

Why intergenerational sufficientarianism is not enough

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journals.sagepub.com/home/ppe**Karri Heikkinen** *University College London, UK*

Abstract

Many political philosophers accept a view called intergenerational sufficientarianism, according to which we should aim to make sure that future people have enough of whatever is the appropriate currency of distributive justice, such as welfare, capabilities, or need-satisfaction. According to proponents of this view, we have good reasons to accept intergenerational sufficientarianism, even if sufficientarianism is not the right way to think about distributive justice among contemporaries. However, despite its popularity, and the established literature on sufficientarianism in the contemporary context, precise statements of intergenerational sufficientarianism remain relatively rare. In this paper, I first survey the reasons that have been offered for accepting intergenerational sufficientarianism, and then formulate multiple precise interpretations of the view. I argue that there is in fact no precise formulation of intergenerational sufficientarianism that achieves all the benefits attributed to the view in the literature, and all plausible interpretations of the view also face serious further problems. Thus, intergenerational sufficientarianism is not as attractive a view as many have thought.

Keywords

intergenerational sufficientarianism, sufficientarianism, sufficiency, intergenerational justice, future people, population ethics, non-identity problem, repugnant conclusion

Roughly, intergenerational sufficientarianism is the view that we should ensure future generations have enough of whatever is the appropriate currency of distributive justice.

Corresponding author:

Karri Heikkinen, Department of Philosophy, University College London, Gower Street, London WC1E 6BT, UK.

Email: karri.heikkinen.20@ucl.ac.uk

Intergenerational sufficientarianism is one of the most influential views among political philosophers working on what we owe to future people, and some version of it is accepted by many prominent authors (Caney, 2009, 2010; Cripps, 2013; Huseby, 2012; Kyllönen, 2022; Kyllönen and Basso, 2017; Meyer and Pölzner forthcoming; Meyer and Roser, 2009; Meyer and Stelzer, 2018; Oliveira, 2023; Page, 2007; Rendall, 2011; Wolf, 2009).¹ Indeed, if a student of intergenerational justice opens the *Stanford Encyclopedia* article on the topic, she will find that sufficientarian views occupy a central role in the field. For example, the conclusion of that article reads:

By employing a threshold notion of harm which may be understood as a central element of a *sufficientarian* conception of intergenerational justice, but could also be an element of other substantive understandings of intergenerational justice, we can justify conclusions about ... present generations' duties. Basic needs or central capabilities are plausible currencies of a *sufficientarian* interpretation of intergenerational justice that relies on the threshold notion of harm. (Meyer, 2021, my emphasis)

The influence of intergenerational sufficientarianism, however, is not limited to academia: it has also had considerable traction in politics. When the UN's World Commission on Environment and Development released its 1987 report *Our Common Future*, the key message of sustainable development was framed in a distinctively sufficientarian ethos: 'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED, 1987: 41). In other words, we should make sure future generations can meet their *needs*, rather than, say, aiming for equality between generations or maximising welfare across them. Needless to say, this concept of sustainable development has had an immense impact on policy over the last few decades.²

Despite its influence, however, it seems to me that precise statements of intergenerational sufficientarianism are relatively rare, and even those authors who do provide explicit definitions often do so in rather vague terms. Take, for example, what I believe is one of the most explicit and influential formulations of the view, by Lukas Meyer and Dominic Roser:

Strong Sufficientarianism: First, the improvement in well-being of those whose level of well-being is below the threshold has absolute or lexical priority; and to benefit persons below the threshold matters more the worse off they are. Second, both below and above the threshold it matters more to benefit persons the more persons are being benefited and the greater the benefits in question. But: Trade-offs between persons above and below the threshold are precluded. (Meyer and Roser, 2009: 224)

Here, for example, it is unclear whether improvements in wellbeing matter in an axiological or deontic sense. By this, I mean that it is not clear whether what we have here is a view about *value*, in the sense of what makes outcomes vis-a-vis future generations good and bad, or a view about what we *ought to do*, for example, to respect future people's rights.

Vagueness of this kind is worrying, for it might contribute to the view's appeal by allowing us to subconsciously switch between multiple more precise views depending on the argument at hand. To give an example that will become much clearer over the course of this paper, a strong and straightforward deontic interpretation of intergenerational sufficientarianism might block the Repugnant Conclusion but counterintuitively imply that we ought to strive towards human extinction, whereas a weak axiological interpretation might avoid this implication at the cost of leading us back to the Repugnant Conclusion. This way, we may end up attributing many benefits to intergenerational sufficientarianism, without acknowledging its more worrying implications.

In this paper, I take on the task of clarifying intergenerational sufficientarianism and investigate whether any version of the view can achieve the benefits that its defenders attribute to it in the literature while also avoiding counterintuitive implications elsewhere. The paper has four sections. In the first section, I list the benefits that have been offered in the literature as reasons for accepting intergenerational sufficientarianism. Here, I take the influential paper by Meyer and Roser already quoted above as my starting point, while also indicating how other authors make similar claims. After this, I formulate and evaluate multiple more precise versions of intergenerational sufficientarianism: in the second section, I examine what I call axiological intergenerational sufficientarianism, and in the third, I turn to deontic intergenerational sufficientarianism. Finally, in the fourth section, I consider a recent suggestion that aims to avoid certain problems with the view by weakening it. My main conclusion is that there is, in fact, no precise version of intergenerational sufficientarianism that can achieve all or even most of the benefits that those in favour of the view claim it to have, and all of these views also face significant additional problems.

Why accept intergenerational sufficientarianism?

In both intra- and inter-generational contexts, sufficientarianism is typically placed in opposition with utilitarianism, egalitarianism, and prioritarianism. Roughly speaking, sufficientarian views hold that what matters in distributive justice is that everyone has enough of whatever is the currency of justice, and ensuring this takes lexical priority over other aims. Here, lexicality means that no amount of benefits to people above the level deemed sufficient can outweigh benefits to people below it. Egalitarian and utilitarian views, on the other hand, do not place such significance on any putative sufficiency threshold: instead, utilitarians claim that we should choose whatever distribution maximises the total sum of benefits, whereas egalitarians hold that we should aim towards everyone having the same amount of benefits. Finally, according to prioritarianism, benefits to the worse off matter more than benefits to the better off, but distributions are still judged based on a sum of weighted benefits, rather than by their proximity to equality or people meeting any kind of sufficiency threshold. The key difference with sufficientarianism is that even though both views prioritise benefitting the worse off, in the prioritarian view this priority never goes as far as lexicality.

In the debate between these views as it concerns currently existing people, sufficientarianism has both significant advantages and disadvantages (see e.g., Casal, 2007; Crisp, 2003; Frankfurt, 1987; Huseby, 2010). Against utilitarianism, sufficientarians argue that

their view has the benefit of not disregarding distributive justice for the sake of total (or average) welfare – it can explain our intuitive discontent with a population in which some people are very badly off and others are very well off, even when this option maximises welfare. Compared to egalitarianism, on the other hand, sufficientarianism has the benefit of avoiding the levelling down objection, meaning that, unlike egalitarian views, sufficientarianism need not imply that it is better in any respect to achieve equality by making everyone as badly off as the worst off. However, as Casal (2007) showed, it is very difficult to accept the sufficientarian idea that once everyone has enough, inequalities do not matter at all. Furthermore, sufficientarians face many difficulties when it comes to specifying the threshold(s) of sufficiency.

There is much more that could be said on both sides of this debate, but that would fall outside the scope of this paper. Instead, I want to focus on the claim, advanced by multiple philosophers, that even if sufficientarianism is not the correct theory of distributive justice in the context of the current generation, we should still accept it *in the intergenerational context*. As Kyllönen and Basso (2017: 78) put it, ‘Although the sufficientarian understanding of justice has provoked some plausible objections when applied among contemporaries, this approach has specific characteristics that speak in its favor when dealing with relations between generations’. Thus, I will set aside the arguments mentioned above, and instead move on to list the apparent advantages of intergenerational sufficientarianism. Keep in mind that, at this point, I am not yet trying to determine if the view really has these advantages.

Solving the non-identity problem

The first putative benefit of intergenerational sufficientarianism is that the view can avoid the non-identity problem (Cripps, 2013: 17–18; Gosseries, 2016: 132; Kyllönen and Basso, 2017: 87; Meyer, 2003, 2021: section 3.1; Meyer and Roser, 2009: 226–232). The non-identity problem, made famous by Parfit (1984), arises from the fact that many of our actions influence not only the welfare and number of future people but also their identity. Consequently, it becomes difficult to say exactly what is wrong with many intuitively impermissible actions, such as accelerating climate change by burning fossil fuels, that seemingly make future people worse off. This is because, had we acted differently, the individuals affected would not have existed at all, and some other people would have existed instead. Thus, as long as the people who exist in the future do not have lives that are worse than non-existence, we do not in fact make anyone worse off than they would otherwise have been.

According to Meyer and Roser (2009), the way intergenerational sufficientarianism avoids the non-identity problem is that it incorporates a threshold notion of harm. Here, the idea is that the threshold of sufficiency is such that causing a person to exist below it harms that person. Consequently, burning all fossil fuels might harm future people if those people, as a consequence of our choice, exist below the threshold of sufficiency – even if, because they would not otherwise have existed, they are not made worse off than they would otherwise have been. This harm makes our action impermissible, and so the non-identity problem disappears.³

To be clear, I have not here attempted to explain how, for example, the definition of intergenerational sufficientarianism from Meyer and Roser quoted in the introduction is meant to generate the response to the non-identity problem described above. I think that the definition is not enough to generate the response outlined here, and this is part of the point of this paper. For now, however, I am simply reporting the benefits that defenders of intergenerational sufficientarianism have attributed to their view.

Avoiding the repugnant conclusion

The second major benefit often attributed to intergenerational sufficientarianism is that it can avoid the so-called Repugnant Conclusion (Huseby, 2012: 191–193; Kyllönen, 2022: 356; Kyllönen and Basso, 2017: 83; Meyer and Pözlner forthcoming: section 4.3; Meyer and Roser, 2009: 232; Rendall, 2011: 232–234). The Repugnant Conclusion, also made famous by Parfit (1984), is a counterintuitive implication about the betterness of different populations implied by many popular theories of population ethics. Paraphrasing Parfit, we can state it as follows.

Repugnant Conclusion. For any finite population A where everyone enjoys a very high quality of life, there is some much larger finite population Z whose existence, if other things are equal, would be better even though its members have lives that are only barely worth living.

Out of the natural competitors to intergenerational sufficientarianism, total utilitarianism and prioritarianism imply the Repugnant Conclusion. Avoiding it is thus meant to give us a reason to prefer intergenerational sufficientarianism over these other views.

The way intergenerational sufficientarianism avoids the Repugnant Conclusion, according to its proponents, is that, because the view gives lexical priority to everyone meeting the threshold of sufficiency, population Z, where everyone is below that threshold, cannot be better than population A, where everyone is above it, regardless of how many more people exist in Z. In other words, the view avoids the Repugnant Conclusion because once we hit the threshold of sufficiency, the view does not allow us to trade quality of lives for quantity of lives.

Demandingness

The third benefit linked with intergenerational sufficientarianism is that, unlike many of its competitors, the view is not implausibly demanding (Kyllönen and Basso, 2017: 82–84; Meyer and Pözlner forthcoming: section 4.2; Meyer and Roser, 2009: 234–235; Rendall, 2011: 235–236).⁴ Utilitarian and prioritarian views, the argument goes, are way too demanding. For example, they may require us to all but starve ourselves in order to avoid climate change making very many future generations worse off. Indeed, this can happen even in cases where we expect future people to be richer than us, or where the risk of a serious catastrophe is extremely small (Rendall, 2019: 441–446).

Intergenerational sufficientarianism, at least according to its defenders, does not make excessive demands on us, for when it comes to future people, we need only to make sure

they have enough. Furthermore, the view can be thought to place a hard limit on how much we are required to contribute because we cannot be required to contribute more when doing so would mean falling below the sufficiency threshold ourselves (Daly, 1996: 36).⁵

Epistemic feasibility

The final benefit often attributed to intergenerational sufficientarianism that I want to mention here is that, unlike its natural competitors, the view does not suffer from the simple problem that it is hard to predict the future (Caney, 2009; Kyllönen and Basso, 2017: 81; Meyer and Roser, 2009: 241).⁶ The idea here is that, when it comes to future generations, utilitarianism and egalitarianism in particular are difficult to apply in practice. This is because we do not know how to maximise future people's welfare, as we do not know what kind of things are most important for them. To a perhaps lesser but still significant degree, we do not know how to achieve equality with future people, since, depending on factors beyond our control, they could be either much richer or much poorer than we are.

Here, the idea in favour of intergenerational sufficientarianism goes as follows: even if we do not know what maximal utility or equality requires, we at least know that future people will need certain basic goods, simply because they are still people. These goods could include things like food, water and shelter, and the threshold of sufficiency is meant to correspond to them. So, for example, even if we will never know exactly how much natural resources we should save, we should at least take care to not destroy the environment so much that our descendants lack drinkable water. Thus, epistemic feasibility seems to give us another reason to prefer intergenerational sufficientarianism over utilitarian and egalitarian alternatives.

We have now seen the four major benefits that are often attributed to intergenerational sufficientarianism.⁷ To recap, these benefits are as follows: 1. solving the non-identity problem, 2. avoiding the Repugnant Conclusion, 3. avoiding excessive demandingness, and 4. being epistemically feasible. In other words, intergenerational sufficientarianism is claimed to provide a practically applicable theory that solves certain classic problems in intergenerational ethics without making unreasonable demands on us.

Having set out the putative benefits of intergenerational sufficientarianism, we can now move on to investigate whether any precise formulation of this view can in fact secure these benefits while avoiding highly counterintuitive implications elsewhere. I start by trying to figure out the most plausible axiological version of the view.

Axiological intergenerational sufficientarianism

Interpreting intergenerational sufficientarianism in axiological terms means that we interpret the view in terms of value. From this understanding, the view gives us criteria for judging states of affairs as better or worse: how good things are dependent on whether people reach the threshold of sufficiency. In this section, I aim to formulate a precise view that captures that idea.

How should we understand axiological sufficientarianism?

Recall the statement of intergenerational sufficientarianism from Meyer and Roser, quoted in the introduction. In a nutshell, this statement told us that improving the welfare of those below the threshold of sufficiency takes lexical priority over improving the welfare of those above it, and that for those below the threshold, benefits matter more the worse off these people are. Leaving aside the prioritarian idea expressed in the second part of this statement for now, we might at first be tempted by the following kind of interpretation:

Minimal Sufficientarianism. Population A is better than population B if and only if A includes no people below the threshold of sufficiency and B includes at least one such person.

Minimal Sufficientarianism is an implausible view, for many reasons. Here, it suffices to point out that, according to this view, a population that includes one person just very slightly below the threshold and billions of blissfully happy people is not better than another, different population that includes billions of people living hellish lives. But that is clearly implausible.

To avoid such a result, we might instead wish to minimise the number of people who fail to achieve sufficiency, a view suggested but not endorsed by Hirose (2016: 56). I will state it as follows:

Headcount Sufficientarianism. Population A is better than population B if and only if A has a smaller number of people below the threshold of sufficiency than B.

However, this view is also implausible. To see this, assume that 8 is the threshold of sufficiency and consider two populations A and B, with the individual welfare scores in brackets. This view implies that A (6, 6, 10) is not better than B (1, 1, 10), because both populations have the same number of people below the threshold. That result is unacceptable. The same problem would arise for a version of this view where one population is better than another if it has more people above the threshold of sufficiency (see Huseby, 2012: 192).

The two views we have seen fail because we must consider not only the number of people not having enough but also the degree to which that is the case. Here is my formulation of a view that aims to do just that, also suggested by Hirose (2016: 56–57):

Minimise Total Shortfall. Population A is better than population B if and only if A has a lower total sum of shortfalls from the threshold of sufficiency, where the shortfall for each person is the threshold of sufficiency minus the welfare of that individual.

Returning to the example above and keeping the sufficiency level at 8, this view judges population A (6, 6, 10) to be better than B (1, 1, 10), because the shortfall for A is $(8-6) + (8-6) = 4$ and for B $(8-1) + (8-1) = 14$, meaning that A minimises shortfall. So, this is the best view so far.

Now, it might seem like the view is problematic because it implies that removing people from below the threshold, even with lives worth living, always makes things better. Since we can remove people from below the threshold not only by improving their lives but also by killing them, the view implies that it would make things better to kill such people – but surely, killing people with lives worth living is unacceptable.⁸ Here, however, sufficientarians have a satisfactory reply available: they can argue that even though having less people below the threshold is in a strictly axiological sense better, there is nothing in their view that would block them from saying that killing innocent people is nevertheless impermissible. Such acts might be simply forbidden in a deontic sense, even if they would sometimes make things better.

Having cleared that up, we can further develop the view. It is easy to add a prioritarian element into the view: instead of the total sum, we can instead minimise a sum of weighted shortfalls, such that the lower the individual's welfare, the greater weight that person's shortfall from the threshold of sufficiency gets. Another thing we need to add to capture the spirit of Meyer and Roser's statement is the idea that even though meeting the threshold takes lexical priority, welfare above it also matters. The view can then be stated like this:

Axiological Sufficientarianism (AS). Population A is better than B if and only if:

1. *EITHER* A has a lower sum of prioritarian-weighted shortfalls from the threshold of sufficiency than B, where the shortfall for each person is the threshold of sufficiency minus the welfare of that individual.
2. *OR* A and B have the same sum of prioritarian-weighted shortfalls, but A has a higher sum of total welfare above the threshold.⁹

By the phrase 'prioritarian-weighted', I simply mean that the weighting is given by some prioritarian function.¹⁰

The sadistic conclusion and multilevel axiological sufficientarianism

While I believe AS to be the view that best captures the axiological interpretation of Meyer and Roser's statement of intergenerational sufficientarianism, I do not think it is the best axiological interpretation of the view in general. This is because AS faces a serious problem, not considered by Meyer and Roser, known as the Sadistic Conclusion. Arrhenius states the problem as follows:

Sadistic Conclusion. When adding people without affecting the original people's welfare, it can be better to add people with negative welfare rather than positive welfare. (Arrhenius, 2000: 251)

AS implies the Sadistic Conclusion very directly: according to this view, a population where everyone's lives are net negative can be better than a population where all lives are net positive. To see why, consider population Z, where very many people all live lives that are positive but below the threshold of sufficiency, and a smaller population X, where everyone lives a hellish life. No matter how bad the lives of those in X, this population is still better than Z, as long as Z is sufficiently larger than X. This is

because a great enough number of people in *Z* can always make the sum of even weighted shortfalls in *Z* higher than in *X*.

To avoid this problem, Huseby (2012: 194) suggests that sufficientarians could adopt a multilevel view, according to which avoiding shortfall from what we might call the neutral level, above which life is worth living even if not sufficiently good, takes lexical priority over avoiding shortfall from the sufficiency level, and avoiding shortfall from the sufficiency level takes lexical priority over maximising welfare above it. Huseby does not give an explicit statement of such a view, but I will develop one here. Consider the following:

Multilevel Axiological Sufficientarianism (MAS). Population *A* is better than population *B* if and only if:

1. *EITHER* *A* has a lower sum of prioritarian-weighted shortfalls from the neutral level than *B*, where the shortfall for each person is the neutral level minus the welfare of that individual.
2. *OR* *A* and *B* are equal in terms of the sum of prioritarian-weighted shortfalls from the neutral level, but *A* has a lower sum of prioritarian-weighted sufficiency shortfalls than *B*, where the sufficiency shortfall for each person is the threshold of sufficiency minus the welfare of that individual.
3. *OR* *A* and *B* are equal in terms of both the sum of prioritarian-weighted shortfalls from the neutral level and the sum of prioritarian-weighted sufficiency shortfalls, but *A* has a higher sum of total welfare above the threshold.

To see how MAS works, let us look at an example. Consider the following five options: *A*(−10, 10, 10); *B*(−1, 20, 30); *C*(4, 9, 9); *D*(5, 9, 10); *E*(8, 10, 10); and *F*(10, 10, 10). Let 0 be the neutral level and 8 the sufficiency level. Let us also set aside prioritarian weightings for simplicity. Here, *C*, *D*, *E*, and *F* have the same shortfall from the neutral level, namely zero, whereas *A* and *B* have shortfalls of 10 and 1 respectively. So, by condition 1, we can rank *A* the worst, *B* the second worst, and the rest better than these two. Moving to condition 2, *E* and *F* have the same sufficiency shortfall, namely zero, whereas *C* and *D* have $8-4 = 4$ and $8-5 = 3$ respectively, meaning that *D* is better than *C*, and *E* and *F* are better than both. Finally, by condition 3, *F* is better than *E*, for *F* has a higher sum of total welfare above the threshold. From worst to best: *A*, *B*, *C*, *D*, *E*, and *F*.

MAS avoids the Sadistic Conclusion, because no amount of welfare above the neutral level in *Z* can compensate for the fact that *X* includes many people living lives not worth living. I believe that this view is the most plausible axiological interpretation of intergenerational sufficientarianism.

Hirose (2016: 67) has objected to views like MAS by pointing out that they still imply that a small population *X*, where everyone has a hellish life, is better than a very large population *Z*, where everyone has a life just slightly below the neutral level. But while Hirose seems to find this objection fatal, I do not think it is. After all, note that standard formulations of total utilitarianism and prioritarianism also have the very same implications. Furthermore, the rejection of this implication seems to follow the kind of logic exemplified by Scanlon's (1998: 235) Transmitter Room example: we would rather see a very large number of people suffer a minor harm than let one person suffer a

very serious harm. Plausibly, this intuition is best accounted for by deontic restrictions on interpersonal aggregation, in the style of Voorhoeve (2014), rather than by building such restrictions into our axiology. If that is right, then Hirose's objection does not look fatal for an axiological view like MAS.

That said, it is worth addressing two well-known objections to sufficientarianism that also affect MAS. Firstly, we might think that the lexicality of the view makes MAS implausibly sensitive to tiny differences in individual people's welfare level. To see the point of this objection, imagine population A, which consists of a billion blissful lives, and population B, which consists of a billion people just barely above the threshold. Imagine next that one person just barely below the threshold is added to population A. According to MAS, population A is massively better than B in the beginning, but it becomes worse than B when we add a single person to A, a person who furthermore is only slightly worse off than everyone in B.

While I find this kind of hypersensitivity counterintuitive, I am not sure that it amounts to a decisive objection. After all, in some sense, the objection simply dismisses the very starting point of sufficientarianism, namely lexicality. Such dismissals would perhaps be justified if the view in question did not have any redeeming qualities, but according to its defenders, the view should have at least four major such qualities, as we saw in the first section. Therefore, while this cost is worth noting, we should at least see whether MAS can achieve the benefits attributed to intergenerational sufficientarianism before rejecting the view.

Secondly, there is the general difficulty of providing some non-arbitrary justification for the threshold of sufficiency, and it seems to me that MAS faces a particularly acute version of this difficulty, because it has to justify multiple thresholds in a way that is not ad hoc. Again, however, I think that this objection is not fatal. Plausibly, the threshold of a life worth living captures something morally very significant, namely the point at which we make people worse off by bringing them into existence. Sufficientarians, of course, will want to say something similar in relation to the sufficiency level: for example, we might follow Caney (2009: 164) in saying that the sufficiency threshold corresponds with human rights we all have. Therefore, my overall assessment is that, as with the view's extreme sensitivity to tiny changes in the lives of those close to the thresholds, this objection should not lead us to reject MAS outright, but rather, we should first investigate what benefits the view might have. In that vein, I will now turn to examine whether MAS can achieve the four benefits I discussed in the first section of this paper.

Testing MAS

The four benefits attributed to intergenerational sufficientarianism that we saw before were: 1. solving the non-identity problem, 2. avoiding the Repugnant Conclusion, 3. avoiding excessive demandingness, and 4. epistemic feasibility. Since 2 turns out to be the simplest to discuss, let us start with the Repugnant Conclusion.

To its credit, MAS avoids the Repugnant Conclusion. This is because the view does not allow any amount of welfare below the threshold of sufficiency to outweigh the objective of getting people above it. Recall population A with billions of blissful lives and population Z with even more people, and higher total welfare, but such that everyone

in Z individually only has a life just worth living. Here, it is easy to see that Z, even with higher total welfare, also has a very high sum of weighted shortfalls from the threshold of sufficiency, meaning that A is better by condition 2 of MAS. Furthermore, note that this solution does not lead us to the Sadistic Conclusion, because I already formulated MAS to avoid that conclusion by condition 1.

That being clear, we can move on to consider the non-identity problem. To frame our discussion, consider the following, bare-bones example of the problem.

Non-Identity. You can either create A at welfare level x or B at welfare level y , such that $x > y$, and $y > 0$, where 0 is the neutral level.

To recap the problem, most people share the intuition that we ought to create A rather than B, or at least that creating A is better than B. However, it seems that if we create B, this cannot wrong anyone, because it is not worse for anyone – under that choice, B still has a life worth living and A does not exist at all.

To work out what MAS implies, assume again that the threshold of sufficiency is at 8. MAS gets the intuitively correct result in all two-way choices between A and B. If $A > 8$ and $B < 8$, then A is better by condition 2 of MAS, since it minimises shortfall from sufficiency. The same goes if both A and B are below sufficiency, in which case A is again better by condition 2. Finally, if both A and B are above sufficiency, then A is better by condition 3 of MAS, since A maximises welfare above sufficiency.

However, things get more complicated when, instead of creating A or B, the choice is between creating A and no one. If $A > 8$, then MAS implies that creating A is better than creating no one, for this maximises above threshold welfare. However, if $A < 8$, then it is better to create no one, since this option minimises shortfall from sufficiency. In other words, MAS implies that it is better to create no one than to create a person with a life worth living but below the threshold of sufficiency, even if this is the only kind of person we can create. That seems wrong to me, but perhaps from a sufficientarian perspective, the bullet can be bitten. As Huseby (2012: 197–198) points out, an empty world is in one respect better than a world with people living positive, but sub-sufficiency lives: it lacks the badness of people not having enough.

The point about empty worlds, however, generalises. Note that according to MAS, a world with no population is better than a population with even one person just below sufficiency and billions of people with blissful lives, since the former minimises shortfall from sufficiency. If in addition, we accept the seemingly plausible assumption that it is almost impossible to make sure that not even one future person will ever be below sufficiency, then MAS seems to imply that it would be better to have no future people at all. In other words, MAS strongly pushes us towards a kind of anti-natalism, according to which it would be best if humanity ceased to exist.¹¹

It is worth stopping for a moment to appreciate just how extreme a version of anti-natalism this is. MAS implies that extinction would be better than a situation where 1) just one person is below sufficiency, 2) this person still has a life worth living, and 3) everyone else has a blissful life that involves no suffering whatsoever.¹² This seems to go further than even many philosophical defences of antinatalism are willing to go: for example, Benatar's (2006) argument for anti-natalism depends on a kind of asymmetry

between pleasure and suffering, plus the empirical assumption that all lives will contain at least some of the latter. In my view, this implication makes MAS very difficult to accept.

Furthermore, MAS cannot be said to avoid demandingness. According to MAS, the more people above the threshold of sufficiency, and the better off they are, the better the population – just like with utilitarianism. Very importantly, however, the demandingness of MAS would remain even if we disregarded welfare above sufficiency (that is, even if we give up condition 3). Note that even then MAS would imply that the current generation must do everything it can up to the point of reducing itself to the level of sufficiency just to make even one future person meet the threshold. Widerquist (2010) makes a similar point about sufficientarianism in relation to the present generation,¹³ and I believe that this feature of sufficientarianism is massively amplified in the intergenerational context.

To see what I mean, consider the following example. Imagine that everyone alive now enjoys levels of welfare way above sufficiency, but then sad news break: because of a new gene mutation, we learn that approximately one child every *ten thousand years* will be born with a terrible disease that makes reaching sufficiency impossible, unless a cure is found. Scientists then inform us that we can indeed find a cure, but this would require a concentrated research program so expensive that, to fund it, everyone must be reduced to the level of sufficiency indefinitely. Assuming that we are to avoid extinction, as discussed above, MAS then implies that we ought to commit to the research program. Depending on the numbers, this could require way more than even utilitarianism demands from us. Therefore, there is no principled reason to think MAS would be less demanding than its main competitors.

At this point, I should also clarify something important about demandingness in this debate more broadly. Note that, in a strict sense, MAS is not demanding, because as a purely axiological view, it makes no demands on us at all. However, if this was the way in which the proponents of the view understood MAS to avoid demandingness, then demandingness could not have been a reason to prefer intergenerational sufficientarianism over utilitarian or prioritarian views in the first place, because the proponents of these competing views could make the exact same claim. Rather, for demandingness to give us a genuine reason to prefer intergenerational sufficientarianism, the avoidance of demandingness cannot rely solely on the general method by which we translate axiological claims into deontic ones. Instead, it must be the case that the view somehow limits axiological stakes, so that even when making things go better translates more or less directly into something we ought to do, these views do not grow too demanding. As I have shown above, this is not the case.

What about the final benefit, namely epistemic feasibility? Here, things get complicated. On the one hand, we might think that since there will very likely be more people in all the future generations to come than there are people alive now, there will also be more people falling short of the neutral and the sufficiency thresholds in the future. MAS would then seem to give us a reason to save resources for the future, to help reduce the shortfall as much as possible.¹⁴ On the other hand, technological progress and socioeconomic development could mean that the further into the future we go, the less widespread sub-sufficiency life in the form of poverty and illness becomes, which would then mean that MAS instead instructs us to spend on raising people to the threshold

of sufficiency now. But then, even in the event of a very positive future in this regard, surprising events beyond our control (like natural disasters) could suddenly push many people below sufficiency again. So, it seems to me that even if MAS does not do particularly badly in terms of epistemic feasibility, it is also not obviously better in this regard than its competitors, because its lexical structure means that the priorities it gives us could change drastically across different possible futures.

In sum, then, MAS can avoid the Repugnant Conclusion, and if we are *very* charitable, it can get the non-identity problem right. However, MAS also faces many problems. First, the view can be very demanding, and it does not do particularly well in terms of epistemic feasibility either. Second, it gives us a reason to prefer voluntary extinction over virtually all realistic scenarios of future populations. Finally, it also faces the problems I mentioned before, namely extreme sensitivity to tiny changes in people's welfare levels close to the thresholds, and the difficulty of motivating the multilevel structure. Therefore, if MAS is the best version of intergenerational sufficientarianism, then the view is not nearly as attractive as it has been claimed to be.

All that said, it is also possible to interpret intergenerational sufficientarianism in deontic terms. This is what I turn to next.

Deontic intergenerational sufficientarianism

The core idea usually associated with sufficientarianism is that making sure people meet some threshold of sufficiency takes lexical priority over improving the situation of those above it. Sometimes, the literature on intergenerational sufficientarianism suggests that this lexicality does not arise from a view about value, but rather, it is grounded in notions like rights or side constraints – that is, grounded in deontic notions. For example, consider Caney (2009: 136), who goes as far as saying that people ‘have the human right not to suffer from the disadvantages generated by global climate change’. Thus, some intergenerational sufficientarians could argue that my discussion so far misunderstands the view and suggest that a deontic interpretation may avoid my criticisms. I think this possibility should be taken seriously, so, in this section, I investigate whether interpreting the view in deontic terms produces better results.

There are many ways to formulate a deontic version of intergenerational sufficientarianism. In doing so, one important choice concerns whether the view should consist of one powerful principle or multiple, more fine-grained principles. The former strategy can often be easier to motivate, but it may prove difficult to get all the results one wants. The latter, on the other hand, allows for a more complicated view that gets more of the right results, but it can be difficult to justify. I will consider both these strategies, starting with the former.

Simple deontic sufficientarianism

The natural thought behind a deontic interpretation of intergenerational sufficientarianism, as we saw above, is that causing someone to exist below the threshold of sufficiency violates either some side constraint on our actions or some kind of right they have.

Together with the idea that meeting the threshold of sufficiency should have lexical priority over other aims, this suggests something like the following deontic interpretation:

Deontic Sufficiency (DS). We ought not to cause people to exist at a level of welfare below the threshold of sufficiency.

The most natural motivation for a view like this, I believe, comes from the idea that everyone has a right to not experience life below the threshold of sufficiency. Whatever the basis of such a right, it seems to me that in order to do justice to the lexical spirit of sufficientarianism, this right has to be such that it generates an absolute side constraint, for otherwise, we would not have a strong enough view to prohibit all trade-offs between sub-sufficiency and above-sufficiency welfare. This is why I have framed the view in terms of an outright 'ought'. If this seems like a mistake, bear in mind that I will consider views that add more 'ought's or involve mere pro tanto obligations later.

Note also that, at least at first glance, DS looks quite different from views like MAS. This means that, as the intergenerational sufficientarian might have been eager to point out at the end of the previous section, it is not immediately obvious that my objections to axiological versions of the view also apply to deontic ones. Rather, this is an open question that needs answering.

So, does DS achieve the benefits attributed to intergenerational sufficientarianism, without generating fatal problems elsewhere? Let us start from the positive. DS can clearly avoid a deontic counterpart of the Repugnant Conclusion, in the sense that DS implies that we should not choose population Z over population A. Because Z includes people below the level of sufficiency, whereas A does not, we ought to not choose Z, meaning that we should choose A. Furthermore, like MAS, DS can get the non-identity problem right in cases where $A > 8$ and $B < 8$, namely that we ought to create A.

Unfortunately, that is more or less where the strengths of the view end. With regards to the non-identity problem, DS does not give us any reason to choose A over B if both are above sufficiency, no matter how much better A is. Furthermore, DS does not, at least in any straightforward sense, give us a reason to choose A over B even when $A > B$ and both are below sufficiency. This is because in either case, we do something we ought to not do when bringing A or B into existence. But that seems clearly wrong: if we are forced to create either A who is only slightly below sufficiency or B who would experience hellish suffering, it must be permissible to create A and impermissible to create B. In sum, DS is too minimal a view to be plausible.¹⁵

A related implication here is that whenever we also have the option to create no one, DS implies we should do so rather than causing even one person to exist below sufficiency. This means that DS, in a way similar to MAS, pushes us towards anti-natalism. Given how likely it is that at least one future person will be below the threshold of sufficiency if humanity goes on, DS gives us a reason to opt for extinction.

It could be objected that if DS is combined with a view that grounds our reasons to ensure the continued existence of humanity on the current generation's interests, then this could block anti-natalist implications, because going extinct would inevitably harm those already alive. For example, Finneron-Burns (2017: 336), who rejects impersonal reasons for avoiding human extinction, argues that knowing there will be no future

people could still have ‘various deleterious psychological effects’ on already-existing people.¹⁶

I think views like this are difficult to defend in themselves, but even setting my worries aside, I do not think this move helps. Notice that, assuming DS, this justification for the continued existence of humanity would require that the harm from extinction to currently existing people be so severe that it pushes them below the threshold of sufficiency. In other words, any old harm to the current generation will not be enough to make the argument work; rather, we need their sufficiency to be at stake. It seems to me unlikely that the sadness or loss of meaning that already-existing people would endure from knowing about the future extinction of humanity would be enough for this argument to go through. Furthermore, even if such knowledge would force already-existing people below the sufficiency threshold, DS would then imply that neither extinction nor non-extinction is permissible, because either way someone falls below sufficiency. So, this argument looks like a dead end.

We should also note that DS is a very demanding view. To avoid violating DS, the current generation may be required to save for the future until it has reduced itself to the threshold of sufficiency, just to stop even one future person from falling below this threshold – indeed, as we just saw, DS can even require achieving this by voluntary extinction. Finally, in a way similar to MAS, DS is not particularly light on epistemic requirements either.

In sum, then, DS is not a plausible view, and it cannot secure the benefits attributed to intergenerational sufficientarianism. However, it might be possible to formulate a more sophisticated deontic view that avoids these problems.

Multilevel deontic sufficientarianism

One very natural way to develop DS into a more plausible view is to add more ‘oughts’. These ‘oughts’ should allow us to deal both with cases where everyone is above the threshold of sufficiency and cases where all options involve at least one person falling below it. At the same time, the revised view should retain the basic sufficientarian idea, namely that people having enough should take lexical priority over improving things for those above sufficiency. Furthermore, as we learned from considering axiological sufficientarianism, we must also prioritise avoiding lives not worth living before concentrating on sufficiency, for otherwise we risk generating the deontic counterpart of the Sadistic Conclusion.

These ideas can be brought together into a view that consists of multiple, lexically ordered ‘ought’s. Here is my attempt to formulate such a view:

Multilevel Deontic Sufficientarianism (MDS). In a choice of population,

1. If there is at least one option where no one falls below sufficiency, then, from the options meeting this condition, we ought to choose the option that maximises total welfare.
2. If there are no options where no one falls below sufficiency, but there is at least one option where no one falls below the neutral level, then, from the options

meeting this condition, we ought to choose the option that minimises the sum of prioritarian-weighted sufficiency shortfalls.

3. If there are no options where no one falls below the neutral level, then we ought to choose the option that minimises the sum of prioritarian-weighted shortfalls from the neutral level.¹⁷

The idea of this view is that there are three morally important goals. First, from any set of options, we should pick out the ones that avoid creating lives below sufficiency (and thus below the neutral level), and then, from these, choose the option that maximises total welfare. Second, if there are no such options, then we should take all the options that avoid creating lives below the neutral level, even if they do involve some people below sufficiency, and choose the option that minimises the sum of weighted sufficiency shortfalls. Third, if there are none of these options available either, then we ought to choose the option that minimises the sum of weighted shortfalls from the neutral level.¹⁸

MDS gets the rights result in non-identity cases where everyone we can create is either above or below the threshold of sufficiency, and it avoids the deontic counterparts of the Repugnant Conclusion and the Sadistic Conclusion. Indeed, as the reader might notice, MDS behaves exactly like MAS, apart from being formulated in explicitly deontic terms. Unfortunately, this also means that the view faces all the same problems: due to the lexical priority of avoiding sub-sufficiency lives, MDS drives us towards anti-natalism, it is very demanding, it is hypersensitive, and it is potentially difficult to motivate.

In fact, when it comes to the problem of motivating the view's multilevel structure, there is an additional difficulty that those attracted to a view like MDS face. This is that it is not easy to motivate the 'ought's of MDS without falling back on something very much like axiology. To see what I mean, note first that we often think of rights in rather binary terms: in any given situation, they are either respected or violated. Furthermore, even if we think that rights can be violated to a greater or lesser degree, we do not usually consider different instances of rights violations as something that can be straightforwardly aggregated. Indeed, some will even reject the idea that for any given right, we should act so that less rather than more violations of that right will occur. For example, many would maintain that we ought not to kill an innocent person, even if we somehow know for certain that their future child will grow up to be a mass murderer.

All of this means that even if people have a right against existing below the level of sufficiency, this does not immediately imply that we ought to minimise shortfalls from the sufficiency level (and similarly for the neutral level). If rights violations, in general, are not the kind of things that occur to a greater or lesser degree, that can be aggregated across people, or that ought to be minimised in a teleological sense, then those attracted to deontic interpretations of intergenerational sufficientarianism face a difficult task in explaining how the rights they propose can give rise to a view like MDS. Furthermore, as we saw in the previous section, solving this issue by returning to a simpler, more easily motivated view is not a viable option.

In sum, formulating intergenerational sufficientarianism in deontic terms does not help proponents of the theory, because the resulting view is either implausible or faces essentially the same problems as MAS but with more difficulties with underlying motivation.

Weak intergenerational sufficientarianism

We have not yet seen a version of intergenerational sufficientarianism that can secure all or even most of the benefits associated to the view in the literature, or a version that can avoid highly counterintuitive implications elsewhere. However, Lukas Meyer and Thomas Pölzner have recently made a new proposal that differs from the views I have discussed so far. The proposal goes as follows:

Weak sufficientarianism gives some, but not absolute, priority to those who are below the threshold. Both below and above the threshold it matters more to benefit persons (a) the worse off the persons, (b) the more persons are being benefited, (c) the larger the benefit at issue. ... Weak sufficientarianism allows for trade-offs between enabling basic needs satisfaction and other ways of increasing well-being. (Meyer and Pölzner forthcoming: section 2.2)

The headline idea here is that of *weak* intergenerational sufficientarianism, according to which, roughly, making sure that future people will meet the threshold of sufficiency should take some, but not lexical, priority over improving the situation of those above it.¹⁹ In this final section, I consider whether this move can help the sufficientarian.

Note that, as with many other statements of the view, weak intergenerational sufficientarianism is ambiguous between axiological and deontic interpretations. I consider the axiological version first.

Reading the above statement with axiology in mind, it seems to me that despite labeling the view as sufficientarianism, the view Meyer and Pölzner propose is essentially a form of prioritarianism, perhaps with some kind of discontinuity in the prioritarian function at the threshold of sufficiency. If we disregard the somewhat confusing vocabulary regarding prioritarianism and sufficientarianism, this seems to suggest a view like the following.

Weak Axiological Sufficientarianism (WAS). Population A is better than population B if and only if A has a greater sum of weighted welfare than B, where the weighting is given by some prioritarian function f , and where f has a kink at the threshold of sufficiency.

By ‘a kink at the threshold of sufficiency’, I just mean that the prioritarian function in question is such that it gives disproportionately (but not lexically) higher weight to benefits below the threshold. In other words, this function would increase very quickly until the threshold, and then continue increasing slower after that.²⁰

As a prioritarian view, WAS has some positive features. Most importantly, it avoids the Sadistic Conclusion, and compared to MAS, which was our earlier candidate for the best axiological version of intergenerational sufficientarianism, it is not hypersensitive and need not adopt a multilevel structure that would be difficult to motivate.

Furthermore, when it comes to the non-identity problem, WAS can get the right results, simply because in any choice between two populations where welfare is equally spread, WAS tells us to choose the one with higher welfare. WAS also prefers the creation of people below the threshold of sufficiency but above the neutral level over creating no one, a result that blocks the kind of push towards extinction that we got with MAS.

That said, it is important to note here that the sense in which WAS ‘solves’ the non-identity problem is the same as the sense in which total utilitarianism does: bringing into existence a person with higher welfare is better than bringing into existence a person with lower welfare. This point has two implications. Firstly, it seems to me that if WAS really is the best form of intergenerational sufficientarianism, then given that the mechanism that allows WAS to avoid the non-identity problem is so similar to utilitarian and prioritarian views, this problem does not really give us a reason to prefer intergenerational sufficientarianism over these competing views.

Secondly, it is even more important to note that because of the structural similarity that WAS shares with prioritarianism, the view does not avoid the Repugnant Conclusion. Even when sub-threshold sufficiency is discounted, for any finite population A where everyone lives a blissful life, there is some population Z with so many people living a life just worth living such that Z is better than A. Giving up lexicality means losing the benefit of avoiding the Repugnant Conclusion.

Furthermore, giving up lexicality means that WAS becomes demanding in the same way utilitarianism is demanding. Because things above the threshold of sufficiency can now be traded off against things below the sufficiency level, there is in principle no sacrifice from the current generation that could not generate an overwhelming amount of value over the course of the long-run future.

What about a weak deontic interpretation, then? Earlier, I defined what I took to be two representative examples of possible deontic versions of intergenerational sufficientarianism. Let us begin with the simple view I called DS. A natural way to weaken this view is to replace the overall ought in the original definition with something like the following:

Weak Deontic Sufficientarianism (WDS). There is a weighty moral reason against causing people to exist at a level of welfare below the threshold of sufficiency.

This kind of view could be motivated, for example, by the idea that people have a right to not exist at a level of welfare below the threshold of sufficiency, but this right is not absolute, meaning that it can be outweighed by other important considerations.

There is a way in which WDS is clearly not very demanding. However, the problem with WDS is that it is too minimal to provide almost any concrete results, and thus, it fails to achieve the advertised benefits of intergenerational sufficientarianism. This poses a dilemma: either the view stays weak and cannot get the desired results, or we strengthen it and face the same problems we already saw with the stronger version of the view.

Things get even more muddied if we try to weaken the more complicated deontic view, namely MDS. Given the lexical ordering of the ‘ought’s in this view, a weak version of it seems almost self-contradictory: how can we ever have a lexical priority between two moral principles that describe mere pro tanto obligations? It is part of the very idea of

such obligations that they can be outweighed by other morally significant factors, whereas the idea between the lexical ordering of the oughts in MDS is that no amount of welfare at one level can ever outweigh any amount of it at the level below. Because of this difficulty, and the fact that the same dilemma that I described above for WDS would also affect a weak version of MDS, I believe there is no need to attempt formulating such a version here.

Conclusion

In this paper, I have aimed to achieve two things. First, I have tried to explicate the multiple ways in which intergenerational sufficientarianism might be understood, and second, I have argued that there is in fact no precise view that achieves all, or even most of, the benefits attributed to the view in the literature, while simultaneously avoiding highly counterintuitive implications elsewhere.

While I have not here attempted to formulate an impossibility theorem, I think there is a sense in which the difficulty of achieving all the benefits that those in favour of intergenerational sufficientarianism tend to promise is unsurprising. Generally speaking, views that get the non-identity problem right tend to be vulnerable to the Repugnant Conclusion, because the most obvious way a view can get the non-identity problem right is by requiring us to maximise (weighted) welfare in our choice of population. On the other hand, views that do not adopt this strategy, but instead rely on the idea that causing someone to exist below some threshold constitutes a rights violation, tend to face problems in cases where no matter what we do, someone will be below that threshold. Furthermore, whenever these thresholds have lexical significance, they also introduce ample opportunity for excessive demandingness, anti-natalism, and epistemic challenges induced by hypersensitivity to enter the picture.

Of course, the challenge that future generations pose for moral and political theory is famously difficult, and some people may wish to bite the bullets relating to a view like MAS or MDS to avoid having to bite others. However, even if intergenerational sufficientarianism is not an outright implausible theory, what does seem clear to me is that the view is not nearly as attractive as many authors have claimed, and any version of it comes with significant theoretical costs. By spelling out the different plausible interpretations of the view, as well as bringing to light the problems that each of them faces, I hope to have clarified the task that confronts those who wish to further develop sufficientarian thought in the intergenerational context.

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ORCID iD

Karri Heikkinen  <https://orcid.org/0000-0003-0752-3640>

Notes

1. Intergenerational sufficientarianism has also been explored, but not explicitly endorsed, in important contributions by Gosseries (2016) and Hirose (2016).
2. This understanding of sustainable development has sometimes been called 'Brundtland Sufficientarianism', after the WCED chair G.H. Brundtland. For a helpful analysis of this view in relation to other theories of intergenerational justice, see Gosseries (2008).
3. The basic idea of this argument can be traced back to Shiffrin (1999).
4. In fact, Rendall thinks that intergenerational sufficientarianism is *not demanding enough* and thus must be supplemented. The thought that sufficientarianism avoids excessive demands is also present in the classic sufficientarianism literature, as discussed by Casal (2007: 305–306).
5. More broadly, we can also see the same idea in the concept of sustainable development: recall that sustainable development *meets the needs of the present* without jeopardizing the needs of the future. See WCED (1987: 41).
6. I include Caney here because it seems to me that a key reason behind his attraction to a recognizably sufficientarian account is that such an account looks eminently applicable to the case of anthropogenic climate change. We may not know the ultimate balance of harms and benefits that accrue from climate change, but we do know, he claims, that climate change will violate some future persons' human rights to life, health, and subsistence. See Caney (2009: 166–169).
7. To be clear, not every author cited so far claims these exact same benefits, and many of them identify multiple further ones. Still, I believe that my presentation here accurately captures a kind of overall picture of intergenerational sufficientarianism that has been very influential in the field, particularly due to the work of Lukas Meyer. Readers who suspect that sufficientarians should not make all the claims outlined here may read the rest of this paper as demonstrating the difficulties and trade-offs involved in formulating their own preferred position, whatever combination of the benefits above they take seriously.
8. The putative objection here relies on the idea that killing a person simply removes them from the calculation. For example, we could make A (10, 6, 6) better by killing one of the people at welfare level 6, since then the total shortfall would only be 2 rather than 4. It may be tempting

- to think that instead of removing the person from the calculation, killing them instead drops their welfare to zero, which would avoid the objection. However, that thought, at least when combined with the view considered here, has the implausible implication that as time goes on, things get worse and worse. This is because over time, the number of people who have died inevitably increases, and therefore, more and more people end up at welfare level zero, and so the total shortfall from sufficiency increases.
9. Here, and for all the views I formulate throughout the paper, we could also apply a prioritarian weighting to welfare above sufficiency, without affecting my arguments. I choose to talk about total welfare instead simply because this seems to me more consistent with the quote from Meyer and Roser that I took as my starting point in the introduction.
 10. To be more precise: a strictly increasing and strictly concave function. Informally: a function whose graph looks like an uphill, but one that gets less and less steep, when moving from left to right.
 11. Here, one might wish to object that MAS in fact gets things right in the sense that an empty world would indeed be best in terms of justice, but we have other moral reasons to avoid it. But that move would mean that we can no longer know whether the view achieves the benefits I have been discussing. For example, these other moral reasons could lead us back to the Repugnant Conclusion, if we include total welfare among them.
 12. I thank an anonymous reviewer for helping me see just how extreme the view is here.
 13. Huseby (2010:186–187) also concedes something much like this objection in the contemporary case. His response is essentially that problems faced by competing theories seem equally serious. But in so far as future people amplify the objection here, this response becomes more difficult to maintain. I thank an anonymous reviewer for directing my attention towards these two papers.
 14. I thank an anonymous reviewer for this point.
 15. Why not say that since ought implies can, we must be allowed to create either A or B? This is a sensible response, but it merely highlights the implausibility of DS, and the need for a more sophisticated view of the kind I consider in the next section. If ought implies can, then there must always be at least one permissible option, but if DS is true, then whenever all options involve someone falling below sufficiency, no option is permissible. Therefore, if we accept DS, then we must deny ‘ought implies can’.
 16. I thank an anonymous reviewer for raising this point. Scheffler (2013, 2018) also advocates for a view like this.
 17. This condition is needed to escape the deontic counterpart of the Sadistic Conclusion – conditions 1 and 2 alone would imply that we sometimes ought to create a small number of people living hellish lives rather than very many people with lives worth living but below sufficiency. Compare this to AS.
 18. For a concrete illustration, the reader may run the same example I used when explaining MAS, which involved populations A through F. MDS gives the same results, just in terms of ‘ought to choose rather than’ instead of ‘better than’.
 19. To be precise, there is also another suggestion contained in the quote, namely the move to *basic needs* as the currency of justice. However, whatever merits this move may have, it does not solve the problems I have raised in this paper. If we hold onto lexicality and interpret basic needs in axiological terms, then we still get demandingness, anti-natalism, and hypersensitivity. For deontic interpretations, we can replace ‘level of welfare below sufficiency’ in my

definition of DS word by word with ‘incomplete satisfaction of basic needs’ or define sufficiency in condition 2 of MDS in terms of basic needs satisfaction, and the problems with these views remain. So, out of the two suggestions in the quote, only weakening lexicality changes things, which is why I focus on it here.

20. Visually, the graph would first rise in a steep uphill until the threshold, and then only show a gentle incline after it. What is important is that WAS involves no lexicality.

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