a convincing rationale for continuing a practice will often carry the day when it is accompanied by concessions that ameliorate those aspects of the situation thought to be problematic. The evolution of Institutional Animal Care and Use Committees (IACUCs) has had considerable success in this regard, and it is worth noting that the IACUC process has significantly changed laboratory animal practice.¹¹ The upshot is that although current practice in laboratory animal research hardly satisfies animal protectionists who take more extreme views, the political give and take on this question appears to have arrived at something approximating equilibrium. In the domain of agriculture, those responses to critics that have been forthcoming have been singularly unconvincing, and a largely negative view of contemporary livestock production has been ascendant.

I do not review the evidence for this conclusion here. The 2008 success of Proposition 2 in California testifies to the fact that it is possible to convince a significant proportion of the voting public that something is amiss in animal agriculture. It will be more helpful to examine the philosophical basis for reforms in animal-production methods that have some promise for ameliorating the most problematic aspects of contemporary livestock production. In this connection, a brief review of some ethical criticisms levied against livestock production will prove useful. In fact, as in the case of laboratory animals, there are some critiques that are simply not amenable to ameliorative response. The implication is that the task for animal ethics

then divides into two parts. On one hand, there is a place for engagement, with radical critiques calling for an end to livestock production altogether; on the other hand, there are inquiries dedicated to ameliorating the condition of farm animals, given the assumption that production on something approximating the current scale will continue. The first task is beyond the scope of this article, so after a review of critics, I take up the second in the next section. In the penultimate section, I discuss the question of whether the ameliorative responses that seem indicated are likely to assuage public opinion. Recent evidence has suggested an equivocal answer to this question. After a discussion of the practical implications for understanding and operationalizing a conception of animal welfare in livestock production, I conclude the article by noting that neither of the two reigning approaches to the ethics of animal welfare appears to fully articulate an adequate practical ethic for developing animal-welfare standards or for implementing reforms in animal production.

WHAT DO PHILOSOPHERS THINK IS WRONG WITH LIVESTOCK PRODUCTION?

The main focus of this article is to examine the philosophical issues raised by a more thorough incorporation of animal welfare into the design and husbandry of livestock production, but it is important to recognize that such reforms may well not be central to many of the ethical critiques that have been levied against animal agriculture. *Moral vegetarianism* can be broadly defined as being a vegetarian for moral reasons, as distinct from being vegetarian on grounds of health, religious duty, or simply personal taste. But there are several varieties of moral vegetarianism. Like Tom Regan's^{9,12} well-known animal-rights theory, many are based on the moral prohibition of taking animal life in all but exceptional circumstances. Although there are multiple routes to such a conclusion, examining these philosophical critiques in detail would take the present inquiry far astray. Suffice it to say that there is very little that could be done by way of altering production methods that would satisfy anyone holding such a view. Other philosophers arrive at moral vegetarianism through considerations that emphasize features unique to the post-industrial era in which we live. Peter Singer's¹³ argument, for example, holds that vegetarianism is a form of protest against the suffering of animals in concentrated animal feeding operations (CAFOs). Were this someone's only reason for being a vegetarian, methods that alleviated suffering would also alleviate the need for protest. From this viewpoint, philosophical interpretation of animal welfare and accurate factual accounting of the extent of suffering become the dominant issues. This perspective is developed at some length below.

However, even a brief review of the literature shows that moral vegetarianism is an over-determined conclusion for many who reflect on this topic. Here, *over-determined* means that several lines of reasoning contribute to this conclusion, so that responses addressing only one argument do not defeat the moral commitment to a vegetarian diet. Environmental impact is frequently cited as a supporting argument, for example.¹⁴ The view that

humanity might reduce adverse impacts on the environment from agriculture by reducing the acres dedicated to producing animal feed was popularized by Frances Moore Lappé¹⁵ in her 1974 book *Diet for a Small Planet*. The view has received support from findings on livestock production's contributions to the release of greenhouse gases. Because this line of reasoning moves quickly into empirical disputes over the actual impact of CAFOs as opposed to other forms of animal production, it would once again launch the present inquiry into tangential issues. Yet it is important to note that environmental impacts play an important role in moral vegetarian views, even if they have little to do with the impact of livestock production methods on the health or well-being of the animals themselves.¹⁶

Other authors object not to killing animals as such but to the industrial organization of animal slaughter that has been characteristic of meat production in industrialized countries for well over a century. This is one of the themes that emerges in J. M. Coetzee's¹⁷ Tanner Lecture on Human Values, published under the title *The Lives of Animals*. This work, which should be read by everyone who believes themselves to have an informed view on ethical responsibility to animals, places a number of different philosophical attitudes to animals in dialog with one another through the vehicle of a short story about a famous novelist who is visiting the small college where her son is a member of the faculty. The novelist, Elizabeth Costello, gives a talk in which she describes herself as "wounded" by the industrial scale of contemporary livestock production and makes a comparison to industrialized slaughter of human beings in Nazi death camps. This reference motivates further developments in the plot, as a poet and Holocaust survivor who happens to be on the faculty responds with a strenuous protest.¹⁷ Doing justice to the conflicting lines in Coetzee's story would, once again, launch the present inquiry into tangential matters. Yet it is worth stressing the way that philosopher Cora Diamond,¹⁸ a strong critic of Peter Singer's approach to animals, sees Costello's character to represent a much more honest and effective entrée into animal ethics. As Diamond put it, it is the contrast between the enormity of animal slaughter and the unfeeling way in which most of humanity carries on its business in the face of this enormity that causes Costello to feel wounded and unhinged.

These samples from numerous writings on animals that have been published over the past 40 years show that making an attempt to improve the welfare of animals within industrial production systems will simply not be viewed as an adequate response by many critics. Indeed, John McDowell⁵ offered the following comment on such a response:

Suppose someone said the project of eliminating Europe's Jews would have been a lesser evil if its victims had been treated with the utmost consideration and kindness in all respects apart from being deprived of a life, which would of course have been done, in this fantasy, as humanely as possible. Such a judgment could be seriously advanced only in the somewhat crazy environment of academic philosophy. It distorts the way how things actually were matters.

McDowell's⁵ point is not to make a literal comparison between livestock production and the Nazis' conduct of a "final solution" but instead to provide an example of a situation in which ameliorative response to welfare deficits would be regarded as wholly inadequate from a moral point of view. Nevertheless, the existence of these themes in the published literature shows two things that should not be forgotten when considering the broad social context for this symposium. First, as noted, the symposium itself will be viewed as a morally inadequate response by some animal advocates. Second, the ethics of animal welfare within livestock production involves the assumption that, whether livestock production is or is not viewed as a morally defensible activity, animals will continue to be raised on a large scale for the foreseeable future. Given this framing assumption, a careful attempt to understand how animals fare under alternative housing and husbandry systems becomes both reasonable and incumbent. But Cavel et al.'s remark shows that some will regard the attempt to understand how animals fare as morally compromised itself.

ANIMAL WELFARE

The welfare of animals in livestock production systems is often represented in terms of three overlapping domains (see Figure 1). First are standard indicators of veterinary health, including mortality and morbidity. Other indicators for growth and development as well as some physiological measures combine with gross measures of mortality and morbidity to form this first category of non-controversial welfare standards. Second are cognitive measures, sometimes represented as animal feelings. Criteria are less straightforward in this category because objective measures of stress hormones, brain function, and behavioral indicators are interpreted as indicators of pain, frustration, or suffering that is experienced by animals. The philosophical problem in this category is a version of the "other minds" problem: Strictly speaking, it is impossible for any of us to know exactly how things feel to someone else. The problem is exacerbated for other species because their brain functions, evolution, and perceptual apparatus differ from that of humans in important ways. Yet, as Thomas Nagel¹⁹ argued, although we may not know what it is like to be a bat, we do believe that there is something that it is like to be a bat, that there is a quality of feeling to a bat's existence. The final category of welfare indicators have been derived from observation of animal behavior and from evolutionary theory, including evolutionary genetics. This category recognizes certain behaviors, drives, and functions as elements of animal welfare. It would include reproductive drives and social behaviors characteristic of a particular species. The presumption is that these drives have some sort of genetic basis.²⁰

Michael Appleby²¹ has provided a convenient rubric for these domains of animal welfare. He characterized veterinary health as "animal bodies," cognitive measures as "animal minds," and the final category as "animal natures."²¹ The three-way classification of domains for welfare indicators has become commonplace in the literature of animal-welfare science. David Fraser¹ christened them with more scientific labels: Animal bodies become

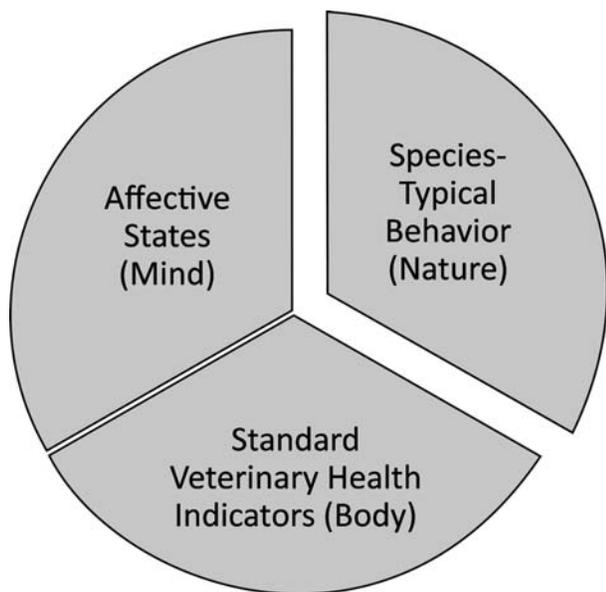


Figure 1: Domains of animal welfare

“basic health and functioning,” animal minds become “affective states,” and animal natures becomes “natural living.” Although there are a number of potentially significant differences in the way in which different authors would classify these domains of welfare, Appleby’s²¹ terminology is particularly useful in the present context, as becomes clear below. There are a number of philosophical issues that must be addressed in operationalizing animal-welfare indicators within any actual production context. Sandøe, Christiansen, and Appleby²² suggested four: What is the baseline standard for morally acceptable animal welfare? What is a good animal life? What farming purposes are legitimate? What kinds of compromise are acceptable in a less-than-perfect world? The three-way framework is applicable in addressing each of these questions, but it is primarily oriented to the second: What is a good animal life? The suggestion is that each of these domains includes indicators that characterize quality of life for animals and that ethical purposes will be served by ensuring that farming practices are attentive to indicators in all three domains. The final question concerning acceptable compromise recognizes that there may be trade-offs between some elements of animal welfare and other ethically compelling goals associated with livestock production. What is less obvious from this treatment is that there may well be trade-offs that are internal to the determination of what constitutes a good animal life, irrespective of the larger functions and goals of livestock production. Thus, factors bearing on animal bodies may need to be sacrificed in pursuit of indicators for animal minds or animal natures. It is this rather narrow sense of trade-offs that is the focus of the analysis given here.

In particular, there are competing strategies for the ethical interpretation of the entire category of animal natures. Indicators in this category include species-typical behaviors that vary for each of the primary species groups in livestock production. As noted already, many of the practical changes that have been advocated for housing

and husbandry emphasize opportunities for animals to engage in species-typical behaviors such as socialization and foraging for pigs²³ or nesting and dust bathing for laying hens.²⁴ The philosophical question is “Why do opportunities to engage in species-typical behavior matter from an ethical standpoint?” There are two important strategies for answering this question. One approach understands the frustration or curtailment of these behaviors that may occur in some intensive rearing systems as having impacts either in terms of animal health or at the cognitive level in terms of felt distress, suffering, anguish, or pain. This view effectively presumes that the ethically significant categories of animal welfare are the veterinary health indicators included under the heading of animal bodies and the felt needs or experiences characterized by animal minds. Animal natures, in other words, are ethically important in a derivative sense. By analogy to the way that we characterize human welfare, maintaining healthy bodies and healthy minds are intrinsically important. They are *sui generis* contributors to welfare, as opposed to indicators that stand in for something else or that lead to some more fundamental kind of good. Encouraging or enabling behaviors or capabilities that are typical of the species become ethically important because they contribute to bodily or mental health.

The alternative view supposes that each of the three domains of welfare represent *sui generis* contributions to well-being. None can be reduced to any of the others. As noted already, species-typical behaviors are generally presumed to be based in genetics, and animal genetics are, in turn, generally understood to be the product of the evolutionary history of the species. Thus, drives to engage in certain behaviors can be presumed to have contributed to the evolutionary success of the species, at least as reflected by genetic selection in natural environments.²⁵ Given this orientation, one may characterize the opportunity to engage in these behaviors as an ethological need.²⁶ Because the satisfaction of ethological needs may be quite challenging to animals when their physical environment differs substantially from that of natural environments in which the species evolved,²⁷ Appleby’s²¹ characterization of this category in terms of animal natures can be interpreted as an injunction to make the production environment match the natural environment as closely as is feasible, at least insofar as the performance of species-typical behaviors is concerned. As Ruth Newberry²⁸ has argued, there is a tendency for researchers to characterize this goal as promoting natural behavior, and it is very easy to move beyond this tendency to an ethical judgment that such behaviors contribute to animal welfare because they are natural.

This seemingly small change in one’s language moves the debate into one of the most hotly contested areas in philosophical bioethics. Authors on human behavior have asserted the moral importance of maintaining traditional gender identities and argued against liberalization of laws that sanction homosexuality or racial mixing by asserting the unnatural character of those behaviors.²⁹⁻³¹ More broadly, the notion that human beings have a nature or *telos* that determines or fixes the conduct and character to which they should aspire is associated with the philosophy of Aristotle and has historically been characterized as an ethic of perfectionism: Although

achieving one's full potential may be impossible, the realization of an innate potential nonetheless provides the primary directive for ethical evaluation of conduct.³² The term *perfectionism* is used by Appleby and Sandøe³³ to indicate ethical philosophies that interpret species-typical behaviors and capabilities as ethical ideals to which husbandry should aspire to conform. They introduced the term *welfarism* for ethical philosophies that interpret the ethical significance of such behaviors and capabilities in terms of their impact on any given individual animal's physical and mental well-being.³³ In broader philosophical contexts, perfectionist views have lost influence as a result of the way in which these argument forms were deployed in defense of views that are now widely regarded as sexist, racist, repressive, and discriminatory, although Thomas Hurka³⁴ has argued that it is possible to reform the approach. More in line with the critics of perfectionism, Paoli Cavalieri,³⁵ a prominent philosophical advocate of animal rights, argued that perfectionism has been a source of the assumption that human beings have a higher moral status than other species. In defense of Appleby and Sandøe,³³ I should note that their use of the term is constrained in ways that would appear to block these troublesome implications. However, in deference to the problems noted by Cavalieri³⁵ and others, I use the term *naturalism* to refer to the view that Appleby and Sandøe³³ called *perfectionism* in the following discussion.

WHAT DOES THE PUBLIC THINK?

The sources discussed above are drawn from specialist literatures developed by ethologists and philosophers. It is always a matter of speculation as to the extent to which the ideas and debates in such literatures reflect opinions or attitudes that might be held more broadly by members of the general public. However, a recent telephone survey by Rob Prickett, Bailey Norwood, and Jayson Lusk³⁶ places us in a position to interpolate our speculation with some very revealing hard data. Prickett et al.³⁶ asked respondents to rate the importance of factors that could potentially bear on the housing and husbandry of farm animals. Factors on this list ranged from providing access to food and water to ensuring opportunity for natural behaviors or providing a comfortable place to sleep and being "raised so as to keep prices low."³⁶ The factors were treated as logically independent from the standpoint of survey analysis. Prickett et al. then used a statistical technique that has been deployed by political scientists who measure the way in which opinions on diverse issues are correlated in ways that create a cluster. These clusters of correlated opinions (opinions opposing gun control may be correlated with opinions on abortion, e.g.) reflect political constituencies, and it is often possible to see coherent policy preferences and philosophical attitudes toward government underlying the clusters. In fact, something quite similar appears to be the case with respect to the findings of Prickett et al.

Although the importance of factors such as access to food and water is widely endorsed by all respondents, other factors establish three clusters of statistically significant correlations among preferences for housing and husbandry in Prickett et al.³⁶ They characterized one group

of respondents as "price seekers," who tended to view aspects of animal welfare that are not directly relevant to the survival of farm animals as relatively unimportant. Significantly, this group placed much higher emphasis on the low-price question than did respondents in the other two groups. Price seekers made up 14% of the sample. The other two groups are of primary interest here, however. One, which Prickett et al. called "basic welfarists," emphasized those aspects of animal welfare that seem directly pertinent to the suffering or relative comfort of individual farm animals. Basic welfarists' responses tended to rank those aspects of housing or husbandry that would be associated with the experience of pain, satisfaction, frustration, or contentment much higher than did the other two groups. Basic welfarists made up 40% of the sample. The final group was characterized as "naturalists," who tended to think that the kind of life that animals would lead in nature should be the norm for the life that animals lead under the care of human beings. Naturalists made up 46% of the telephone sample.³⁶

Examination of the difference of opinion in these two groups as it relates to a few specific survey questions is revealing. Interpretation of the statistical results is complex because of the comparative nature of the analysis, but a qualitative description is both consistent with those results and more helpful in the present context. Naturalists distinguished themselves by placing significantly greater emphasis on "allowed to exhibit natural behaviors," "allowed outdoor exercise," and "allowed to socialize with other animals" than did either of the other two groups. Basic welfarists placed comparatively more emphasis on factors such as "comfortable place to sleep" and even "access to food and water," than did Naturalists (although as noted above, all groups rated access to food and water highly). The implication is that animals in natural habitats can be presumed to lack comfortable bedding or access to food on occasion; hence, those factors are seen as less significant for those who see the environment in which species evolved as the moral norm for good welfare. Similarly, one may infer that basic welfarists do not understand performance of natural behaviors or socialization as being a significant source of stress or suffering in farm animals.

There is a striking parallelism between the basic welfarists and the naturalists as revealed in these survey results on one hand and the elite discourse division into welfarists and naturalist-perfectionist philosophies of animal ethics on the other. Limitations in the Prickett et al.³⁶ methodology do not allow any basis for more probing speculation on the actual knowledge base of survey respondents. It is, for example, impossible to determine whether respondents tended to assume that lack of opportunities to socialize or perform natural behaviors have no significant impact on physical or mental health in farm-animal species. It is clear that experts on animal welfare would not make this assumption. Newberry²⁸ argued that ethologists should not emphasize natural behavior simply because it is natural but went on to argue that experimental studies can reveal the extent to which stifling of species-typical behaviors are actually contrary to the welfare of confined animals. Fraser and Weary²⁷ also argued that the welfare significance of con-

straints on species-typical behavior should be interpreted in light of whether it is important for an animal to continue engaging in these behaviors in its current environment. Nothing in the survey results would allow one to make such fine-grained interpretation of public opinions. Yet, the correlation that does exist between measured public opinion, on one hand, and the division between approaches that see the ethical significance of species-typical behaviors dividing along the lines of welfarism versus naturalism, on the other hand, provides support for the hypothesis that these two philosophical alternatives represent competing approaches that capture a significant portion of the concern actually expressed by members of the general public.

PRACTICAL IMPLICATIONS

Those of us in the academic world find philosophical debates interesting for their own sake, but the philosophical orientation to animal natures has practical consequences. The dilemma has been discussed in connection with animal breeding and biotechnology and with the so-called “blind chicken problem.” Congenitally blind chickens show less evidence of stress than sighted chickens when subjected to housing environments typical in conventional caged layer systems. Sandøe et al.³⁷ presented evidence from both affective and standard veterinary health measures to support this conclusion in posing the hypothesis that reducing sensory capacity or modifying genetic drives through breeding might be a response to animal-welfare issues in intensive production systems. They noted that such strategies will not be consistent with ethical perspectives that stress natural behaviors and speculated that they will therefore raise ethical questions, especially when the alternative of modifying the production environment is available. A similar debate has been conducted in connection with the use of more powerful recombinant DNA techniques for modifying the natural capabilities of farm animals.^{38,39}

David Fraser¹ has argued that the two alternatives for understanding the ethical significance of natural or species-typical behaviors create a dilemma for even more basic comparisons of animal welfare in different housing environments. Fraser noted how two studies of the welfare of sows housed in gestation crates reached two diametrically opposed judgments on the welfare acceptability of these systems. His analysis showed that the study that found the sow welfare acceptable in these confined systems interpreted the lack of evidence that restriction of natural behavior leads to welfare deficits in terms of animal health or affective state to mean that the welfare of sows housed in gestation stalls was comparable to that of hogs kept in group housing. The other study, by contrast, took the fact that stall-housed sows’ natural behavior was constrained to be direct evidence of a welfare deficit.¹ In short, the compromise to animal natures was taken to be constitutive of poor welfare in the study less favorable to gestation crates, whereas the lack of measurable deficits in animal minds or animal bodies was taken to show that welfare had not been compromised in the other study.

More generally, extensive housing systems often involve exposure to threats from predation and infectious disease

and thus not infrequently experience higher rates of mortality and morbidity than intensive systems, especially those that involve keeping animals indoors.⁴⁰ Thus, even on the least controversial indicators of comparative welfare, extensive systems are very likely to score more poorly than are intensive systems. Yet it is quite possible for someone holding a perfectionist–naturalist animal ethic to view predation or natural disease as ethically unproblematic. Indeed, animal ethicists who have written on the moral significance of predation have taken pains to argue that their pro-animal ethical arguments should not be interpreted as implying that any moral wrong occurs when predators attack and kill prey under natural conditions.^{9,41} Although one should be cautious in extending this reasoning directly to domestic animals, it is reasonable to presume that mortality resulting from natural predators will not be subjected to the same standard of evaluation as mortality in intensive production systems when one takes the perfectionist–naturalist view of species-typical behaviors. However, if one evaluates natural behaviors in terms of animal health and affective states, it seems clear that high mortality rates in traditional pasture systems will be viewed as a welfare problem.

Thus, the philosophical tension between welfarist and naturalist conceptualizations of animal welfare has two closely related implications for practice. First, it implies that strategies aimed exclusively at ameliorating problems in animal health and animal suffering are unlikely to be regarded as ethically adequate, either by animal advocates or by a significant portion of the general public. Peter Singer’s^{13,41} advocacy on behalf of animals appears to be closely aligned with the welfarist conceptualization of animal interests. As such, one might expect an animal advocate whose views are aligned with Singer’s to endorse practices that optimize welfare as specified in the welfarist paradigm, even at the expense of animals’ ability to perform natural behaviors. As the first two sections of this article illustrated, however, the range of current debate over human–animal relations is exceedingly broad, and many objections to intensive livestock production are not addressed by amelioration of problems in animal health or animal feelings. To the extent that the thinking of animal advocates is influenced by the need to promote a social movement for reform of animal use—something explicitly cited as an element in Singer’s¹³ philosophy—it may be judged more important to maintain solidarity with those whose reasons for objecting to intensive livestock production go beyond the welfarist concerns. In short, animal-welfare standards and reforms that focus only on animal health and affective states are not likely to be regarded as adequate.

Second, the comparison of two or more husbandry or housing systems will be highly sensitive to the way that a naturalist conception of animal welfare is or is not incorporated into animal-welfare standards. This point may be illustrated with a hypothetical example. Anecdotal evidence from producers suggests that both laying hens and broiler chickens in organic production systems that require outdoor access often do not avail themselves of the opportunity to spend time outdoors. Singer and Mason⁴² recounted such an anecdote in their book on food ethics. A welfarist might interpret this behavior

as evidence that outdoor access is not actually all that important to chickens, at least relative to other welfare needs. A naturalist-perfectionist, however, will regard this as a problem with these organic systems and will urge modifications that make outdoor spaces more attractive or possibly even breeding strategies to “restore” a putative behavioral drive to spend time outdoors. The more general point is that comparison of husbandry and housing systems is an inherently normative judgment. As such, comparisons that are critical to the formation and enforcement of laws, regulations, or standards for animal husbandry and housing are highly sensitive to philosophical approaches to understanding the ethical significance of animal natures.

CONCLUSIONS

In summation, the ethical debate over the interpretation of natural behaviors is not merely a philosophical problem. Adopting the view that natural behaviors are constitutive of an animal’s welfare leads one to a jaundiced view of breeding or other genetic strategies to address welfare by modifying the drives to engage in these behaviors. It can also result in diametrically opposed evaluation of welfare in existing production systems, as Fraser showed in the case of gestation stalls.¹ Finally, it can lead one to take a more favorable view of the welfare of animals in traditional extensive settings such as pastures and barnyards, even though animals kept in such environments are vulnerable to predators and to infectious disease. Mortality and morbidity owing to these factors may be viewed as “natural” in the sense of being normal for animals of the species living under conditions more closely resembling those in which behavioral drives and capabilities evolved. Given this way of interpreting the role of natural behaviors in animal welfare, extensive systems will be viewed as ethically better and more consistent with an animal’s welfare, irrespective of objective measures in the animal bodies and animal minds categories. The opinion research of Prickett et al.³⁶ provides evidence that these philosophically articulated perspectives reflect viewpoints that inform opposing perspectives in the American public.

Further ethical implications of taking either the welfarist or naturalist view reveal that neither perspective is wholly adequate. On one hand, if one concludes that animals who can perform a more complete range of species-typical behaviors are better off, one will be inclined to favor livestock production systems that tolerate injuries and animal suffering resulting from aggression, infectious disease, or predation. This will create circumstances of poor welfare (at least in the domains of animal bodies and animal minds), especially for those less dominant animals that are most frequently the victims of aggression. To be sure, there may be ways to ameliorate these conditions over the long term. Breeding for less aggressive animals is one strategy.⁴³⁻⁴⁵ Furthermore, group sizes that are more typical of animal production systems in days past experience fewer instances of these welfare problems for less dominant animals, so the response may simply be that large-scale livestock production systems that allow for a full range of species-typical behaviors are still not natural enough.⁴⁶ However, as

noted already, small-scale systems can also be expected to exhibit a higher percentage of mortality and morbidity. Thus, even under the most ideal scenario for implementation of welfare standards, taking the naturalist perspective implies that one is willing to allow at least a few animals to undergo suffering or unpleasant deaths that no animal would experience in a more intensively managed system.

On the other hand, those who take the welfarist perspective must live with a conundrum: What they take to be ethical will be seen as profoundly unethical by a plurality in the general public. This may not, in itself, be regarded as an ethical problem because history provides many examples in which majorities supported practices now recognized to be deeply unethical. What is more problematic, however, is that the welfarist view provides no principled basis for drawing the line in opposition to strategies such as blind chickens, surgical and pharmacological methods for limiting the occurrence of pain or frustration, or using breeding or genetic modification to “dumb down” animals or to make them resistant to disease syndromes that are associated with intensive production practices. Indeed, the welfarist view seems to provide every reason to deliberately induce animals into a coma so that they would not experience suffering, so long as the producers’ economic objectives could still be realized.⁴⁷ Yet it seems very unlikely that even those who have endorsed the welfarist strategy for interpreting the significance of species-typical behavior would go so far as to recommend an approach that resolves difficulties in animals’ affective states by rendering them incapable of having affective states. As such, welfarists have both a practical and a philosophical conundrum. They seem to have adopted a philosophical approach to animal welfare that is so reductive as to vitiate any standard that recognizes an animal’s ability to express drives and behavioral needs as an intrinsic, rather than instrumental, contributor to the animal’s welfare.

Succinctly stated, most thoughtful people who consider this question find something persuasive in both of these opposing points of view. In the face of these conceptual difficulties, all one can say in conclusion is that these problems may become more tractable as the tensions in effecting better welfare for farm animals come to be more fully appreciated. Thus, more focused philosophical and sociological research may prove to be helpful in deciding when it is appropriate to stifle a natural behavior to achieve improved welfare in terms of animal health and affective states. An approach capable of recognizing that performance of natural behaviors is not a desideratum in every case might still draw on the category of animal natures to propose limits on use of technology (including breeding) to ameliorate welfare problems in the domains of animal bodies and animal minds. In this connection, deliberative or participatory processes, as well as structured research, may achieve more consensus on the ultimate limits to constraining natural behaviors, even when no elements of animal health or affective states seem to be adversely affected. Here it is worth emphasizing that the most effective and responsible strategy for addressing controversial ethical issues is often simply to engage in open debate and conversation.⁴⁸ Although one cannot guarantee that a fuller airing of the issues

will resolve a difficult philosophical problem, it does have the effect of communicating the seriousness and overriding sense of responsibility with which the problem is being addressed. Veterinarians are particularly important both as responsible parties and as credible sources; hence, it is critical that when veterinarians serve as public spokespeople, they show understanding and respect for the difficulty of this issue, whether or not they choose to advocate for a particular point of view.

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AUTHOR INFORMATION

Paul B. Thompson, PhD, holds the W. K. Kellogg Chair in Agricultural, Food and Community Ethics at Michigan State University, 503 South Kedzie Hall, East Lansing, MI 48824 USA. E-mail: thomp649@msu.edu.