



The 3D Method: A Tool to Analyze Positions in Animal and Environmental Ethics

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Abstract

Over the past fifty years numerous ethical and political traditions, and positions and sub-positions, have emerged in the fields of animal and environmental ethics. In combination with inconsistent terminology and axiological variation, this has made it difficult for both novices and professional scholars to maintain an overview of these fields. Referring to the preliminary work of Kenneth Goodpaster, William Frankena and Kirsten Schmidt, this paper describes and explains a workable 3D method in which advantageous use is made of three dimensions in ethical argumentation: “moral considerability”, “moral significance” and “moral practice”. The method is a useful research tool for at least three reasons: it allows us to systematically analyze, reconstruct, compare and criticize different normative positions in animal and environmental ethics; it helps ethical theorists to reflect on, and define, their distinctive positions; and it leads to the construction and development of a moral position with the desirable qualities of clarity, transparency, comprehensibility and completeness. First, the 3D method is introduced, and its historical context and origins outlined. Then the three dimensions of the method (moral considerability, moral significance, and moral practice) and their interrelations are considered. The paper concludes with some critical remarks and discusses the limits of the method.

Keywords Animal ethics · Environmental ethics · Metaethics · Methodology

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Introduction

Since animal and environmental studies were established as philosophical disciplines about fifty years ago, legion ethical and political positions and sub-positions have emerged, making it difficult to keep track of all of the developments (Grimm et al., 2016). Additionally, in this period several axiologies have been applied, and variable, and sometimes inconsistent, terminology has been used (Camenzind, 2020: 144), presenting a challenge for both the novice and the professional scholar. The last matter is especially pressing because animal and environmental issues are nowadays not only a fixed component on many Bachelor's and Master's curricula but have also been introduced in courses offered in secondary school education (An overview of diverse university programs relating to human-animal studies is provided by the *Animals and Society Institute*. Online: <https://www.animalsandsociety.org/human-animal-studies/degree-programs/> [last access: 28.3.2023]).

Against this background, the aim of this paper is to highlight and emphasize the attractiveness of a workable method that I call the “3D method”, in which three dimensions of ethical theory are distinguished: moral *considerability*, moral *significance* and moral *practice*. This allows us to reflect on the many ethical, juridical and political traditions, positions and sub-categories that have emerged within the past 50 years in the fields of animal and environmental ethics. The 3D method serves as a useful instrument for:

- the systematic analysis, reconstruction, comparison and critique of different normative positions in animal and environmental ethics;
- the reflection on and definition of one's own position;
- the construction and development a moral position exhibiting clarity, transparency, comprehensibility and completeness.

Despite emerging in the context of animal ethics, the 3D method is adaptable to environmental studies as well as medical ethics, because all of these subjects confront similar questions. Two of the core questions are: What entities possess moral status? How should moral agents treat beings with a moral status? One advantage of the 3D method is that it is easily adaptable for different levels of difficulty. For novice scholars from various disciplines such as philosophy, veterinary medicine, conservation medicine and laboratory animal science, as well as laypersons, it can be employed as a merely descriptive and analytical tool that enables labeling any bioethical position. It can also be used as a way of identifying and reflecting on one's own position. For advanced students and professional philosophers, it serves as a way of gaining a quick overview of a specific position, or as a way of locating a particular problem with reference to its rationale or terminological features extending beyond simple implementation issues.¹ The method has already been successfully used to

¹ The 3D method may also provide guidance on didactical questions about the teaching of bioethics. After ten years of experience in academic teaching across the aforementioned fields, I can strongly recommend the 3D method as an aid to productive reading for beginners, or as an analytical structure illuminating the comparative analysis of a range of positions (e.g. in the preparation of a BA or MA thesis).

analyze positions in animal and environmental ethics (Schmidt, 2011; Camenzind, 2013, 2020) and in courses introducing animal ethics, where it helps to explain how the main positions are best approached (Grimm et al., 2016).

The historical context, and the origins of the 3D method, will now be outlined. The three dimensions and their interrelations. The paper will conclude with four critical remarks and a discussion of the limits of the method.

Historical Background and Origins of the “3D Method”

My inspiration for the 3D approach has its origins in the “three levels of argumentation” set out by Kirsten Schmidt (2011: 158f.). She uses a briefly sketched distinction between (1) the level of moral status, (2) the level of specification of the moral status, and (3) the implementation level, regarding concrete moral obligations to examine differing functions of animal welfare within various approaches to animal ethics. Adapting Schmidt’s distinction, and expressing it at a more abstract level, I will detach and decontextualize it from the animal welfare perspective and treat it as applicable to animal and environmental ethics, and more widely to bioethics generally. To strengthen the three dimensions of animal and environmental ethics and extend beyond Schmidt’s approach, I will first place the 3D method in historical context, offering some background information about its origins and possible predecessors.

First Dimension: William Frankena and the “Different Types of Ethics”

The analytical philosopher William Frankena (1979, 5 f.) was the first to discern “different types [of] ethics” within environmental ethics without referring to the traditional categories of teleology, deontology, contractarian ethics and virtue ethics. His approach was to identify moral communities in terms of their extension, concerning whom or what they include. This approach will later be referred to as the “first dimension” (moral status). Thus, Frankena distinguished between positions that only consider *oneself* as a morally relevant object, all and only *human beings*, all and only *sentient beings*, all and only *living beings* and *every existing thing*. He further added three other types of ethics: theocentrism, a combination of the aforementioned types, and the *naturam sequere* position. Although they were not labeled with precise terms at that time, the contemporary categories of anthropocentrism, pathocentrism/sentientism (consistently sentientcentrism), biocentrism, ecocentrism and holism (or physiocentrism) all date back to Frankena’s different types of ethics.

We should pause here to critically reflect on a few features of Frankena’s system. First, the *naturam sequere* (meaning “follow nature”) position should not be included in this classification, because it does not refer to the extension of the moral community. It already promotes an imperative concerning how moral agents should act.

Second, although it seems unlikely that the introduction of another “-ism” will make the bioethical landscape clearer, one should add the category of either autono-mocentrism (Camenzind, 2020: 23, 97 f.) or rationcentrism (Rippe, 2003: 97 f.) to describe Kant’s ethic, and all other positions such as traditional contractarianism that

only count persons (in the technical sense) as morally relevant entities, to distinguish Kant's ethics from a superficial humanism.

Third, these categories are sometimes presented as elements in an historical unfolding of moral progress (e.g. Singer, 2011 [1981]) in the sense that expanding the moral community from narrow to wide and from wide to all-inclusive is a morally desirable progress from bad to good and finally perfect over time. This is historically misleading, because some of these positions have existed synchronously, both in earlier periods and today. For example, in the early twentieth century, Kantians held to autonomocentrism and its implication that (non-rational) animals lack moral status, while Leonard Nelson (1932) already considered the interests of all sentient animals as morally relevant, and biocentrist Albert Schweitzer (1987) pleaded for reference for all living beings, including plants and bacteria. Although the vast majority of ethicists agree that sentient animals should be considered morally, traditional Kantians and contractarians continue to have reservations about the possibility of establishing duties *to* animals and the environment (e.g. Rawls, 1971, Stemmer, 2000, Basaglia, 2018, Altmann, 2019). In sum, there is an ongoing debate over who, or what, merits moral consideration.

Fourth, having outlined the common classification of bioethical positions, I would argue – *pace* Frankena – that this classification does *not* include “at least by implication, certain instructions (directions, permissions, or prohibitions) about how moral agents may or should treat the environment” (Frankena, 1979: 6). For example, when it is assumed that all sentient beings possess moral status, and a form of sentientism is thereby promoted, it remains unknown what moral weight should be accorded, within this status, to sentient beings, and what kinds of duty moral agents owe to them. Thus, it is as yet unknown whether we should guarantee them rights, or equal consideration of interests, or whether they are instead merely morally relevant objects of our virtues. The only known fact about the members M of the moral community C is that every action A that involves a moral relevant being B must be justified with morally relevant reasons R.

Fifth, against Frankena's view, it is not possible to combine the positions randomly, because they are mutually incompatible: you are *either* an anthropocentrist, *or* a sentientist, *or* a biocentrist, and so on. You cannot be both an anthropocentrist and a sentientist, or both a sentientist and a biocentrist. Sentient animals either have moral status (sentientism, biocentrism) or they do not (anthropocentrism). Nevertheless, it is theoretically possible to be a sentientist and therefore grant moral status to all sentient animals but then argue that human animals have a higher moral standing² than other animals (e.g. Dean, 2006, Kagan, 2019). Thus, mere delimitation of the extension of the moral community is insufficient to guide our relations and actions towards other beings with moral status. For one thing, there is simply something

² This term is sometimes used as what I refer to as “moral status”, sometimes as “moral significance” (see next paragraph) and sometimes even in a very broad sense as any form of (moral) considerability. Morris (2013) has already highlighted the ambiguity of the concept of moral standing in the literature. He finally defines the terms in the opposite way as I do. As long as the terms are clearly defined, both interpretations are accurate. I will distinguish and contrast the term “moral status” from “moral standing”. Whereas the former is a binary concept, the latter can be differentiated in degrees. This means that the moral standing of an entity A can be higher or lower in comparison to other entities.

missing if we wish to give a satisfying answer to the question: How should moral agents treat animals? For another, there seems to be a huge variety of sub-positions within these positions. Within sentientism, we meet welfarism, utilitarianism, several forms of animal rights theory, the ethics of care and even some forms of contractarianism. These differ markedly, not only over the question of how moral agents should treat animals, but also in terms of the answers that they give to the question: How much weight should moral agents give to animal interests compared to the interests of human beings?

Second Dimension: Kenneth Goodpaster and the Distinction Between Moral Considerability and Moral Significance

To fill these knowledge gaps, Kenneth Goodpaster (1978: 311) once separated moral *considerability* and moral *significance*. While moral considerability refers to the bioethical positions (anthropocentrism, sentientism, etc.) mentioned above, moral significance allows us to differentiate, within a certain position, between egalitarian and hierarchical variants. This distinction allows us to add a second dimension (moral considerability), enabling graduation regarding the moral status. This means that every bioethical position (anthropocentrism, sentientism, etc.) can be categorized as either egalitarian or as hierarchical. For example, based on widely shared moral intuitions, or due to their lack of practicability, positions with an extensive range of specifications such as biocentrism have a tendency to rank members of the moral community according to their socio-cognitive abilities (e.g. Balzer et al., 2000; Rutgers & Heeger, 1999). On the other hand, others promote egalitarian biocentrism (e.g. Schweitzer, 1987, Taylor, 1989) and try to deal with the various moral conflicts that arise within an egalitarian approach.

Some authors go one step further and develop an additional classification of egalitarian positions. Klaus Peter Rippe (2003) distinguishes between *weak* and *strong* egalitarianism, asking whether the former gives the interests of human beings more weight than the interests of non-human animals in harm-benefit analysis, and whether the latter denies human privileges categorically and give equal weight to the interests of humans and the other animals. In another classification, using the right to life and the political sphere as criteria, Philipp Bode (2018) distinguishes four versions of egalitarianism: weak, extended, strong and absolute egalitarianism.

While I understand and acknowledge the demand for further differentiation, I do not think that the solution here lies in distinguishing sub-categories of egalitarianism as Rippe and Bode suggest. In fact, because interests are not considered equally, it would be more appropriate to understand Rippe's differentiation as the description of a hierarchy.³

Third Dimension: Kirsten Schmidt and the Third Level of Moral Practice

Recognizing the need for further differentiation, Schmidt (2011) was the first to add a 3rd dimension, supplementing moral considerability and moral significance, without

³ A critique of Bode's approach can be found elsewhere (Camenzind, 2019: 314 ff.).

introducing further sub-categories of moral significance. Explaining this third level of moral *practice* Schmidt states: “The central issue on this third level is the content of our moral obligations. What are the normative criteria for our moral duties towards beings that have moral status? How can respect for the moral status of an animal be implemented? The criteria that we specify on this level can serve as guidelines to establish concrete rules for moral actions” (Schmidt, 2011: 159).

The Three Dimensions of Animal and Environmental Ethics

Having sketched the history of all three dimensions, we can now look at the dimensions in more detail, as well as the relations between them. In the following, the 3D method will be presented. It will be explained that each dimension has a single dominant focus that can be precisely labeled and assigned to one question.

First Dimension: Moral Considerability

In the first dimension, members of the moral community are identified. The focus here is on the moral status question: Who or what counts morally? A being with moral status is *considered for its own sake*. Therefore, entities with moral status can be harmed or wronged in a morally relevant way. Using the terminology of value, the idea that an individual possesses moral status can be expressed by saying that this being has moral worth, namely independently of her instrumental, economic, aesthetic or social value for other beings. Although at the first level it is not yet clear exactly how moral agents should treat a member of the moral community, it is clear that beings with moral status are entitled *not* to be treated arbitrarily, and that any harming, or wronging, of a being with moral status must be justified with morally relevant reasons. A being with moral status must be treated according to its specific status, something that cannot be said of beings without moral status.

Moral considerability is categorical. It does not come in degrees: you either have moral status or you do not. Put simply, who or what, counts morally is a question defining the moral community. Within the first dimension of moral considerability, the positions of autonomocentrism (or ratiocentrism), anthropocentrism, sentientism, biocentrism, ecocentrism and holism (or physiocentrism) are possible. Note that the categories of autonomocentrism to biocentrism primarily focus on individual entities, while ecocentrism and holism also refer to systems such as ecosystems, planets or abstract entities such as species as morally relevant entities.

Second Dimension: Moral Significance

The second dimension aims to specify and define the weight to be accorded to those with moral status. The central question here is not about who, or what, counts morally, but rather concerns how much an entity counts. This question presupposes that the first dimension has already been dealt with. It can only be explained properly when beings with moral status have been identified. Any position can be structured in either an *egalitarian* or *hierarchical* way. Hence, the options are egalitarian or hier-

archic anthropocentrism, egalitarian or hierarchic biocentrism, and so on. The challenge for hierarchical approaches lies in defining a non-arbitrary criterion explaining how the hierarchy is created. As a result of the various moral conflicts that arise in most egalitarian approaches, a difficulty occurs here as regards the third dimension, namely moral practice.

Third Dimension: Moral Practice

The third dimension focuses on the fundamental question of moral philosophy: How should moral agents treat beings with moral status, and with a specific moral significance? In other words: What actions are morally permitted, required or prohibited where beings that are part of the moral community are concerned? In this dimension, the traditional schools come into view: Kantianism, utilitarianism, rights theory, virtue ethics and contractarianism all belong here (together with other moral theories that can be added to these traditions such as moral individualism, relationalism, the ethics of care, the ethics of compassion, critical theory, and any other “isms” that I have not listed here). Each of these schools and approaches has a different moral currency defining the appropriate ways in which moral agents can treat each other and other members of the moral community. These currencies can be expressed by duties and rights, interests, relations and virtues, and so on. In the third dimension, positions can also be examined in relation to different concepts of harm. What exactly is protected? What is to be considered morally? Is it subjective or objective welfare? Is it integrity, telos, dignity or capabilities? Are the protected rights moral, legal or political? These questions define what I call the moral *currency* with which a theory deals. The following overview summarizes the possible positions and combinations:

First dimension: Moral considerability: *Who (or what) counts morally?*

The available answers include:

- Autonomocentrism: All and only autonomous beings have moral status.
- Anthropocentrism: All and only human beings have moral status.
- Sentientism: All and only sentient beings have moral status.
- Biocentrism: All and only living beings have moral status.
- Ecocentrism: All and only entities of the ecosphere have moral status.
- Holism: Everything that exists has moral status.

Second dimension: Moral significance: *How much do entities with a moral status count?*

Moral significance can be applied to any of the positions in the first dimension, the answers can follow either egalitarian or hierarchical rationales:

- Egalitarianism: All entities of the moral community count the same.
- Hierarchy: Not all entities of the moral community count the same (there are differences in their moral significance).

Third dimension: Moral practice: *How should moral agents treat beings within the moral community?*

Available answers include:

- Kantianism⁴
- Utilitarianism and other versions of consequentialistic theories.
- Contractarianism.
- Virtue ethics.
- Rights theory.
- Ethics of care and other forms of feminist ethics.
- Ethics of compassion.
- Critical theory, etc.⁵

Relations Among the Three Dimensions

Although the three dimensions can be detached from each other and analyzed separately, they are related by the fact that they depend on each other in several ways.

When applying the three dimensions of animal and environmental ethics, the most productive approach is to increase the complexity gradually – starting with the first dimension of moral considerability, then defining the second dimension of moral significance, and finally determining the third dimension of moral practice. As already mentioned, the reflection on, and determination of, the second dimension of moral significance requires a prior determination of the moral considerability. Only after identifying the entities with moral status does it make sense to determine their moral weight and significance of those entities. Although the third dimension seems to stand independently of the other two, there is an important relation between it and logically prior dimensions. For example, one could ask how the harm concept at the third dimension (e.g. in the well-known principle of nonmaleficence) relates to the criterion of moral status. Is a moral hierarchy only relevant in moral dilemmas (e.g. child versus dog dilemma) or is it manifested in fundamental principles that are mirrored in everyday practice? How does moral currency relate to the criterion used to justify a hierarchical account of moral significance?

⁴ Jens Timmermann's (2015) contribution "What's Wrong with 'Deontology'?" provides convincing reasons to no longer use the term "deontology". Just to mention two of them: first, historically Jeremy Bentham coined the neologism "deontology" in 1834 and defined it as "the science of duty", which in his case leads to utilitarian deontology (!). This origin is very interesting because "deontology" nowadays is often defined negatively as non-consequentialistic or anti-utilitarian. Regarding the negative definition, a second problem occurs: it is not very precise because it also applies to virtue ethics, feminist ethics and other approaches, which oppose with both consequentialism and typical deontological approaches. Further reasons to dispense the term "deontology" and the suggestion to use an alternative terminology are outlined in Timmermann's article.

⁵ Key proponents of the mentioned theories that deal with animal and environmental issues are as follows. For Kantianism: Immanuel Kant and Christine „Korsgaard“; for utilitarianism: Jeremy Bentham, Peter Singer and Katarzyna de Lazari-Radek; for contractarianism: John Rawls and Peter Stemmer; for virtue ethics: Aristotle and Philippa Foot; for rights theory: Tom Regan, Sue Donaldson and Will Kymlicka; for the ethics of care and other forms of feminist ethics: Carol Adams and Lori Gruen; for the ethics of compassion: Arthur Schopenhauer; and for critical theory: Anthony J. Nocella II and Barbara Noske.

The process of moving from the first dimension to the third, should not disguise the fact that the various theories were not constructed in the corresponding *chronological* order. While some philosophers (e.g. Taylor 1989, see below) follow the proposed order to develop their positions, others – such as Peter Singer (2011) in developing his preference utilitarianism – reflect a different order. Singer first introduces the “principle of equal consideration of interest” (Singer, 2011: 20) (third dimension), before then identifying the entities to which this principle can be applied (first dimension). Finally, he explains why one should differentiate “mere sentient beings” and persons, namely “self-conscious beings, aware of themselves as distinct entities with a past and a future” (Singer, 2011: 94) (second dimension).

In a rather different way, Immanuel Kant excludes (non-rational) animals from the kingdom of ends (first dimension) *en passant* in his derivation of the formula of humanity (Kant, 1785: 427–429), which is a principle assignable to the third dimension. Because animals do not possess moral status in Kant’s ethics, they are not relevant in the second dimension. Kant’s example is also enlightening because it shows that for some philosophers working in the Kantian or contractarian traditions, questions about the moral status of animals, plants or the environment are not central. Rather, with those philosophers, the focus is on the relation between ideal rational beings. This is an excellent example of an issue that can be reflected upon and highlighted by the 3D method.

In clear contrast with Singer and Kant, in his book *Respect for Nature – A Theory of Environmental Ethics* (1989) Paul W. Taylor proceeds in the chronological order of the three dimensions. After criticizing moral anthropocentrism and arguing that every entity should be declared as a moral subject that can be harmed, he outlines the concept of “the good of its own” (Taylor, 1989: 60 ff.), which is the necessary criterion to qualify for the moral community. Excluding sand and ecosystems but including plants, Taylor finally promotes biocentrism. These reflections match the question of the first dimension of who counts morally, and by postulating that “[...] everyone is understood to have the same status as a moral subject to whom duties are owed” (Taylor, 1989: 78; see also page 46), an egalitarian version of biocentrism is represented. Later, Taylor discusses whether animals and plants should have moral rights (chapt. 5) and he defines five priority principles for the fair resolution of conflicting claims in his last chapter. This fits the focus of the third dimension, namely how moral agents should treat entities with a moral status in a particular situation.

Limits, and a More General Discussion

It should be noted that the 3D method is an analytical tool that can be used to illuminate three dimensions of animal and environmental ethics. It can be used to break complex theories into smaller, more readily accessible units to gain a better understanding of them, and to achieve an appropriate focus: one that is simpler but not too simple. It enables us to understand and compare different theories in animal and environmental ethics.

Like any other method of analysis, the 3D approach has its limits. For instance, the term “moral status” is far from being precise and is not undisputed. Some authors

from the virtue ethics tradition argue that it is redundant, which is understandable because hardly any use of the term is made in virtue ethics and it is argued that it can be to be replaced by the concept of “intrinsic value” (both Hursthouse, 2013: 123 f.). Nonetheless, although it is true that the term “moral status” is not used greatly within virtue ethics, and despite the fact that other terms may also be suitable, the central question that the concept of moral status is designed to address – Who or what entities count morally – cannot be ignored (Camenzind, 2020: 30 f.).

In the second dimension, it is possible for a hierarchy to be so steep that it only theoretically occupies a certain position at the first dimension. For example, if within a sentientist position (first dimension) the interests and welfare of animals are regularly neglected or animals’ rights are structurally violated (third dimension), as a result of the promoted hierarchy (second dimension), one may discuss whether this position should be better categorized as anthropocentrism.

A further limitation of the third dimension should be mentioned, namely that the method is not designed to tell us which of the main traditions in ethics is preferable over the others or to advise us to adopt an intermediary option such as the principlist approaches advocated by Tom Beauchamp and James Childress (2013) or Ben Mepham and colleagues (Mepham et al. 2006).

Criticism could also focus on whether the 3D method has the appropriate level of complexity. One may ask: What about a fourth dimension? As we have seen, good reasons exist to extend beyond a two-dimensional classification, but then, are three dimensions sufficient? Do they provide enough room for differentiation? From experience, I would say that three dimensions already offer a high degree of differentiation of the positions that are occupied and available within animal and environmental ethics. However, further differentiation may be still necessary, because the animal turn has also reached political philosophy and some positions are hybrids bridging these two disciplines (e.g. Nussbaum, 2007, 2013; Donaldson et al., 2011; Cochrane, 2018;). With this in mind, one could add a fourth dimension distinguishing between moral and political philosophy. Alternatively, one could apply the three dimensions to positions in moral philosophy and political philosophy separately.

Finally, especially among novices and non-philosophers, the plurality of positions in each dimension may prompt the question: Which position is the right one? The problem of arbitrariness, and related issues concerning subjectivism, relativism and skepticism are not unique to animal and environmental ethics, but rather a feature of ethics generally. They have been well described in the context of teaching ethics (e.g. Wendel, 2001, Rachels & Rachels, 2015), and this is not the place to discuss them in detail. Rather, I would like to stress that the 3D method can serve as a starting point from which to address metaethical questions about the challenges presented by relativism and its competitors (both for animal and environmental ethics and ethics in general). The 3D method may also serve as a tool to raise questions about the role of ethics, its aims and its inevitable boundaries, as well as the justification of moral norms. As already stated elsewhere (Camenzind, 2020: 15–18; Rippe, 2003: 66), this means that animal and environmental ethics should not be understood as a marginal field of applied ethics along with many other fields such as the ethics of war, law, technology, psychology, science or economics, because both fields lead to fundamental problems of ethics as such.

To sum up, I have presented an analytical tool – a 3D method that uses the three dimensions of animal and environmental ethics to analyze available ethical positions. The tool serves as a useful instrument in the systematic analysis, reconstruction, comparison and critique of various normative positions in animal and environmental ethics. It can also be used for reflecting on and defining one's own position, and indeed in the construction and development of an as yet undefined a moral position. Besides that, it helps us to gain a quick overview of specific positions. Lastly, it opens up the an opportunity of addressing fundamental questions about the nature of ethics that lie beyond the specific issues raised by animals and the environment.

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