

The Basis of Human Moral Status

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© S. MATTHEW LIAO

Faculty of Philosophy, Oxford University, Littlegate House, 16/17 St. Ebbes Street, Oxford OX1 1PT, UK; e-mail: matthew.liao@philosophy.ox.ac.uk; www.smatthewliao.com

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Abstract

When philosophers consider what moral status human beings have, they tend to find themselves either supporting the idea that not all human beings are rightholders or adopting what Peter Singer calls a ‘speciesist’ position, where speciesism is defined as morally favoring a particular species – in this case, human beings – over others without sufficient justification. In this paper, I develop what I call the ‘genetic basis for moral agency’ account of rightholding, and I propose that this account can allow all human beings to be rightholders without being speciesist. While my aim is to set out this account clearly rather than to defend it, I explain how this account is different from a potentiality account and I argue that it is preferable to an actual moral agency account of human moral status.

The Basis of Human Moral Status

I. The Speciesism Challenge

Many people believe that all human beings have the same, basic moral status, that is, that they are all rightholders. For example, this belief is encapsulated in the Universal Declaration of Human Rights (1948), which states that “all human beings are born free and equal in dignity and rights.” Or, a number of prominent philosophers have also expressed this belief. For example, T. M. Scanlon says that “the mere fact that a being is “of human born” provides a strong reason for according it the same status as other humans.”¹ Or, as the late Bernard Williams said, “there are certain respects in which creatures are treated in one way rather than another simply because they belong to a certain category, the human species.”²

However, the claim that all human beings are rightholders is in fact surprisingly difficult to defend. When philosophers assess this claim, they tend to find themselves either agreeing that not all human beings are rightholders or adopting what Peter Singer and others have called a ‘speciesist’ position, where speciesism is defined as morally favoring a particular species – in this case, human beings – over others without sufficient justification.³ Why is this?

Many philosophers believe that when we assess who can be a rightholder we must meet what might be called the Species Neutrality Requirement.⁴ The Species Neutrality Requirement says that an adequate account of rightholding must provide some criterion for rightholding that in principle does not exclude any species and where the criterion can be assessed through some objective, empirical method. The reason for the latter condition is that there does not seem to be an a priori way of knowing who the rightholders are. For example, if we meet some alien beings and we

want to know whether they are rightholders, it seems that we would not be able to know a priori whether they are rightholders. If so, the only way to find out is to investigate empirically what attributes they have and to consider if these attributes are relevant enough to make them rightholders.

However, supposing that the Species Neutrality Requirement is correct, there does not seem to be a relevant empirical attribute that would apply to all human beings. The most plausible attributes such as actual sentience and actual agency do not apply to all human beings. For example, some human beings such as anencephalic children and comatose persons lack actual sentience, and many human beings including newborn infants lack actual agency. These human beings would not be rightholders on these accounts.

Given this, those who wish to defend the claim that all human beings are rightholders typically reject the Species Neutrality Requirement. For example, some argue that all human beings are rightholders because they have intrinsic worth or because they have dignity.⁵ Neither notion is an attribute that one can empirically identify and assess. Others assert that it is just self-evident that all human beings are rightholders, and that it is not necessary to find out the particular attributes that make them so.⁶ Although justification for any moral principle must end at some point, if being human is a sufficient but not necessary condition for rightholding, it seems problematic that this approach is not able to help us determine whether the beings with which we presently live and the beings we might encounter in the future are rightholders. If being human is a necessary condition for rightholding, it seems that this approach would have the seemingly counterintuitive implication that all non-human beings that we presently know as well as those we might meet in the future cannot be rightholders.

Still others have argued that all human beings have rights, not in virtue of the actual attributes they possess, but in virtue of belonging to the kind of beings that typically have the relevant attributes for rightholding. For example, John Finnis says that “to be a person is to belong to a kind of being characterized by rational (self-conscious, intelligent) nature.”⁷ Or, Scanlon says that “the class of beings whom it is possible to wrong will include at least all those beings who are of a kind that is normally capable of judgment-sensitive attitudes.”⁸ Indeed, Scanlon believes that severely mentally handicapped human beings can be wronged, “even though they themselves do not and will not have the capacity to understand or weigh justifications.” For convenience’s sake, we can call this account the species-norm account.⁹

The species-norm account also fails the Species Neutrality Requirement. To be sure, some members of a given species would have the required attribute for rightholding. But, as Scanlon admits, it can be the case that other members would not have the required attribute. Also, this account faces the following kind of objection advanced by Jeff McMahan. McMahan describes a Superchimp who has rational capacities as a result of gene therapy, but is a chimpanzee.¹⁰ Since the Superchimp does not belong to a kind that is characterized by having rational capacities, it seems to follow, from the species-norm account, that the Superchimp is not a person. According to McMahan, this seems absurd though if the Superchimp indeed has rational capacities. Moreover, suppose Superchimps come to outnumber the normal chimpanzees, the norm for the species would have changed and it would follow, on the species-norm account, that we would now need to treat the normal chimpanzees as persons. As McMahan argues, this also seems absurd if the normal chimpanzees do not have rational capacities at all.

In this paper, I shall assume that there is some merit to the belief that all human beings are rightholders. I shall also assume that when trying to justify this belief, one should try to meet the Species Neutrality Requirement so as to not be speciesist. I shall further assume that the methodology employed by adherents of the Species Neutrality Requirement is valid, namely, it is possible to identify an empirical attribute relevant for rightholding, and, *pace* Moore, it is possible to derive moral claims such as rightholding claims from empirical attributes.¹¹ In light of these assumptions, I shall propose an account that appears to meet the Species Neutrality Requirement and that at the same time appears to allow all human beings to be rightholders. I call this the ‘genetic basis for moral agency’ account of rightholding.

Before we begin, it is worth noting that every plausible account of human moral status comes with a certain “theoretical baggage.” That is, each account will face difficult issues particular to it that it must address. For example, on a sentience account of moral status, according to which beings that have the same amount of sentience have the same moral status, it seems that one would have to address the issue of how to treat a human being and a non-human animal, when both have the same amount of sentience.¹² Similarly, an account of moral status, according to which all human beings are rightholders, will imply that fetuses and embryos are rightholders since they are human beings, and this will require discussions about issues such as abortion and embryonic stem cell research. Typically, plausible accounts of moral status will have responses to these issues. For example, suppose one believes that all human beings are rightholders and that abortion is permissible. One can follow Judith Jarvis Thomson and hold the view that even if fetuses were rightholders, abortion would still be permissible.¹³ It is beyond the scope of this paper to discuss all the theoretical issues that can arise from the belief that all human beings

are rightholders. My aim here is therefore to set out clearly an account that supports this belief, but not to defend this account against all possible objections. Nevertheless, I shall explain how the genetic basis for moral agency account is different from a potentiality account and how it is preferable to an actual moral agency account of human moral status.

II. The Genetic Basis for Moral Agency Account of Rightholding

My proposal is as follows: all human beings are rightholders because they all have the genetic basis for moral agency; and it seems that having this genetic basis is sufficient for one to be a rightholder.

Following Carl Wellman and others, I take moral agency to be the capacity to act in light of moral reasons.¹⁴ Moral agency can be contrasted with rational agency, which involves the capacity to know something about causality such as if one does x, then y would happen, and the capacity to bring about something intentionally. It can also be contrasted with autonomous agency, which involves the capacity to determine one's life course (autonomy) and the capacities to pursue these courses (liberty). A moral agent need not act morally all the time or at all.

The genetic basis for moral agency is the set of physical codes that generate moral agency. In human beings, this set of codes is located in their genome. We know this because a lot of complexity is needed as the developmental basis for a complex adaptive phenotype like moral agency, and the genome contains a significant proportion of this complexity. Also, the capacity for moral agency is grounded in psychological capacities such as rationality and empathy that uncontroversially have a genetic basis. Indeed, rationality and empathy, two essential components of the capacity for moral agency, develop in all normal human beings according to a fairly

predictable schedule.¹⁵ If the capacity for moral agency did not have a genetic basis, the development of its essential components would not be so regular.

At present, we do not know exactly which set of genes is necessary and sufficient for the genetic basis for moral agency (though rapid advances in genomic technologies might mean that we could have this knowledge sooner than we think). Also, it seems that some genes may be necessary not only for the genetic basis for moral agency but also for some other general capacities. But we can talk about a genetic basis for moral agency as long as there are genes that definitely play no role in forming the genetic basis for moral agency. For example, the genes for my toe nails or a gene whose expression serves only to produce pigment in the eyes probably play no role in the formation of the genetic basis for moral agency. Moreover, I shall shortly draw a distinction between genes that make up an attribute and genes that undermine the development of an attribute, a distinction that could help us further narrow the set of genes that is necessary and sufficient for the genetic basis for moral agency.

It should be mentioned that some people are hostile to the idea of a genetic basis for human behavioral traits. A reason for this hostility is due in part to the fact that historically, there have been racist and sexist attempts to show that human beings of a certain race or gender have the genetic basis for higher intelligence than human beings of another race or gender; and these attempts typically fail to consider seriously the role that non-genetic factors play in the development of intelligence. Hence, by association, these people might also be hostile to the idea of a genetic basis for moral agency.

However, the genetic basis for moral agency, as I understand it, gives rise to a capacity and not a behavioral trait. This means that the fact that human beings have

the genetic basis for moral agency does not mean that they will act morally. Also, nothing I have said precludes the idea that non-genetic factors are also necessary for an adequate development of moral agency. Indeed, the idea of a genetic basis for moral agency is compatible with the idea that much of the complexity needed for the development of moral agency is located in the developmental environment, a developmental resource that has been specifically adapted to afford the development of moral agency (in a niche construction-type way).

Here it is worth making two further points regarding the genetic basis for moral agency. First, the idea of a genetic basis does not mean that there is only one way this genetic basis can be sequenced or realized. In fact, this genetic basis could be multiply realizable. That is, it could be the case that in certain environments, certain genes, A, B, C, might be the genetic basis for moral agency for a particular being, while in certain other environments, genes D, E, F would be the genetic basis for moral agency in the same being.¹⁶

Secondly, to have the genetic basis for a certain attribute, the genes that make up that attribute must be activated and be coordinating with each other in an appropriate way. A being does not have the genetic basis for a certain attribute if a being just possesses somewhere in its genome the genes that could make up the attribute, but these genes are either not activated or are scrambled in such a way that they do not coordinate with each other in an appropriate way. To support the point about coordination, consider the following: Suppose there is a book containing many random words, which if put together in the right way, would result in a Shakespeare book. That book would not be a Shakespeare book just because it contains the correct words; those words must be organized in the right way.

How do we know that all human beings have the genetic basis for moral agency? We know that all normal functioning human beings and those at the beginning of life (e.g. infants, young children, fetuses) who will develop normally have this genetic basis, since they exercise moral agency or will exercise it; and after conception, the genetic codes of a human being do not change very much, if at all. We also know that most comatose human beings have this genetic basis, because they have exercised moral agency. Most of the causes of anencephaly are not genetic but are caused by environmental factors such as folic acid deficiency.¹⁷ So we can assume that many of those with anencephaly also have this genetic basis.¹⁸ Moreover, those with mild mental retardation, such as children with Down syndrome, typically exhibit some moral agency. This suggests that they also have the genetic basis for moral agency.¹⁹

Finally, to see how those severely defective human beings whose conditions are the result of genetic defects rather than environmental factors would also have this genetic basis, it is useful to distinguish between genetic defects of the genes that make up an attribute and genetic defects that undermine the development of an attribute. For example, consider a human being born without a hand. This may be because this human being lacks the genes to form the hand, or it may be that certain conditions needed for the genes to form the hand, e.g., prenatal nutrition, were blocked or lacking. In the former, this human being would not have the genetic basis for having a hand, since the human being lacks the genes that make up the hand. In the latter, the human being would still have the genetic basis for having a hand, because the genes that make up the hand are there and active, but they were blocked from developing because of certain conditions.

On this distinction, the genetic defects that we are likely to encounter in these severely defective human beings are not defects in the genetic basis for moral agency but at best defects that undermine the development for moral agency. For example, consider Phenylketonuria (PKU), Tay-Sachs, Sandhoff Disease and a whole cluster of about 7000 other kinds of genetic disorders, which are caused by the mutation of a gene.²⁰ The gene is typically necessary for producing a certain protein or enzyme, which is then needed to change certain chemicals to other chemicals or to carry substances from one place to another. Mental retardation and other defects are typically caused by abnormal build-ups of certain amino acids that become toxic to the brain and other tissues, because the cell is unable to process these amino acids owing to the mutation. But with treatment of a low enzyme diet as soon as possible in the neonatal age, normal growth and cognitive development can be expected in many cases. For our purpose, this shows that the brain tissue has initially developed normally and would have continued to do so except for the abnormal build up of the amino acids. Therefore, following the distinction between genetic defects that make up an attribute and genetic defects that undermine the development of the attribute, single gene defects seem to be cases of the latter rather than the former. Given this, one can say that human beings who have these kinds of genetic defects most likely have the genetic basis for moral agency.²¹

It might be necessary to concede that there is a theoretical possibility that a human being could lack the genetic basis for moral agency, even if all present cases of deletions are not cases in which human beings lack this basis.²² In particular, owing to advances in genetic engineering, someone might be able to create such an individual artificially. Of course, it could be questioned whether such an individual would be a human being at all. This raises the difficult issue of what makes a being human, and

whether the genetic basis for moral agency is an essential human property. At present, I do not know of a good answer to this question. Consequently, it should be admitted at least for now that it is theoretically possible that a human being could lack the genetic basis for moral agency. Still, we can conclude that for practical purposes, virtually all living human beings we are likely to encounter will have the genetic basis for moral agency.

The claim that the genetic basis for moral agency is sufficient for rightholding is attractive for several reasons. First, as this account practically supports the widely held intuition that all human beings are rightholders, for many, this would be a reason in favor of it.

Secondly, the genetic basis for moral agency is an identifiable, actual, physical attribute. This means that this account meets one of the primary conditions of the Species Neutrality Requirement. It also means that this account avoids speciesism. Indeed, if we were to learn that chimpanzees or some other animals have the genetic basis for moral agency, then they would be rightholders.

Thirdly, this account captures what is intuitively appealing (at least to some) about the species norm account, namely, it too is motivated by the thought that 'the kind of being that is typically characterized by moral agency' should be a rightholder. However, the genetic basis for moral agency account offers a more adequate interpretation of this claim, because on this account, one actually possesses an identifiable, actual, physical attribute and is not just a member of a group that possesses this attribute. In fact, this account can handle the kind of objection posed by McMahan against the species norm account. If a Superchimp has a rational nature as a result of gene therapy, this account can accommodate this case by locating this

nature in the genetic makeup of the Superchimp. Or, if Superchimps come to outnumber the normal chimpanzees, this account can explain how the two groups can be treated differently, if, for example, the Superchimps have the genetic basis for rational nature while the normal chimpanzees do not.

Finally, since the genetic basis for moral agency is only a sufficient condition for rightholding, it avoids the intuitive cost of denying the status of rightholding to those non-human animals or other beings who may plausibly qualify as rightholders but who may not have the genetic basis for moral agency. For example, even if a dog does not have the genetic basis for moral agency, the dog could still be a rightholder on other grounds. Or, suppose it were possible to genetically engineer a being to lack just one gene for the genetic basis for moral agency and still to be human, although this human being would not have the genetic basis for moral agency, this human being could still be a rightholder on other grounds.

Here it is worth mentioning that it is possible that some beings, e.g. some alien being or some super artificial intelligent being, could be made up of non-genetic, that is, non-carbon-based, isomorphic material, and still possess something functionally similar to the genetic basis for moral agency. In my view, they would also be rightholders, given that they have the physical basis for the development of moral agency even though they do not have the genetic basis for moral agency. Hence, a more precise name for this account should be the 'physical basis for the development of moral agency' account of rightholding. However, since most of the living beings we know are genetic-carbon based life forms, to keep things simple, I shall continue to refer to this account as the genetic basis for moral agency account.

The intuitive appeal of the genetic basis for moral agency account of rightholding should be easy enough to grasp. Some people might of course not share

these intuitions and they might demand that one produces an independent argument as to why one should believe this account. This demand may not be entirely fair though, since, as far as I am aware, those who advance other criteria for rightholding typically offer no non-circular, independent arguments for why their preferred criterion is relevant for rightholding. To give just one example, suppose one holds the view that if X has actual sentience, then X is a rightholder. It might be asked, why is this so? Asserting that 'pain is bad' does not seem to be providing an independent argument for this account. Arguably, this is just a circular way of restating that actual sentience is relevant. In any case, since my aim here to set out clearly the genetic basis for moral agency account and not to argue that it is the correct account of moral status, I shall leave this matter here. What I shall try to do in the remaining parts of the paper is to consider some possible objections to this account and to respond to these objections on its behalf.

III. Just a Potentiality Account?

To start, some might wonder if the genetic basis for moral agency account is just a potentiality account in disguise. That is, it might be thought that having the genetic basis for moral agency is just having the potential for moral agency. As such, so the argument goes, the genetic basis for moral agency account contributes nothing new to the debate and inherits all the problems that have been attributed to the potentiality account.

First, even if the genetic basis for moral agency account were just a potentiality account, this may not be a problem, because the arguments against the potentiality account are not conclusive. I do not want to defend the potentiality

account here, but let me present two oft-rehearsed arguments against the potential account. One goes as follows:

1. According to the potentiality account, if X is a potential F, then X has the same rights and interests as an actual F, where F could be a rightholder, human being, person, and so on.
2. However, potential F's typically do not have the same rights and interests as actual F's. For example, a potential president does not have the same rights and privileges as an actual president.
3. Therefore, the potentiality account is mistaken.

Clearly, proponents of the potentiality account would deny premise 1. No such proponent would hold the view that a potential rightholder has the same rights and interests as an actual rightholder. A more plausible interpretation of the potentiality account is something like "If X has the potential for V, where V denotes attributes such as moral agency, sentience, and so on, then X is an F, where F could be a rightholder, human being, person, and so on." For example, A.I. Melden has proposed that if X has the potential for moral agency, then X is a rightholder.²³ If so, a proponent of the potentiality account need not be making the kind of mistake that this argument attributes to her.

The other oft-rehearsed argument against the potentiality account is that if the potentiality account were correct, then sperm and ova would be rightholders, because on some notion of potential, they would be regarded as having the potential to be rightholders.²⁴

However, the term 'potential' has different meanings. It can mean 'possible.' For example, flour, water, eggs and raising powder have the potential to become a cake, which means that it is possible for these ingredients to become a cake.²⁵

‘Potential’ may sometimes also mean ‘probable.’ For example, one may say that the Lakers have the potential to win the NBA Championship. By this, one may mean that there is some probability that the Lakers will win the NBA Championship. Finally, ‘potential’ may mean that an entity, which has a certain nature, has an inherent capacity to realize its particular nature. For example, one may say that an acorn has a potential to become an oak. This may mean that the acorn has the inherent capacity to realize its nature of being an oak.²⁶

On the most plausible reading of potential, namely, in the third sense, sperm and ova do not have the inherent capacity to realize the nature of being an agent. At best, they have the inherent capacity to realize their nature of being functioning sperm and ova. Indeed, as Joel Feinberg has pointed out, critics who continue to insist that the potentiality of the sperm and ova is identical to the potentiality of the zygote are vulnerable to a *reductio ad absurdum*, namely, “[a]t the end of that road is the proposition that everything is potentially everything else, and thus the destruction of all utility in the concept of potentiality. It is better to hold this particular line at the zygote.”²⁷ Hence, the argument that sperm and ova could be rightholders is also not a problem for the most plausible potentiality account.

In any case, having the genetic basis for the development of a particular attribute is not the same thing as having the potential for a particular attribute. Consider a human being, Joe, with hands. We would say that Joe actually has hands and that Joe had the potential to have hands. But suppose Joe’s hands were accidentally sawed off in a wood factory. We would say that Joe no longer actually has hands and that Joe does not have the potential to have hands. However, we can still say that Joe has the genetic basis for the development of hands, because Joe still has the genes for the development of hands in him. Indeed, if Joe has a child, the

child will most likely develop hands. Or, consider another example. Friends of the potentiality account typically would accept that anencephalic infants do not have, and individuals in irreversible coma no longer have, the potential for moral agency.²⁸ As I have argued earlier though, anencephalic infants and individuals in irreversible coma both still have the genetic basis for moral agency. If so, having the genetic basis for the development of a particular attribute such as moral agency is not the same thing as having the potential for a particular attribute such as moral agency.

IV. Only Actual Agency Matters

As another possible objection, other people might argue that surely moral agency matters only if one can actually exercise it. On this view, the possession of the genetic basis for moral agency does not matter. What matters is that one actually has the capacity to act in light of moral reasons. Indeed, some people will say that the value of the genetic basis for moral agency is entirely derived from the value of actual moral agency.

But actual moral agency cannot be the sole ground for rightholding. The reason is that if rightholding served any function at all, one would be the following:

If and when the rightholder's interest is in conflict with the same kind of interest, that is, with the comparable interest, of a non-rightholder, the rightholder's interest should prevail.

A corollary of this is that if one were to give the interest of a non-rightholder priority over the comparable interest of a rightholder, then one would be acting wrongly.

For example, normal adult human beings are typically regarded as rightholders, whereas normal adult turtles are not (Those who believe that all animals have rights may be unhappy with this example. If so, I suggest that they substitute the turtle with whatever they would regard as a non-rightholder. The general point would remain valid). Suppose this is correct, and suppose rightholding has the function I suggested, this means that if and when the interest of a normal adult human being conflicts with the comparable interest of a normal adult turtle, one ought to give the interest of the human being more weight. Hence, if a normal adult turtle and a normal adult human being both require rescue (suppose both are crossing the street and are in danger of being hit by oncoming traffic), and suppose that one can only save one of them, then one ought to save the human being, because the turtle is not a rightholder while the human being is. If one did not do this, then one would be acting wrongly. This does not mean that one does not have any duties at all regarding non-rightholders. For example, if a turtle requires rescue and it would cost one little effort to save it, it seems that one would have a duty to save the turtle. It also does not mean that any interest of a rightholder would be more important than any interest of a non-rightholder. If the turtle requires rescue and it would cost one little effort to save it, and suppose that I, a rightholder, am having a cup of tea at the moment, it seems that I may have a duty to save the turtle even if my tea may become cold.

If actual moral agency is the sole ground for rightholding though, adult human beings would be rightholders while human infants would not be, as the latter do not have actual moral agency. If rightholding has the function I suggested, it would mean that an adult human being's interest should be given priority over the comparable interest of an infant. And, if one were to give an infant's interest priority over the comparable interest of an adult human being, then one would be acting wrongly. Yet,

it is often permissible to give the interests of infants priority over the comparable interest of adult human beings. For example, suppose a human baby and a human adult who has only a short period to live are drowning, and one can only save one of them. It seems permissible to save the baby rather than the adult. Or, in a high sea when a ship is sinking, it seems permissible to give infants the priority to be in the lifeboat instead of the adults.²⁹ These examples suggest that either we are wrong to think that it is sometimes permissible to give infants preference over adults, or actual moral agency is not the sole basis for rightholding. Our intuition is that it is at least permissible and not morally wrong to give infants preference over adults. This suggests that actual moral agency cannot be the sole ground for rightholding.

Some might say that the human baby versus human adult case is not a case in which comparable interests are at stake. In particular, it might be said that from the perspective of a whole lifetime, the baby has more at stake, because all things being equal, it has more years of good life to lose.³⁰ However, suppose the choice was between the same adult (a rightholder with only a short time to live) and a long-living turtle (a non-rightholder, which would lose many years of good life as a result of death). It would not be permissible to save the turtle just because it has more years to lose. So the fact that the baby may have more years of good life to lose cannot be the reason why it is permissible and not morally wrong to save the baby.

But even supposing that the baby and the human adult both have the same number of years to live, it still seems permissible to save the baby at least sometimes. For example, it seems permissible for a mother to save her baby instead of a stranger. One might add that this is so not just because it is *her* baby. Indeed, suppose the mother was instead faced with the choice of saving her turtle or a stranger, both

having comparable interests at stake. Even though it is *her* turtle, it would be wrong for her to save the turtle, given that the turtle is not a rightholder.

Others might argue that the problem is that the status of rightholding does not have the function I discussed above. They might point out that sometimes non-rightholders' interests are given priority over the comparable interest of a rightholder. For example, suppose to rescue an adult human being who only has a short period to live, one must blow up a gigantic planet that contains many wonderful life forms, none of which are rightholders. One might decide against blowing up the planet. If so, this seems as if non-rightholders' interests can sometimes be given priority over the comparable interest of a rightholder.

However, the argument that the status of rightholding has the function I discussed above need not claim that the interest of a rightholder can never be outweighed by any amount of non-rightholders' interests. In fact, the rule implies that the comparison should be one to one, that is, one rightholder's interest versus a comparable interest of a non-rightholder; and, not one to a larger number. On a one to one basis, I cannot think of an example where it would be permissible to give preference to a non-rightholder's interest over a comparable interest of a rightholder. At the same, there are many instances where it seems permissible to save an infant's life over that of an adult human being, even if the infant does not have more to lose.

Still others might suggest that perhaps we save the infants not because the infants are rightholders but because in doing so, we would be promoting the interest of rightholders, namely, the interest of the parents. This argument may have some plausibility if the choice is between saving an infant and the infant's parent, and the parent has given indications that he would want the infant rather than himself to be saved. But even when the choice is between saving an infant and an unrelated adult

human being, it often still seems permissible to give preference to the infant. If this is right, this is one reason why actual moral agency cannot be the sole ground for rightholding.

V. Actual Agency Matters More

Still other people might accept that the genetic basis for moral agency matters somewhat for moral status, but they might insist that actual moral agency always matters more, and therefore, only those with actual moral agency should be rightholders. For example, suppose an IVF clinic is burning and one could either save an embryo, which has the genetic basis for moral agency, or a five-year-old child, who has actual moral agency.³¹ It seems that one should save the five-year-old. If so, this seems to show that actual moral agency matters more.

First, this case does not show that actual moral agency always matters more. Imagine a variant of this case in which another IVF clinic is burning, and there is another embryo and another five-year-old child. This time though, the five-year-old child has inhaled too much smoke, has temporarily passed out, and will die soon (in a few days time) and the embryo happens to belong to you. You have been desperately trying to have a child for years and the doctors tell you that this time there is a very good chance you will succeed, but that this is your last chance to have your own biological child. Is it so intuitively clear that you should save the five-year-old? My intuition is not as clear in this case. Indeed, I think you may be permitted to save your last embryo. Note that suppose the alternative is between saving the five-year-old and saving, for example, your beloved Picasso painting. Clearly, you should save the five-year-old. This suggests that the reason why you may be permitted to save the embryo in this case is not just because the embryo is *your* embryo, since the Picasso is

also *your* Picasso. If this is right, there may be certain circumstances in which saving someone with the genetic basis for moral agency matters more than saving someone with actual moral agency.

In any case, it is not necessary to deny that often an actual moral agent will matter more than a being with just the genetic basis for moral agency. But this would not show that the two beings have different moral status. Indeed, when a stranger and one's partner are both drowning, other things being equal, one's partner typically matters more than the stranger; but this would not show that the two have different moral status.

Because an embryo typically has a greater future potential than a grown child, some people might worry instead that the genetic basis for moral agency account implies that we should always save the embryo rather than the child. This implication need not follow. First, just as there could be agent-relative reasons for choosing one's embryo, there could also be agent-relative reasons for choosing one's grown child, even if the embryo indeed has a greater future potential. Secondly, there could also be agent-neutral considerations why one would choose the grown child over the embryo. In particular, it could be argued that the embryo will have little or no *time-relative interests* while the grown child may have very strong time-relative interests.³² To have time-relative interests is to be able to stand in some psychological relations to one's future and past selves. The strength of one's present time-relative interests depends on how strongly one is psychologically connected to those future and past selves. For example, an infant will typically have weaker time-relative interests in continuing to live than a grown adult, since an infant has little or no awareness of his or her future self. Similarly, the embryo will have little or no time-relative interests, since the embryo will not have the required capacities to be able to stand in some

psychological relations to the embryo's future and past selves. The grown child, on the other hand, may have very strong time-relative interests, since the child could by then have fully developed psychological capacities. If so, this could provide an agent-neutral reason to choose the grown child over the embryo, because although the grown child may have less future potential, the grown child may have stronger time-relative interests. Still, the fact that there is a difference in time-relative interests between the embryo and the grown child need not be taken to mean that there is also a difference in moral status.³³

VI. Anencephalic Infants and Embryos Cannot Have Interests

Some people might ask, in what sense can anencephalic infants and embryos have interests that can ground rights? Following Feinberg, many people hold that to have an interest is to be interested in something, which requires that one has the capacity to desire and want things and to be self-aware.³⁴ Given that anencephalic infants and embryos lack brains, they lack the capacity to desire and want things. Consequently, on this view of interest, they cannot have interests that can ground rights.

First, it is worth pointing out that healthy newborn infants would also not be able to have this kind of interest. Indeed, newborn infants are hardly self-aware. In fact, it has been argued that infanticide is permissible given that newborn infants cannot have this kind of interest.³⁵ Surely, this is a bullet one would not want to bite too quickly.

Secondly, unless proponents of this point wish to win the argument by stipulation, there is an alternative view of interest that is equally common and plausible. That is, one can have an interest if something is in one's interest, namely, if something can affect one's flourishing, even if one is not able to be interested in it.³⁶

For example, as a number of writers have argued, it is in the interest of a plant to be watered, as the plant will die if it does not receive adequate water, even though the plant is not able to be interested in being watered.³⁷ Or, an individual in a deep coma can have an interest in being fed, even if the individual cannot desire being fed. If plants or individuals in deep coma can have this kind of interest, then anencephalic infants and embryos can also have this kind of interest. For example, it may be in their interest not to be destroyed or mutilated, not to be used as food or objects of experimentation or play, and possibly not to be used as sources of organs. Some people might insist that plants cannot have interests because according to them, plants are merely valuable in so far as they are valuable to us, and not for their own sake. But from a biological perspective, a plant can certainly need water for its own sake. In any case, there is no reason to think that anencephalic infants and embryos cannot be valuable for their own sake and cannot have interests in this sense.

Thirdly, Feinberg defends the more restrictive notion of interest because he holds the view that being able to have an interest is a sufficient condition for rightholding, and the view that entities such as plants cannot be rightholders.³⁸ However, one can deny that being able to have an interest is a sufficient condition for rightholding. If so, there would be less pressure to have this restrictive notion of interest. On a view according to which having an interest and having rights are two different matters, the fact that a plant can have interests would not mean that it is a rightholder. Indeed, anencephalic infants and embryos are rightholders because they have the genetic basis for moral agency, and not just because they can have interests.

VII. A Reductio?

The last objection I will consider here is that some might think that the genetic basis for moral agency account faces a possible *reductio ad absurdum*. According to this line of thought, it seems that every human cell has the genetic basis for moral agency, since theoretically it is possible to produce a human being from any human cell. But if every human cell has the genetic basis for moral agency, would it not follow that every human cell is a rightholder? Clearly, human cells are not rightholders. So there must be something wrong with this account.

This argument fails however because human cells are not beings; they are parts of a being. It is not so easy to distinguish a being from parts of a being, but it seems that the kind of being at issue is some sort of a self-contained organism that is ready to develop into an individual or that is developing as an individual *as long as nutrients and normal developing conditions are provided*. On this view, a human cell is not a being, because it is not a self-contained organism ready to develop into an individual or that is developing as an individual as long as nutrients and normal developing conditions are provided.

Moreover, for a human cell to become a human being, its nature must be significantly changed – to the extent that it would stop being a human cell. Specifically, given present technologies, one must de-differentiate the genetic material of a human cell, that is, make the cell unspecialized, e.g. make a skin cell into an unspecialized cell; and transfer the genetic material to a viable egg. As I noted before, for a being to qualify as having the genetic basis for moral agency, it is not enough just to have the genes for the genetic basis for moral agency located somewhere in the being; these genes must be activated and be coordinating with each other in the appropriate manner, which is not the case with normal human cells.

This last point allows us to respond to some hypothetical examples involving injecting or integrating the genes for the genetic basis for moral agency into non-human entities. For example, suppose we injected these genes into a cabbage, would the cabbage be a rightholder?³⁹ To answer this question, we should inquire whether these genes are integrated into the cabbage or not. If they are, then the cabbage may no longer be a cabbage, since its nature may have changed. In such a case, the resulting being may be a rightholder, given that it has the genetic basis for moral agency. A real life parallel may be transplanting human genes into a rabbit egg and creating an embryo with human characteristics.⁴⁰ Arguably, such an entity may be a rightholder. On the other hand, suppose that the genes for the genetic basis for moral agency are not integrated into the cabbage, but instead these genes just sit inside the cabbage. In such a case, the cabbage may not have the kind of moral status that a cabbage with integrated genetic basis for moral agency may have.

VIII. Conclusion

In this paper, I proposed that the genetic basis for moral agency account of rightholding can allow all human beings to be rightholders without being speciesist. Although I did not try to argue that this account is the correct account of human moral status, I did argue that this account is different from a potentiality account and that it is preferable to an actual moral agency account of human moral status. While it was beyond the scope of this paper to consider all issues arising from this account, I have laid out some of its particular strengths. By being able to incorporate the intuition that an appropriate account of rightholding should be species neutral and by being able to explain how all human beings are rightholders, the genetic basis for moral agency account appears to provide a real and coherent alternative to present accounts of

rightholding and therefore deserves further study and to be part of the debate about the foundations of human moral status.⁴¹

¹ Scanlon, T. *What We Owe to Each Other*. Cambridge, Mass.: Belknap Press, 1998, p. 185.

² Williams, B. "The Human Prejudice." In *Philosophy as a Humanistic Discipline*, edited by A. W. Moore, 135-54. Princeton: Princeton University Press, 2008, p. 142.

³ See e.g., Singer, P. *Practical Ethics*. 2nd ed. Cambridge: Cambridge University Press, 1993. There is conceptual space for a position, according to which all human beings as well as some other animals are rightholders. Such a position would not necessarily be speciesist. In fact, the account I shall develop may be an example of such a position. As far as I am aware, such a position has not been advanced in the literature.

⁴ Feinberg, J., and B. B. Levenbook. "Abortion." In *Matters of Life and Death*, edited by T. Regan. New York: McGraw-Hill, 1993.

⁵ Vlastos, G. "Justice and Equality." In *Theories of Rights*, edited by Jeremy Waldron, 41-76. Oxford: Oxford University Press, 1984; Dworkin, R. *Life's Dominion*. New York: Alfred A. Knopf, 1993.

⁶ McCloskey, H. J. "Respect for Human Moral Rights Versus Maximizing Good." In *Utility and Rights*, edited by R. G. Frey, 121-36. Oxford: Basil Blackwell, 1985; Nozick, R. "About Mammals and People." *New York Times Book Review*, November 27: II, 29-30; Williams, "The Human Prejudice," op. cit.

⁷ Finnis, J. "A Philosophical Case against Euthanasia." In *Euthanasia Examined: Ethical, Clinical, and Legal Perspectives*, edited by J. Keown. Cambridge: Cambridge University Press, 1995, p. 48. Readers will notice that Finnis is talking about persons, whereas I have been discussing rightholders. In this paper, I understand the terms "rightholding" and "personhood" interchangeably. Some people who equate rightholding with personhood also hold a particular conception of personhood, namely, all and only those who are actual moral agents are persons. Consequently, they believe that all and only those who are actual moral agents are rightholders. I do not hold this view. Others equate personhood with actual moral agency, but not with rightholding. As many of them also believe that some non-moral agents, e.g. animals, can also be rightholders, these people argue that personhood is only a sufficient but not a necessary condition for rightholding. Since my equating rightholding with personhood is a

stipulation, nothing substantive follows from it. If animals are rightholders, then, as I understand these terms, they would be persons, even if they are not actual moral agents.

⁸ Scanlon, *What We Owe To Each Other*, p. 186.

⁹ McMahan used the term 'species norm account' to describe something different, namely, a view about the nature of fortune and misfortune. This term is useful though for capturing the ideas advanced by writers such as Finnis and Scanlon. See McMahan, J. *The Ethics of Killing: Problems at the Margins of Life*. Oxford: Oxford University Press, 2002, pp. 146-149, pp. 209-217.

¹⁰ McMahan, *The Ethics of Killing*, pp. 146-149. Some might question whether the Superchimp would still be a chimpanzee if in fact it has rational capacities. This is a difficult issue as it involves knowing the nature of being a chimpanzee. I do not know of a good answer to this question at present. Hence, at least for now, I think we should give McMahan the benefit of the doubt and allow for the disjunction between having rational capacities and being a chimpanzee.

¹¹ Moore, G. E. *Principia Ethica*. Cambridge: Cambridge University Press, 1959, has cautioned that we should not try to derive an Ought from an Is. It is not possible to do justice to this important question here, but arguably, empirical attributes in the world play some role in giving moral agents certain moral reasons for action (whether these empirical attributes do so directly, as, e.g., when one derives an Ought directly from an Is, or indirectly via some other means, seems to be another matter). For example, it seems that an empirical phenomenon such as pain does play some role in giving moral agents moral reasons to avoid causing it and to alleviate it if and when they can. If the empirical phenomenon of pain did not exist, there would not be a moral reason to alleviate it. If this is right, we can begin to understand how internal, empirical attributes can play some role in determining what we ought to do. See, e.g., Griffin, J. *Value Judgement: Improving Our Ethical Beliefs*. Oxford: Clarendon Press, 1996, for this point.

¹² See, e.g., Singer, *Practical Ethics*, op. cit.

¹³ Thomson, J. J. "A Defense of Abortion." *Philosophy and Public Affairs* 1 (1971): 47-66, pp. 48-49. In Liao, S. Matthew. "Rescuing Human Embryonic Stem Cell Research: The Blastocyst Transfer Method." *American Journal of Bioethics* 5, no. 6 (2005): 8-16, I argue that even if embryos were rightholders, there are still permissible ways of pursuing embryonic stem cell research.

¹⁴ See, e.g., Wellman, C. *Real Rights*. Oxford: Oxford University Press, 1995, p. 113.

¹⁵ Piaget's work in human cognitive development, for example, supports the idea that rationality develops according to a fairly predictable schedule. For the claim that the development of empathy in human beings also follows certain prescribed progression, see Hoffman, M. L. "Moral Development." In *Developmental Psychology: An Advanced Textbook*, edited by M. H. Bornstein and M. E. Lamb, 497-548. NJ: Erlbaum, 1988; Martin, G. B., and R. D. Clark, III. "Distress Crying in Neonates: Species and Peer Specificity." *Developmental Psychology* 18 (1982): 3-9.

¹⁶ I thank David Wasserman for this point.

¹⁷ Other environmental factors include undiagnosed diabetes; hypervitaminosis A; high temperatures of 102 degrees or higher for more than 5 hours; anticonvulsant medication, especially valproic acid (valporate); or environmental/chemical exposure. See, e.g., CDC. "Effectiveness in Disease and Injury Prevention: Use of Folic Acid for Prevention of Spina Bifida and Other Neural Tube Defects, 1983--1991." *Morbidity and Mortality Weekly Report* 40, no. 513-6 (1991); MRC Vitamin Study Research Group. "Prevention of Neural Tube Defects: Results of the Medical Research Council Vitamin Study." *Lancet* 338 (1991): 131-7.

¹⁸ It is true that there are some cases of anencephaly that are the result of genetic causes. But at the moment, it is an open question whether anencephaly even has a genetic cause. Scientists know that some genetic disorders such as Waardenburg syndrome seem to correlate with a higher incidence of anencephaly. But there is no reason at the moment to believe that anencephaly is the result of a defect of the genes that make up moral agency.

¹⁹ About 3-4% of the mentally retarded population is severely retarded, and only 1-2% of the mentally retarded population is classified as profoundly retarded. See, e.g., American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 4th ed. Washington, DC: American Psychiatric Press, Inc., 1994. Batshaw, M. L., and B. K. Shapiro. "Mental Retardation." In *Children with Disabilities*. 4th ed. Ed. M. L. Batshaw. Baltimore: Paul H. Brookes, 1997.

²⁰ U.S. Genome Project, Genetic Issues in Mental Retardation: A Report on The Arc's Human Genome Education Project. 1:1 <http://www.thearc.org/pdf/gbr01.pdf>

²¹ There are other kinds of genetic defects that involve more than a single gene. As far as I know, either those defects are so severe that the fetuses typically die before birth, or individuals with these defects typically only have mild mental retardation. See, e.g., American College of Obstetricians and

Gynecologists. Prenatal diagnosis of fetal chromosomal abnormalities. ACOG Practice Bulletin, 27 (May 2001).

²² I thank Jeff McMahan for this point.

²³ Melden, A. I. "Do Infants Have Moral Rights." In *Whose Child?*, edited by William Aiken and Hugh LaFollette, 199-220. Totowa, New Jersey: Littlefield, Adams & Co., 1980, pp. 210-211.

²⁴ See, e.g., Harris, J. *The Value of Life*. London: Routledge & Kegan Paul, 1985, pp. 11-12; Sumner, L. W. "Abortion." In *Health Care Ethics: An Introduction*, edited by D. Van DeVeer and T. Regan, 162-183. Philadelphia: Temple University Press, 1987, p. 174; Warnock, M. "Do Human Cells Have Rights?" *Bioethics* 1, no. 1 (1987): 1-14, p. 12.

²⁵ See, e.g., Glover, J. *Causing Death and Saving Lives*. Harmondsworth: Penguin, 1977.

²⁶ See, e.g., M. Reichlin, "The Argument from Potential: A Reappraisal," *Bioethics* 11, no. 1 (1997); S. Buckle, "Arguing from Potential," *Bioethics* 2 (1988): 227-253; R. Hursthouse, *Beginning Lives* (London: Blackwell, 1987); K. Young, "The Zygote, the Embryo, and Personhood: An Attempt at Conceptual Clarification," *Ethics & Medicine* 10, no. 1 (1994): 2-7, p. 4; Wade, F. "Potentiality in the Abortion Discussion." *Review of Metaphysics* 29, no. 2 (1975): 216-55, p. 245; Gillett, G. "Women and Children First." In *Medicine and Moral Reasoning*, edited by K. Fulford, G. Gillett and J. Soskice, 131-43. Cambridge: Cambridge University Press, 1994, p. 132.

²⁷ Feinberg and Levenbook, "Abortion," *op. cit.*

²⁸ See, e.g. Sumner, *Abortion*, p. 173; Freedman, M. *Rights*. Milton Keynes: Open University Press, 1991, p. 59, who argues that the potentiality account has this implication. See also Marquis, D. "Why Abortion Is Immoral." *Journal of Philosophy* 86 (1989): 183-203.

²⁹ Some might suggest that perhaps infants are given preference because they are smaller. However, this cannot be the explanation, since if someone were to have a small turtle, and assuming that turtles are not rightholders, we would not give the turtle preference over an adult male just because it is smaller.

³⁰ See, e.g., Rachels, J. (1986). *The End of Life: Euthanasia and Morality*. Oxford, Oxford University Press, p. 6; Marquis, "Why Abortion is Immoral," p. 189.

³¹ See, e.g., Liao, S. Matthew. "The Embryo Rescue Case." *Theoretical Medicine and Bioethics* 27, no. 2 (2006): 141-47.

³² The concept of time-relative interest comes from McMahan, *The Ethics of Killing*, pp. 80, 170-174, 183-188. See also Liao, S. Matthew. "Time-Relative Interests and Abortion." *Journal of Moral Philosophy* 4, no. 2 (2007): 242-56.

³³ I develop this point in greater detail in Liao, "The Embryo Rescue Case," *op. cit.*

³⁴ Feinberg, J. "The Rights of Animals and Unborn Generations." In *Rights, Justice, and Bounds of Liberty*. Princeton, Princeton University Press, 1980: 159-84.

³⁵ See, e.g., Singer, *Practical Ethics*, Chs. 2 and 4.

³⁶ For philosophers who have argued that Feinberg's notion of interest is too narrow and that some nonsentient entities such as plants can also have interests, see, e.g., Varner, G. In *Nature's Interests? Interests, Animal Rights, and Environmental Ethics*. New York, OUP, 1998; Goodpaster, K. "On Being Morally Considerable." *Journal of Philosophy*. 1978; 75: 308-325.

³⁷ See, e.g., Varner, *In Nature's Interests?*, *op. cit.*; Goodpaster, "On Being Morally Considerable," *op. cit.*

³⁸ Feinberg, "The Rights of Animals and Unborn Generations," *op. cit.*

³⁹ I thank Agnieszka Jaworska for this point.

⁴⁰ Chen, Ying, He, Zhi Xu, et al. "Embryonic Stem Cells Generated by Nuclear Transfer of Human Somatic Nuclei into Rabbit Oocytes." *Cell Research* 13, no. 4 (2003): 251-63.

⁴¹ I would like to thank Jeff McMahan, Peter Singer, Julian Savulescu, James Griffin, John Broome, Roger Crisp, David Archard, Nick Bunnin, the late Geoffrey Marshall, Wibke Gruetjen, David Wasserman, Nick Shea, David DeGrazia, Joseph Shaw, Nick Bostrom, Dan Robinson, Nic Southwood, Agnieszka Jaworska, Nathan Nobis, Michael Walzer, Clifford Geertz, Chris Grau, Anders Sandberg, Steve Clarke, and audiences at the Institute for Advanced Studies at Princeton, City University of Hong Kong, Princeton University, University of Northern Florida, Joint Session of the Mind Association and the Aristotelian Society (2004) at University of Kent, Georgetown University Work in Progress Bioethics Seminar, City University of New York, University of South Carolina, and the Society for Applied Philosophy Congress at St. Anne's College, Oxford, for their comments on earlier versions of this paper.