

Ethical considerations in the selective breeding of animals

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Introduction

It has been known for some time in veterinary medicine that certain breeds of animals show predilections for particular diseases, and furthermore that particular diseases may be confined entirely to one breed or a small group of breeds. Most veterinary textbooks discuss breed predilections for disease as relates to their specific subject matter, and at least one textbook is devoted entirely to the subject of breed-associated disease.¹ Breed-associated disease can arise in a few ways. First, morphological breed standards can directly cause disease, or can otherwise exacerbate disease. Second, because “purebreeding” is essentially inbreeding,* the creation and maintenance of particular breeds decreases genetic heterozygosity as compared to an outbred population, thus increasing the probability that a given individual will possess two copies of rare, recessive disease-causing alleles. Third, disease-causing alleles may be inherited though their genetic linkage to loci corresponding to traits that are being selected for.¹⁻⁵

Until very recently the ethical dimensions of animal breeding and its relationship to disease were seldom discussed. This all changed rather dramatically in 2008, when the British Broadcasting Corporation (BBC) aired the documentary *Pedigree Dogs Exposed*, which discussed at length health problems in pedigree dogs, and which thrust the issue of breed-associated disease into the public spotlight in a new way. This documentary prompted three separate inquiries into the issue,^{2,4,6} as well as a handful of academic journal articles.^{3,5,7} In addition, the Companion Animal Welfare Council (CAWC) published a report about the health and welfare of selectively bred animals in 2006.⁸ These reports and articles typically discuss the genetic mechanisms of disease and animal welfare problems associated with selective breeding, and also offer numerous recommendations intended to improve the welfare of selectively bred animals, which variously address breeders, breeding societies, research scientists, veterinarians, regulatory authorities, and consumers. In many cases these recommendations are far-reaching. For example, Patrick Bateson recommends that “all pre-mating tests for inherited disease appropriate to the breed or breeds [be] undertaken on both parents. No mating [should take] place if the tests indicate that it would be inadvisable in the sense that it is likely to produce welfare problems in the offspring and/or is inadvisable in the context of a relevant breeding strategy.”⁴

However, existing reports and articles concerning selective breeding tend not to include explicit discussion of the ethical principles relevant to the issue; hence recommendations for changes to breeding practices are often unsupported. Even where a reader agrees with these recommendations, s/he may wish to gain an understanding of how they might be justified. Someone might also think that such recommendations go too far or not far enough. In addition, reports and articles on breed-associated disease may or may not define the concept of “animal welfare,” and where this concept is defined it may require some additional philosophical qualification. Hence there is a need to support and contextualize practical discussions about selective breeding by joining them with more philosophical considerations. Attention to these philosophical considerations can help to uncover latent assumptions and value judgments, and can also help us to develop an organized framework for thinking through our obligations to animals as concerns breed-associated diseases. The remainder of this article will discuss key philosophical and ethical issues in the selective breeding of animals. While this discussion focuses primarily on the selective breeding of companion animals, many of the following points also apply to selective breeding more broadly, and furthermore the concepts and principles discussed here should be applicable to many issues in veterinary medical ethics.

Definitions and distinctions

Before proceeding further, it will be helpful to clarify a few key terms and concepts. As used here, “selective breeding” means breeding to effect, maintain or enhance certain morphological, behavioral, and/or physiological characteristics. This definition covers the breeding of companion

animals for appearance, temperament, or function (e.g., herding or guarding, if distinguished from temperament); it also covers the breeding of farm animals for production purposes (e.g., higher milk or meat yield) and the breeding of laboratory animals for purposes conducive to scientific experimentation (e.g., nude mice). However, “selective breeding” as discussed here excludes two key practices, and thus two key ethical questions. First, it excludes the domestication of wild animals, and thus the question of whether this is ethically defensible. Second, it excludes the human-managed reproduction of already-domesticated animals *per se*. To argue that *selective* breeding for certain appearances, behaviors or other characteristics is morally justified is to presuppose that it is morally permissible for humans to breed domesticated animals at all. However, the converse is not true: a person could argue that it is morally permissible for humans to live with domesticated animals and to manage their reproduction, but that it is morally impermissible for humans to selectively breed animals for particular ends in light of the welfare costs that this entails to the animals; or that such selective breeding is only permissible under certain specified circumstances. The question of whether humans ought to live with domesticated animals *per se* is one that usually arises only on strong animal rights views, and even here all scholars who adopt this kind of view do not hold that it precludes humans’ living with domesticated animals.[†] For present purposes it is assumed that the continued reproduction of already domesticated animals *per se* is morally permissible, with the focus being on the selective breeding of such animals for appearance, behavior, or other characteristics.

Selective breeding can both compromise and enhance animal welfare. For example, we could use genetic tests to screen individuals for disease-causing alleles and remove them from the breeding pool in the hope of reducing the prevalence of particular disease. We could also preferentially breed animals that score very highly on the evaluation of particular health- or welfare-associated traits. Both of these strategies involve the use of selective breeding to improve animal welfare. However, for purposes of ethical analysis it makes sense to focus initially on the ways in which selective breeding compromises animal welfare. This is for two reasons. First, selective breeding may be used to ameliorate animal welfare problems that were created by selective breeding in the first place. In these situations, justifying obligations to change breeding practices to improve animal welfare will likely be contingent upon assessing the ethical status of selective breeding when it leads to such welfare problems. Using selective breeding techniques to improve animal welfare may impose financial costs upon breeders in the form of screening tests, the removal of valuable animals from the breeding pool, decreases in animal production efficiency, etc. Given these costs, a person may reasonably ask *why* they are obligated to honor such restrictions. Answering this question likely requires that we first assess whether it is permissible to selectively breed animals even when it leads to welfare problems. If so, then it is hard to see how breeders or other stakeholders can be morally required to change breeding practices to improve animal health. If not, then an obligation to use selective breeding to improve animal health might be subsumed under a general responsibility to minimize harm or right past wrongs.

The second reason why ethical analysis of selective breeding should start with welfare problems is that specific proposals to improve the health of purebred animals may beg important questions[‡] about what is ethically permissible. For example, it has been recommended that strategies to improve breed health avoid simply removing all individuals from the breeding pool when such individuals test positive for a particular disorder during screening tests, since removing all such individuals may introduce genetic bottlenecks by shrinking already small effective breeding populations.⁴ This recommendation presumes that it is ethically defensible to continue selectively breeding animals even when doing so may be associated with the perpetuation of some deleterious characteristics. This recommendation may be sound, but the point certainly requires argument and cannot be assumed.

The anatomy of an ethical judgment

Arguably the best way to approach the ethical analysis of selective breeding is to first ask what kinds of considerations are generally relevant to moral judgments. Specific moral judgments are the product of both non-moral facts and moral evaluations.[§] Moral evaluations tell us what is good, bad, desirable, undesirable, right, wrong, etc. Non-moral facts inform us about the specific circumstances we

are in, or the circumstances that would obtain were we to act a certain way. An example of a non-moral fact relevant to moral judgment is whether a particular procedure causes pain to an animal. We need to know both the relevant non-moral facts and moral evaluations in order to know how we ought to act in a given situation. Without moral evaluations, we do not know why certain non-moral facts matter. For example, knowing that a procedure causes pain to an animal is not sufficient to know whether we ought not to perform the procedure. What is needed in addition to this is an understanding of what our moral obligations are when it comes to harming animals. Just the same, without knowing the relevant non-moral facts, we cannot apply moral evaluations to the present circumstances. For example, we cannot apply the principle “do not cause unnecessary pain to animals” if we do not know whether a particular set of circumstances causes pain to an animal. Furthermore, judgments about our ethical obligations usually presuppose some idea of what is good or bad for an individual’s welfare. In the preceding example, an implicit judgment is that pain detracts from an individual’s welfare.

Though moral disagreement in specific circumstances is often thought to be about moral evaluations *per se*, at times non-moral facts can be of significant importance to moral disagreement. For example, debates about human healthcare policy may hinge not on ethical principles, but rather on different views about the likely economic effects of a particular policy choice. In the context of selective breeding, relevant non-moral facts relate to the physical and behavioral consequences of selective breeding, both in general and as concerns individual matings. Relevant moral judgments concern the way in which we define “animal welfare,” our evaluations of the severity of various breed-associated diseases or conditions, and our obligations to avoid imposing risk or harm upon animals (such obligations falling under the umbrella of what philosophers call “normative ethics”). I consider each of these issues below.

It should be emphasized that the concept of “animal welfare,” while informed by non-moral facts, is an evaluative concept: it captures ideas about what makes an animal’s life go well or poorly. This may easily be overlooked in situations where the relevant evaluations are non-controversial (e.g., the judgment that being in pain is bad for an animal’s welfare, although it should be noted that not all commentators agree even about this!), in which case it might seem that the judgment that something sets back an animal’s welfare is purely a non-moral judgment. However, moral evaluations will always be in the background, and it is important to be aware of them since they may be controversial. Furthermore, our conceptions of animal welfare will determine which non-moral facts are deemed relevant. For example, if animal welfare is defined as the absence of unpleasant sensations (pain, fear, distress, etc.), then the relevant non-moral facts will be those that pertain to whether an animal is experiencing such unpleasant states. But if animal welfare is defined differently, for example by including reference to positive mental states, then additional non-moral facts may be at issue, such as whether an animal is experiencing pleasurable feelings or is able to satisfy preferences. (As an aside, it should also be emphasized that relevant non-moral facts, e.g., scientific facts, often involve value judgments themselves—something that philosophers of science have long studied. Hence non-moral facts cannot always be taken as a non-controversial starting point or “value-free” realm when debating moral issues.)

When thinking about the ethics of selective breeding, it is very important to keep judgments about animal welfare and normative ethics distinct. This is for three reasons. First, it’s helpful to sort things out conceptually when addressing ethical questions. Discussions of animal welfare frequently conflate *prudential value theory* and *normative ethics*—that is, the question of what is good or bad for animals (animal welfare, prudential value theory) and the question of how we should treat animals (normative ethics). If these various concepts are not adequately distinguished, then ethical discussion will be confused, and discussants may talk past each other. Second, establishing that something is harmful or beneficial for an animal’s welfare does not entail anything about our moral obligations or lack thereof. Most if not all reports on selective breeding discuss its possible detrimental effects on animal welfare, and then proceed directly to a set of recommendations for mitigating these adverse welfare effects. However, this skips over a step that is both necessary and important: defining what obligations we have to protect or promote animal welfare. From a political standpoint, if all parties to a debate happen to agree about our obligations, then omitting a discussion of the basis for our ethical obligations to animals may go unnoticed. But if we are interested in the philosophical justification of various positions, and/or if there is

some degree of political disagreement about the nature and extent of our obligations, then we need to go beyond a discussion of the welfare impacts of selective breeding and consider these obligations explicitly.

Third, it is important to keep the notions of what is good or bad for animal welfare and our moral obligations to animals separate because we need to be careful not to let our normative commitments bias us when defining or assessing animal welfare. Scholars who study animal welfare have noted that the definition of this concept may sometimes be inappropriately influenced by political concerns. For example, the discipline of animal welfare science has historical roots in animal research and animal agriculture. Both of these activities entail the death of animals. Therefore the concept of “humane care and use” came to be defined in such a way that death was not viewed as a harm to animals,⁹ since otherwise, it would be impossible to conduct these activities in a “humane” way—a conclusion that defenders of these practices wished to avoid. Whether death harms sentient animals is a philosophical issue that can be debated, and which furthermore *has* been debated by philosophers (though the best answer seems to be “yes”). However, we should hope that any conclusion that death does not harm animals will be reached via unbiased, rigorous argument, and not because such a conclusion happens to be politically expedient to the interests of a particular group. It is presently unclear whether the issue of political bias in defining animal welfare will impact the discussion about selective breeding. However, this should at least be noted as a reasonable possibility, given the fact that it is an issue in other areas of animal ethics. For example, a person might argue that an animal only experiences poor welfare if it is afraid, distressed or in significant pain. Even on this definition of animal welfare, selective breeding will sometimes adversely affect animal welfare. However, this definition of animal welfare will probably result in a less critical analysis of selective breeding than alternative definitions, since it excludes concerns such as length of life, overall quality of life, mobility and the ease with which animals can satisfy preferences, etc. The point here is not to argue for any particular definition of animal welfare, or for any particular conception of our moral obligations to animals (or lack thereof), but rather just to note that these two determinations are independent of each other.

Non-moral facts at issue in selective breeding

We know with a fair degree of confidence that selective breeding is positively associated with disease as compared to random matings or outcrosses. For example, recent reviews identified a total of 396 inherited disorders in the top 50 breeds. Each of the top 50 breeds has at least one conformational aspect predisposing it to a disorder, and though the number of non-conformational inherited disorders varies by breed, the number is usually not less than a few and may be as high as 50 in a given breed.^{3,5} As compared to an outcrossed population, selective breeding as presently practiced results in greater conformational and non-conformational disease.

As discussed below, in order to apply moral principles and evaluations to actual breeding practices, we are going to want to be able to assess for a given mating the risk that offspring will have a particular disease, disorder, or other welfare-relevant phenotype. In the ideal, (at least part of) this risk assessment would be quantitative, in the sense that we would be able to assign with a high degree of confidence the probability that a particular genotype or phenotype would manifest in the offspring of a particular mating. However, making quantitative risk assessments is not presently possible in a large percentage of situations. As concerns non-conformational disease, relatively few genetic tests are currently available, and many traits of interest are polygenic, meaning that for these traits developing predictive genetic tests will not be simple. In the absence of information from genetic tests, we might use phenotypic screens (e.g., hip screening), pedigree analysis, estimated breeding values (EBVs), prevalence information, or simply personal experience with a family line in order to assess risk. In many cases these methods of assessing risk will not yield an exact numerical estimate of probability (although pedigree analysis can sometimes provide this), but while an exact probability is desirable, it may not be necessary from a moral standpoint. Rather, what seems necessary is for us to be able to say that we *have good reason* to believe that a particular mating will have particular effects.

Where for some reason a genuine state of uncertainty exists as to whether a particular mating will produce particular effects, we can broaden our frame of assessment to include the breed at large. There presumably will be situations where we cannot know with a high degree of confidence what the outcome of a specific mating will be, but where over time certain breeding practices (e.g., limiting the number of times an animal may stud, only breeding animals above a certain cut-off point in terms of health or welfare assessment scales) can help us to lower the extent of breed-associated disease, and the risks that an individual animal will face. The preceding comments apply to non-conformational disease. As concerns conformation-related disease (e.g., brachycephalic airway obstruction syndrome), it is assumed here that the effects of specific matings will be somewhat easier to assess. Hence, while many reports on the issue of selective breeding have emphasized the need for more information relating to disease prevalence, and the development of more genetic tests^{2,4,6}, such data gaps need not prevent us from applying relevant ethical principles at the present time.

Yet another non-moral fact of considerable importance to ethical analysis is whether we can selectively breed animals for appearance or function without imposing some additional risk of disease as compared to an outcrossed population. This can be considered an open question at present; however, since selective breeding typically involves decreasing genetic heterozygosity as compared to an outcrossed population, there is reason to suspect that the answer is “no.”

Defining and assessing animal welfare

The term “animal welfare” may be used ambiguously in veterinary medicine, where it could refer to a general concern for animal well-being; those things that make an animal’s life go well or poorly; or a discussion of our obligations to animals. It is the second of these meanings for which the term is used here: those things that make an animal’s life go well or poorly. This use of the term “animal welfare” is most consistent with the way “welfare” tends to be used in the philosophical literature; “welfare” in this sense is also consistent with what philosophers call *prudential value*.

There is much that can be and has been written about animal welfare, even when restricted to its present usage. Here I will concentrate on a few points I believe are most important both in discussions of selective breeding and veterinary medical ethics more generally. First, while it is often claimed in both veterinary medicine and animal welfare science that “animal welfare is a science-based concept,” this is not strictly speaking true. Rather, welfare is an evaluative concept at bottom: judgments about what is good or bad for an animal, what makes that animal’s life go well or poorly, are *by definition* evaluative judgments. Another way of appreciating the evaluative nature of “animal welfare” is to observe that no amount of scientific data *by itself* will answer questions about animal welfare. Such data can always be met with the question “Why is that bad for the animal’s welfare?” For example, data that supports the conclusion that an animal is in pain do not in themselves “prove” that the animal is experiencing poor welfare unless joined to the evaluative judgment that pain (distress, fear, etc.) is bad. So, too, for judgments that an animal cannot express natural behaviors, that it is not “coping” with its environment, and so on. It is important to recognize the evaluative nature of the concept of animal welfare, since the value judgments at play in the concept may be contested between parties.

If animal welfare is an evaluative concept at bottom, then why is it so often claimed to be “science-based”? One reason is that scientific data, though not *definitive of* animal welfare, can be useful and sometimes crucial in *assessing* an animal’s welfare. For example, it may not be obvious whether animals prefer one housing system over another, and scientific studies designed to assess animals’ preferences can help us to answer such questions. There are also philosophical and sociological reasons why a “science-based” notion of animal welfare gained traction amongst veterinarians and scientists. For some time in the early- to mid- 20th century, science was dominated by a philosophy known as *logical empiricism* (or logical positivism), which held that something could only be called a fact if it was empirically verifiable (or falsifiable). Logical empiricism went hand in hand with psychological behaviorism, which held that mental states either could not be fruitfully studied or did not even exist; hence talk of animal mind was replaced by talk of animal physiology and behavior. Though behaviorism has long since fallen in philosophical circles as well as human psychology (having been replaced by

cognitive psychology), it has left a strong legacy in discussions of animal welfare, and is still evident in some recently published papers.¹⁰ A third reason is political: animal welfare science as it is presently institutionalized initially grew out of biomedical research and animal agriculture, and this is reflected somewhat in the tendency to define welfare in scientific terms. This tendency might be explained in part by scientists' comparatively greater comfort with scientific language and concepts, as opposed to moral language and concepts. However, it should also be noted that a "science-based" conception of the concept of welfare bestows expertise upon scientists while denying expertise to non-scientists, and given the controversy often associated with animal use expertise is a valuable political commodity.**

There are a number of practical upshots to recognizing the evaluative nature of animal welfare. First, different considerations deemed relevant to animal welfare, such as behavior and physiology, may at times conflict when examining animal welfare in a specific context (e.g., sows in gestation crates). If these considerations are taken as definitive of animal welfare, then there is an irreducible conflict, whereas if they are taken as evidential considerations for the assessment of animal welfare otherwise defined (e.g., by preference satisfaction, pleasurable sensations, etc.), then the conflict may be merely illusory. It is unclear at present whether this issue will arise when considering the welfare impact of selective breeding, but again, since it is an important issue in animal welfare generally it is best to keep it in mind.

Second, multiple discussions of animal welfare in the context of selective breeding highlight the need for more "objective" measures; thus severity scales for ranking the welfare impact of various breed-associated diseases have been proposed.¹¹ "Objectivity" is a term that can take on multiple meanings, which may not be sufficiently disambiguated when the term is used. One such meaning of "objective" is "true, independently of what anyone happens to think"; another meaning is "quantifiable." Though the first sense of objectivity can apply to moral and scientific judgments alike, in practice these two meanings of "objective" may be run together in discussions of animal welfare, such that it is thought that the only way judgments about animal welfare can be "true, independently of what anyone happens to think" is to attach a quantified measurement to such judgments. However, attaching a number to a concept does not make it a truer representation of that concept unless some rational standard can be identified to determine how numbers should be assigned. Severity indices can be useful insofar as they allow for comparisons between different persons' judgments, and they allow persons to refine intuitive judgments about animal welfare by explicitly considering a number of factors. However, the numbers are still generated by intuitive judgment and stand as proxies to it, so it is important not to overestimate the degree to which such numbers represent "accurate and true" welfare measurements.

Third, as discussed above the view of welfare as "science-based" tends to place all expertise about animal welfare in the hands of scientists; this purported expertise can be and has been used as a political weapon when different parties disagree about welfare-related issues,^{††} since it disenfranchises all nonscientists of relevant knowledge. Veterinarians, ethologists and animal welfare scientists certainly do possess knowledge and expertise relevant to animal welfare; however, they are not the sole repositories of such expertise, so it is important not to be led astray by "science-based" ideology here.

Aside from critically interrogating "science-based" conceptions of animal welfare, it is also important to broadly assess the welfare impact of selective breeding. Reports or journal articles on selective breeding may or may not define "animal welfare." In either case, however, it is important to make sure that relevant considerations are not left out of the analysis. One set of concerns relates to how we define welfare. Welfare may be defined in terms of pleasure and pain (hedonism), preference satisfaction, the expression of natural behaviors, certain physiological measures, coping, the absence of disease, and perhaps other criteria. The animal welfare science literature is filled with debate about which of these criteria, or which combination of criteria, constitute the best definitions of "welfare." It is not uncommon for authors to acknowledge that all such criteria are equally important, and that "good welfare" must take each into account. While defining welfare—either human or nonhuman—admits of some philosophical complications that may preclude tidy answers, this kind of response is more an evasion than an answer. Here I only emphasize that plausible views of welfare will likely have to make reference to subjectivity; that is, to what an animal experiences or does not experience. Even with this

restriction in place there is still room for debate about how we should define welfare, but the restriction helps to show why some considerations are relevant and why some aren't. For example, an animal's ability to fulfill natural behaviors may be relevant to welfare because the fulfillment of such behaviors correlates to the satisfaction of preferences, so it is really preference satisfaction that is definitive of welfare on this view. Similarly, definitions of welfare in physiologic terms or in terms of "coping" are suspicious unless it can be shown that such things impact the quality of an animal's life *from the perspective of the animal*. Otherwise, what would it mean to say that certain things promote or thwart an animal's well being?

Even when taking a certain definition of animal welfare for granted, it is important to think broadly about how selective breeding may impact welfare. For example, the CAWC restricts usage of the term "welfare" to situations where "only...the quality of consciously, subjectively, experienced feelings (e.g. pain, fear, warmth, pleasure) is at issue in subjective terms." They focus their discussion of the impact of selective breeding on the ways in which "heritable diseases or characteristics... have the potential to cause, depending in their nature, severe pain, discomfort, anxiety or other unpleasant feelings".⁸ However, this ignores the ways in which selective breeding can adversely affect animal welfare by depriving animals of pleasurable experiences. For example, inbreeding (which is by definition part of selective breeding) is associated with shorter lifespan.⁴ Even if animals do not experience "pain, discomfort, anxiety or other unpleasant feelings" while they are alive, we can plausibly say that inbreeding adversely affects their welfare by shortening their lifespan and allowing them fewer opportunities to satisfy interests. Similarly, an animal affected by brachycephalic airway obstruction syndrome whose exercise is restricted to prevent discomfort may still be harmed by the condition, since the exercise restriction necessary to ensure its comfort precludes it from running or playing vigorously.

Problematic arguments for the permissibility of selective breeding

In conversation and in print, some problematic arguments may be advanced for why it is morally permissible for us to breed animals, even when doing so harms the animals. Before we can get to an appropriate moral framework for exploring selective breeding, we need to dispatch with such arguments. Here I briefly review three of the most popular of such arguments; much longer critical analyses are possible.

Dominion

The dominant moral tradition in the West is the Judeo-Christian religious tradition. It is not uncommon in conversation to hear persons justify various kinds of animal treatment on the grounds that God gave us dominion or stewardship over all of creation. There are two major problems with this kind of argument. First, even if a person accepts dominion in general terms, it is an open question what kinds of *specific* animal treatment are morally licensed by dominion. For example, Matthew Scully accepts the concept of dominion, but argues against industrial animal agriculture ("factory farming") because in his view, dominion requires respectful treatment of animals not provided by industrial farming.¹² The theologian Andrew Linzey argues that the Christian tradition requires nonviolence and moral vegetarianism, for example.¹³ The point here is not that either of these authors' arguments is correct (they may or may not be), but rather that the concepts of dominion or stewardship cannot be unproblematically invoked to justify specific kinds of animal treatment. Since the concept of dominion is open to interpretation, additional argument is needed. The second major problem with religious arguments about animal ethics (or ethics in general) is that they are subject to a number of well-known controversies. Such arguments must show at the least that the concept of God is intelligible, that we have good reason to believe that God exists, that there is some connection between God and morality (either because morality consists in doing God's will, or because it consists in discovering values or purposes that God built into nature), and that specific moral conclusions or principles can be deduced from all of this. This is a significant burden of proof, and one which philosophers have long questioned our ability to meet.

At the very least, arguments raised against theological conceptions of ethics need to be addressed head-on, and not skirted. Social etiquette often regards religion as an essentially private matter, and one

that is beyond appropriate or tasteful criticism. Perhaps for this reason, religious views are often invoked in moral debate as “discussion enders”—a way for someone to defend their moral view and place it beyond criticism at the same time. But religious views of morality may be rationally critiqued just like any other moral view. Furthermore, morality is by definition a public matter in some respects. It concerns not just our ideas about what makes our own lives meaningful, but how we treat our children, our fellow citizens, animals, and the environment. Because our conduct affects others’ interests and not just our own, proponents of views tying morality to religion have a responsibility to defend their position to others, and not just invoke religious views as “discussion enders.”

The argument from nonidentity

It is sometimes argued that certain kinds of animals, including farm animals and perhaps also certain breeds of companion animal, would not exist were it not for the human purpose for which they were brought into existence (food, breed appreciation, etc.), and that this fact justifies bringing them into existence even if this existence subjects them to some harms, since the harms (e.g., breed-associated disease) are a necessary condition for them being alive in the first place. There are a number of problems with this argument. First, it assumes that being brought into existence is a benefit, and therefore that an animal’s life is worth living on balance. This is sometimes (if not often) questionable in the case of farm and laboratory animals. However, it is probably true that many companion animals have lives worth living on balance. Second, it is unclear why the argument justifies bringing animals into existence in conditions that wind up harming them. Even if bringing an individual into existence is viewed as a benefit to that individual, the fact that we benefit someone does not give us a right to harm them afterwards. (I cannot justify assaulting my neighbor because I once mowed his lawn for him.) Similarly, the fact that we bring someone into existence does not give us ownership over them. We cannot mistreat our children, or treat them well for a period of time before imposing significant harm upon them, just because they would not exist were it not for us. Children are not property. Third, and more generally, we have no obligation to bring animals or persons into existence—recognizing such an obligation would lead to very strange conclusions—and no harm is committed by *not* bringing them into existence. However, once they are brought into existence they now have interests, and we have obligations to respect those interests. If bringing animals into existence justifies our harming them, but bringing persons into existence does not justify harming them, then the argument really at play is that animals have lesser moral standing than humans—that is, that animals deserve lesser moral protection than do humans—not that bringing a being into existence justifies harming it.

The contract argument

A third problematic argument, which is related to the argument from nonidentity, is a version of the contract argument (in the case of farm animals, sometimes called “the ancient contract”). This argument holds that it is acceptable for humans to harm animals in some circumstances because doing so is part of a “fair deal” that benefits the animals on balance. This argument may collapse into the nonidentity argument just considered, since it may be held that the “fair deal” is that the animals have lives that are worth living on balance, or that they receive protection they would not receive in the wild. However, this kind of argument is often represented by contractual language, so it is worth considering the contract metaphor on its own terms. One problem with this argument is that it may presuppose that animals receiving human protection are the same animals that would otherwise be in the wild, but this of course is not true; here we are talking about bringing individual members of domesticated breeds into existence. Hence we cannot strictly say that individual animals are better off than they would be in the wild. A second problem is that species or breeds don’t make contracts; individuals do. Hence the idea of a contract between humankind and, say, the Golden Retriever breed just doesn’t make sense. A third problem is that in both moral and legal terms, valid contracts are usually understood as those that were knowingly entered into by rational parties in possession of all the relevant information. In fact, in our legal system individuals usually have to be of adult age in order to sign legally binding contracts. Animals are not rational agents; they are not capable of understanding the terms of a contract and acting

according to rational self-interest in the ways humans can. Hence the relevant worry is simply that whatever contract we would invoke would be exploitative, just as we would worry that contracts signed by six year-old children would not ultimately be in their interest. One possible response is to say that whatever contract is under consideration is the “best possible deal” for animals, even if they cannot understand it. But then we run into a familiar problem, which is that it doesn’t make sense for individuals to make agreements to be brought into existence. Furthermore, the “best possible deal” for animals would presumably be one where they are brought into existence *and* not harmed. Finally, assuming that an individual is going to be brought into existence, modern proponents of social contract theories of morality often hold that just contracts are those that would be made behind a “veil of ignorance,” whereby parties to the contract do not know anything about their race, gender, socioeconomic status, intelligence, etc. The underlying idea here is fairness: this prevents the formation of exploitative contracts that benefit some parties at the expense of others, and we can easily add species to the list of conditions that would be veiled. If species does not belong on the list, then again we find ourselves at the point where it is really a difference in humans and animals’ moral standing that is motivating the argument.

A framework for the ethical analysis of selective breeding

Knowing that selective breeding can adversely affect animal welfare does not tell us whether or when selective breeding is ethically permissible; in order to arrive at such conclusions we need to appeal to additional ethical principles and considerations. These additional considerations include 1) a general theory of ethical decision-making, and 2) an understanding of humans’ and animals’ comparative moral standing within such a theory. These two things are often conflated, but it is important to keep them separate. One way of seeing the distinction is to exclude animals from the discussion for a moment and note that while most persons accept a thesis of equality between different humans, accepting such equality does not tell us what our obligations to other humans are; it only tells us that when thinking about such obligations, we cannot discount the interests of other persons just because they are not like us (e.g., because of different gender, ethnicity, etc.). So we need additional ethical principles to help explain and derive our obligations.

In the long history of Western philosophy a large number of prominent philosophers have elaborated moral theories that are intended to explain the origin and authority of morality, and also to guide our conduct by elaborating various principles. Famous moral theories include various virtue theories, Kantianism, natural law theory, utilitarianism, social contract theory, modern rights theory, and others. Rather than ground the present discussion in a particular ethical theory—which would risk making it too parochial—I will proceed by focusing on a principle of *nonmaleficence*, which holds that we should not harm others. There are two reasons for focusing on this principle. First, essentially all plausible ethical theories recognize a principle of nonmaleficence; this principle is also strongly embedded in our common morality. Second, the ethical concern most at issue with selective breeding is that fact that it causes welfare problems for the animals in question. Selective breeding is also associated with some benefits to humans; however, the best way to bring these benefits into the context of ethical discussion is to ask the question of when, if ever, it is ethically permissible to bring about harm to others—or to impose risk upon others—because doing so benefits us. The reason for couching the discussion this way is that as concerns humans, a principle of nonmaleficence tends to be recognized as very strict. There may be exceptional circumstances in which it is permissible for us to harm other humans, such as in self-defense or in the cause of a just war. However, outside of these exceptional circumstances it is generally held by both philosophers and non-philosophers alike that we ought not to harm others, particularly when harms are nonconsensual and nontrivial.

The next question, then, is whether a principle of nonmaleficence applies to nonhuman animals and, if so, how strongly. Here we get into the question of *animals’ moral considerability*. To say that animals are morally considerable, or that they are owed moral consideration, is to say that animals’ interests matter directly in moral decision-making. There are roughly three options as concerns animals’ moral considerability. First, we might adopt the “no moral consideration view,” which holds that animals do not matter morally in any direct way; that their interests^{††} do not count directly in any moral calculus.

Second, we might adopt the “equal moral consideration view,” which holds that animals’ interests deserve equal moral weight or protection as do humans’ interests. Third, we might adopt an “unequal moral consideration view,” which holds that animals’ interests matter morally, but to a lesser degree than humans’ interests. The philosophical literature on animal ethics is filled with detailed discussions about the various merits and demerits of these particular positions.^{14,15} Because of space limitations, it is not my intention to argue here for a particular conclusion as regards animals’ moral standing. Instead, I will simply trace out what various views imply for selective breeding practices. Readers are encouraged to think about which of these positions they find most plausible, and what their favored position implies as to the ethics of selective breeding.

No moral consideration views

It might seem that on a “no moral consideration view,” we have absolutely no moral obligations to animals, but this is not true. Even though animals do not count *directly* in moral decision-making, they may still count *indirectly*, since humans take an interest in animals, and since humans’ interests still count on this view. Hence “no moral consideration” views are also sometimes called *indirect duty views*. For example, even on a no moral consideration view it would be morally impermissible for us to poison our neighbor’s dog, since the dog is his property, and since he takes a sentimental interest (we are assuming) in the dog. Hence we would harm our neighbor by killing his dog, and since the dog is his rightful property, this harm would be impermissible (just as it would be impermissible for us to vandalize his car). In addition, the way that we treat animals might matter on this *indirect duty view* since being cruel to animals might make us more likely to be cruel to humans.

However, it is hard to see how either of these considerations would be relevant to selective breeding. Even though selective breeding may detract from animals’ welfare, harm is not being deliberately inflicted upon animals for sadistic purposes. Therefore it is hard to see how the selective breeding of animals would make us more callous to human welfare in the way that deliberate cruelty would (though perhaps this is possible). Similarly, when discussing selective breeding we are not typically talking about harming our neighbor’s property, but about what we may do to animals in our own care or remit. Therefore, I tentatively conclude that a “no moral consideration view” would not place any meaningful restrictions on the selective breeding of animals, even when this causes disease or other welfare problems. Perhaps the most that this view would require in the way of reform is better transparency in breeding and selling practices, so that consumers can make more informed decisions about the breeds of animal they are purchasing and any welfare problems or disease risks associated with the breed.

Equal moral consideration views

An “equal moral consideration” (EC) view, on the other hand, would place extensive restrictions on selective breeding. On this view, animals’ interests deserve the same level of moral protection that we afford to humans’ comparable interests, and since a principle of nonmaleficence applies strongly to humans, it would apply strongly to nonhuman animals as well. In many cases, the welfare impacts of selective breeding are probabilistic—that is, we are talking about imposing a probability of harm (risk) upon animals, rather than a certainty of harm. Does this make a difference? Probably not. Moral considerations around risk are sometimes different than moral considerations around harm, but this usually concerns situations where risk imposition is unavoidable, or where imposing risk is necessary if we are to pursue some basic life interest. Neither of these conditions applies to selective breeding, and outside of such conditions we may extend a principle of nonmaleficence from harm to risk without much problem philosophically. On an equal moral consideration view, this would mean that we have stringent obligations not to impose harm *or* risk upon animals outside of the exceptional circumstances discussed above. Hence any time selective breeding imposes harm or risk upon animals over and above what would be seen in the “baseline” of an outcrossed population, it would appear to be impermissible on an equal moral consideration view. In fact, it is unclear whether *any* selective breeding (other than explicitly for health considerations) would be morally permissible on this view, since it is unclear whether it is possible

to selectively breed for appearance, productivity, etc. without inbreeding and thus increasing the probability of genetic disease over and above an outcrossed population. That an equal moral consideration view would place extensive restrictions on breeding practices is not surprising—philosophers who endorse this kind of view also frequently argue that we ought not to kill animals for food or fiber, and that most invasive animal research is morally impermissible. And while it is not my present intention to argue for or against a particular view of animals' moral standing, one brief point is in order here: equal moral consideration views are often dismissed out of hand in veterinary medicine as being radical, extreme, or obviously mistaken. And they are radical in one sense: accepting them would entail very significant changes to the status quo of how humans treat animals. But the fact that a moral view would require significant social change does not in itself invalidate the moral view. Many leading scholars in animal ethics have in fact endorsed an EC view^{16,17}, and while this view may or may not ultimately be correct, it should not be dismissed out of hand.

Unequal moral consideration views

It is somewhat more difficult to trace the implications of an unequal moral consideration view as concerns selective breeding. "Unequal moral consideration" (UC) does not really describe one view as much as it describes a range of views. We could hold that animals are due less moral consideration than humans, but still maintain that animals are due a very high level of moral consideration that is just slightly less than what we grant to humans; we could also hold that animals are due some moral consideration but very little. Both of these are UC views; however, they would entail radically different practices as concerns human obligations to animals. In addition, UC views may accord different degrees of moral standing to different species, depending on their cognitive complexity. Some of these complications must be set aside at present. For present purposes, there are two determinations that seem particularly important when assessing selective breeding from a UC perspective, and on which I focus here.

First, in light of the possible complexity of UC views, it is helpful to try and identify a lower limit for serious moral consideration of animals' interests. In my experience, most persons seem to hold some kind of UC view about animals' moral standing. When attempting to formulate broadly acceptable social policy, then, it will be helpful to try and identify the minimum that we commit ourselves to if we accept the notion that animals have *some* moral standing. This lower limit can serve as a starting point for us to say "UC views require at least this much in the way of obligations to animals." From this minimal starting point, we can then gradually increase the level of moral consideration owed to animals and see how such changes impact our moral obligations. We can also continue to have debates about animals' moral standing, but we should not let points of disagreement obscure points of agreement.

I propose here that a reasonable lower limit of serious moral consideration is as follows: "humans should not impose significant harms or risks upon animals for trivial purposes." The reason why this may be a lower limit for serious moral consideration is that if it were any lower, then animals' significant interests could be overridden for pretty much any reason whatsoever—but such a view is not consistent with taking animals' interests seriously from a moral standpoint.

This principle sounds similar to the oft-expressed view that "humans should not harm animals unnecessarily." However, the concept of "necessary harm" is too vague to be useful; "necessary" really means "necessary in order to achieve a particular end," so we have to evaluate the importance of the particular end for which animals are harmed. Other things being equal, harms to animals that are imposed in the process of serving a very important human interest (e.g., curing HIV or cancer, providing necessary food without which we will starve) will be more permissible than harms imposed to animals for less urgent purposes, such as entertainment, luxury, non-essential food, etc. Since selective breeding may serve a number of human interests whose significance may vary, its overall ethical defensibility will vary, even on a UC view. Therefore the principle "humans should not impose significant harms or risks upon animals for trivial purposes" seems a better candidate for tracing the lower bounds of serious moral consideration, since it helps to clarify the relative importance of interests at stake.

Second, and given the above principle, we need to ask whether selective breeding imposes significant harms or risks upon animals, and whether these harms are imposed for an important or trivial human purpose. The judgment that a harm or risk is significant is of course evaluative, and reasonable persons may sometimes disagree about whether particular harms or risks should be deemed “significant.” Nonetheless, a good case can be made that at least sometimes, selective breeding results in significant harms and risks to animals, since breed-associated diseases or disorders can result in significant pain and distress, shortened lifespan, and difficulty for animals in satisfying some preferences (e.g., by damaging an animal’s mobility, sight, hearing, etc.). For illustrative purposes, examples of breed-associated diseases that severely set back an animal’s interests would (in my view) include, but not be limited to: intervertebral disc disease, hip dysplasia, severe atopy, progressive retinal atrophy, brachycephalic airway obstruction syndrome, elbow dysplasia, and syringomyelia.

Next, we should assess the importance of the human interests at stake in selective breeding. This is likely to be the most controversial aspect of the ethical discussion, but it is also the most important. Reports and articles on the pedigree breeding of dogs and cats typically recommend some reforms to breeding practices to improve animal health and welfare. However, they also tend to take for granted the fact that it is ethically permissible for humans to breed companion animals for desired appearances or functions, without much if any reflection on the importance of the ends for which we are breeding. Given the degree to which veterinarians, breeders, and breed enthusiasts may be invested in selective breeding (for economic purposes, social purposes, or because they are attached to a particular breed), we can expect that questioning the importance of selective breeding will be controversial and perhaps unwelcome, particularly if the ethical perspective from which we are questioning this is one that all parties to the debate claim to agree on (and most persons seem to agree that animals have at least *some* moral standing). Nonetheless, if we are to perform an honest ethical analysis we need to assess whether the harms that result to animals from selective breeding can be justified, and this requires looking at the significance of the human interest(s) at stake.

As concerns pedigree dog and cat breeding, a number of considerations militate against the view that the human interest in selective breeding is significant. First, it is important to distinguish the human interest in selective breeding *per se* from other human interests that are related to animals, such as the human interest in enjoying a relationship with a dog or cat. Relationships with animals can valuably enrich human existence, but this is a distinct issue from whether breeding animals for particular appearances or functions serves a significant human interest. Second, when considering what makes for a good human life, we can (at least roughly) rank various interests according to their importance. Most fundamental are our interests in such things as adequate food, shelter, freedom from significant physical and emotional harm, and basic medical care. Without these interests being satisfied, it is very difficult for a person’s life to go well for them. Also very important are interests in companionship, some degree of control over one’s life, and the ability to exercise one’s intellectual and creative capacities. However, selectively breeding animals for appearance (which comprises most cases of selective breeding of companion animals) serves an aesthetic or recreational interest. This kind of interest is less fundamental and important than the other kinds of interests listed above. Furthermore, the aesthetic interest in an animal’s appearance is not on par with, say, our aesthetic interest in enjoying fine works of art. Fine works of art represent significant human cultural achievements, whose appreciation can enrich our understanding of ourselves and the human condition. As concerns breeding for appearance, the term “aesthetic” refers to something different, more along the lines of “taste” or “preference.”

Moreover, while it can be argued that recreation is an important part of a valuable human existence (even if less fundamental than the other things mentioned here), humans can satisfy an interest in recreation or aesthetic enjoyment in myriad number of ways; pedigree breeding is not the sole means by which humans can recreate. When considering alternatives to current breeding practices it is also important to remember that the ethical debate about selective breeding is not just a matter of *whether* we selectively breed animals, but also *how*. Where the question at issue is whether a particular breed standard becomes modified somewhat, as opposed to whether a particular breed should be done away with entirely, the significance of the human interest at stake becomes even lesser, since breed enthusiasts

would not have to give up the breeds in which they take an interest. However, even where we are talking about the elimination of particular breeds altogether, it is difficult to argue that such elimination would set back a *significant* interest for breed enthusiasts. Clearly breed enthusiasts would be *unhappy* about the elimination of a breed of dog or cat to which they are attached. If such a person had devoted a large portion of their time, money and/or energy to breeding or associated activities, it might be argued that eliminating the breed would set back a significant interest of theirs, since such breeding and breed enthusiasm were a large part of their life. On one sense of the term “significant,” such a person’s interest in a particular breed is significant: they care about it a lot. However, not everything that we care about a lot necessarily deserves to be termed “significant” from a *moral* perspective. Otherwise, any of animals’ interests could be overridden for a human purpose, as long as the purpose in question is one that a person cares about enough. But this means that animals’ interests can, in principle, be overridden for any reason whatsoever, and this seems inconsistent with giving animals serious moral consideration. When assessing the significance of an interest from a moral perspective, part of what is being assessed is the overall *importance* of that interest as relates to an individual living a valuable or fulfilling life. Were certain persons who are “breed fanciers” prevented from appreciating a particular breed of animal (because its conformation or temperament was modified, or because we stopped perpetuating a particular breed entirely), they could still enjoy a very fulfilling life, their disappointment at this loss of breed appreciation notwithstanding. Furthermore, the kind of loss in question is one where a person first develops an appreciation for a particular breed, and then has this specific form of appreciation taken away from them. Were breeding practices changed with respect to appearance, then many persons in the future would never develop such breed appreciation in the first place. Nonetheless it is difficult to imagine their lives going more poorly for them because of this, or even their taking notice of it in the first place. This observation is important as we consider policy moving forward.

The selective breeding of companion animals (or support services for this) may also be performed for economic and functional (e.g., herding, hunting) purposes. What of the significance of these? While a person’s ability to earn a living and support themselves and their family is clearly important, again we must think about alternatives, and there is any number of alternative ways for a person to derive income. Hence it is difficult to say that a person’s economic interest in selective breeding is significant unless there is no alternative way for them to derive income, and in particular unless their ability to derive income depends on their breeding a particular breed of animal, or breeding for extreme conformation within a breed. It is hard to think of examples where this would be the case. Furthermore, while consumers may be preferential to some conformations (e.g., pugs with very brachycephalic faces), in my experience they are often ignorant of the adverse health consequences sometimes associated with selective breeding, and often would rather have a healthier example of the breed with a less extreme conformation once these health consequences are explained to them. Hence with aggressive client education about health and welfare, consumer demand for some conformations may dry up.

As concerns breeding for function, the importance of selective breeding must be assessed against the importance of the activity for which animals are bred. Examples of functions include herding, hunting, or higher production from farm animals. Some reports on selective breeding seem to presume that breeding for functions like this is less likely to result in adverse welfare consequences than breeding for appearance⁴, but this seems doubtful in at least some cases (e.g., farm animals). Let’s assume for the sake of argument that breeding for herding, hunting, increased productivity, or other functions imposed significant harm or risk upon the animals. What is the significance of the human interest in these functions? Since most hunting is carried out for recreational purposes and not to acquire necessary food (even if the animals killed are eaten), this does not seem to be a significant interest. The same can be said for animal agriculture in most (though not all) cases, since persons in the developed world do not need to consume animal products to be healthy; in fact emerging evidence suggests that plant-based diets may be nutritionally advantageous in some respects. Furthermore, in the case of breeding for increased production, we are often dealing with a situation where the interest in question is an interest in less expensive animal products, not a situation where consumers are facing a choice between consuming animal products or not consuming them, further lessening the significance of the human interests at stake.

In some cases, breeding laboratory animals to model particular diseases might be viewed as representing a significant human interest (assuming fidelity of the model and importance of the disease). As concerns companion animals, perhaps the best candidate for a significant human interest in selective breeding for function would be service dogs, e.g., seeing eye dogs.

I conclude here that outside of a few notable exceptions (e.g., seeing eye dogs), the selective breeding of *companion* animals for appearance or function generally does not serve a significant human interest. Therefore, even on a view according only minimal moral consideration to animals, we are led to the conclusion that the selective breeding of companion animals is (generally) impermissible when it results in significant harm to the animals. This conclusion does not prohibit selective breeding for appearance or function entirely. However, it does support the kinds of policy recommendations typically laid out in reports on the issue. For example, this argument supports the modification of extreme breed conformational standards so as to lessen severe disease impacts (e.g., brachycephalic airway obstruction syndrome). It also supports the modification of breeding practices when such practices impose significant risk upon animals, for example by perpetuating genes causative of significant disease where the genetics of disease are not well enough understood to avoid production of diseased animals.^{§§} Even on this view one might argue that certain breeds of animal should not be perpetuated, because it is impossible to maintain a particular breed without imposing significant harm or risk upon the animals. For example, intervertebral disk disease is arguably a significant risk for Dachshunds, and given the etiology of this disease it is questionable whether the breed can be maintained as we know it without imposing this risk upon the animals. However, such conclusions would apply at the level of a specific breed, and not to selective breeding for appearance in general.

More stringent restrictions of selective breeding practices in a broad way will likely require that we accord animals more than minimal moral standing. For example, the principle outlined here—that we should not impose significant harms or risks upon animals for trivial human purposes—does not rule out the imposition of small or moderate harms or risks for trivial human purposes. However, it should be emphasized that the discussion here has been aimed at identifying the bare minimum that we owe animals if we say that they have moral standing, and what this implies for selective breeding practices. The point of identifying this “bare minimum” is to motivate political agreement, not to identify what we *reasonably* owe animals. There is still ample room to endorse more stringent restrictions on breeding practices with respect to animal welfare while still endorsing some form of unequal consideration. This conclusion rests on the assumption that the selective breeding of companion animals generally does not serve a significant human interest. There may be exceptional cases in which the human interest served is more significant, in which case restrictions on breeding would have to be arrived at through more stringent principles. In addition, it is always open to defenders of selective breeding to argue that even in routine cases, the selective breeding of companion animals serves a significant human interest—though this conclusion seems dubious.

What seems most important for present purposes as concerns unequal moral consideration views is to emphasize the form of argument that these views must take, and to show how they are different than the approach often espoused in veterinary medicine. The American Veterinary Medical Association’s “Animal Welfare Principles” start by listing a number of appropriate human “uses” of animals (e.g., for food, fiber, research, etc.), and while “humane” or “respectful” treatment of animals is advocated, human obligations to protect or promote animal welfare are recognized only insofar as they are consistent with these uses.¹⁸ This approach does not provide much guidance in specifying which practices within broad categories of animal use (e.g., agriculture) are permissible or impermissible, for example by delineating which kinds of breeding, housing, or handling practices are consistent with humane or respectful animal agriculture. Nor does this approach advance arguments to support its assertions about the permissibility of certain kinds of animal use in general. These are both serious philosophical defects. While there are many details of unequal moral consideration views that remain to be worked out, the general framework of moral considerability outlined here is in my view the best way for us to frame our obligations to animals, and to build upon in future work. As concerns unequal moral consideration views, the advantage of this approach over the “welfarist” approach characteristic of the AVMA principles is that it forces us to

honestly assess the significance of the human interests at stake in various kinds of animal use, and whether those interests justify harm to animals. Since various kinds of animal use presuppose certain tradeoffs of animals' interests to serve humans' interests, assuming the moral defensibility of such activities without providing a supporting argument begs important ethical questions. Similarly, the fact that some forms of animal use (e.g., agriculture, or pedigree breeding of dogs and cats for appearance) will be permissible in broad sketch on unequal moral consideration views in broad sketch does not mean that all possible variations of these activities will be.

Conclusion: Animals' Moral Considerability and Selective Breeding

The preceding discussion shows that significant changes to current breeding practices of companion animals can be supported just by acknowledging that animals have nontrivial moral status. This is because selective breeding may at times impose significant harm or risk upon animals, and because the human interest in the selective breeding of companion animals seems insignificant in most cases. At a minimal level of moral consideration, however, selective breeding may still be ethically defensible if it imposes small harms or risks upon animals. At any higher level of moral consideration it is questionable whether the selective breeding of companion animals for appearance or function can be justified when it imposes harm or risk. There is also the larger question of whether we should be selectively breeding companion animals for appearance or function at all. In part this depends on an empirical question: Is it possible to selectively breed animals for appearance or function without imposing additional harm or risk as compared to an outbred population? It also depends on moral questions: if selective breeding does impose harm or risk by necessity, how much moral consideration is owed to animals, and how significant are the human interests at stake? Finally, if animals are accorded no direct moral standing at all, then there are few if any restrictions on breeding practices that can be justified.

Veterinary responses to ethical issues in selective breeding

Thus far the discussion has been focused on fundamental moral arguments around the selective breeding of animals for appearance (most commonly) and function. We have not talked about veterinarians' role in improving breed health. This is purposeful: we cannot know how veterinarians, either individually or as a profession, should respond to this issue until we have some sense of whether current breeding practices are morally defensible. Unless we deny that animals have direct moral standing, it would appear that current breeding practices (on the main) are not morally defensible. However, it seems unrealistic to expect the veterinary profession as a whole to renounce selective breeding for appearance in the immediate future, or even to radically change breeding practices to curb deleterious welfare effects—though, to be clear, *if* the moral arguments indicate that either of these responses is obligatory, then this is how the profession *should* respond. But in the spirit of moving us forward, I offer a few practical recommendations that we as a profession should be able to implement in the immediate future.

Most reports on selective breeding and animal welfare emphasize the emerging need for veterinarians to keep abreast of developing tools to screen for breed-associated disease, and to actively counsel clients about the possible welfare effects of breed conformation and breed-associated disease. I agree with these conclusions, but think that the profession needs to go further. First, and most importantly, the veterinary profession needs to engage fundamental arguments around animals' moral standing and the importance of the human interests that are served by various kinds of animal use or treatment. Discussions about veterinary ethics, if they occur at all, tend to take for granted various kinds of animal use and to advocate for "humane" or "respectful" treatment in very general terms. But we have already seen that this is a problem. It is a problem because endorsements of various kinds of animal use in the abstract provide little guidance when thinking about whether specific decisions associated with that use are morally permissible. Knowing that is morally permissible to raise and kill animals for food, to use animals in research experiments, or to breed animals for certain human ends does not tell us what

kinds of moral restrictions apply to these practices. To say that our treatment of animals should be “respectful” or “humane” does not really help, since these terms are vague.

Furthermore, whether these activities are morally permissible is itself something that requires argument and cannot be assumed. To date, the veterinary profession has tended to dismiss views calling for substantial changes to the status quo of animal treatment as “radical,” “irrational,” and the product of “strong animal rights views.” But none of these responses is adequate. Substantial revision to the status quo of animal treatment does not rest on equal moral consideration or strong animal rights views alone. Rather, unequal consideration views are also capable of motivating significant changes to current practices, once it is recognized that harms to animals actually have to be justified by reference to the significance of the human interests at stake. Furthermore, the absolute dismissal of any view as “radical” or “irrational” without considering the view on its merits and refuting it is itself an irrational response. The only way that we can know whether a particular moral viewpoint is correct is to assess the reasons for and against the view, and to do so in as rigorous and unbiased a way as possible. Without doing this, veterinarians cannot claim the moral or rational high ground when rejecting a particular viewpoint as incorrect, or advancing their own viewpoint as correct. Moreover, a large amount of philosophy about animals’ moral standing has been written over the past forty years, much of which questions traditional views about animals’ radically inferior moral standing to humans. In addition, public views about the appropriate treatment of animals are changing, as concerns farm animals, research animals, and companion animals. In many cases the public’s views seem to be more progressive and more protective of animal welfare than the views espoused by mainstream veterinary medicine. From a political standpoint, veterinary medicine can only avoid a genuine engagement with the moral issues for so long before it loses social credibility.

Second, as a corollary to the preceding point, veterinarians should be receptive to legislative proposals to require veterinary health screens or other services as part of ensuring breed health. Such proposals are good for animal welfare *and* the profession, but historically the veterinary medical profession has sometimes resisted legislative proposals that would empower it (e.g., as concerns laboratory animal protection) because such proposals were viewed as being motivated by “radical” or “extremist” social views.¹⁹

Third, if veterinarians are also breeders, then whether and how they breed animals is something that is directly under their control. Hence moral arguments about what kinds of breeding practices are defensible can be applied directly by these persons; no additional considerations appear to be required.

Fourth, since veterinarians provide support services for breeders and animal owners, we must think about how veterinarians should respond when clients request services or make decisions that are not in-line with a veterinarian’s values. It is often noted that the veterinarian-client-patient relationship (VCPR) is triangular in nature, and that the veterinarian must serve the interests of both animals and their owners. However, when the interests of animals and owners conflict, the profession has historically tended to side with owners except in egregious situations where neglect or abuse is occurring. Though veterinarians ultimately lack control over the decisions that clients make, they do have control over the degree to which they advocate for what they believe is the right decision, as well as their involvement in ethically problematic decisions or practices. Veterinarians may need to more aggressively advocate for the health of companion animals, for example by stating outright to a client considering purchase of a particular breed that the veterinarian believes certain breeding practices to be unethical, as opposed to saying something like “Well, if it were *me*, I wouldn’t purchase breed ‘x’, but it’s ultimately your call.” In addition, veterinarians may need to consider conscientious objection in cases where support services are requested by breeders known to be involved in unethical practices, and where education and advocacy by the veterinarian have failed.

Notes

* Though some persons distinguish between “inbreeding” and “linebreeding,” I do not—the difference between these two terms is only one of degree and not one of kind. Even where two animals of the same breed not known to share a particular ancestor are

mated, the mating is between two individuals more genetically similar than two individuals of different breeds, or two hybrid individuals.

[†] The reason that some proponents of strong animal rights views view the domestication of animals as wrong is that, in their view, the human relationship with such animals is necessarily exploitative. However, even if someone accepts the core premises of a strong animal rights view, including the premises that animals' interests deserve equal moral consideration to humans' interests and that both humans and nonhuman animals have strong negative rights against being harmed, it does not follow logically that humans' relationship to such animals is exploitative. In fact I think that, apart from special circumstances, this exploitation thesis is mistaken, though I won't defend this argument here.

[‡] The term "beg the question," as used in philosophy, is a term of logic. It means that a person is assuming the truth of something that requires demonstration by argument. This is distinct from the ordinary-language use of "begs the question" as synonymous with "raises the question."

[§] These terms are often bundled together in the so-called "fact-value distinction" or "fact-value dichotomy." Unfortunately, these terms have a number of meanings in philosophy, some of which are more controversial than others. I'll avoid getting into these issues here and simply talk about "non-moral facts" and "moral evaluations," which should be sufficient to get the job done without attaching any philosophical baggage. The reader should *not* draw from my use of this distinction the conclusion that moral judgments cannot be true or false, or that science practice (which generates many non-moral facts) does not involve any kinds of value judgments.

^{**} For excellent reviews of these issues, see Haynes⁹ and Rollin.²⁰

^{††} For example, in a recent interview with the Humane Society Veterinary Medical Association, Michael Blackwell, stated that "HSVMA must take the lead as an affiliate of HSUS to help define animal welfare from the perspective of trained veterinary professionals. The veterinary profession cannot do this by riding on the back of the bus while laypersons are driving the bus. Rather, we need to take control of the steering wheel to ensure that there are balanced, reasonable and educated voices speaking for the needs of animals." Humane Society Veterinary Medical Association Monthly News, June 14, 2012. Available at: http://action.humanesociety.org/site/MessageViewer?em_id=41441.0&dlv_id=44022

^{‡‡} By "interest" I mean those things that are pertinent to an animal's well being; the things that matter to it in the sense of making the animal's life go well or poorly. An animal's "welfare" represents the collective set of interests that it has.

^{§§} At the present time, screening tests for genetic disease are relatively few, and we may ask the question of how breeders should proceed in cases where screening tests and prevalence data are not robustly available. In such cases, it may be unknown whether a particular mating is likely to impose a significant risk of genetic disease upon offspring. Here ancillary sources of data, such as expected breeding values, may be of use. It may also be necessary to institute certain rules (e.g., rules limiting the number of times an animal may sire offspring) based on the general knowledge that particular kinds of breeding practices are particularly risky when it comes to perpetuating genetic disease.

References

1. Ackerman L: The genetic connection: a guide to health problems in purebred dogs. Lakewood (CO): American Animal Hospital Association Press; 1999.
2. Rooney N, Sargan D: Pedigree dog breeding in the UK: a major welfare concern? West Sussex (UK): Royal Society for the Prevention of Cruelty to Animals; 2009.
3. Asher L., Diesel G, Summers JF, et al: Inherited defects in pedigree dogs, part 1: disorders related to breed standards. *Vet J* 2009;182:402-411.
4. Bateson P: Independent inquiry into dog breeding. Privately published; 2010. Available at: <http://www.dogbreedinginquiry.com>
5. Summers JF, Diesel G, Asher L, et al: Inherited defects in pedigree dogs, part 2: disorders that are not related to breed standards. *Vet J* 2010;183:39-45.
6. Associate Parliamentary Group for Animal Welfare: A healthier future for pedigree dogs. London: APGAW; 2009. Available at: <http://www.apgaw.org/>
7. Rooney N: The welfare of pedigree dogs: cause for concern. *J Vet Behav* 2009;4:180-186.
8. Companion Animal Welfare Council: Breeding and welfare in companion animals. Devon (UK): Companion Animal Welfare Council, 2006. Available at: <http://www.cawc.org.uk/reports>
9. Haynes R: Animal welfare: competing conceptions and their ethical implications. New York: Springer Publishing; 2008.
10. Korte SM, Olivier B, Koolhaas JP: A new animal welfare concept based on allostasis. *Physiol Behav* 2007;92:422-428.
11. Collins LM, Asher L, Summers J, et al: Getting priorities straight: risk assessment and decision-making in the improvement of inherited disorders in pedigree dogs. *Vet J* 2011;189:147-154.
12. Scully M: Dominion: the power of man, the suffering of animals, and the call to mercy. New York: MacMillan Publishing; 2003.
13. Linzey A: Christianity and the rights of animals. Chestnut Ridge (NY): Crossroad Publishing; 1987.
14. DeGrazia D: Animal rights: a very short introduction. New York: Oxford University Press; 2002.
15. Garner R.: Animal ethics. Malden (MA): Polity Press; 2005.
16. DeGrazia D: Taking Animals Seriously: Mental Life and Moral Status. Cambridge: Cambridge University Press, 1996.

-
17. Regan T: *The Case for Animal Rights*, revised ed. Los Angeles: University of California Press, 2004.
 18. American Veterinary Medical Association (AVMA). "Animal Welfare Principles." November, 2006. Available at: <https://www.avma.org/KB/Policies/Pages/AVMA-Animal-Welfare-Principles.aspx>
 19. Rollin B: *Science and Ethics*. New York: Cambridge University Press, 2006, pp. 110-111.
 20. Rollin B: *The unheeded cry: animal consciousness, animal pain and science*. New York: Oxford University Press; 1990.