

Of Mice and Men: Equality and Animals*

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Originally published in *Journal of Ethics* 9 (2005): 403-433.

Reprinted, with slight revisions, in *Egalitarianism: New Essays on the Nature and Value of Equality*, edited by Nils Holtug and Kasper Lippert-Rasmussen (Oxford University Press,

2006).*

Abstract: Can material egalitarianism (requiring, for example, the significant promotion of fortune) include animals in domain of the equality requirement? The problem can be illustrated as follows: If equality of wellbeing is what matters, and normal mice are included in this egalitarian requirement, then normal mice have a much stronger claim to resources than almost any human. This is because their wellbeing is much lower than that of normal humans. Thus, equality of wellbeing requires a massive shift of resources away from most humans to most mice. This view, however, seems crazy. I explore this problem and propose a solution.

1. Introduction

I shall address a problem that can arise for a certain kind of egalitarianism once sentience is recognized as a sufficient condition for moral standing and speciesism is rejected. Consider the following conditions, where wellbeing is understood to be quality of life in an absolute sense:

Moderate Egalitarianism: Morality requires that, perhaps subject to certain relatively weak constraints, we significantly promote equality of fortune among individuals with moral standing.

Fortune as Wellbeing: Fortune is wellbeing (quality of life), opportunity for wellbeing, or brute

luck wellbeing.

Sufficiency of Wellbeing for Moral Standing: The capacity for wellbeing is sufficient for moral standing.

Mouse Wellbeing: Mice have the capacity for wellbeing (because they are sentient), but most human beings have more wellbeing (opportunity for wellbeing, or brute luck wellbeing) than most mice.

Given certain plausible empirical assumptions, these conditions lead to the following conclusion:

The Problematic Conclusion: Morality requires a massive shift of resources away from most humans—even most of those with significantly diminished human lives—to most mice.

If equality of wellbeing is what matters, and normal mice have moral standing, then normal mice have a much stronger claim to resources than almost any human. This is because the wellbeing of normal mice is much lower than that of normal humans. Thus, equality of wellbeing requires a massive shift of resources away from most humans to most mice. This view, however, seems crazy. It may well be that mice should have much more resources than they currently have. It seems quite implausible, however, that morality requires that almost all mice have more resources than almost all humans. Of course, the same problem arises for any other animal species with the capacity for wellbeing.

Of course, this apparent implausibility may simply be the result of our failure to rid

ourselves fully of speciesist prejudice against non-human animals. In this paper, however, I shall assume for the sake of argument that the conclusion is indeed wildly implausible and examine ways in which it can be avoided.

Although I shall focus on the problem that arises when egalitarianism covers sentient non-human animals such as mice, it's important to note that a version of the problem can arise even within a given species. Within a given species, such as homo sapiens, there is variability in the capacities and potentials for wellbeing. Equality of wellbeing requires a massive shift of resources from normally-abled humans to humans with innately limited capacities and potentials. Many people find this implication almost as absurd as the corresponding implication concerning mice. Most egalitarians, however, do not find this implication so absurd. They are quite willing to accept that genuine equality among humans may require very radical redistribution of resources to the disadvantaged. I therefore focus on mice, since most egalitarians will, I believe, find the implication there absurd.

The general problem is not new. Most of the groundbreaking work was done by Jeff McMahan (1995, 2002) and others.¹ My contribution is to give a more general characterization of the problem and to explore some new solutions.

2. The problem examined

For simplicity, throughout I shall write as if the only beings with the capacity for wellbeing are mice and humans. Nothing of substance depends on this. In addition, for simplicity, I will assume a fixed set of individuals, and thus ignore the problems that arise when choices affect who exists.

The problematic conclusion is generated in part from the assumption that mice have the capacity for wellbeing but typically have lower wellbeing than most humans. The first part of

this premiss is plausible, since mice are sentient (i.e., capable of pleasure and pain), and sentience is sufficient for the capacity for wellbeing (since pain and pleasure are components of wellbeing). The second part of the premiss—that mice typically have less wellbeing (opportunity for wellbeing, brute luck wellbeing) than most humans—is plausible for the following reasons. The typical human capacity for wellbeing is much greater than the typical mouse capacity for wellbeing. Part of wellbeing (what makes a life go well) is the presence of pleasure and the absence of pain. The typical human capacity for pain and pleasure is no less than that of mice, and presumably much greater, since we have, it seems plausible, more of the relevant sorts of neurons, neurotransmitters, receptors, etc. In addition, our greater cognitive capacities amplify the magnitude of pain and pleasure. Moreover, wellbeing does not depend solely on pain and pleasure. It's controversial exactly what else is relevant—accomplishments, relationships, and so on—but all accounts agree that typical humans have greater capacities for whatever the additional relevant items are. In short, typical humans have greater capacities for wellbeing than typical mice. This leaves open, however, whether typical humans *realize* greater wellbeing than typical mice. This is an empirical question. For some species, such as chimpanzees, it may be that, although their typical capacity for wellbeing is somewhat lower than ours, their typical realized wellbeing (e.g., if living freely in the wild) may be greater than that which we typically realize. For mice, however, this is quite improbable (although still an empirical question). Their capacity for wellbeing is radically lower than ours, and, as a result, it is quite plausible that most mice realize less wellbeing than most humans.

The problematic conclusion also rests on the claim that the capacity for wellbeing is sufficient for moral standing. There are two main ways of challenging this assumption. One is to hold that moral standing requires that the individual be rationally autonomous or psychologically sophisticated in related ways. Rational autonomy is clearly relevant and gives possessors a

special kind of moral standing (e.g., because their will is morally relevant), but, as is well known, it seems quite arbitrary to limit moral standing to autonomous agents. In addition to sentient animals, this view implausibly excludes infants and severely cognitively impaired persons from moral standing. The second main way to deny that mice have moral standing is to endorse a form of speciesism and to claim that moral standing requires that the individual be a member of a species (such as *homo sapiens*) whose ‘normal’ adult members are rationally autonomous or psychologically sophisticated in related ways. The problem with this view is that it is quite implausible that one individual would have moral standing, while another with the same capacities and potentials does not, merely because of a difference in species-membership (just as it is implausible in the cases of race and sex). In what follows, I shall assume (without any defense) that at least many non-autonomous animals with the capacity for wellbeing (and mice in particular) have moral standing.²

The argument for the problematic conclusion also assumes moderate egalitarianism for all being with moral standings. Of course, there are many ways of objecting to moderate egalitarianism. Some may completely reject any demands of equality. Others may hold that the demands of equality apply to only *some* beings with moral standing. Many (and probably most) egalitarians, for example, hold that the requirements of equality apply only to rationally autonomous agents. Non-autonomous sentient animals may have moral standing (and thus be protected against certain kinds of harm), but they have no claim to equality of wellbeing (etc.) with autonomous agents.³ I see little reason, however, to exclude sentient animals from the domain of equality, and I shall simply assume that they are included.

Moderate egalitarianism holds that morality requires, perhaps subject to some weak constraints, that equality be *significantly* promoted. It does not necessarily require that we maximize equality. It may leave agents with some moral freedom to pursue their own projects

(i.e., options). Of course, if the requirement that equality be promoted were very weak, then few significant implications would follow. Moderate egalitarianism, however, requires—plausibly in my view—that equality be significantly promoted. In what follows, I shall tend to illustrate claims by assuming that equality must be maximized, but significant implications follow as long as the equality promotion requirement is significant.

Moderate egalitarianism allows that there may be some relatively weak constraints on the promotion of fortune. One constraint that is highly plausible is that options should be *Pareto optimal*, that is, such that no one can be made better off without making someone worse off. The requirement of Pareto optimality is a weak efficiency requirement, and imposing it ensures that equality is not required when this would involve leveling down (i.e., making some worse off and no one better off). Let us now stipulate that a constraint on the promotion of equality of fortune is *relatively weak* just in case it does not typically rule out a high proportion of the Pareto optimal distributions of wellbeing. This stipulative definition ensures that imposing the constraint of Pareto optimality is relatively weak, and thus permits moderate egalitarianism to avoid the objection that it requires leveling down. This definition of relative weakness also allows that moderate egalitarianism may impose some deontological constraints against killing, harming, and so on—provided that these constraints do not typically rule out a high proportion of the Pareto optimal distributions of wellbeing.

It's important to note that requirement that the constraints on equality promotion be relatively weak is crucial to generating the problem of mice. The simple version of the problem can be avoided if the constraints need not be relatively weak. For example, if the constraint of efficiency is strengthened from Pareto optimality to total wellbeing maximization (i.e., utilitarianism), then the problem need not arise in its simple form. In this case, equality would play the limited role of selecting among those distributions that maximize the total. Given that

typical mice are much less efficient than typical humans at generating wellbeing from resources—at least once their basic needs are met—this view will typically require that mice get some resources, but it will not require that they get as much as humans.

There are other ways that the problem can be avoided by imposing relative strong constraints prior to the demands of equality. For example, there may be an *agent-neutral* neutral constraint requiring that *all rational agents* have (to the extent possible) minimally adequate levels of wellbeing. Alternatively, there may be an *agent-relative* constraint requiring that *all members of one's species* have minimally adequate levels of wellbeing. If the minimally adequate level is set high enough, each of these constraints would radically limit the demands of equality (and thus not be relatively weak) and thus avoid the requirement for a massive shift from humans to mice.

Moderate egalitarianism can, as I have indicated, be challenged on several grounds. Nonetheless, many (myself included) find it highly plausible. In what follows, I shall simply assume that it is true and investigate how the problematic conclusion can be avoided for moderate egalitarianism.

It's worth noting, however, that, although we shall focus on egalitarianism, the problematic conclusion can arise for any theory of morality that gives significant concern to providing benefits to those whose *level* of wellbeing is low in a certain sense. Thus, for example, the problem can arise for sufficientarian theories of morality, which require that each individual's level of wellbeing be adequate in some specified sense. If the level of adequacy is, for example, set in a species-independent way somewhere between the average level for mice and the average level for humans, sufficientarianism will require a massive shifting of resources from humans to mice. The problem can also arise for leximin prioritarianism and for forms of weighted total prioritarianism that give significantly greater weight to those whose wellbeing

level is lower. For simplicity, however, we shall focus on moderate egalitarianism.

The final assumption in the argument for the problematic conclusion is Fortune as Wellbeing. This holds that fortune—that which is to be equalized—is wellbeing, initial opportunity for wellbeing, or brute luck wellbeing (i.e., impact on wellbeing of events that the individual could not reasonably have influenced). Obviously, the claim that wellbeing is the sole source of that which is to be equalized is controversial. Alternative possibilities include capabilities (i.e., effective opportunities to function), the competitive value (based on supply and demand) of resources, and primary goods (i.e., resources the possession of which are in an individual's interest, no matter what her conception of the good). Although I shall continue to focus on wellbeing, the problem arises for these conceptions of fortune as well. The problem is particularly acute for wellbeing and capabilities, since each assesses the value of resources for an individual in terms of their value for the individual (as opposed to their value in general). Individuals, such as mice, that (beyond some minimal level) are poor converters of resources into what ultimately matters (wellbeing or capabilities) thus need more resources to achieve the requisite equality. The problem also arises, although in a diminished form, for resources and primary goods. Because these views are not sensitive to what a particular individual can do with resources, they do not require giving mice larger shares to compensate for their more limited abilities to convert resources into wellbeing or capabilities. Nonetheless, given the other assumptions, these views do require giving mice an equal share of resources or primary goods, and even this seems absurd.

One final point: Old-style egalitarianism tended to require that outcome advantage (e.g., wellbeing) be equalized, but contemporary egalitarianism tends to favor initial opportunity for advantage, or brute luck advantage, on the grounds that they leave greater room for accountability for one's choices. The problem at hand, however, does not depend on this issue,

and for brevity I shall therefore use the term ‘wellbeing’ to cover wellbeing, initial opportunity for wellbeing, and brute luck wellbeing. For simplicity I shall typically focus on outcome wellbeing.

Something about Fortune as Wellbeing is, we shall assume, right. Nonetheless, in what follows, I shall examine several ways of modifying it so as to avoid the problematic conclusion.

3. Fortune as species-potential ratio-wellbeing

Fortune as Wellbeing holds that fortune (the equalisandum of equality) is wellbeing, where outcome wellbeing is understood as the quality of life on some absolute scale. The problematic conclusion arises because the wellbeing of a typical mouse is much lower than that of almost all humans. The most commonsensical way of avoiding this problem is to hold that fortune must be understood as wellbeing relativized to the potential of the *species* of the individual. More specifically, fortune can be understood as wellbeing relativized to the maximum potential wellbeing level for a member of the individual’s species. Consider, then:

Fortune as Wellbeing as Ratio of Species-Potential: Fortune for an individual is the ratio of her wellbeing to the species-maximum wellbeing.⁴

Suppose, for example, that the maximum wellbeing for mice is 2, and a particular mouse has wellbeing of 1. Her fortune, on this conception is $.5 (=1/2)$. Suppose that maximum wellbeing for humans is 200 and that a particular human has wellbeing of 100. His fortune is also $.5 (=100/200)$. On this conception of fortune, moderate egalitarianism does not require any shift of resources between the two. More generally, although this will require some shifting of resources from some humans to some mice (and from some mice to some humans), it does not

require a massive shift of resources from most humans to most mice.

This account of fortune avoids the problematic conclusion, but it is implausible because of its speciesism. Consider a severely cognitively impaired human who has the innate potential (e.g., potential at conception) of a normal mouse. Why would morality be more concerned in principle with the human than with the mouse? Of course, there may be various contingent factors related to species that are relevant (e.g., how much others care about the individual), but there seems little reason to think that there is any principled difference. In any case, although this is controversial, I shall assume that speciesism is untenable.⁵ We shall assume, that is:

Species-Neutrality: Morality makes no essential reference to the species of individuals.

Fortune as Wellbeing as Ratio of Species-Potential violates Species-Neutrality, and thus must be rejected. Nonetheless, the idea that fortune is some kind of potential-relative wellbeing has some plausibility. In what follows, I shall formulate and assess two such approaches that satisfy Species-Neutrality.

4. Individual potentiality

In what follows, we shall assume the following:

Fortune as Positively Sensitive to Wellbeing: An individual's fortune is positively sensitive to her wellbeing.

Fortune as Wellbeing and Fortune as Wellbeing as Ratio of Species-Potential each satisfy this condition, but so do other conceptions. This condition leaves open how inter-individual

(‘interpersonal’) comparisons of fortune are made. It allows, for example, that a mouse with wellbeing of .8 may have greater fortune than a human with wellbeing of 10.

If fortune is wellbeing, then, given the other assumptions, the problematic conclusion follows. If the problem of mice is to be avoided, then fortune must, it seems, be understood as some kind of potential-relative wellbeing. The species-potential-relative account of fortune avoids the problem of mice, but errs in appealing to the potentials of members of the individual’s species. It thus may seem plausible that fortune is wellbeing relativized to the potential of the individual:

Individual Potential Relativity: Fortune for an individual is somehow relative to her individual potential for wellbeing.

I shall ultimately argue against this condition, but it will be useful first to explore its implications. We shall explore some ways of avoiding the problematic conclusion, given Moderate Egalitarianism, Sufficiency of Wellbeing for Moral Standing, Mouse Wellbeing, Species-Neutrality, Fortune as Positively Sensitive to Wellbeing, and Individual Potential Relativity.

First, however, a few remarks on the notion of individual potential are in order. This is a slippery notion, and I shall not be able to fully pin it down fully. The one thing that is clear is that the relevant potential is not the *current* one that an individual happens to have at the time of application. It is rather the individual’s *innate* potential. This includes at least the full potential that the individual had when she first came into existence. Thus, although the passage of time in general reduces one’s current potentials (e.g., from aging, accidents, and or failure to develop various capacities), and never increases them⁶, this does not affect the relevant potential for the

purposes of assessing fortune.

There are, however, several different ways that innate potential can be understood. On a relatively narrow understanding, one's innate potential is the empirical potential that one had when one first existed. On the broadest understanding—metaphysical potentiality—one's innate potential also includes all the possibilities that one might have had, given all the ways that one might have come to exist. Suppose, for example, that when I came into existence I had no empirical potential for sight. Suppose, however, that there are many ways that the sperm and egg that produced me might have been altered (e.g., by genetic engineering) prior to my conception while still producing me. On the broad understanding of innate potential, my potential includes these possibilities as well. If on one of these I have sight, then my potential so understood includes sight.

In specifying an individual's potential, it's crucial that the alternative possibilities involved are ones in which that *same individual* comes into existence, and not merely ones in which someone like her comes into existence. Although I'm skeptical that the relevant notion of individual identity is robust enough to apply much beyond the narrow notion of possibility (empirically possible when one comes into existence), I shall assume, for the sake of argument, that we can make sense of individual identity even where individuals come into existence in different ways, in different world histories, and even in different worlds.

A second open issue concerns how wellbeing is to be relativized to potential wellbeing. For simplicity, I shall assume that such relativization is based somehow on the individual's maximum potential wellbeing. One might also invoke minimum potential wellbeing as well (since this is variable among individuals), but I shall assume that the relevant minimum is zero, where this represents the point that separates a life worth living from one worth not living. I make this assumption both for simplicity of presentation and because, given that morality is

concerned with making lives better, variations in how miserable a being can be do not seem relevant for determination of the relevant minimum level of wellbeing. Given that all beings will be assumed to have the same relevant minimum of zero, we can effectively ignore the minimum for the issues at hand. In any case, it will be useful to make this assumption for the purposes of simplifying the presentation.

How then is the maximum set? The most natural possibility for the specification of the maximum is as the maximum wellbeing that is possible *in principle* for the individual given her innate potential. It is possible, however, that there is no maximum: for any given level of wellbeing, there could be a higher one that is possible for that individual. One way that this can arise is where there is no maximum but there is a lowest bound on the maximum, as in the progression $1/2, 3/4, 7/8, \dots$ (which is always smaller than 1). In this case, we can take the maximum to be the least upper bound (1 in this case). More problematic is the case where there is no least upper bound, as in the progression $1, 2, 3, 4, \dots$. This is an important problem, and I have no solution. As a practical matter, we can deal with this by taking the maximum for such individuals to be (for example) a trillion times the maximum ever achieved by any individual in the past. This leaves the theoretical problem, but eliminates any significant practical problem. In any case, I'm going to ignore this important problem.

These are all important and controversial issues, but I shall not attempt to resolve them. I shall simply assume that we have a plausible and well-defined conception of innate potential and of the maximum individual wellbeing relative to that potential. (I will, in any case, argue below that fortune should not be understood as wellbeing relativized to potential.)

5. Fortune as individual potential-relative wellbeing

We shall here consider three different ways of relativizing wellbeing to individual potential. The

first two, I shall argue are clearly implausible, whereas something like the third approach seems to be the most plausible way of taking fortune to being potential-relative wellbeing. Nonetheless, in later sections, I will argue that even it is implausible and defend a different kind of approach.

5.1 Fortune as Wellbeing as Ratio of Individual-Potential

The most natural way of relativizing wellbeing to the individual's potential is the following:

Fortune as Wellbeing as Ratio of Individual-Potential: The fortune of an individual is the ratio of her wellbeing to her maximum wellbeing.

This is just like Fortune as Wellbeing as Ratio of Species-Potential, except that the relevant potential is individual potential and not species potential. Consider, for example, (1) a mouse with wellbeing of 1 and a maximum wellbeing of 2, and (2) a human with wellbeing of 100 and a maximum potential wellbeing of 200. Each has wellbeing as ratio of individual potential of .5. Equality of wellbeing as ratio of individual potential requires no shift of resources between the two.

This view avoids the problematic conclusion because it does not compare the wellbeing of mice with the wellbeing being of humans (or any other individual). It only compares wellbeing as a ratio of individual potential. Equality of fortune so understood thus does not demand that mice have lives equally good with humans.

The main problem with this approach is that it treats some trivial improvements in wellbeing as just as important as very significant improvements. Suppose that a 1-unit difference in wellbeing is trivial and that a difference of 100 units is significant. Consider a mouse with maximum wellbeing of 2 units. Suppose that the only other individual is a human with a

maximum wellbeing of 200 units. Suppose that the only choices are 0 wellbeing for the mouse and 100 units of wellbeing for the human, or 1 unit for the mouse and 0 for the human. Equality of wellbeing as ratio of individual potential views these as equally acceptable. The first option gives the mouse a .5 ratio of potential and the human a 0 ratio. The second option gives the mouse a 0 ratio and the human a .5 ratio. With respect to equality of wellbeing as a ratio of individual potential, there is no difference between the two. It is, however, quite implausible, to treat the trivial 1 unit improvement for the mouse as equally as important as the significant 100 unit for the human. The objection here is not against equality as such. We are assuming that some sort of equality is indeed required. The objection is simply to taking the ratio of wellbeing to individual potential as the equalisandum.

In sum, Fortune as Wellbeing as Ratio of Individual Potential avoids the problematic conclusion, but goes overboard and attaches too much importance to providing benefits to mice. (This problem, it's worth noting, also arises for the Fortune as Wellbeing as Ratio of Species Potential, considered above.)

5.2 Fortune as closeness to maximum potential

Let us now consider a second individual potential-relative account of fortune:

Fortune as Closeness to Maximum Potential: Fortune for an individual is the closeness of her wellbeing to her maximum potential wellbeing.

Like the preceding view, this relativizes to maximum (individual) potential wellbeing, but it does so in a different way. Instead of viewing fortune as a ratio of wellbeing to maximum potential, it views it as the shortfall in wellbeing from each individual's maximum potential. In

the above example, the mouse with 1 unit of wellbeing is 1 unit short of her maximum of 2, and the human with 100 units is 100 units short of his maximum of 200. Thus, the mouse is much closer to her maximum than the human is to his. Both views hold that fortune increases the closer one gets to one's maximum. The difference concerns whether closeness is viewed in percentage terms or absolute terms. Fortune as Closeness to Maximum Potential views closeness in absolute terms and thus avoids the problem of treating trivial shortfalls as equally significant for fortune as very significant shortfalls.⁷

The closeness to maximum potential account also avoids the problematic conclusion. Like the previous view, it does not require that mice have as much wellbeing as humans. It only requires that (to the extent possible) the shortfall of mice from their respective maxima be the same as that for humans. Nonetheless, this view, I shall now argue, is also implausible.

The main problem with this view is that it seems to give inadequate attention to mice. It has, for example, significantly less effective concern for mice than utilitarianism. Utilitarianism factors in the benefits to mice along with those to others, but, given that, beyond basic needs, most mice are much less efficient at generating wellbeing from resources than most humans, they tend to receive much fewer resources than humans. This is not obviously problematic. The closeness to the maximum potential view, however, tends to favor humans for a second reason: even where a given human and a given mouse would reap the same benefit (in absolute terms) from a given resource, the closeness to potential will tend to favor the human on the ground that her shortfall from her maximum potential is greater than that of the mouse. This is because the potential range in wellbeing for typical humans (e.g., 0-200) is much greater than that for typical mice (e.g., 0-2). As a result, almost all humans have a greater shortfall from their maxima than almost all mice. The closeness to the maximum view thus does not take the interests of mice seriously enough.

5.3 Fortune as excess over relevant intermediate wellbeing

As we have seen, equality cannot be merely concerned with (absolute) wellbeing. Otherwise, almost all mice have greater equality claims than almost all humans. We are considering approaches that relativize wellbeing to individual potential. One view is to take fortune to be wellbeing as ratio of individual maximum potential. This is implausible because it treats some trivial improvements for disadvantaged mice as more important than some significant improvements for disadvantaged humans with a normal human range for wellbeing. This suggests that shortfalls should be understood in absolute terms, but the reference point should be selected in some potential-relative way. Selecting the reference point as the maximum potential, I have suggested, inappropriately disadvantages beings with lower potentials (since their shortfalls will typically be smaller). This suggests that the reference point should be some level of wellbeing between zero and the maximum.

One possibility is to appeal to the mid-point between zero and a person's maximum potential. This seems, however, rather arbitrary. It seems more plausible to appeal to (something like) the *maximum average potential-relative wellbeing ratio* at the time of evaluation, where this is understood as follows. The potential-relative wellbeing ratio is (as defined earlier) the ratio of wellbeing to the individual's maximum wellbeing. At a given time, given the total resources in the world, there is a maximum achievable *average* potential-relative wellbeing ratio for the set of beings with moral standing. For example, if there are just two individuals and one can give them ratios of .7 and .3 respectively (average of .5) or .4 and .8 respectively (average of .6), the maximum achievable average potential-relative wellbeing is .6. For a given individual, his/her maximum average potential-relative wellbeing *point* (at that time) is that level of (absolute) wellbeing that gives him/her the maximum average potential-relative wellbeing ratio.

Note that maximum average potential-relative wellbeing ratio is a number between 0 and 1, whereas the maximum average potential-relative wellbeing *point* is the level of absolute wellbeing that, for a given individual, represents the maximum average potential-relative wellbeing (at that time). For example, if maximum average potential-relative wellbeing ratio is .3 (i.e., the best one can do on average is to give individuals 30% of their maximum potential wellbeing), then for an individual with a maximum of 10, her maximum average potential-relative wellbeing point is 3.

Fortunately, we don't need to resolve ~~this-the~~ issue of how an intermediate reference point is selected—since I will argue against more general features of this approach. Let us simply assume that there is some principled basis for selecting each individual's relevant intermediate level of wellbeing (e.g., as some percentage of his/her maximum). Let us consider, then:

Fortune as Excess over Relevant Intermediate Wellbeing: Fortune, for a given individual, is the excess of wellbeing over her relevant intermediate level of wellbeing (where shortfalls are negative excesses, and thus cases of misfortune).

Fortune, on this view—as with the previous view—is concerned with absolute differences of wellbeing from a reference point, and the reference point is picked out, for each individual, in individual potential-relative way. The new feature is that the reference point is some level of wellbeing between zero and the maximum. This reduces (but does not eliminate) the extent to which individuals with great potentials will tend to have greater shortfalls from the reference point. For example, if the reference point were set at the zero point, this tendency would be entirely eliminated.

With an appropriately set reference point, this approach may seem to give the right

balance to the wellbeing of mice and humans. A mouse and a human who are each at their respective reference points are deemed to have equal claims with respect to equality.

Furthermore, each has, from the point of view of equality, less priority than any being who has less than her reference point. Thus, there will be some redistribution from humans who are above their reference point to individuals who are below. For individuals below their reference point, however, humans will tend to have a stronger equality claim than mice. This is because their shortfall will typically be larger. Thus, to the extent that there is a shifting of resources from individuals who have more than their reference point to individuals who have less than their reference point, it will tend to be a shift from humans (since human excesses are typically larger than mouse excesses) to humans (since human shortfalls are typically larger than mouse shortfalls).

Fortune as Excess over Relevant Intermediate Wellbeing, or something like it, is, I speculate, the most promising individual potential-relative account of fortune for a form of egalitarianism that rejects speciesism and that includes sentient beings in its scope. Of course, it is highly controversial and subject to many objections. The main objection is that it treats differences in innate potential as given and ineligible for egalitarian compensation. For example, consider two individuals with the same level of wellbeing, and the same current capacities for wellbeing, but with different potentials for wellbeing. Suppose that one unit of wellbeing can be given to one of them but not both of them. According to Fortunate as Excess over Relevant Intermediate Wellbeing, the one with the greater potential has lower fortune (since her potential is greater, and thus her reference point wellbeing is greater, and thus her shortfall from that point is greater (or her excess is smaller). It seems implausible, however, that in this case equality requires giving the benefit to the person with the greater potential. This, however, is not a conclusive refutation of the view. The problematic conclusion (that morality requires a radical

shift of resources from most humans to most mice) is much more implausible. It may be that, once speciesism is rejected, the troublesome conclusion just mentioned must be accepted. It may be, that is, that all views have troubling conclusions for some cases, and that this is the most promising path to take.

I shall now argue, however, that there is a deeper problem of interspecies equality that this approach does not solve and that an adequate solution does not take fortune to be any form of potential-relative wellbeing.

6. The problem of radical enhancement

Sometime in the future, it will, it seems, become feasible—through genetic engineering and other means—to enhance the capacities of mice, or other sentient beings, to be roughly equal to those of typical humans.⁸ In particular, it will be possible to radically enhance the capacity of mice for wellbeing. Thus, the maximum potential wellbeing of most mice for wellbeing will be, at least roughly, that of most humans. Of course, the potentials of humans will also be radically enhanced, but the difference in the potential for wellbeing between a typical mouse and a typical human will arguably eventually become quite small. Moreover, the cost of such enhancement will eventually become reasonably small. When this is true, the problematic conclusion returns even on the proposed approach. The maximum potential for most mice will be roughly the same as that for most humans, and thus unenhanced mice will have greater shortfalls from their reference points than most unenhanced humans. Hence, equality will require a radical shift in resources from most humans to most mice.

Of course, if the capacities for wellbeing of mice can be enhanced, then typically their productive capacities can also be enhanced. If the latter can be enhanced enough that they produce enough wealth to provide for the benefits to which they are entitled (and perhaps

more!), then, of course, there is little that is problematic about their enhancement. This, however, need not always be possible, and I shall therefore focus on the case where it is not.

The possibility of *radical enhancement* generates the problematic conclusion only if the enhanced mice are the same individuals as the original mice. Otherwise, the original mice (as opposed to different beings) do not have the potential for the enhanced capacities. This places some constraints on the relevant enhancements of mouse potentials, but it seems plausible that there is no barrier in principle to such radical enhancement of the capacity for wellbeing while maintaining the relevant individual identity. Indeed, for individuals, such as mice, whose moral standing is grounded entirely in their capacity for wellbeing, it seems plausible that the relevant identity is simply that of being the same center of wellbeing, and it seems plausible that radical enhancement can preserve this. In any case, in what follows, I shall tentatively assume that this is so.

The possibility of radical enhancement has significant implications for the problematic conclusion. One, just noted, is that even if innate potential is understood narrowly as the *practically achievable* potential that one had when one first came into existence (i.e., roughly, what the then current knowledge, resources, and technology permitted us to achieve reliably at will), someday the potential of mice in this sense will be roughly that of humans (although they do not currently have that potential). A second implication is that this is true *now*, if innate potential is understood more broadly as the *empirically possible* potential that one had when one first came into existence (i.e., roughly, the possibilities left open by the laws of nature given the state of the world then). The mere fact that one day we will be able to implement radical enhancement is enough to show that it is, and always has been, empirically possible, even if we do not know how to bring about these results now. Of course, this is also true if innate potential is understood more broadly still, such as including all metaphysical possibilities compatible with

being the same individual.

The lesson seems to be this. Assessing fortune in a potential-relative way makes some difference, since typically at least some individuals have different potentials. Given the possibility of radical enhancement, however, the difference seems not to be as great as we have thought. This is especially so if potential is understood in the broadest metaphysical sense. It seems still to be so (although to a lesser extent) if potential is understood in the sense of empirical possibility. If potential, however, is understood in the relative narrow sense of practical possibility, then there is currently a lot of variation in potential-relative wellbeing. Even that difference, however, will significantly diminish with the advancement of technology, and the problem of those demanding little mice will eventually return.⁹

Thus, it may seem that, if we are to avoid permanently the problematic conclusion, we need to narrow further the notion of innate potential. I shall suggest, however, that this is not promising.

Jeff McMahan (2002: ch. 2) suggests that we limit the relevant potentials to *intrinsic* potentials, where these are something like the (e.g., empirical) potentials that individuals have, the realization of which do not involve ‘direct alteration of their constitution’. The rough idea is that one’s intrinsic potential is somehow based solely on one ‘internal’ condition and not on ‘external’ conditions such as the presence or absence of the possibility of adding body parts (e.g., eyeballs, brain cells, or synthetic circuitry). If, for example, given the right training environment, mice could develop the same capacities as humans (which they can’t), then their intrinsic potentials would be the same as those of humans. The mere fact that genetic engineering, or other direct physical alterations, would enhance a mouse’s potential, however, would not establish that mice have the same *intrinsic* potentials as humans.¹⁰ Hence, if potentials are restricted to intrinsic potentials, the problematic conclusion does not arise—at least not so easily.

There are two problems with this approach—each acknowledged by McMahan. One is that it's not clear that there is much content to the distinction between intrinsic (as here understood) and unrestricted potentials. What one realizes depends on the kind of nourishment one obtains (which is a kind of external contribution), but that is taken not to make the potential for such achievement non-intrinsic. Otherwise no potentials would be intrinsic. Consider then a mental enhancement pill. It would seem also not to make the potential it generates non-intrinsic—even, say, if the pill promotes neural connections. Why then, wouldn't the possibility of surgery that establishes various neural connections also enhance one's intrinsic potential? All realizations depend both on internal and on external conditions, and almost all involve enhancing internal constitution by external means. It is thus unclear what the distinction is supposed to be between internal potentials (which do not require direct alteration of one's constitution) and non-internal ones.

The second problem with restricting innate potentials to those that do not require direct alteration of one's constitution (assuming that the intuitive content is capturable) is its plausibility. As McMahan (2002:153) notes, this view has the implication that an innately blind infant, whose condition is easily and cheaply correctible, has less relevant (i.e., intrinsic) potential than an innately normal infant who acquired the same condition as a result of an accident shortly after coming into existence. In both cases, the needed treatment involves altering their internal constitution. The only difference is that the innately normal infant had the intrinsic potential for sight when she came into existence, whereas the innately blind infant did not. It strikes most of us as wildly implausible to hold that this difference is relevant to assessing their fortune. In a very real sense the innately defective infant has the potential to have normal capacities. It seems quite arbitrary to treat her differently than the other infant. Of course, this is not a knock-down objection. We are dealing with cases where some of our strongly held

intuitions must be given up. Nonetheless, I claim that it is more plausible to treat the enhanceable mouse as having the same relevant potential as the normal human being than to treat the two infants differently. Thus, the restriction to intrinsic potential so understood seems unpromising.

Perhaps there is some other relevant way to characterize intrinsic potentials, but I shall not pursue that possibility here.¹¹ This is because there is a general problem with restricting potential more narrowly than empirical possibility when the individual came into existence (and perhaps even that restriction is problematic). The empirical possibilities open to an individual when she comes into existence are real (as opposed to counterfactual) possibilities for that individual. It therefore seems quite arbitrary to ignore some of them for the purposes of specifying fortune. For example, limiting potential to *practical* potential (potential that is, roughly, reliably realizable) seems arbitrary. Of course, practical limitations are highly relevant for what we should do in practice (e.g., there is no point in trying to accomplish something for which we don't have the know-how). It seems inappropriate, however, to assess fortune in a way that ignores in principle certain empirical possibilities merely because they are not now practical possibilities. Likewise, it seems inappropriate to assess fortune solely on the basis intrinsic empirical potential, however that is understood. Why should differences in real potential be ignored?

If this is right, and if, as we have been assuming, radical enhancement of potential wellbeing is empirically possible for mice, then taking fortune to be relative to individual potential may somewhat reduce the requirement to shift resources from most normal humans to most normal mice, but it leaves in place a very strong requirement for such transfers. If the problematic conclusion is to be robustly avoided, some additional machinery is, it seems, needed. Before concluding, I shall propose some such machinery.

7. A possible solution

So far we have explored ways of avoiding the problematic conclusion that take fortune to be wellbeing relativized to individual potential. We have seen two main problems with this approach. First, as just noted, given the possibility of radical enhancement, it does not avoid the problematic conclusion (since the potentials of mice are may not be that different from ours). Second, as noted earlier, it implausibly takes brute luck limitations in innate potential (e.g., of a human) as demanding no egalitarian compensation (since fortune is relative to innate potentials).

I believe that we have taken a false turn. Instead of focusing on the *potential* for wellbeing, we should, I believe, focus on the *capacity* for wellbeing. A *capacity* is something that can be realized now, whereas a potential can be something that can be realized only at some later time after the capacity is developed. Thus, for example, most normal adults now have the potential to play a simple piece on the piano (i.e., after much practice to develop their capacities), but only a few adults now have the capacity to do so. I shall suggest that fortune should be understood as wellbeing relativized to the degree of moral standing, where moral standing is grounded in the capacities of the individuals (rather than in their potentials).

The solution that I shall sketch requires several significant departures from the standard way of thinking of things. The best I can do here is to formulate and motivate this approach. I will not attempt anything close to a rigorous defense. Indeed, the following is highly speculative, and should be understood merely as identifying an approach that needs to be developed and assessed more carefully.

I shall introduce six ideas, which taken together offer the promise a plausible way of avoiding the problematic conclusion. Consider, then:

Idea 1: Moral standing is grounded in the capacity for wellbeing and the capacity for rational

choice.

This is a strengthening of Sufficiency of Wellbeing for Moral Standing. It recognizes that capacity for rational choice is also relevant for moral standing, and further claims that nothing else is. Of course, this claim is not uncontroversial. Those who hold that moral standing is grounded in the possession of a Cartesian soul or in being a member of certain species would reject it. Most moral theorists, however, would accept this assumption, and I shall not here attempt to defend it.

In what follows, I shall, for simplicity, ignore the capacity for rational choice. This is because, for the problem at hand, that capacity is not relevant. Those with the capacity for rational choice are protected by the *morality of respect*, and this requires, roughly, that their autonomous wills be respected in various ways. Moderate egalitarianism may indeed impose various constraints on respecting the wills of autonomous agents, but such respect does not block the problematic conclusion (e.g., where the issue is simply of how to divide up resources). Thus, for simplicity, I shall focus below solely on the *morality of interests*, and for this purpose we can ignore the capacity for rational choice (except, of course, as it contingently impact on wellbeing). Given this simplifying assumption, we shall assume that moral standing is grounded solely in the capacity for wellbeing.

This leads naturally to:

Idea 2: Moral standing (for the morality of interests) comes in degrees, with zero for no moral standing, and, for example, one unit for the current average degree of moral standing for normal humans with normal lives.

If moral standing is grounded solely in the capacity for wellbeing, then it is natural to think that moral standing comes in degrees, given that the capacity comes in degrees. This does not, however, follow as a matter of logic. Full moral standing may be (and has typically taken to be) a *threshold concept*: Those who have the grounding features above some specified degree have full moral standing. The concept of being a dollar millionaire is a threshold concept. Everyone who has at least one million dollars is a millionaire. A person with just one million dollars has the same status in this regard as a billionaire. Full moral standing has typically been taken to be a threshold concept. All normal human beings, for example, are taken to have the same full moral standing (for the morality of interests). When we focus on normal adult human beings, this seems plausible, given that our capacities are all roughly equal. Moreover, it is seemingly natural to extend this idea to sentient fetuses, young children, and severely cognitively disabled people.

Once, however, we start to consider sentient individuals of all the various species, the implausibility of treating moral standing as a threshold concept becomes apparent. Consider two individuals one of whom spends her life just below the threshold capacity for wellbeing (perhaps a snail) and the other who spends her entire life just above it (perhaps a squid). The former has no moral standing whereas the latter has some moral standing. It would be crazy, however, to think that the individual who just barely has the capacity for wellbeing (e.g., the squid) has the same moral standing as a normal human adult human (who has a much greater capacity for wellbeing). Such a small difference in capacities cannot make such an enormous difference in moral standing. This is especially clear in the context of egalitarian theory where full moral standing would generate a claim to equal benefits with all others. It is also true more generally in the context of theories that hold (as I believe plausible) that we have no duty to ensure that individuals who would have good lives acquire moral standing but do have a duty to ensure (to

the extent possible) that those with moral standing have good lives. Development of the relevant capacities for moral standing from slightly below to slightly above some threshold does not make a big difference in our duties to make sure that the life goes well (which is not to deny that it does make some difference). It thus seems that we need to recognize degrees of moral standing.¹² Obviously, the issue is complex and highly controversial, but I cannot defend it here.

We are finally ready for the core of the solution (although more qualification will be given below):

Idea 3: Fortune is wellbeing relativized to degree of moral standing, such that (1) zero wellbeing represents zero fortune, and (2) for a given level of wellbeing, fortune is inversely related to moral standing (i.e., increasing moral standing reduces fortune, for a given level of wellbeing).

The idea is that a mouse and a human both have zero fortune if each has zero wellbeing, and that, for a given level of wellbeing, the fortune (that which is to be equalized) of the mouse is greater than that of the human. To make this more concrete, I shall make the following assumption:

Working Assumption 1: For non-negative levels of wellbeing, fortune is divided by degree of moral standing.¹³

Suppose that a mouse has moral standing of .01 and a human has moral standing of 1. If the mouse has wellbeing of 1 and the human wellbeing of 100, then they each have fortune of 100. The relativization to the degree of moral standing thus seems to avoid the problematic conclusion. Mice have a claim on resources, but, because their moral standing is typically much

lower than that of most humans, their claim is much weaker. This idea also seems independently plausible. A being with no moral standing has no claims on us (by definition). Given that moral standing comes in degrees, it seems plausible that a being who has a very low degree of moral standing (e.g., only slightly above no moral standing) has only very weak claims on us.¹⁴

There are two issues that need to be addressed about how the degree of moral standing is determined. One is that moral standing, I believe, needs to be relative to possible actions, and not independent of what action is performed. This is admittedly a very unusual idea. To motivate it, consider a situation in which there is a (presentient) zygote and one can perform one of three possible actions (where no one else is affected): (1) allow the zygote to die, (2) provide sustenance for the zygote, in which case it goes on to live a very good life with normal human capacities, and (3) provide partial sustenance, in which case it goes on to live a poor life (but worth living) with normal human capacities. If one ensures that the zygote dies, it never acquires moral standing, and it thus not wronged. Even though it could have had a very good life, failure to provide that life does not wrong the zygote because it ensures that the zygote never acquires the relevant capacities for moral standing. (Those who think that a zygote already has moral standing can change the example to one combining a particular sperm and egg, or failing to do so, to produce a particular possible person.) Nonetheless, providing only partial sustenance to the zygote, I claim, wrongs the zygote. In that case, the zygote does acquire the relevant capacities and is needlessly made to live a poor life. I believe that the most plausible way of making sense of this is to say that moral standing is relative to the action performed. The zygote has no moral standing relative to an action that ensures that it dies prior to acquiring the relevant capacities, but has full moral standing relative to an action that ensures that it acquires normal human capacities. It is thus wronged by the action that needlessly deprives it of benefits.

Consider then:

Idea 4: For a given choice situation of a given agent, the degree of moral standing that an affected individual has is *action-relative* (i.e., depends on which action the agent performs).

This idea is highly controversial, and there are other ways of addressing the problem just raised. Nonetheless, I believe that relativizing moral standing to action performed is independently plausible.¹⁵ My goal here, however, is not to defend it, but simply to identify it and to show how it can help avoid the problematic conclusion.

The final main question that we must address, before I illustrate how this general approach seems to avoid the problematic conclusion, concerns how the degree of moral standing is grounded in past, present (just prior to action), and future capacities for wellbeing. Clearly, the present capacities are relevant. Moreover, future capacities, I have already suggested above, are also relevant: A being with no past or present capacity for wellbeing (such as a presentient fetus) has moral standing relative to an action for which she later develops that capacity (and thus can be wronged by that action). Finally, past capacities are also relevant. If they were not, then a normal adult who temporarily lost her capacity for wellbeing would not be wronged if she were then killed (since she would never have the relevant capacities now or in the future). Hence, the past is somehow relevant. Once, however, an individual has lost all potential for present and future capacities for wellbeing, she no longer has, I claim, any moral standing (dead people have no moral standing). Hence, the past is relevant only if there is present or future potential for the capacity for wellbeing.

This leads us to:

Idea 5: The degree of moral standing that an individual has relative to a given action depends

positively on (1) the current capacity for wellbeing, (2) each of the various empirical possibilities for future capacity for wellbeing if that action is performed, and (3) if there is at least some present or future potential for the capacity for wellbeing, on past capacity for wellbeing of at least some past times.

This leaves open exactly how the degree of moral standing is determined, and it seems that any possible function of past, present, and possible future capacities has some problematic implications. I shall not attempt to resolve this issue here. Instead, I shall simply make the following working assumption for illustration:

Working Assumption 2: The degree of moral standing that an individual has relative to given action is the expected average capacity for wellbeing that she has over the course of her life if that action is performed (but zero if the individual has no current or future potential for the capacity for wellbeing at the time the action is performed).

Implicit in this assumption is the view that future capacities are discounted for their probability. An individual that has no past or present capacities, and only a very small chance of a future high capacity has a low degree of moral standing. She might, however, have a high degree of moral standing if the future capacities were great and highly likely. Also implicit in this working assumption is the view that all past capacities matter equally. One might, on the contrary, hold that only the recent past matters, or that the past matters more the closer it is to the present. This whole issue is complex and murky, and I fully agree that there is no simple answer.¹⁶ Nonetheless, I believe that the general idea of Idea 5 is plausible. I will invoke Working Assumption 2 simply as a way of illustrating the idea.

Let us now consider an example that illustrates how these ideas help avoid the problematic conclusion. Suppose for simplicity that there is just one mouse (M) with current and past capacities for wellbeing of .01 and just two humans (H1 and H2) with current and past capacities for wellbeing of 1. Humans have potential for wellbeing of 100 and the mouse has same potential with radical enhancement. For simplicity, I'll assume radical enhancement of mice costs nothing to implement and that further enhancement of humans is not possible.

Possible actions:	Wellbeing			Moral Standing			Fortune (WB/MS)		
	M	H1	H2	M	H1	H2	M	H1	H2
Do Nothing, Unequal Fortune	.5	10	50	.01	1	1	50	10	50
No Enhance, Equal Fortune	.301	30.1	30.1	.01	1	1	30.1	30.1	30.1
Enhance, Equal Fortune	18.7	20.9	20.9	.9	1	1	20.9	20.9	20.9

Table 1

[Table 1 goes here.]

Here there are three feasible actions. Doing nothing leaves the mouse with low capacities and moral standing of .01 (normal mouse standing). Although the mouse gets only .5 wellbeing, its fortune (50) is higher than that of H1 (10). Relative to moral standing of .01, .5 wellbeing represents greater fortune than 10 units for an individual with moral standing of 1. The second feasible action also involves no enhancement, but it distributes wellbeing in a way that equalizes fortune. The third feasible action enhances the mouse and then equalizes fortune.

What does moderate egalitarianism require in this case? For simplicity, here and below, I'll assume that it requires maximizing equality rather than simply significantly but non-

maximally promoting it. Nothing of substance depends on this. I also assume that a plausible version of egalitarianism will never require leveling down. Instead, it will require choosing a most equal distribution of fortune from among those that are Pareto optimal in wellbeing. Pareto optimality is a weak kind of efficiency requirement. It requires that it not be possible to improve one person's wellbeing without making someone worse off. Thus, for example $\langle 2,2,2 \rangle$ is not Pareto optimal when $\langle 2,3,4 \rangle$ is also feasible (since the second and third individuals are better off and the first person is not worse off). For simplicity, I'll focus on examples, such as the one above, where all the feasible options are Pareto optimal.

In the above example, all three options are Pareto optimal in wellbeing, and the second and third options achieve maximum feasible equality of fortune. Moderate egalitarianism thus judges the first option impermissible (since it is less equal than the others) and judges the other two permissible (since they are each Pareto optimal in wellbeing and each maximally equal in fortune relative to the Pareto optimal set). In this example, then, enhancement of the mice is not required, but it is permitted. Thus the problematic conclusion in its strict form is avoided (since there is no requirement to radically shift resources to mice), but a weaker form remains: it is permissible to radically shift resources to mice (after enhancing them). This is less problematic, but it is still significantly problematic. We have not yet, I believe, fully solved the problem.

If we add one more twist, we can, I believe, avoid even the weak version of the problematic conclusion. The twist (very roughly) is that we strengthen the efficiency requirement to give a certain priority to increasing the wellbeing of those whose degree of moral standing is not decreased over increasing benefits to those whose degree of moral standing is decreased. Consider then:

Idea 6: Efficiency requires that an option, X, be Pareto optimal ~~ity relative to those options, X,~~

~~that satisfy the requirement that~~ and such that there is no alternative ~~feasible~~ Pareto optimal option, Y, such that:

- (1) for all individuals with *same degree* of moral standing in X and Y, all have at least as much wellbeing in Y and some have more in Y;
- (2) all individuals with *higher degree* of moral standing in Y than in X, have *maximal wellbeing* for that feasible set; and
- (3) all individuals with *lower degree* of moral standing in Y than in X, their *fortune* is at least as great in Y as it is in X.

This idea strengthens the efficiency requirement that is prior to the equality requirement.

It still maintains that Pareto optimality in *wellbeing* is necessary, but further rules out certain ~~those~~ options that are not Pareto optimal in *fortune* relative to the Pareto optimal (in wellbeing) set. The third option above of enhancing the mice fails this requirement, since the second option provides more wellbeing to the humans (whose degree of moral standing is not affected) and it provides more fortune (although less wellbeing) to the mouse (whose degree of moral standing is decreased). The first and second options, however, satisfy this requirement. Given that the first option is less equal in fortune than the second, only the second option is permissible. In particular, radical enhancement is impermissible, and even the weak problematic conclusion is avoided in this case.

This strengthened efficiency requirement creates a presumption against enhancement. Enhancement increases the moral standing of individuals, and if there is a fixed total of wellbeing, then enhancement must decrease the fortune of at least some individuals (and perhaps increase no one's). The above ideas do not, however, entail that radical enhancement is always impermissible. Indeed, sometimes they require it. Consider the following case:

Possible actions:	Wellbeing			Moral Standing			Fortune (WB/MS)		
	M	H1	H2	M	H1	H2	M	H1	H2
Do Nothing	.1	10.2	50.2	.01	1	1	10	10.2	50.2
No Enhance, Equalize Humans	.1	30.2	30.2	.01	1	1	10	30.2	30.2
Enhance, Equalize All	18.7	20.9	20.9	.9	1	1	20.9	20.9	20.9

Table 2

[Table 2 goes here.]

Here each option satisfies the enhanced efficiency requirement of Idea 6. Enhancement is not ruled out in this case, because, although the second option gives more wellbeing to the two humans (whose degree of moral standing is unaffected) it does this by reducing the fortune of the mouse. Thus, enhancement is not ruled out on efficiency grounds. Moreover, the third option (enhance the mouse and then equalize fortune) is the uniquely most equal in fortune (because for contingent reasons it is not possible to equalize fortune without enhancement). Hence, only it is permissible. Radical enhancement followed by a shift in resources from humans to mice is morally required in this case.

Some may find even this implication deeply troubling, but I do not. If mice have moral standing and are protected by the requirements of equality, then at least sometimes we will be required to shift some resources to them and sometimes this will involve radical enhancement. This is much less problematic than the implication that morality requires a *radical shift* of resources from *most* humans to *most* mice.

8. Speculative conclusion

We have been exploring the implications of accepting moderate egalitarianism while holding that

sentience, as a capacity for wellbeing, is sufficient for moral standing and while rejecting all forms of speciesism. We have been seeking a way of avoiding the problematic conclusion that morality requires a massive shift of resources from most humans to most mice. I have sketched a way of avoiding the problematic conclusion. The demands of equality should be understood as something like equality of fortune, relative to the feasible options that are efficient in the enhanced sense of Idea 6. Fortune, for a given action, should be understood as wellbeing relativized to moral standing if that action is performed—more specifically (for positive wellbeing), as wellbeing divided by degree of moral standing. This gives, I suggest, a plausible approach to interspecies equality in the simple case where radical enhancement is not possible and also in the deep case where it is.

Even if the specifics of this approach are mistaken, the following two general features of this approach are, I claim, independently plausible: (1) Moral standing comes in degrees and those who only barely have moral standing have only very weak moral claims. (2) Differences in one's past, present, or future capacities for wellbeing affect the strength one's moral claims (because they affect one's degree of moral standing), but mere differences in potential for wellbeing do not. If two individuals have the same moral standing (grounded in past, present, and future capacities) and would reap the same benefit in wellbeing, they have equally strong claim to that benefit—even if their potentials are different.

Admittedly, I have done little more than formulate and motivate this general approach. Further analysis may show that it is deeply flawed in unanticipated ways. My only claim here is that egalitarians should worry about the problem, and that the proposed solution is at least worth considering carefully. Much more analysis is of course needed before we have an adequate sense of what kinds of solution are possible, and which are the most plausible.¹⁷

References

- Arneson, R. (1999). 'What, If Anything, Renders All Humans Morally Equal?' in D. Jamieson (ed.), *Peter Singer and His Critics*. Oxford: Blackwell.
- Buchanan, A., Brock, D., Daniels, N., and Walker, D. (2000). *From Chance to Choice: Genetics and Justice*. Cambridge: Cambridge University Press.
- Crisp, R. (2003). 'Equality, Priority, and Compassion', *Ethics* 113: 745-763.
- Daniels, D. (1990). 'Equality of What: Welfare, Resources, or Capabilities?', *Philosophy and Phenomenological Research* 50 (supplement): 273-96. Reprinted in N. Daniels, *Justice and Justification*. New York: Cambridge University Press, 1996, 208-231.
- Harman, E. (1999) 'Creation Ethics: The Moral Status of Early Fetuses and the Ethics of Abortion,' *Philosophy and Public Affairs* 28: 310-24.
- Kaufman, F. (1998). 'Speciesism and the Argument from Misfortune,' *Journal of Applied Philosophy* 15: 155-63.
- McMahan, J. (1996). 'Cognitive Disability, Misfortune, and Justice,' *Philosophy and Public Affairs* 25: 3-35.
- McMahan, J. (2002). *The Ethics of Killing: Problems at the Margins of Life*. Oxford: Oxford University Press.
- Persson, I. (1993). 'A Basis for (Interspecies) Equality', in P. Cavalieri & P. Singer (eds.), *The Great Ape Project*. New York: St. Martin's Press, 183-193.
- Rachels, J. (1990). *Created from Animals: The Moral Implications of Darwinism*. New York: Oxford University Press.
- Singer, P. (1990). *Animal Liberation* 2nd ed. New York: Random House.

Notes

* This is a slightly revised version of Peter Vallentyne, 'Of Mice and Men: Equality and Animals', *Journal of Ethics* ?? (2005?): ??-?? [not yet published]. Copyright 2005 by Springer Science and Business Media. Reprinted with the kind permission of Springer Science and Business Media.

* In addition to miscellaneous stylistic revisions, this version of the paper corrects two errors in the original version: Fn. 13 contained a numerical error and Idea 6 was poorly formulated.

¹ McMahan is, of course, building on the work of Singer (1990). See also, Rachels (1990: ch. 5), Persson (1995), Kaufman (1998), Arneson (1999), and Crisp (2003).

² Note that, in any case, restricting moral standing to rationally autonomous agents does not avoid the problem. The problem arises, for example, if equality of welfare is required and some rationally autonomous agents have only the capacity for welfare that mice have.

³ McMahan (1996: 30) suggests such a view.

⁴ This is roughly a specific version of the species-norm account discussed by McMahan (1996, 2002: ch. 2). Daniels (1990) and Buchanan *et al.* (2000: ch. 4) appeal to a species-relative account but based on capabilities rather than wellbeing.

⁵ McMahan (2002: ch.2), for example, argues against any kind of species-norm account.

⁶ Of course, one's capacities (i.e., abilities to do things at will) can increase over time (e.g., from practice and education), but this is simply the development of a potential that was present all along.

⁷ Note that, in the example given, the mouse (who is 1 unit short of her maximum of 2) is 1 unit above her minimum, whereas the human (who is 100 units short of his maximum of 200) is 100

units above his minimum. A different view of fortune would take fortune to be the excess over the minimum. If the minima are the same (e.g., zero), this view is equivalent to Fortune as Wellbeing. In any case, it generates the problematic conclusion, since mice will typically have a smaller excess.

⁸ McMahan (1996, 2002: 2) insightfully discusses this issue at length.

⁹ It's worth noting that, if radical enhancement is possible, then even total utilitarianism faces the problematic conclusion, once the cost of radical enhancement becomes small. Given decreasing marginal wellbeing and roughly identical marginal wellbeing for any two individuals at the same level of wellbeing, enhancing mice and then transferring resources to them from humans will generally increase total wellbeing. Indeed, this illustrates the point that there is a close connection between the problems generated by radical enhancement and problems in population policy about adding additional individuals to the world. The latter concerns our duty to add beings to the world with a given level of standing, whereas the former concerns our duty to increase the moral standing of existing individuals to a given level.

¹⁰ Of course, once such 'external enhancements' have taken place, the mouse's intrinsic potential is enhanced. Likewise, the offspring of mice that have been genetically enhanced to produce offspring with enhanced capacities have enhanced intrinsic potentials. The issue here concerns the force of the moral reason to provide such enhancement in the first place.

¹¹ For example, one might understand intrinsic potential to be those possibilities that the individual has in his/her statistically normal (e.g. most common) environment. It seems quite arbitrary, however, to limit the relevant potentials to those states that are achievable in statistically normal environments. The mere fact that a child cannot overcome dyslexia in statistically normal environment surely does not mean that the child does not have the relevant

potential to overcome the condition.

¹² Degrees of moral standing also seem necessary in order to deal adequately with future people who will come into existence with less than certainty. I shall suggest below that their standing is discounted by the probability of their coming into existence.

¹³ I here sidestep the important issue of how fortune is to be calculated when wellbeing is negative. It would be quite implausible to hold that here too it is wellbeing divided by degree of moral standing. This would have the result that a mouse with moral standing of .01 and wellbeing of ~~-01~~-1 has worse fortune (-100) than a human with moral standing of 1 and wellbeing of -99. It would also violate Idea 3's requirement that for a given level of wellbeing (e.g., -1) fortune is inversely related to degree of moral standing (e.g., that a mouse with wellbeing of -1 has better fortune than a normal human with -1). One promising way of relativizing negative wellbeing is to set fortune equal to wellbeing *multiplied* (cf. divided) by degree of moral standing. This ensures that those with lower degrees of moral standing require less wellbeing to achieve a given level of fortune (as required by Idea 3). I shall not, however, pursue this important and difficult question.

¹⁴ It's worth mentioning that throughout I am putting aside issues of rectification for past wrongs. A person who has a low degree of moral standing because her capacities were wrongfully thwarted has, I would argue, a claim to have her capacities suitably enhanced, or at least to be compensated so that her wellbeing is no lower than it would have been had she not been wronged. In any case, this issue is ignored throughout.

¹⁵ The idea of relativizing moral standing to action performed is similar to the idea, proposed by Elizabeth Harman (1999), that moral standing depends (if I understand correctly) on how the future turns out. I reject, however, this claim. Moral standing, I claim, is determined at the time

of action. It depends only on what action is performed and the probabilities of future events that it imposes. It does not depend on which of the possible future events contingently ends up occurring.

¹⁶ Working Assumption 2 entails that two individuals with the same current capacities, and the same future capacities if a given action is performed, may nonetheless have different degrees of moral standing relative to that action, if they their past capacities are different. Admittedly, this seems bizarre. Nonetheless, the past must somehow be relevant. Otherwise, a person who temporarily lost her capacity would not be wronged if she were killed.

¹⁷ For insightful comments, I thank Dick Arneson, Alexander Cappelen, Paula Casal, Matthew Clayton, Roger Crisp, Trent Dougherty, Marc Fleurbaey, Nils Holtug, Brad Hooker, Brian Kierland, Jeff McMahan, Gene Mills, Mike Otsuka, Thomas Pogge, Mathias Risse, Larry Temkin, Bertil Tungodden, Jo Wolff, and the participants in the following colloquia: Kline Colloquium on Equality, Poverty, and Global Justice (University of Missouri-Columbia, 2004), University of Warwick Graduate Student Conference (2004), University of Copenhagen Conference on Equality (2004), the Lofoten Genes and Justice Conference (2004), and the James Rachels Memorial Conference at the University of Alabama at Birmingham. I'm especially indebted to Jeff McMahan for his encouragement and help as I struggled with this perplexing problem and to Nils Holtug for raising several important objections to earlier versions of this paper.