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Chapter 1. Rethinking our Assumptions about Moral Status

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1. The Idea of Moral Status

When a being or entity has moral status its interests matter morally, for its own sake (Jaworska and Tannenbaum 2018). If a being or entity has moral status, then an act that is morally bad, in at least one respect, is committed when an agent harms that being or entity. Any all-things-considered moral justification for such an act must take into account the harm committed by the agent against that being or entity. Ordinary adult humans are usually supposed to have a specific and equal level of moral status – often referred to as ‘full moral status’ (FMS). Non-human animals are usually accorded some moral status, but this is typically understood to be a lesser level or degree of moral status than FMS.¹

Statuses are often organised in hierarchies. In the peerage of Great Britain, for example, an Earl has higher status than a Viscount, a Viscount ranks higher than a Baron, and a Baron is the lowest status British peer, ranking only above commoners. Standard attributions of moral status form a partial hierarchy. It is usually agreed that humans have a higher level of moral status than non-human animals. However, there is no widely accepted ordering of non-human animal moral status.² Opinions vary about the relative levels of moral status of different non-human animals and about which species of animals have moral status. Most of us ascribe some moral status to non-human primates. Many of us ascribe some moral status to other mammals. Some of us ascribe some moral status to birds, reptiles and fish and a few of us ascribe some moral status to arachnids, insects and crustaceans.³ Further disagreement about the presence of moral status, or about the extent to which it is possessed, becomes apparent when we consider humans other than ordinary adult humans. Do human foetuses and embryos have FMS, some moral status, or no moral status? What about infants? What about severely cognitively impaired or unconscious adults?

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1 A few scholars appear to proceed on the assumption that there is no level of moral status other than FMS. For discussion of such views, see Hursthouse (2013, pp. 3425–3427).

2 For a recent proposal to develop a hierarchy of non-human animal moral status, see Kagan (2018).

3 A small number of us are inclined to attribute moral status to plants and perhaps ecosystems. See, for example, Goodpaster (1978).

Technological developments are throwing up new and controversial cases, which will require our consideration. What are we to say about human non-human chimeras,⁴ human brain organoids⁵ or artificial intelligence?⁶ What should we say about the moral status of a cyborg,⁷ a post-human,⁸ or a human mind that has been uploaded into a computer, or onto the internet?⁹ To provide sensible answers to these questions we need to be able to think clearly about what it is to have moral status and about when and why we should attribute moral status to beings and entities.

One way to help clarify our thinking is to try to define moral status. However, when we try to define moral status, it can start to look like talk of moral status doesn't add anything to other, more familiar forms of moral discourse. DeGrazia offers the following characterization of moral status:

To say that X has moral status is to say that (1) moral agents have obligations regarding X, (2) X has interests, and (3) the obligations are based (at least partly) on X's interests. (DeGrazia 2003, p. 183)

We are already familiar with the language of interests and obligations, so why not restrict ourselves to this terminology and forego talk of moral status? An answer to this question, defended by DeGrazia, is that reference to moral status is a convenient form of shorthand, which is especially useful to us when we want to generalise about moral obligations and interests (2008, p. 184). Another answer is that moral status talk is well suited to play a specific explanatory role that talk of moral interests and obligations is not well suited to play. This is to relate the moral properties of beings to whom we have moral obligations to the non-moral properties and capacities of those beings.¹⁰

If we are pushed to rethink our assumptions about moral status to accommodate artificial intelligence, cyborgs, human brain organoids, human non-human chimeras, post-humans and uploaded minds, then we should consider the possibility that some of these beings have a level of moral status below FMS. We should also be open to the possibility that some of these beings and entities might have a higher moral status than do ordinary adult humans. The phrase 'full moral status' (FMS) suggests a threshold level above which moral status cannot rise. However, as we will go on to discuss, it seems possible that a being or entity could have a higher moral status than the moral status of ordinary adult humans.

In this chapter we consider some of the key philosophical issues that arise when attempts are made to rethink our usual assumptions about moral status in order to try to handle the aforementioned new and controversial

4 A human non-human chimera is a being created by combining cells that have human origins with cells that have non-human origins. For discussion of the moral status of human non-human chimeras, see Roberts and Baylis (2003), Streiffer (2005), DeGrazia (2007) and H. Bner (2018).

5 Human brain organoids are artificially grown miniature organs resembling human brains. They are created by culturing human pluripotent stem cells; and are used as relatively simple *in vitro* models to assist in neurological experimentation. For discussion of the moral status of human brain organoids, see Cheshire (2014) and Lavazza and Massimini (2018).

6 For discussion of the moral status of artificial intelligence, see Basl (2014) and Søraker (2014).

7 For discussion of the moral status of cyborgs, see Gillett (2006) and Jotterand (2010).

8 Post-humans are humans who have radically enhanced capacities, for example, an IQ above 200 or the power of telepathy or telekinesis. For discussion of the moral status of post-humans, see Buchanan (2009), Agar (2013; 2013b) and Douglas (2013).

9 For discussion of the moral status of uploaded minds, see Sandberg (2014).

10 Some authors worry that the apparent convenience and utility of talk of moral status comes at a price and suggest that we should not pay that price. Sachs (2011) argues that talk of moral status can be obfuscating. Horta argues that moral status talk can distort our understanding of how we should behave towards some individuals in particular circumstances (2017, p. 909).

cases. In the next section of the chapter we critically examine the widespread assumption that all ordinary adult humans have equal moral status. In the following section we subject the assumption that membership of the species *homo sapiens* somehow confers FMS to scrutiny. In Section Four we consider some revisionary approaches to thinking about moral status that involve rejecting the presupposition that there is a sharp distinction between the FMS of ordinary adult humans and the partial moral status of non-human animals. In Section Five we consider proposals to reject an almost universally accepted assumption – that no beings could have higher moral status than the FMS that is usually attributed to ordinary adult humans. We also consider some consequences that could follow from creating beings with higher moral status than that of ordinary adult humans. In the final section of the paper we turn our attention to a practical concern. This is the issue of deciding how to behave towards beings when we find ourselves uncertain about their moral status.

2. Human Moral Status

The assumption that all adult humans who are not severely cognitively impaired have equal moral status is hardly ever challenged these days, at least in Western liberal societies.¹¹ This is because it is a background assumption made by the many of us who share liberal, democratic ideals. However, it would have been rejected by most ordinary members of the various slave-owning societies that flourished before the rise of modern liberal democracy.¹² In slave-owning societies, the enslaved were regarded as having fewer legal rights than the free. The systematic difference between the expansive legal rights of the free and the limited rights of the enslaved was provided with apparent justification by the pervasive assumption made in many slave-owning societies that the enslaved were of a lesser moral status than the free.¹³

Defenders of institutional slavery usually sought to justify the attribution of different levels of moral status to different groups of people by appealing to perceived natural differences between different types of humans. These differences were then invoked to try to justify the enslavement of humans of one type by humans of another type. The best-known attempted philosophical defence of slavery is from Aristotle, who argued that some humans lacked the capacities for significant deliberation and foresight, and so were ‘natural slaves’, in need of direction by natural masters who possessed the capacities that natural slaves lacked.¹⁴ Aristotle’s theory of natural slavery was based on an assumption of systematic underlying differences between different types of humans. However, unlike more recent, Eighteenth and Nineteenth Century defenders of slavery, Aristotle did not assume that these differences correlated with racial differences. This should not be surprising. In Ancient Greece, slaves were captured and traded from many different countries and had a diverse range of racial origins. By the Eighteenth and Nineteenth Centuries, slavery in the West was, for the most part, restricted to specific races, with Blacks especially liable to be enslaved by Whites. Eighteenth and Nineteenth Century apologists for slavery often appealed to quasi-scientific theories about racial differences, which lacked supporting evidence, to try to justify race-based slavery.¹⁵

11 However, it is subject to the occasional sceptical challenge. For discussion of how defenders of the assumption might try to respond to sceptical challenges, see McMahon (2008).

12 There was a long delay between the initial rise of modern liberal democracy and the end of institutional slavery. The US Declaration of Independence was signed in 1776, and is surely one of the foundational documents of modern liberal society. It made the unqualified assertion that it is self-evident that all men are created equal. However, it would take 89 years and a hugely destructive civil war before institutional slavery was abolished in all parts of the US.

13 For discussion of the challenge that slave-owning societies present, for those who assume that humans have equal moral status, see Lindsay (2005).

14 Aristotle’s theory of natural slavery is much more complicated than this brief characterisation suggests. For further discussion, see Smith (1983).

15 An influential approach was to appeal to the now discredited theory of polygenesis. This is the theory that different human races evolved separately, in different parts of the world. The purportedly separate origins of different races was

The fact that institutional slavery was still practiced in the US (and elsewhere), as recently as 160 years ago is very disturbing to defenders of the view that all adult humans who are not severely cognitively impaired have equal moral status, including the authors of this chapter. It seems clear to us that societies that fail to treat all ordinary adult humans as having equal moral status ought to do so, because in fact all ordinary adult humans have equal moral status. If all ordinary adult humans have equal moral status, as we are convinced that they do, then this is presumably because of some or other properties and capacities that they share, which may, or may not be shared by human infants, human foetuses and embryos, and severely cognitively impaired humans. What properties or capacities might these be?

Almost all attempts to locate grounds for the moral status of ordinary adult humans identify specific cognitive capacities as the basis for that moral status. However, there is a lack of agreement in the literature regarding the cognitive capacities necessary for FMS. Quinn suggests that the ability to will is necessary for FMS (1984, p. 51), while Singer stresses the importance of future-oriented planning (1993, pp. 116–7), McMahan suggests that self-awareness is necessary for FMS (2002, p. 45). Baker (2000) argues that self-consciousness is necessary,¹⁶ Metz (2012) suggests that the capacity to participate in communal relationships is necessary,¹⁷ and Jaworska (2007) stresses the importance for FMS of having a capacity to care.

A different approach to grounding attributions of FMS is to argue that the potential to go on to develop sophisticated cognitive capacities warrants the attribution of FMS. Infants and severely cognitively impaired adults do not possess sophisticated cognitive capacities, but many possess the potential to develop – or recover – sophisticated cognitive capacities. Appeals to potential, as a basis for the attribution of FMS, are popular amongst opponents of abortion and unpopular amongst proponents of abortion. Just as infants have the potential to acquire sophisticated cognitive capacities, so do human foetuses and embryos. If we are to grant FMS to human foetuses and embryos, then it looks like we should ban most instances of abortion, as abortion will involve killing beings who are acknowledged to have FMS.¹⁸

A major concern with appeals to potential as a basis for attributions of FMS is that it is far from obvious what constraints there are on such appeals. An unfertilized human ovum together with a human sperm have the potential to become a human adult. However, anti-abortion activists do not usually want to argue that unfertilized ovum-sperm pairs have FMS, in virtue of having the potential to become adult humans. In response to objections along these lines, opponents of abortion, such as Watt (1996) and Camosy (2008), draw conceptual distinctions between the type of potential the unfertilized over-sperm pair has and the potential that a fertilized ovum has to become a human adult. It is not clear that such attempts to distinguish between different types of potential are successful. Nor is it entirely apparent how any specific type of potential could confer moral status.¹⁹

A common way of supplementing accounts of the grounds necessary for FMS is to assert that personhood is necessary and sufficient for FMS.²⁰ Persons are said to have FMS, while non-persons are said to have either less-

then appealed to, to try to explain why some races were better suited to freedom and others better suited to slavery. For discussion of polygenetic defences of slavery amongst Eighteenth Century philosophers, see Watkins (2017). For a Mid-Nineteenth Century polygenetic defence of slavery, see Nott and Gliddon (1854).

16 Shepherd (2018; Forthcoming) has recently argued for the moral insignificance of self-consciousness.

17 Metz's (2012) appeal to the capacity to participate in communal relationships as necessary for FMS is one component of a relational account of moral status he defends.

18 Not all arguments for abortion rely on appeals to the moral status of foetuses and embryos. A famous argument for abortion that does not is due to Thomson (1971).

19 For arguments against the relevance of appeals to potential for moral status, see McMahan (2002, pp. 308–329), Persson (2003) and Singer and Dawson (1988).

20 There are different senses of personhood discussed in the philosophical literature, including metaphysical and legal personhood. The sense that is most relevant to discussions of moral status is 'moral personhood'.

than-full or no moral status.²¹ There is significant disagreement in the literature about which beings and entities are persons. Human foetuses are not usually regarded as persons, at least by secular philosophers, but they are considered to be legal persons in some jurisdictions.²² Human infants are usually regarded as persons, but some scholars, such as Tooley (1972), argue otherwise. Cognitively impaired human adults are usually regarded as persons, however, it has been argued that once humans have become severely cognitively impaired and have fallen into a persistent vegetative state they may no longer be persons (Callahan 1993). Non-human apes may be persons, or at least ‘border-line persons’ (DeGrazia 2007, p. 323). Now extinct Neanderthals may have been persons (Buchanan 2009, p. 372), and some intelligent machines that we might create in the future could be persons (Bostrom and Yudkowsky 2014). It is not easy to see how the stipulation that personhood is a criterion for FMS could assist us in identifying who and what has FMS. If we treat personhood as a criterion for FMS then we transform the problem of identifying who and what has FMS into the equally challenging problem of figuring out who and what is a person.

3. Species Membership and the Boundary between Full and Partial Moral Status

As well as identifying grounds for attributing FMS to ordinary adult humans we need to consider where the conceptual boundary lies between beings that possess FMS, including ordinary adult humans and beings that are ordinarily held to possess only partial moral status, such as non-human animals. Many will want to say that this conceptual boundary maps on to the boundary between membership of the species *homo sapiens* and membership of other species. However, most philosophers are wary of stipulating that membership of a particular species is necessary for FMS, as making this assertion would appear to leave them open to the charge of unfairly favouring one species over others – the charge of speciesism, which is often depicted as akin to sexism and racism. (Singer 2009; Liao 2010).²³

A philosopher who defends a prejudice in favour of our fellow *homo sapiens* and who argues that it is not akin to racism and sexism is Bernard Williams (2006). According to Williams, racism and sexism are unjustified prejudices because defenders of racism and sexism are unable to answer the question ‘What’s that got to do with it?’ (2006, p. 139). In contrast to the answers ‘he’s white’ or ‘she’s a woman’, Williams thinks the answer ‘it’s a human being’ provides a reason for us to favour humans, rather than a rationalization for prejudice. While ‘it’s a human being’ may seem compelling to us human beings the most plausible explanation for it seeming this way is that we are members of the club of human beings. ‘He’s white’ may seem similarly compelling to white supremacists. It is hard to see that Williams has identified a morally relevant consideration that operates as a reason for us to favour humans over non-humans, as opposed to a rationalization for pro-human prejudice. (Savulescu 2009, p. 219).

Most philosophers who appeal to species membership as a basis for FMS are likely to assert that membership of the species *homo sapiens* is sufficient for FMS, in virtue of underlying capacities that ordinary adult humans possess – such as sophisticated cognitive capacities. In making this assertion they allow for the possibility that membership of any species whose ordinary adult members possesses the required capacities would also be a sufficient basis for FMS. The argumentative move of underwriting the case for species membership as a basis for FMS by appealing to the underlying capacities that ordinary adult members of that species possess enables the

21 See, for example, Singer (1993), Baker (2000), Warren (1997, Chapter Four) and McMahan (2002).

22 For further discussion, see Schroedel (2000).

23 Those who take membership of our species as necessary for FMS are more likely to employ theological rather than philosophical arguments to support their case. One influential Christian theological argument for the conclusion that humanity is necessary for FMS appeals to the Biblical doctrine that humans are the only beings made in the image of God. See Genesis 1: 27.

charge of speciesism to be avoided. However, it raises other problems. If the moral status of the members of a species turns out to be grounded in capacities that ordinary adult members of that species happen to possess, then it is unclear why we should accept that members of that species who lack the capacities in question should be accorded FMS. Why think that infants and severely cognitively impaired adults who lack sophisticated cognitive capacities should be considered to possess FMS simply because they happen to be members of a species in which other members possess sophisticated cognitive capacities? It seems arbitrary to attribute FMS to human infants and severely cognitively impaired human adults when we have reason to believe that members of other species, to whom we are not attributing FMS, possess cognitive capacities that are as sophisticated as those possessed by infants or severely cognitively impaired adults.²⁴ We could respond to this problem by relaxing our criteria for the attribution of FMS and allowing that some non-human animals that are as cognitively developed as human infants and severely cognitively impaired humans also have FMS. However, if we were to do this then we would be morally required to treat those non-human animals in far better ways than we do now (Singer 2009). Many will balk at this consequence.

Another problem for species membership accounts of FMS is raised by consideration of exceptional members of species whose ordinary members lack the underlying capacities to warrant attributions of FMS. A widely discussed example is McMahan's 'superchimp'. The superchimp is a member of the species chimpanzee that comes to acquire cognitive capacities which exceed those that one might expect of a chimpanzee. It acquires cognitive capacities (say, by gene editing) as sophisticated as those of a ten-year old human (McMahan 2002, p. 147). Intuitively, it seems that we ought to attribute the same moral status that we attribute to ten-year old humans to the superchimp – FMS (McMahan 2002, p. 216). However, we will be unable to justify doing so if we insist on membership of a cognitively sophisticated species as a necessary condition for possession of FMS.

Yet more problems for appeals to species membership, as a necessary condition for FMS, are raised by consideration of the concept *species*. It is notoriously difficult to give a philosophically satisfactory account of the concept *species*.²⁵ This difficulty should not be surprising given that acceptance of Darwin's theory of evolution commits us to the view that species evolve from other species, via a process of mutation and natural selection. The boundaries between species are porous and at times beings will exist that are not members of any particular species.²⁶ If there are beings that are not members of specific species then we cannot determine their moral status by appeal to species membership. The same can be said of hybrid animals, such as mules and ligers, as well as chimeras created by blending genetic material from more than one species, such as sheep-goat chimeras. Artificial intelligence also raises problems for species membership accounts of moral status. In the future, we may be able to create beings and entities with very sophisticated cognitive capacities and intuitively it seems that there is a compelling case for attributing FMS to at least some of them. However, they will not be members of species. Acceptance of species membership as a necessary condition for attributions of moral status would preclude us from attributing moral status to these beings and entities.

4. Revisionary Approaches to Moral Status

If we want a theory of moral status to account for ordinary (contemporary) intuitions about moral status then that theory will need to be consistent with the conclusion that ordinary adult humans, small infants, and most, if not all, cognitively impaired human adults, have FMS. It will also need to be consistent with the conclusion that at least some non-human animals, including most, if not all mammals, have partial moral status. Additionally, such a theory should be 'species neutral' rather than anthropocentric.²⁷ Even though most of us do not believe

24 For extended discussion of this line of reasoning, see Singer (2009, pp. 568–570.).

25 For discussion of various ways to define species, see Ereshefsky (2017). See also Robert and Baylis (2003, pp. 2–4).

26 The phenomenon of ring species make further trouble for appeals to species membership as a necessary condition for FMS. For discussion, see Persson and Savulescu (2010).

that we have met non-humans with FMS, there are few who would deny that it is possible that cognitively sophisticated non-humans might exist, and few who would deny that it would be appropriate to attribute FMS to them. It is not clear that any current unified theory of moral status manages to achieve all of this.²⁸ Given the difficulty of providing a coherent theory that accounts for ordinary intuitions about moral status, it is not surprising that some philosophers have advocated rejecting at least some of these ordinary intuitions, and developing revisionary theories of moral status.

One influential group of revisionaries are those animal rights activists who deny that non-human animals have lesser moral status than humans. According to Tom Regan (2004), all ‘subjects-of-a-life’ have the same moral status. For Regan, subjects-of-a-life are those beings that have a particular set of properties and capacities. This set includes ‘... beliefs and desires; perceptions, memory and a sense of the future ...’ (2004, p. 243). In his view, many non-human animals and humans are subjects-of-a-life.²⁹ The utilitarian Peter Singer also argues that we should reject the ordinarily assumed division between the moral status of humans and the moral status of non-human animals. According to him, we should adopt a principle of ‘equal consideration of interests’, and apply it to both humans and non-human animals. The most important interests that beings have, according to Singer, are interests in enjoyment and the avoidance of suffering. Some non-human animals will have a greater capacity for enjoyment and a greater capacity for suffering than do some cognitively impaired humans. So, application of the principle of equal consideration of interests will lead us to prioritise the interests of these animals over the interests of severely cognitively impaired humans (Singer 2009, pp. 574–576).

Another revisionary view is due to Jeff McMahan. McMahan (2002) raises the possibility of ‘intermediate moral status’. This is a level of moral status somewhere between that of most non-human animals and FMS. McMahan (2002) suggests that we should attribute intermediate moral status to human infants and cognitively advanced non-human animals, such as ‘higher primates’ (2002, p. 265). While McMahan (2002) allowed for three distinct levels of moral status, McMahan (2008, pp. 97–100) contemplates two levels of moral status with a rising series of degrees of moral status between the two levels. These rises take place in response to increases in ‘psychological capacity’ up to a threshold of FMS (McMahan 2008, p. 99). On McMahan’s later view, intermediate moral status still exists, but some beings with intermediate moral status have higher moral status than others.³⁰ Another possibility is that moral status comes in degrees and rises consistently, before levelling off at the threshold at which personhood is attained (DeGrazia 2008).³¹ There are also many other possible combinations of levels, or thresholds, of moral status and continuous rises by degrees that we could invoke to depict the relationship between increases in possession of the relevant properties and capacities that we take to underpin moral status and increases in moral status.³²

5. More-than-full Moral Status?

The phrase ‘Full Moral Status’ suggests that there is a maximum level of moral status that might be obtained. However, it seems possible that there could be beings with higher moral status than the full moral status that is

27 For discussion of the ‘species neutrality requirement’, see Liao (2010, pp. 159–163).

28 Metz reasons similarly (2012, pp. 399–400).

29 Regan doesn’t say exactly where the line between beings that are and are not subjects-of-a-life is to be drawn. He does mention that ‘mentally normal mammals of a year or more’ are above that line, however (2004, p. xvi).

30 For discussion of the development of McMahan’s views between 2002 and 2008, see Ebert (2018, pp. 84–88).

31 DeGrazia describes this position approvingly but does not explicitly endorse it. He speculates that moral status may vary according to the extent of a being’s interests and these may depend on ‘cognitive, affective and social complexity’ (2008, p. 192).

32 Douglas depicts six different possible relationships between moral status and the underlying property of mental capacity (2003, p. 478).

usually attributed to ordinary adult humans. It may be difficult for us to conceive of such beings, but it does not follow from the limitations of our imaginative capacities that such beings cannot exist.³³ If we think that humans have a higher level of moral status than non-human animals, in virtue of possessing cognitive capacities that are superior to those of non-human animals, then it looks like we should be open to the possibility that beings with superior cognitive capacities to ours would have a higher level of moral status than us. Transhumanists, such as Bostrom (2005), urge us to try to create 'post-humans' with superior cognitive capacities to ourselves. If we manage to do so then we may also end up creating beings with higher moral status than we possess (Agar 2013; Douglas 2013).

Suppose that we could create beings with superior moral status to ourselves. Should we do so? There are reasons that speak in favour of creating such beings. If these beings have higher moral status than us, in virtue of having more developed cognitive capacities than we have, then, all things being equal, they will be more capable of accurate and consistent moral reasoning than we are. If they are more capable of accurate and consistent moral reasoning than us then, all else being equal, they will be more likely to perform good acts and less likely to perform bad acts than we are. From an impartial point of view, it seems, therefore, that we should prefer the creation of post-humans with superior moral status to the creation of mere humans. It is plausible to think that the creation of post-humans will also be good for humans. All things being equal, post-humans with more highly developed moral capacities than humans possess will be more likely to treat other beings, including humans, in morally appropriate ways than will humans.

However, there are reasons to be concerned about the consequences for us of creating post-humans with higher moral status than we possess. From the point of view of post-humans with higher moral status than us, we humans would be beings of lower moral status and morality could permit post-humans to treat us in ways that we would prefer not to be treated. To understand this concern, it helps to start by thinking about the ways in which we regard it as morally permissible to treat the non-human animals that we consider to have lower moral status to ourselves. Many of us regard it as morally permissible to kill and eat non-human animals, sacrificing their lives for our nutrition and our gustatory pleasure. Many also regard it as morally permissible to conduct harmful experiments on non-human animals if doing so leads to medical or cosmetic benefits to humans. Also, we generally regard it as morally permissible, if not obligatory, to sacrifice non-human animals when human lives are at stake.

Consider a 'trolley case' in which a runaway trolley is going to run over a human unless we flick a switch, diverting the trolley down a side-track and thereby killing five sheep that are stuck on the side-track. Most of us would regard it as morally permissible, if not obligatory, to flick the switch and sacrifice the lives of the sheep to save the life of the human. If we are right about it being morally acceptable for us to treat beings with lower moral status than ourselves, in the various ways that have been listed, then we should worry about the ways in which beings with higher levels of moral status might regard themselves as being entitled to treat us. By parity of reasoning, we can infer that they may well regard themselves as being entitled to kill and eat us, to conduct harmful experiments on us, and to sacrifice the lives of many of us in order to save the life of one of them.³⁴

Agar (2013) argues that we are not under a moral obligation to create 'post-persons' – his preferred term for post-humans with higher moral status than ourselves. He further argues that when we think about the potential harms to us that may result from the creation of beings with higher moral status than ourselves, it becomes clear that we have good reason not to create such beings. Persson (2013) offers a contrary view. He argues that Agar is

33 Buchanan allows that it is possible for beings with higher moral status than humans possess to exist. However, he thinks that our inability to conceive of such beings means that any argument that might be mounted to try to persuade us that particular beings actually have higher moral status than humans, would fail to be convincing to us (2009, p. 363).

34 If they were to reason this way then they would be treating moral status as having relative value. An alternative possibility is that they might regard human moral status as an absolute value and they might reason that their relatively superior moral status should not be relevant to the moral permissibility of treating humans in particular ways.

biased in favour of mere humans and against post-persons. On Persson's (2013) view, while we are not under a moral obligation to create post persons, it would be good, all things being equal, for us to create post persons. As post persons will only be treating humans as morality requires them to treat humans when they sacrifice human lives for the sake of their own lives, there can be no moral objection to them sacrificing humans for the sake of their own lives. Agar (2013b) disputes that he is merely biased in favour of humans and against post persons. His 'Rawlsian' conception of justice leads him to put the interests of the worst off ahead of those of the better off, and in a world in which mere humans and post-persons both existed humans can reasonably be expected to be the worst off and post humans the better off. To avoid this state of affairs it is better for humans not to create post-humans in the first place, or so Agar (2013b) argues.

6. Moral Uncertainty and Moral Confusion

Suppose we managed to create post-humans with significantly superior cognitive capacities to our own. If we are unsure about the nature of the relationship between cognitive capacity and moral status, as many of us are, we may find ourselves uncertain about whether or not these post-humans have superior moral status to us. How should we treat such beings when we are uncertain about their moral status? One approach would be to treat them as our moral equals until such time as we are presented with compelling evidence that they really do have higher moral status to us. However, there is a strong case for treating them differently to us, at least in some circumstances. To see why consider a rescue situation in which a human and a cognitively superior post-human will both die if we do nothing and we have the opportunity to rescue one of them but not both. If we knew that the post-human was of higher moral status than the human then, all else being equal, we would be morally obliged to save the post-human and allow the human to die.³⁵ However, all we know is that the post-human might have higher moral status than the human or might have the same moral status as the human.

We know that, all things being equal, it is wrong to rescue a being with lesser moral status if doing so involves allowing a being with higher moral status to die. So, we know that we might be acting wrongfully by rescuing the human rather than the post-human. However, all else being equal, there is no chance that we will act wrongfully if we rescue the post-human and allow the human to die. Even if they both have the same moral status, it is not wrong to rescue the post-human and allow the human to die. We might be acting wrongfully if we rescue the human, but all else being equal, we cannot be acting wrongfully if we rescue the post-human. Therefore, it seems clear that we ought to rescue the post-human and allow the human to die, even though we are uncertain as to whether the post-human has superior moral status to the human.

Issues of uncertainty about moral status don't only arise when we think about post-humans. They also arise when we think about human non-human chimeras. Most of us regard it as clear that ordinary adult humans have a higher moral status than non-human animals. However, beings that are part human and part non-human animal pose a potential threat to our intuitive sense of moral clarity. Admittedly, current examples of human non-human chimeras do not seem to present much of a challenge to our intuitive sense of moral clarity. An ordinary adult human who has had a pig valve transplant in her heart is technically a chimera, but she would be regarded by the vast majority of us, as having the moral status of any other ordinary adult human. Similarly, most would consider Oncomice, which are mice that are genetically engineered to contain a human cancer-causing gene, as having the moral status of ordinary mice (Bok 2003). In the future, however, we may be able to create chimeras that involve a more extensive blending of human and non-human animal components and we may find ourselves unable to determine the moral status of these more extensively blended beings.

If we are uncertain about the moral status of a particular type of being and are unable to figure out how to go about alleviating our uncertainty then we are in a state of moral confusion. Robert and Baylis argue that the

³⁵ Note, though, that if reasons can be agent-centred or if some forms of partiality are justified, then it may be morally permissible to give priority to members of one's own group, even if they have lower moral status (Savulescu 1998).

future creation of human non-human chimeras threatens to place us in a state of moral confusion and they further argue that this is an important reason for us to avoid creating such beings (2003, p. 9). Whether or not one is put off creating human non-human chimeras by the threat of moral confusion depends, to a significant extent, on one's ability to tolerate moral confusion. It seems that many of us already manage to tolerate a great deal of moral confusion. Many of us feel confused about the moral status of human fetuses and embryos, adult humans in persistent vegetative states and non-human primates. It could be argued that we have a demonstrated capacity to tolerate significant moral confusion, and the mere presence of another potential source of moral confusion should not be of any special concern to us. A contrary view is that the moral confusion that would follow from the blurring of the boundaries between humans and non-human animals would be more severe and more threatening than forms of moral confusion that we currently have to deal with. Breaking down the distinction between the less-than-full moral status of non-human animals and human FMS could pose an existential threat to our current social order (Robert and Baylis 2003, p. 10).

The creation of artificial intelligence, cyborgs, human brain organoids, human non-human chimeras, post-humans and uploaded minds all have the potential to cause new forms of moral confusion. It is possible that all human societies will collectively agree to avoid creating any of these sorts of beings, and thereby avoid adding to our moral confusion, but this seems unlikely. It also seems unlikely that all of us would stick to such an agreement, were we to make it. So, it looks like we will need to get better at either learning to tolerate, or learning to resolve, moral uncertainty and moral confusion.³⁶

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