Arbitrariness and the threshold for moral status

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[Accepted manuscript. To be published in *Politics, Philosophy & Economics*]

Abstract. It is widely held that entities have moral status if they possess a status-conferring property to a sufficient degree. However, this means that for at least one degree to which an entity can possess the status-conferring property and that grounds moral status, there is some incrementally lower degree of possessing the property that does not ground moral status. Critics maintain that this renders any threshold for moral status arbitrary. In this paper, we reject common responses to this arbitrariness objection, such as that moral status thresholds are not arbitrary but merely vague. Instead, we defend the moderate discontinuity view. This view holds that thresholds denote moderate rather than radical shifts in moral status and that significant shifts in the moral status of entities on opposite sides of the threshold are a function of their distance from the threshold rather than of the threshold itself. Crucially, it follows from this that there is no principled way to reconcile the commitment to the moral equality of persons with the commitment to the moral superiority of persons over nonhuman animals.

Keywords. Arbitrariness, moral status, basic equality, threshold, vagueness.

1 Introduction

Theories about moral status specify which entities matter from a moral point of view and determine in what sense and how much they matter. Accordingly, much of the literature on moral status is focused on identifying a status-conferring property to determine which entities have (a specific tier of) moral status.[1] However, most commonly cited properties, such as "being sentient" or "having sophisticated cognitive capacities," come in degrees. Only entities that hold the status-conferring property to a "sufficient degree" have (a specific tier of) moral

[1] For an instructive overview, see Jaworska and Tannenbaum (2023).

status. Theories about moral status must therefore justify not only which property grounds moral status but also the degree to which that property must be possessed. Call this the question of the *threshold for moral status*.

This question raises a pressing and widely discussed problem for theories of moral status: it seems arbitrary to attribute (a specific tier of) moral status to entities that possess the status-conferring property to a specific degree but not to those that possess it to a slightly lower degree (Warren, 1997: 118-119; Buchanan, 2009: 361; Korsgaard, 2018: 92-93; Kagan, 2019: 210-212; DeGrazia and Millum, 2021: 202-203; Jaworska and Tannenbaum, 2023).[2] More specifically, this objection says:

> *The arbitrariness objection.* For at least one degree x to which an entity can possess the status-conferring property and that grounds (a specific tier of) moral status, there is some incrementally lower degree x_{-1} that does not ground (that specific tier of) moral status. However, attributing (a specific tier of) moral status to entities that possess the status-conferring property to x but not x_{-1} is unmotivated. This renders any threshold for moral status arbitrary.

Although the arbitrariness objection is often mentioned, it is typically dismissed without thorough and careful analysis. This might be because many philosophers accept what we call

[2] The arbitrariness objection is also widely discussed in the literature on basic equality, which is concerned with the question of what, if anything, grounds the *equal* moral status of some entities, like human beings or nonhuman animals. See Arneson (1999: 108; 2015: 37); Cupit (2000: 110); Knapp (2007: 187-188); McMahan (2008: 92); Carter (2011: 549); Sangiovanni (2017: 106); Floris (2019: 240); Parr and Slavny (2019: 843-6). As we will show, the arbitrariness objection applies to theories about moral status and theories of basic equality alike.

the *Standard Response*, according to which moral status thresholds are not arbitrary but merely vague (Rawls, 1971: 509; Buchanan, 2009: 361; Carter, 2011: 549; Christiano, 2015: 57). Others, instead, might hold that we can avoid the arbitrariness objection if we ground moral status in a property that does not admit of degrees (Kagan, 2019).

However, we will argue that none of these responses offer a convincing solution to the arbitrariness objection. Specifically, we have two aims: the first aim is to provide the clearest and strongest possible version of the arbitrariness objection. The second aim is to show that *contra* what is commonly held, the arbitrariness objection cannot be solved but must be embraced. We defend the apparently paradoxical view that moral status thresholds are arbitrary and that we cannot do without such thresholds. We show that this view has fundamental implications for theories about both moral status and basic equality. For example, we argue that there is no coherent way to reconcile a commitment to the moral equality of persons with a commitment to the claim that the moral status of persons is significantly higher than that of nonhuman animals. Therefore, we argue that the arbitrariness objection provides us with compelling reasons to reject the moral superiority of persons over nonhuman animals.

This paper is structured as follows. In Section 2, we offer a typology of accounts of moral status. In Section 3, we introduce and clarify the arbitrariness objection. In Section 4, we reject the Standard Response to the arbitrariness objection. In Section 5, we examine and reject alternative responses to the arbitrariness objection. In Section 6, we develop a novel response to the arbitrariness objection, which we label the *moderate discontinuity view*. This view entails, first, that moral status thresholds denote moderate rather than radical shifts in moral status between entities on opposite sides of but close to the threshold. Second, it entails that any significant difference in the degree of the moral status of entities on opposite sides of the threshold is primarily a function of their distance from the threshold rather than of the threshold itself. In Section 7, we argue that the moderate discontinuity view reveals that a commitment

to the moral equality of persons is incompatible with a commitment to the moral superiority of persons over nonhuman animals.

2 A typology of moral status theories

Theories of moral status specify (i) what it means to say that an entity has moral status; (ii) whether moral status admits of degrees; and (iii) what property (or set of properties) grounds moral status. We discuss these elements in turn.

Generally, saying that an entity has moral status means that it matters morally and therefore imposes normative constraints on how moral agents ought to relate to it (Jaworska and Tannenbaum, 2023). More precisely, entities that have moral status are entities "towards which moral agents have, or can have, moral obligations" (Warren, 1997: 3). Theories about moral status, however, differ regarding the kind of obligations its possession generates. According to consequentialist views, entities that have moral status are the objects of an *undirected duty* to take their interests into account when deliberating about what morality requires. Peter Singer, for example, argues that all sentient beings have equal moral status and therefore their comparable interests count to the same extent towards the moral calculus, which aims to maximize the satisfaction of the interests of all and only moral status holders (Singer, 2011). Alternatively, non-consequentialist (or rights-based) views hold that entities that have moral status are the objects of *directed duties*, that is, duties that are owed to that entity for its own sake, which cannot be violated for the sake of furthering other ends. Kantian views, for instance, maintain that autonomous beings have equal moral status and therefore have equal fundamental rights, which cannot be violated for the greater good (Kant, 2002[1785]; Christiano, 2015).

Subsequently, theories about moral status must determine whether moral status admits of degrees (DeGrazia, 2008: 192; Douglas, 2013: 477–478; Timmer, Forthcoming). That is, they must determine the comparative weight of the interests or the strength of the rights of

entities that have moral status. We can distinguish between three different views on whether moral status admits of degrees: (i) scalar views; (ii) nonscalar views; and (iii) hybrid views.

Scalar views maintain that the higher (or lower) the degree to which an entity possesses the status-conferring property, the higher (or lower) its degree of moral status. These views can be divided into *single-tier views* and *multi-tier views*. Single-tier views hold that the higher (or lower) degree to which an entity possesses the status-conferring property directly corresponds to a higher (or lower) degree of moral status. For instance, Shelly Kagan has recently defended a scalar view of moral status whereby all sentient animals have moral status but their degree of moral status varies according to the degree to which they are sentient. Thus, the comparable interests (or rights) of an elephant matter more than those of a lizard (Kagan, 2019). Multi-tier views, by contrast, posit a threshold that marks a higher tier of moral status, above which higher (or lower) degrees of moral status are possible. For instance, consider a sexist or racist view which holds that the moral status of nonhuman animals varies depending on the degree to which they possess a given property (e.g., sentience), and that there is a threshold such that all human beings enjoy a higher moral status than animals. Within this higher tier, however, some people might be ascribed a higher moral status than others.[3]

Nonscalar views hold that all entities that possess a status-conferring property to a sufficient degree have (a specific tier of) *equal* moral status. Here again, there are *single-tier views* and *multi-tier views*. Single-tier views specify one threshold for moral status: an entity either has or does not have moral status. For example, Tom Regan argues that all and only entities that are "subjects-of-life" have moral status, and that differences in the degree to which that property is held above the threshold do not generate differences in moral status (Regan,

[3] For example, see Waldron's (2018: 19-35) discussion of Hastings Rashdall's racist view of moral status.

1983: 243). Multi-tier views hold that different status-conferring properties, or different degrees to which such properties are possessed, can ground different tiers of moral status. For example, Jeff McMahan has proposed a multi-tier account of the morality of killing, according to which killing entities that occupy the highest tier—that is, those who are above a certain threshold of psychological capacity—is worse than killing entities that occupy lower tiers (McMahan, 2008: 94). According to that view, the interests or rights of entities that occupy a higher tier count more than the comparable interests or rights of those that occupy a lower tier.

Hybrid views posit different tiers of moral status, where some admit of degrees but others do not. For example, consider a view that sets a threshold of moral personhood above which all entities have equal moral status but below which moral status admits of degrees and depends on an entity's level of sentience (Wetlesen, 1999: 288; DeGrazia, 2008: 190; Arneson, 2015: 33.

Finally, theories about moral status must identify the status-conferring property (or set of properties) that grounds moral status. For a property to be a plausible candidate for the basis of moral status, it must be morally significant. This is because if an entity that has moral status matters from a moral point of view, then there must be something about that entity which explains why it matters morally (Floris, 2021).

There are two types of status-conferring properties. *Scalar properties*, such as "being rational," are properties that can be possessed to lesser or higher degrees. In contrast, *binary properties*, such as "being alive," are properties that are either possessed or not possessed. As a result, moral status theories can be scalar in two distinct ways: moral status may itself admit of degrees, or the status-conferring property may admit of degrees.

Moral status theories disagree about which properties ground moral status. For example, proponents of persons' moral equality maintain that the possession of some sophisticated cognitive capacity—such as autonomy or rational agency—grounds equal moral

status (Kant, 2002 [1785]; Rawls, 1971; Carter, 2011; Christiano, 2015; Miklosi, 2022). Most animal ethicists, instead, argue that sentience is a sufficient condition for moral status (Singer, 2011; Kriegel, 2019). And some environmental ethicists contend that the scope of moral status should encompass all entities that are "a teleological-center-of-life" (Taylor, 2011[1986]) or "alive" (Schweitzer, 1929). As a result, theories about moral status can be more or less inclusive, depending on what property (or properties) is taken to ground moral status.

To summarize, theories about moral status specify what it means to have moral status, whether moral status admits of degrees, and what property (or set of properties) grounds moral status. We will now argue that *any* theory of moral status—that is, any coherent specification of the meaning, degree, and ground of moral status—must face the arbitrariness objection.

3 The arbitrariness objection

In this section, we introduce the arbitrariness objection and distinguish it from other common objections.

It is widely held that entities have moral status only if they possess a status-conferring property to a sufficient degree. However, this means that for at least one degree to which an entity can possess the status-conferring property and that grounds (a specific tier of) moral status, there is some incrementally lower degree that does not ground (that tier of) moral status. According to the arbitrariness objection, this is unmotivated and renders the threshold for moral status arbitrary. There is no specific degree to which a status-conferring property can be possessed that justifies a shift from lacking moral status to having moral status, or from having a lower tier of moral status to having a higher tier of moral status (see also Ebert, 2018: 82-82).

To illustrate, suppose that entities have moral status if they have "at least a certain level of cognitive ability" (Singer, 2009: 573). How do we set the threshold for having *sufficient* cognitive ability? Any exact level on that continuum appears arbitrary. We can always ask why *this* degree grounds (a specific tier of) moral status but not *that* degree, especially if these

degrees are only incrementally higher or lower. Put differently, why would degree x rather than the slightly lower degree x_{-1} or the slightly higher degree x_{+1} be the threshold for moral status? It seems that no incremental difference in the possession of that property can motivate a shift from lacking (a specific tier of) moral status to having it.

The arbitrariness objection must be distinguished from two other common objections that are said to make theories about moral status arbitrary. First, moral status theories are sometimes said to arbitrarily ground moral status in some specific property. For example, Singer argues that grounding the moral status of human beings in their "biological commonality" is arbitrary because the biological commonality of human beings is a morally irrelevant property. Instead, he maintains that a nonarbitrary property would be "having a certain level of cognitive ability" because *that* property is morally significant (Singer, 2009: 572-573; see also DeGrazia, 1997: 303-304; Taylor, 2011[1986]: 153; Waldron, 2017: 248; DeGrazia and Millum, 2021: 180-182; Floris, 2023b). This objection, then, concerns *which* property grounds moral status rather than the *degree* to which that property must be possessed. The arbitrariness objection, however, applies even if we agree on which property grounds moral status.

The second objection, known as the "variations objection," holds that it is arbitrary to say that variations in the degree to which the status-conferring property is possessed above the threshold do not generate differences in moral status (Arneson, 1999: 108; McMahan, 2002: 262; Buchanan, 2009: 360-361). For example, consider a view which holds that entities have equal moral status if they possess some sophisticated cognitive capacities at or above some threshold, even if they exhibit these capacities to varying degrees beyond it. However, it seems arbitrary to assert that variations in capacity matter below the threshold (e.g., those of mice versus those of dolphins) while such variations are deemed irrelevant once the threshold is reached (e.g., young children versus adults without a cognitive impairment). This objection

differs from the arbitrariness objection because it concerns the presumed equality between entities that have (a specific tier of) moral status rather than the arbitrariness of the demarcation between entities that have (that specific tier of) moral status and those that do not (Floris, 2019: 238; Parr and Slavny, 2019: 846-850).

4 The Standard Response to the arbitrariness objection

It is often suggested that the arbitrariness objection poses no significant challenge to theories about moral status. Prominent theorists, such as Allan Buchanan, Ian Carter, and Thomas Christiano, argue that the threshold for moral status is not arbitrary but merely *vague* and that, unlike arbitrariness, vagueness is acceptable. According to Buchanan, we can simply "admit that there may be a fuzzy lower boundary for this threshold" (Buchanan, 2009: 361. For Carter, the objection merely "points to the inevitable vagueness of any threshold that can qualify as so fundamentally significant" (Carter, 2011: 549). And Christiano simply accepts that "the threshold can be quite vague so that we don't know exactly when we have crossed it" (Christiano, 2015: 57; see also Rawls, 1971: 509; Waldron, 2017: 130-135). This is the *Standard Response* to the arbitrariness objection.

4.1 Arbitrary thresholds and vague thresholds

Although the Standard Response is commonplace in the literature, almost nothing has been said about the distinction between arbitrary thresholds and vague thresholds. We propose the following distinction. A threshold is arbitrary if its level lacks sufficient justification. Put differently, if we lack sufficient justification for saying that the threshold should be placed at degree *x* rather than some other degree, the threshold is arbitrary. For example, holding that entities have moral status if they possess a capacity for autonomy to at least degree 5 is arbitrary if we lack a principled reason for holding that 5 rather than, say, 4 or 6 is the morally significant degree.

A threshold is vague if there is some set of degrees of the status-conferring property regarding which it is indeterminate whether they ground moral status, but also another set of degrees for which it is determinate.[4] Such vagueness is due to metaphysical indeterminacy rather than epistemological limitations (see also Ebert, 2018: 82; Parr and Slavny, 2019: 845). Consider the view that entities have moral status if they have at least a certain level of cognitive ability. The Standard Response might hold that some lower levels of cognitive ability clearly do not ground moral status, whereas some higher levels clearly do ground moral status. However, we might be unable to determine the degree of moral status of entities that have neither a very low nor a very high level of cognitive ability, which means that the threshold itself is vague. Importantly, this holds even if we knew everything there is to know about the entities under consideration. The vagueness arises because for some degrees of cognitive ability we cannot determine whether they ground moral status. Vague thresholds, therefore, denote not epistemological uncertainty but metaphysical indeterminacy.

The distinction between arbitrariness and vagueness has significant implications for how we can respond to the arbitrariness objection. Suppose that some entities possess the status-conferring property to a degree for which it is unclear whether it is sufficient for having moral status. If the threshold is merely vague, we might say that for these entities we should draw on precautionary principles or expected value principles that aim to minimize the expected harms of mistreating as nonstatus holders entities that might have moral status.[5] This leaves the account of moral status unaffected because the threshold still denotes a significant

[4] For further discussion of the distinction between arbitrariness and vagueness, see Raffman (1994).

[5] For discussion, see Birch (2017) and Sebo (2018).

change in moral status. However, because the threshold is vague, we should act with precaution when attributing moral status to entities or withholding it from them.

On the other hand, if the threshold is *arbitrary*, erring on the side of caution is not enough. Instead, theories of moral status as such should accommodate the fact that we lack a principled reason for defending a specific level for the threshold. Thus, for example, Jeff McMahan argues that since the exact level of the threshold for his preferred status-conferring property, namely autonomy, is arbitrary, we should attribute "intermediate moral status" whenever it is arbitrary to say that an entity has or lacks autonomy (McMahan, 2002: 265).[6] McMahan does not suggest treating entities with intermediate moral status "as if" they have or lack full moral status. Ascribing intermediate moral status is not an instance of precautionary reasoning or erring on the side of caution. Instead, it entails revising the account of moral status because we lack a sufficient justification for positing a specific threshold. This is what it means to change the account of moral status as such in light of the arbitrariness objection.

4.2 Scalar properties and the Standard Response

Let us now examine the Standard Response, which maintains that the threshold for moral status is not arbitrary but vague. Few systematic attempts have been made to establish this, but we understand this argument as follows. We can start from the observation that the attribution of moral status is never completely arbitrary. Consider, for example, Buchanan's theory of moral status. Buchanan argues that moral status is grounded in the "capacity to engage in mutual accountability through the giving and heeding of reasons" (Buchanan, 2009: 361). Since this capacity can be possessed to different degrees, Buchanan concedes that it may be difficult, in

[6] Similarly, Arneson notes that the arbitrariness of the threshold for rational capacity entails that "beings with rational capacities that fall in the grey area between the upper and lower boundaries are of indeterminate status" (Arneson 1999: 109).

a range of cases, to determine whether particular entities possess it. However, he maintains that this poses no fundamental threat to his view, because although "there may be a fuzzy lower boundary," we can still "identify uncontroversial cases of individuals possessing the capacity in question" (Buchanan, 2009: 361).[7]

We fully accept that even if we cannot draw a sharp distinction between entities that possess the relevant capacity and those that lack it, we can confidently say for at least some entities whether or not they possess that capacity. Similarly, although we cannot draw any sharp distinction between "being a tall human being" and "being a short human being," we can confidently say that Shaquille O'Neill is a tall human being and that Afshin Ghaderzadeh is a short human being. Moreover, the range of degrees for which it is indeterminate whether the relevant capacity grounds moral status may be relatively small.[8] Consider, for example, the idea of a voting age, which is the minimum age established by law that a person must attain before being eligible to vote. Almost anyone would agree that the age of 3 is too low for the voting age and that the age of 30 is too high. This means, to use Buchanan's phrasing, that we can identify at least some uncontroversial cases. But rather than arbitrarily picking any age between 3 and 30, we might be able to do better. We may end up with a smaller range (e.g., above 16 but below 21) such that our uncertainty only applies to the specific ages within that range. Even though we still need to make an arbitrary decision within that range, one could argue that *this* degree of vagueness is acceptable. Similarly, we can try to make the gap between

[7] Although we use Buchanan's account as an illustration of the Standard Response, his view can also be interpreted as an instance of what we call "any degree" views, which are discussed in Section 5.2.

[8] Parr and Slavny (2019: 845-846) make this argument in the context of "marginal cases" and basic equality.

degrees that clearly ground moral status and those that do not acceptably small, such that only a few degrees to which entities can possess the status-conferring property are indeterminate in this sense. If so, the Standard Response maintains, the threshold for moral status is vague, and such vagueness is acceptable.

Additionally, one might note that even if the threshold for moral status itself is vague, its location at a specific place on the scale, rather than higher or lower, is not arbitrary. The arbitrariness, therefore, arises not from the threshold as such but from the fact that, within this vague area, discretionary decisions must be made about how to *treat* entities with indeterminate moral status—in law, social policy, and informal interpersonal relations—by reference to qualifying thresholds that must be fixed for pragmatic reasons (e.g., setting the voting age at 18). In other words, what is arbitrary is not the precise placement of the threshold along the continuum, but the treatment of those entities that fall within the vague area, which can arguably be mitigated by drawing on a precautionary principle.[9]

In our view, this represents the strongest formulation of the Standard Response. However, it still faces two major problems. First, vague thresholds, too, have cutoff points; otherwise, the threshold would expand in both directions and seep over the whole continuum. This means that worries about the arbitrariness of the threshold shift to the boundaries of the vague threshold; they are not about how entities within the vague area are treated but are about whether entities at its borders are ascribed (a specific tier of) moral status. Two entities might be only incrementally different in terms of their possession of the status-conferring property, yet one falls just inside the vague area and is ascribed (a specific tier of) moral status, whereas the other falls just outside and is not ascribed such (a specific tier of) status. The arbitrariness

[9] We thank a reviewer for this suggestion.

here concerns the very ascription of moral status, not the arbitrary treatment within the vague area.

Put differently, any "indeterminacy principle" that guides the attribution of moral status within the range of the vague threshold does not apply to entities that are only incrementally below or above that range. Appealing to the vagueness of the threshold, therefore, does not avoid the arbitrariness objection: for at least one degree x to which an entity can possess the status-conferring property and that gives rise to indeterminacy about moral status, there is some incrementally lower degree x_{-1} that does not ground such indeterminacy (and similarly for the upper boundary of that range). However, this difference is unmotivated and renders the boundaries of such a vague threshold arbitrary.

Second, whether vague thresholds are acceptable not only depends on how narrow the indeterminate range is but also on the significance of the threshold. For every degree for which it is indeterminate whether it grounds (a specific tier of) moral status, it is an *arbitrary decision*—that is, a decision that lacks sufficient justification—whether entities that possess the status-conferring property to that degree are treated as if they have or lack (a specific tier of) moral status (see also Ebert, 2018: 81-82). But this arbitrary choice has significant implications, both for the entity itself and for other moral status holders. An entity that has moral status imposes normative constraints on how moral agents ought to relate to it, whereas an entity lacking moral status does not. Or, if the threshold denotes different degrees of moral status rather than having or lacking it, the threshold determines how much an entity matters from a moral point of view. Accordingly, as McMahan puts it, "Morally, the gap between those above the threshold and those below it is immense" (McMahan, 2002: 261). However, while vagueness might be acceptable in certain cases ("You can play outside until it gets dark!"), our normative principles should not rest on vague thresholds when the stakes are high. If our reasons for *this* decision, rather than some other decision about the moral status of an entity,

are arbitrary, then it is difficult to justify significant moral differences that result from this, especially if entities possess the status-conferring property to roughly similar degrees. Vague thresholds, therefore, cannot do the heavy lifting they are meant to do according to the Standard Response.

To summarize, according to the Standard Response, moral status thresholds are not arbitrary but vague, and vagueness is acceptable. However, the Standard Response fails to explain why vagueness is acceptable: vague thresholds have arbitrary boundaries and lead to arbitrary decisions with significant moral implications regarding the moral status of entities both within and (just) outside the vague threshold. The Standard Response must therefore be rejected.

5 Alternative responses to the arbitrariness objection

One might think that the arbitrariness objection only applies to theories that ground moral status in scalar properties. Only these theories must determine the degree to which such a property must be held to ground moral status. Therefore, one might conclude that to avoid the arbitrariness objection, moral status should be grounded in a property that is not scalar. However, in Sections 5.1 and 5.2, we argue that grounding moral status on a binary property or on any degree of some scalar property fails to avoid the arbitrariness objection. Whatever other merits such views might have, they still rely on arbitrary thresholds.[10]

[10] Some might say that there is a third option: abandoning the concept of moral status altogether. For example, see Sachs (2011) and Horta (2017). However, this does not avoid the arbitrariness objection. One can coherently maintain both that the notion of moral status is unnecessary and that the possession of a significant property to a sufficient degree makes an entity the object of moral obligations. Accordingly, such a view is vulnerable to the

5.1 Binary properties

If moral status is grounded in a binary property, we need not specify an arbitrary threshold on a continuum of incrementally different degrees to which that property can be possessed. Either an entity has the property or it does not. Therefore, theories that ground moral status in binary properties might seem immune to the arbitrariness objection. If an entity possesses the property, it has (a specific tier of) moral status; if not, it lacks (that tier of) moral status.

To assess whether an appeal to binary properties can resolve the arbitrariness objection, we must distinguish between two types of binary properties. First, a *scalar-grounded binary property* is the binary property of holding some subvenient scalar properties within a certain range. For example, John Rawls argues that persons' equal moral status is grounded in their capacity for "moral personality," which is the property of possessing the capacity for a conception of the good and the capacity for a sense of justice within a specific range (Rawls, 1971: 504-512).[11] Second, a *binary-grounded binary property* is the binary property of holding some subvenient binary properties. For instance, an organism is either alive or it is not, and if the property of "being alive" does not supervene upon any scalar properties but only on underlying binary properties, then it is a binary-grounded binary property.

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arbitrariness objection because it must set a threshold along the continuum of degrees to which the relevant property can be possessed that separates those entities that are the object of moral obligations from those that are not.

[11] Rawls called this the "range property." However, for our purposes, we prefer the term "scalar-grounded binary property" because this captures more clearly the difference between this kind of binary property and binary properties that are grounded in subvenient binary properties.

With this distinction in mind, we will now argue that grounding moral status in scalar-grounded binary properties or binary-grounded binary properties does not avoid the arbitrariness objection.

5.1.1 Scalar-grounded binary properties

A scalar-grounded binary property supervenes upon scalar properties. Because of this, theories that ground moral status in such properties must set a threshold along the continuum of degrees to which the subvenient scalar properties must be possessed for an entity to hold the binary property. For example, as mentioned above, according to Rawls, being capable of moral personality *directly* grounds equal moral status, and having the subvenient scalar agential capacities to the sufficient level *indirectly* grounds equal moral status in virtue of grounding the capacity for moral personality (Rawls, 1971: 508).[12] However, for at least one degree x of these subvenient scalar agential capacities, which counts as a "sufficient minimum" for moral personality, there is some incrementally lower degree x_{-1} that is insufficient. Hence, appealing to scalar-grounded binary properties does not avoid the arbitrariness objection because it raises the question of why *this* degree to which the subvenient scalar properties can be possessed,

[12] For other accounts of the basis of moral equality according to which the status-conferring property must be possessed to a *sufficient degree* for an entity to have (the higher tier of) equal moral status, see Carter (2011: 548); Arneson (2015: 34); Christiano (2015: 57; 2024: 150-151); Parr and Slavny (2019: 844, 849). Since these views allow for variations below the threshold, they are not instances of "any degree" views, which we discuss in Section 5.2.

rather than some incrementally lower degree, is sufficient to ground (a specific tier of) moral status.[13]

It might be objected that even if a binary property supervenes upon subvenient scalar properties, the ascription of moral status need not be arbitrary. For example, your car engine can be more or less hot, but it is a binary question whether it is overheated. An aircraft can fly at a variety of speeds, but whether it has broken the sound barrier is a binary matter. Water can be cold or very cold, but it is a binary matter whether it is frozen. And students can get different percentage scores in a test, but it is a binary matter whether they passed it. Similarly, then, entities can possess the subvenient scalar properties to different degrees, but it is a binary matter whether they have moral status.

For this argument to work, we must explain why, for at least two incrementally different degrees x and x_{-1} to which entities can possess the subvenient scalar properties, x but not the incrementally lower degree x_{-1} grounds the binary property. In the cases of overheating, breaking the sound barrier, or freezing, the explanation can draw on natural laws that specify the relation between the underlying scalar properties and the binary property. That is, they provide a nonarbitrary explanation of why a specific degree of the subvenient scalar properties grounds the binary property. For example, while water can be cold or very cold, we can explain when it starts to freeze by examining its chemical structure. And we can explain why someone passes or fails a test by referring to rules and practices that specify the minimum percentage score that is required to pass a test.

[13] As Arneson puts it, "it is not at all clear where one might nonarbitrarily place this threshold such that all beings above it are persons and all beings below are nonpersons" (Arneson 1999: 108).

However, moral status is unlike these examples. The claim that possessing some underlying scalar properties to a sufficient degree grounds some binary property (e.g., moral personhood) requires an explanation. But, unlike the property of "being frozen," for example, the threshold for this binary property cannot be explained by a natural law. And unlike "passing a test," the threshold cannot be established by appealing to social conventions, which by their very nature rely on arbitrary decisions and practices that could validate and uphold ableist, ageist, and speciesist accounts of moral status (Warren, 1997: 5-9; Singer, 2009). As a result, we lack a nonarbitrary explanation of why some degree x_{-1} to which the subvenient scalar properties can be possessed does not ground the binary property, whereas the incrementally higher degree x does ground that property.

5.1.2 Binary-grounded binary properties

Let us consider next theories about moral status that ground moral status in binary properties that are not grounded in scalar properties. If the status-conferring property does not supervene upon any scalar property, there is never a specific degree to which a subvenient scalar property must be possessed to ground moral status. If so, the worry that degree x but not degree x_{-1} grounds moral status does not apply, and the arbitrariness objection would be stopped in its tracks.

A binary-grounded binary property, however, presupposes the possession of other properties. For instance, consider Paul Taylor's biocentric account of moral status, according to which all living entities have moral status because they are "a teleological center of life," that is, they have the ability to preserve themselves and realize their own good (Taylor,

2011[1986]: 120-121).[14] As Mary Anne Warren points out, an entity is capable of preserving itself and pursuing its own good if it is at least able to produce energy and maintain its internal states within limits compatible with survival (Warren, 1997: 26). Even if we assume that all these subvenient properties are binary, we must still explain which set(s) of binary properties grounds "being a teleological center of life." For example, Taylor himself maintains that an entity is a teleological center of life if it "reproduces its kind and continually adapts to changing environmental events and conditions" (Taylor, 2011[1986]: 122). But what nonarbitrary reason do we have to maintain that the ability to reproduce its kind and adapt to changing environmental events is or is not necessary to being a teleological center of life?

More generally, even if binary status-conferring properties do not supervene upon any scalar properties, they still supervene upon a specific set(s) of less sophisticated binary properties. This, then, raises the issue of arbitrariness regarding the sets of binary properties upon which such properties supervene. Thus, these views face the following revised version of the arbitrariness objection: for at least one set S_1 of binary subvenient properties that grounds (a specific tier of) moral status, there is some incrementally different set S_2 that does not ground (that specific tier of) moral status. However, attributing (a specific tier of) moral status to entities that possess S_1 but not to the incrementally different S_2 seems unmotivated. Therefore,

[14] See also George Sher, who argues that moral equality is grounded in the binary-grounded binary property of "having a subjectivity" (Sher, 2015). For criticisms of Sher's view on the grounds that "having a subjectivity" is a scalar property and therefore not a plausible basis of moral *equality*, see Arneson (2015: 44-45).

even views that exclusively draw on binary-grounded binary properties fall prey to the arbitrariness objection.[15]

5.2 The "any-degree" view

An alternative answer to the arbitrariness objection is to maintain that moral status is grounded in the possession of *any* degree of some property rather than in some higher *sufficient* degree. For example, Shelly Kagan argues that moral status is grounded in autonomy, but it is hard to see why a precise amount of autonomy is necessary and sufficient for moral status when smaller amounts are insufficient (Kagan, 2019; see also Buchanan, 2009). As he puts it, "I don't mean that it is arbitrary where one *places* the cutoff point. I mean, rather, that the very *idea* of this sort of sharp cutoff point seems arbitrary and unjustified" (Kagan, 2019: 210; emphasis in the original). For this reason, he suggests that "any being with *any degree* of autonomy at all should have at least some deontological standing, and the higher the level of autonomy, the stronger the rights" (Kagan, 2019: 205; our emphasis). Call this the "any-degree view" of moral status.

Let us examine how this view can respond to the arbitrariness objection.[16] The any-degree view might accept that autonomy (or another status-conferring property) is an empirical property that supervenes upon scalar properties, which can be possessed to lower and higher degrees. Kagan himself notes, for example, that autonomy requires the capacity to have some preferences, to choose from among them, and to set ends (Kagan, 2019: 194-201). These properties, in turn, presuppose the possession of even further subvenient scalar properties that

[15] Notice that this objection does not take issue with *which* property grounds moral status (see Section 3). Rather, it is a revised version of the arbitrariness objection because it states that it is arbitrary to hold that the binary status-conferring property supervenes upon set S_1 of subvenient binary properties but not upon an incrementally different set S_2.

[16] We thank an anonymous reviewer for very helpful comments on this view.

entities need to have to at least some sufficient degree; for instance, the capacity to choose between preferences supervenes on the ability to collect, understand, and remember information. But this supervenience is not arbitrary in the same way that a threshold for moral status is arbitrary: it calls for an empirical explanation that is supported by empirical evidence, not a moral explanation. For example, just as the property of water freezing at 0° Celsius under standard atmospheric pressure supervenes upon underlying scalar physical properties of water, and the property of being alive supervenes upon underlying biological properties, one might argue that it is simply an empirical fact that some entities have sufficient cognitive capacities to instantiate some level of autonomy, whereas others do not. Consequently, it is not arbitrary to hold that we must respect the choices only of those entities capable of making them. Respecting the choices of entities whose subvenient cognitive capacities fall just below the level sufficient for any degree of autonomy would amount to respecting the "choices" of those who cannot, in fact, choose, even if they are "close" to being able to do so.

In other words, while it is arbitrary to ground (a specific tier of) moral status in the possession of a *sufficient* degree of autonomy because we lack a principled explanation of why (a specific tier of) moral status "kicks in" only at a certain level of autonomy, it is not arbitrary to ground (a specific tier of) moral status simply in having *any* degree of autonomy. Because the any-degree view avoids specifying a threshold for moral status, it faces no immediate demand to supply a nonarbitrary justification for where that threshold lies. There is never an incrementally lower degree of autonomy that does *not* ground moral status, because any degree of autonomy is enough. Therefore, the arbitrariness objection does not arise.

We offer two points in response. First, we argue that the any-degree view does not avoid the arbitrariness objection. As observed in Section 5.1.1, even if "being autonomous" is analogous to "being frozen" in the sense that the possession of this property depends on the possession of some subvenient scalar properties up to a sufficient degree, our understanding of

what it means and what is required to be autonomous is much less clear than our understanding of what it means for water to be frozen. The difficulty is not that it is hard to empirically measure the degree to which entities possess specific subvenient properties, but that we lack a principled account of what the property of autonomy itself consists in and which empirical facts give rise to it. In the case of freezing, natural laws help us explain how incremental changes in molecular structure yield a binary outcome. By contrast, in the case of autonomy, no comparable explanatory framework exists. This is not to deny the extensive philosophical literature analyzing autonomy's key characteristics and components.[17] Rather, our point is that autonomy is a very complex property that presupposes a wide range of underlying capacities; therefore, specifying exactly *which* capacities these are and the *precise degrees* to which they must be possessed for even a minimal instance of autonomy remains an open and difficult explanatory task.

Thus, just as it is true that water freezes at 0 °C at standard atmospheric pressure, it is an empirical fact that entities that possess a certain set of brain features to a particular degree satisfy the necessary and sufficient conditions for having any degree of autonomy. But unlike freezing, the property of autonomy is defined by a metaphysical account of the capacities required for even a minimal instance of it. Empirical facts can tell us which entities meet a given specification, but they do not explain *where* the specification should be set. However, if a clear specification cannot be given, the claim that entities with subvenient capacities at degree x possess any degree of autonomy while those at x_{-1} do not remains unmotivated.

In other words, the arbitrariness objection does not challenge the *moral* explanation of why having any degree of autonomy (or of any other property, for that matter) qualifies an entity as having moral status; instead it challenges the lack of a principled, nonarbitrary

[17] For an instructive overview, see Christman (2022).

metaphysical explanation of where exactly that property comes into existence, given the scalar nature of the subvenient properties. For this reason, we conclude that while it is not arbitrary to hold that we must respect the choices of all and only those entities that have any degree of autonomy, it is arbitrary to say that all and only those entities that possess the subvenient cognitive capacities at degree x rather than the incrementally lower x_{-1} have "any degree" of autonomy.

The second point is that even if the any-degree view could avoid the arbitrariness objection, it still faces significant independent challenges.[18] These challenges clarify why it is worth defending thresholds for moral status—a task we undertake in Section 6—rather than simply embracing the any-degree alternative.

Figure 1 illustrates this. Broadly speaking, any-degree views can specify the relationship between the status-conferring property and moral status in three distinct ways (see also Douglas, 2013: 478). *Scalar* maintains that the higher the degree to which an entity possesses the status-conferring property, the higher its moral status. *Curved* is similar to *Scalar* but holds that the curve flattens as the property increases, approaching a plateau without ever becoming perfectly flat. Finally, *Flat* maintains that all entities that have some degree of the status-conferring property have equal moral status—higher degrees of the property do not generate higher degrees of moral status.

[18] For criticisms of any-degree views, see also Arneson (1999).

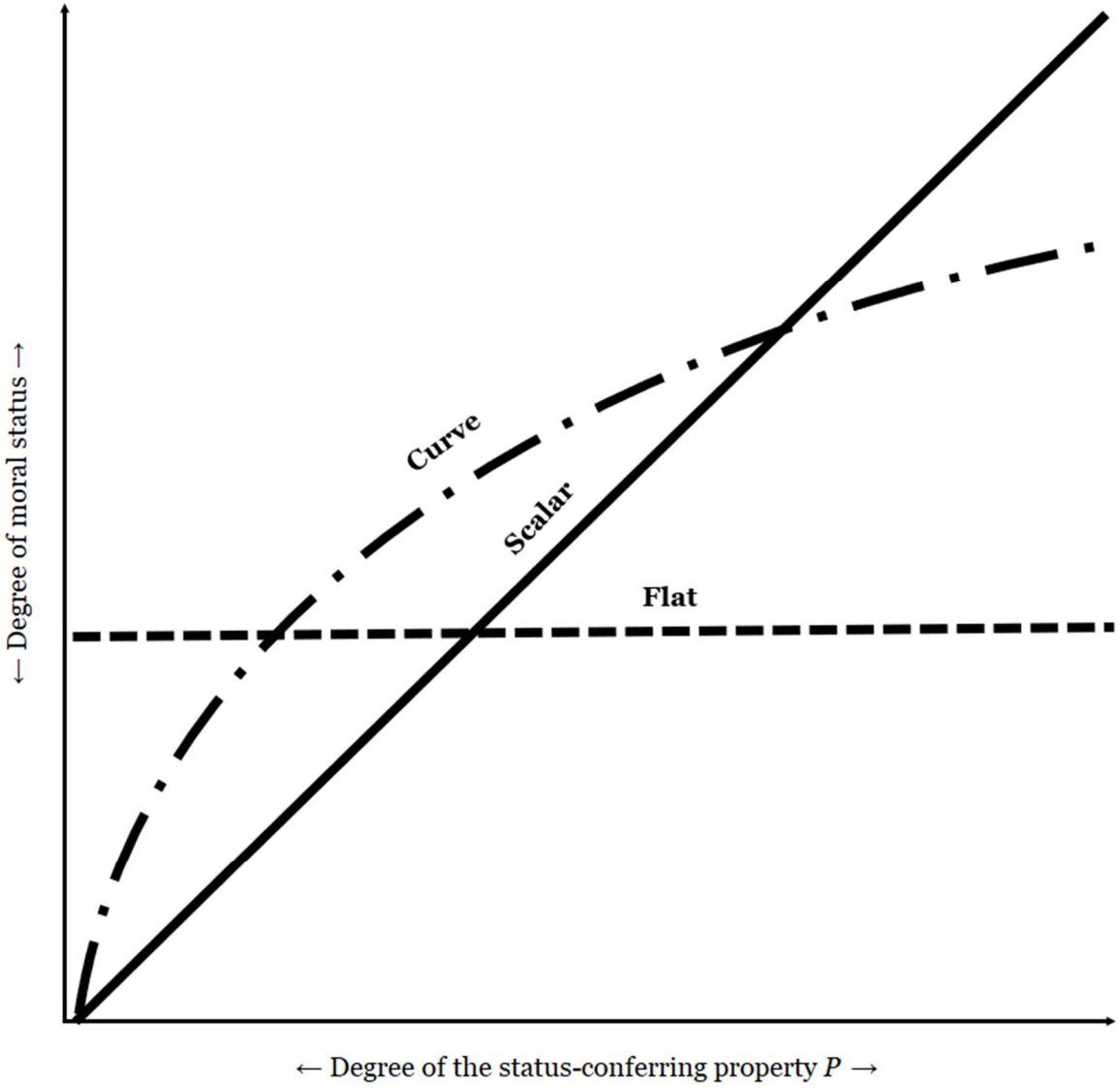

Figure 1. Three variants of the any-degree view (Scalar, Curve, and Flat).

The problem is that *Scalar* and *Curve* are unable to justify a commitment to equality between entities that possess the status-conferring property to different degrees. Kagan, for example, seems to endorse such a view when he claims that "any being with *any degree* of autonomy at all should have at least some deontological standing, and the higher the level of autonomy, the

stronger the rights" (Kagan, 2019: 205; our emphasis).[19] However, this entails, for instance, that those human beings who hold a greater capacity for autonomy have a higher moral status than that of those human beings who have a lower capacity for autonomy, and therefore that the rights of the former are more stringent than those of the latter. But accepting that human beings who possess different degrees of autonomy have *unequal* moral status is a heavy price to pay. We will return to this point in Section 7.

On the other hand, *Flat* holds that variations in the degree to which the status-conferring property is possessed are irrelevant for the moral status of an entity. For example, consider an any-degree view of the capacity to set ends and make choices. Now take the case of "a being that has little brain power, but over the course of its life can set just a few ends and make just a few choices based on considering two or three simple alternatives. It sets one end (lunch, now) per decade three times over the course of its life" (Arneson, 1999: 119-120). According to this view, the moral status of this entity is equal to that of entities that possess the relevant status-conferring property to a far greater degree, such as human adults and sophisticated nonhuman animals. Yet many would deny that *all* entities that possess any degree of autonomy should be considered and treated as equals in any fundamental sense. This obviously holds for any-degree views that reject Flat and endorse Scalar or Curve instead. But also, and more importantly, for many prominent theories of moral status that maintain that *only* entities that possess the status-conferring property to some significant degree have *full moral status*, which means that they possess the fullest set of moral protections and entitlements, even if they

[19] Kagan ultimately ends up defending different levels of moral status on practical realist grounds (Kagan, 2019: 284-292). However, this presupposes setting thresholds that ground higher tiers of moral status. Such a view is therefore vulnerable to the arbitrariness objection as discussed in Section 4.

possess that property to different degrees (Jaworska and Tannenbaum, 2023: Sec. 2; McMahan, 2002; Warren, 1997).

6 The moderate discontinuity view

We have argued that neither the Standard Response nor reverting to binary properties or any-degree views of moral status refutes the arbitrariness objection.[20] Seemingly paradoxically, then, theories about moral status must draw on thresholds but accept that these thresholds are arbitrary. They must draw on thresholds because they are committed to holding that at least one incremental difference in the degree to which an entity possesses some property can make the difference between having a (specific tier of) moral status and lacking it. But they must accept that this threshold is arbitrary, because for any two incrementally different degrees to

[20] Another response to the arbitrariness objection might be as follows: while the subvenient properties can be possessed to different degrees, only a specific configuration(s) of those properties "click" in such a way as to give rise to the status-conferring property. Call these "click views" of moral status. However, such views face two significant challenges. First, they must do more than assert that certain configurations of subvenient properties click: they must provide an independent explanation of why only those configurations, and not others, generate the status-conferring property. Second, while this strategy may be plausible for very rudimentary or minimal properties, such as consciousness, its prospects for more sophisticated properties, such as autonomy or rational agency, seem much less promising. To the best of our knowledge, no such theory currently exists. This means that those who take sophisticated properties to be the basis (or at least a basis) of moral status cannot appeal to click views to overcome the arbitrariness objection.

which an entity can possess such a property, we lack a principled reason for saying that degree x but not degree x_{-1} is sufficient for moral status.[21]

These findings are fundamentally irreconcilable with what we call the *strong discontinuity view*. According to this view, moral status thresholds demarcate the point above which the moral status of entities is significantly higher than below that threshold. For instance, Christiano observes that "[t]he threshold point must present some kind of very strong discontinuity in order to qualify as a genuine threshold" (Christiano, 2015: 57; see also Waldron, 2017: 134). And McMahan says that "the threshold separating those who command respect from those who do not is not so much a line as a chasm" (McMahan, 2002: 261).

Our discussion of the arbitrariness objection shows why the strong discontinuity view should be rejected. Even if the claim that there is *a* threshold for moral status is justified, we lack a principled reason for placing the threshold for moral status at a precise level. And, whereas we can address concerns about vagueness by drawing on precautionary or expected value principles, the fact that the threshold itself is *arbitrary* rather than merely vague renders such principles insufficient. Instead, the account of moral status itself should take proper account of the arbitrariness of the threshold. To do this, we propose that the threshold for moral status should not have as great a moral significance as proponents of the strong discontinuity view hold.

In particular, we argue for two claims, which, combined, make up what we call the *moderate discontinuity view*. The first claim concerns the moral status of entities close to the threshold:

[21] As we argued in Section 5.1.2, the same argument applies to incrementally different sets of subvenient binary properties.

The Moderate Claim. Moral status thresholds denote moderate discontinuities in moral status between the entities on opposite sides of but close to the threshold.

The second claim specifies the conditions under which there can be a significant difference in the degree of moral status of entities:

The Degree Claim. Any significant difference in the degree of moral status of entities on opposite sides of the threshold is a function of their distance from the threshold.

To illustrate the difference between the strong discontinuity view and the moderate discontinuity view, consider the views depicted in Figure 2.

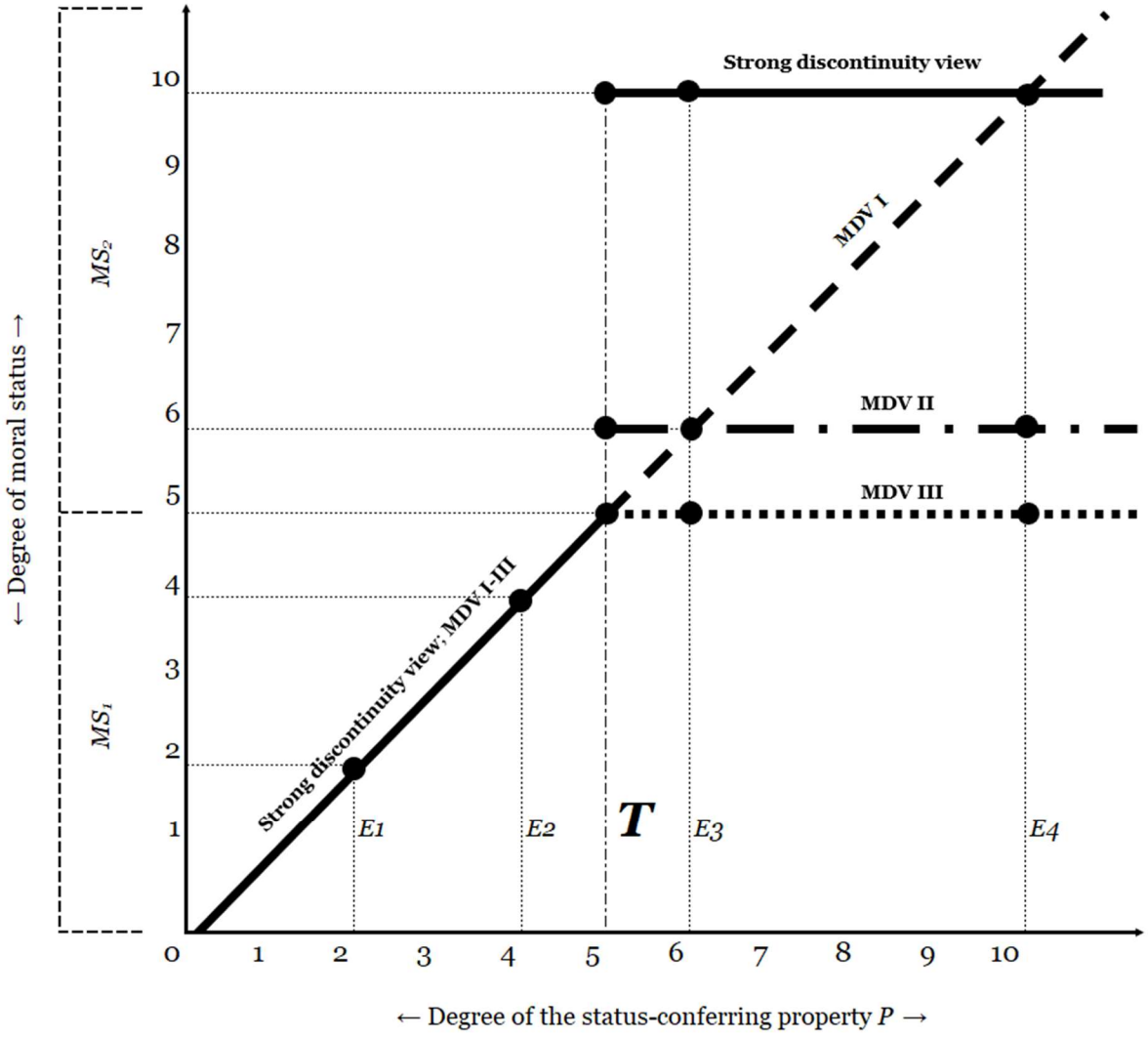

Figure 2. The strong discontinuity view and three variants of the moderate discontinuity view (*MDV*).

The horizontal axis represents the degree to which status-conferring property *P* can be held by an entity *E*. The vertical axis represents the degrees of moral status. Let *T* at 5 be the threshold that distinguishes lower moral status MS_1 from higher moral status MS_2 (see vertical axis). Further, let us assume that degrees of moral status denote the moral weight of an entity's interests. The higher an entity's moral status, the worse harming that entity is, other things being equal.

We assume here, for the sake of easy comparison, that all views have the same implications below the threshold.[22] There is a significant shift in moral status in the strong discontinuity view at *T*. This illustrates the strong discontinuity marked by the threshold. Entities that reach or pass the threshold have a much higher degree of moral status than entities that are just below the threshold. Thus, in the strong discontinuity view, entity *E3*, which possesses *P* at degree 6, has a moral status of degree 10, whereas entity *E2*, which holds *P* to degree 4, has a moral status of degree 4. Accordingly, the strong discontinuity view entails that we should give "strong priority" to *E3*'s interests over the interests of *E2*, even though both entities are relatively close to the threshold.

Exactly what it means to say that *E3*'s interests have "strong priority" over those of *E2* can be understood in two different ways. First, "strong priority" might mean that the interests of *E3 trump* the interests of *E2*, such that *E3* has lexical (or absolute) priority over *E2*. On this

[22] Note that the moderate discontinuity view, just like any-degree views, requires the identification of a status-conferring property that itself supervenes upon thresholds of subvenient scalar properties and that marks the difference between lacking and having *a* degree of that property. In our view, this threshold is an *arbitrary* threshold that should denote a moderate rather than significant shift in moral status. For the purpose of our discussion, we focus on the higher threshold. We thank a reviewer for urging us to clarify this.

interpretation, no matter how great the possible benefits to an entity (or entities) below the threshold, entities above the threshold have priority. Second, "strong priority" might mean instead that the interests of *E3* have *significant but non-lexical priority* over those of *E2*. In this case, the difference between "weak" and "strong" priority is one of degree rather than kind, since weak priority—advocated by the moderate discontinuity view—is also a type of non-lexical priority. On both interpretations, the interests of entities with lower status might still outweigh the interests of entities with higher status if the interests of the former are sufficiently weighty and the inequality in moral status is sufficiently small. However, such cases are more likely under weak priority than under significant but non-lexical priority. To illustrate, suppose *E3* has weak priority over *E2*. If so, *E3*'s interests might count twice as much as those of *E2*. By contrast, if *E3* has significant but non-lexical priority over *E2*, *E3*'s interests will count significantly more than twice as much as *E2*'s.

Figure 2 shows three out of many possible variants of the moderate discontinuity view (MDV I, MDV II, and MDV III). The three variants agree with the strong discontinuity view that entities at and above the threshold have higher moral status than those below the threshold. Yet they disagree with the strong discontinuity view in that they attribute only a moderately higher moral status to entities just above the threshold relative to entities close to but below the threshold. What distinguishes the variants from each other is that only MDV I allows for inequality in moral status above the threshold; that MDV II has a stronger shift in moral status at the threshold than MDV I and MDV III; and that in MDV III the threshold only denotes the point at and above which entities have equal moral status but without an increase in moral status.

The moderate discontinuity view takes proper account of the arbitrariness objection in two ways. First, there is no significant discontinuity in the degree of moral status of entities that are close to the threshold but on opposite sides of it. For example, *ex hypothesi*, we know

that *E2* possesses *P* to degree 4, whereas *E3* holds *P* to degree 6. Yet, in light of the arbitrariness objection, there is no principled reason to maintain that *T* is reached when *P* is held at degree 5 rather than degree 4 or 6. Hence, the exclusion of *E2* from MS_2 is arbitrary. Accordingly, there should not be as great a discontinuity in degrees of moral status between *E3* and *E2* as implied by the strong discontinuity view. Put differently, the arbitrariness of *T* gives us a compelling reason to maintain that the interests of *E3* ought not to count much more than the interests of *E2*. This favors the moderate discontinuity view over its strong counterpart.

Second, the degree of discontinuity in moral status is a function of the distance from *T*. This is because the less arbitrary the positioning of entities above or below *T* becomes, the less arbitrary the attribution of significant differences in degrees of moral status. Thus, for example, the difference in degrees of moral status between *E1* and *E4* can be much greater than the difference in degrees of moral status between *E2* and *E3*. This is because *E1* is further below *T* than *E2*, and *E4* is further above *T* than *E3*. More generally, then, *if* there is a significant difference in the degree of moral status of entities on opposite sides of the threshold, this difference should be primarily explained by their distance from the threshold rather than by the fact that they are on opposite sides of the threshold.

In our view, the moderate discontinuity view offers the most coherent and compelling explanation of what role thresholds should play in theories about moral status. Because such theories must specify arbitrary thresholds, they cannot simply rely on precautionary reasoning or expected value principles when they are unable to determine whether an entity has (a specific tier of) moral status. Instead, they must revise the role and the significance of the threshold: thresholds must denote moderate rather than radical shifts in moral status, and significant shifts in the moral status of entities on opposite sides of the threshold must be a function of their distance from the threshold rather than of the threshold itself.

7 Moral equality or moral superiority

In this final section, we show that the moderate discontinuity view also has far-reaching and disruptive implications for many prominent theories of basic equality. These implications do not rest on any substantive disagreements about the basis of basic equality. Instead, they follow from the role that thresholds should play in accounts of basic equality. More specifically, we argue that there is no principled way to reconcile a commitment to the moral equality of persons with a commitment to the moral superiority of persons over nonhuman animals.

A central commitment in influential theories of persons' moral equality is that the interests of persons have strong priority over the interests of nonhuman animals—that is, the interests of the former trump or have significant but non-lexical priority over those of the latter.[23] More specifically, such theories accept the following:

> *The Equality Claim.* Moral persons have equal moral status.
>
> *The Superiority Claim.* The moral status of moral persons is significantly higher than the moral status of nonhuman animals.[24]

[23] Prominent examples are Kantian theories of basic equality which hold that persons have a special and unique dignity *qua* rational and moral agents, which makes them each other's equals and superior to nonhuman animals. See Kant (2002[1785]); Christiano (2015); Waldron (2017).

[24] Notice that accounts of basic equality differ in how they specify the moral superiority of persons over nonhuman animals. For the purposes of this paper, we adopt a broad understanding of what such superiority entails. It may mean that moral persons have rights that nonhuman animals lack, that their rights are more stringent, or that their interests count

However, the moderate discontinuity view brings to light a tension between the Equality Claim and the Superiority Claim. To see this, suppose that the entities above the threshold in Figure 2 are human beings and that the entities below it are nonhuman animals. More specifically, imagine that *E1* is a mouse, *E2* is a dolphin, *E3* is a very young child (say, a three-year-old), and *E4* is an adult without a cognitive impairment. If the Equality Claim holds—that is, if moral status is equal above the threshold—then young children and adults have equal moral status. However, as we argued in Section 6, this moral equality is incompatible with granting a *strong* priority to the interests of young children and adults over the interests of those nonhuman animals, such as dolphins, that fall just below the threshold. This is because, according to the Moderate Claim, the threshold cannot mark a strong discontinuity in moral status between entities that are just above the threshold and entities that are just below it. Since we lack a principled reason to place the threshold at degree 5, the exclusion of dolphins from the highest tier of moral status—and the corresponding inclusion of children—is arbitrary. Therefore, there should not be a significant difference between them in terms of degrees of moral status. Hence, we can only accord a *weak* priority to the interests of the former over the interests of the latter.

This has significant implications for treatment and policy. When *comparable* interests are at stake, persons' interests prevail over those of nonhuman animals. However, the interests of those nonhuman animals close to the threshold for moral personhood—such as dolphins and great apes—can sometimes outweigh the interests of persons. Thus, for instance, the moderate discontinuity view provides a principled rationale for why causing harm to dolphins or apes

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significantly more. Importantly, *superior* (or *inferior*) moral status is not the same as *higher* (or *lower*) moral status: a slight difference in moral status does not amount to superiority (or inferiority). Rather, moral superiority requires a *significantly higher* moral status, such that the interests of persons enjoy "strong priority" over the comparable interests of nonhuman animals.

cannot be justified by relatively minor human benefits, such as modest medical improvements or entertainment. Likewise, it suggests that preserving habitats that are crucial to the survival of developed nonhuman animals can outweigh important human interests, such as the expansion of commercial agriculture or tourism.[25]

Crucially, this means that the Superiority Claim, which grants strong priority to the interests of moral persons over the interests of nonhuman animals, is incompatible with the moral equality of persons. If the moral status above the threshold admits of degrees, as is the case in MDV I, the Degree Claim states that any significant difference in the degree of moral status between entities on opposite sides of the threshold must be a function of their distance from the threshold rather than of the threshold itself. But consider adults who possess *P* to degree 10, and dolphins that have *P* to degree 4. If the interests of adults have a strong priority over the interests of dolphins, this is not simply because they are on different sides of the threshold. It is primarily because adults are *far above* the threshold. But their interests can only have a strong priority over the interests of dolphins if we accept that adults have a moral status that is superior to that of young children, who possess the status-conferring property to a lower degree. This is because, unlike adults, young children are only just above the threshold, and, consequently, their interests should not count much more than the interests of nonhuman animals that are just below the threshold.

Accordingly, we can only ascribe strong priority to the interests of persons well above the threshold over the interests of nonhuman animals just below it if we accept that the interests of persons close to the threshold count less than the comparable interests of persons well above it. Such a view would entail, for example, that the interests of young children, or of other human

[25] For an instructive analysis of the comparative claims to resources between human beings and nonhuman animals, see also Vallentyne (2007).

beings that possess the capacity for moral personhood (or another property that grounds basic equality) to a similar degree, count less than those of adults. Rejecting persons' moral equality, however, is a conclusion that hardly anyone accepts.[26]

The Equality Claim and the Superiority Claim are two core commitments of several prominent theories of basic equality. Critics of such theories have often pointed out that persons' moral superiority should be rejected because "moral personality" is neither the only nor the most valuable status-conferring property (Singer, 2011). However, the moderate discontinuity view provides a more principled line of criticism, which does not rest on a substantive disagreement about the moral significance (or lack thereof) of specific status-conferring properties. If the Moderate Claim and the Degree Claim hold, theories of basic equality face the following dilemma. On the one hand, if persons have equal moral status, there is only a moderate discontinuity in degrees of moral status between persons and those nonhuman animals that are close to the threshold for moral status (as in MDV II and MDV III). On the other hand, if there is a strong discontinuity in degrees of moral status between persons and nonhuman animals (as in MDV I), then persons do not have equal moral status. If so, the interests of some persons ought to take priority over not only the comparable interests of all nonhuman animals but also over the comparable interests of some other persons.

The moderate discontinuity view, therefore, shows that there is no principled way to reconcile a commitment to the moral equality of persons with the commitment to the moral superiority of persons over nonhuman animals. Since few would deny the moral equality of persons, this provides us with a compelling reason to reject the moral superiority of persons over nonhuman animals.

[26] For further discussion, see Floris (2023a).

8 Conclusion

It is widely accepted that entities that possess a status-conferring property to a sufficient degree have (a specific tier of) moral status. However, the arbitrariness objection holds that there is no nonarbitrary way to determine the exact degree to which entities must possess that property to have moral status. Theorists of moral status often suggest that this arbitrariness objection is not a pressing challenge: the threshold for moral status might be vague, but it is not arbitrary. Or that the threshold might be nonarbitrarily grounded in a binary property or in "any degree" of a scalar property. In this paper, we have shown that these are not convincing responses to the arbitrariness objection. The upshot, then, is that theories about moral status cannot do without thresholds, but also that these thresholds are inevitably arbitrary.

Accordingly, we have argued that we must revise the role that thresholds play in moral status theories. In particular, we have proposed the *moderate discontinuity view*. This view states that (i) moral status thresholds denote moderate discontinuities in moral status between the entities on opposite sides of but close to the threshold; and that (ii) any significant difference in the degree of moral status of entities on opposite sides of the threshold is a function of their distance from the threshold rather than of the threshold itself.

Finally, we have shown that the moderate discontinuity view has significant and far-reaching implications for theories of basic equality. Specifically, this view reveals that there is no coherent way to reconcile a commitment to the moral equality of persons with a commitment to the moral superiority of persons over nonhuman animals. Granting a strong priority to persons' interests over the interests of nonhuman animals can only be justified at the cost of denying the moral equality of persons. This, however, is a cost that we cannot afford. Therefore, the arbitrariness objection provides us with compelling reasons to hold that the moral status of moral persons is not significantly higher than the moral status of nonhuman animals.

Acknowledgments

For helpful comments and discussion on previous versions of this article, we thank Ian Carter, Willem van der Deijl, Tim Meijers, Christian Neuhäuser, Tom Parr, Matt Perry, Eva Schmidt, Federico Zuolo, as well as audiences in Leiden and Tilburg. We are also grateful to the Editor, Avia Pasternak, and two anonymous reviewers for their detailed and thoughtful feedback.

Declaration of conflicting interests

None.

Funding

Giacomo Floris' research was supported by the British Academy under the Postdoctoral Fellowship Scheme grant No. PF22\220010.

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