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Climate Change, War, and the Non-Identity Problem

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Abstract

This paper explores the relevance of the Non-Identity Problem to explaining the wrongness of causing climate change.

Keywords

climate change – war – Non-Identity Problem – Derek Parfit – no-difference view

1 Climate Change and the Non-Identity Problem

If industrial countries continue to produce carbon emissions at the present rate, they will cause changes in climate conditions 100 years from now that will greatly increase the number and severity of droughts, floods, hurricanes, tsunamis, tornados, and other destructive natural events. These events will cause billions of people and animals living at the time to suffer malnutrition, dehydration, disease, injury, and violent, premature death. No sane person doubts that we have moral reasons not to cause these conditions, as well as reasons to prevent them if we can. The questions I will consider here concern the nature and strength of these reasons.

In sections 2 and 3, I argue that the reasons not to cause climate change 100 years from now have nothing to do with the rights of the people who will exist at that time. In sections 4 and 5, I explain what I think is the fundamental reason not to cause climate change that derives from the effects on future people. In sections 6 through 8, I present arguments for the disconcerting conclusion that this reason is to some extent weaker than many of us have assumed that it must be.

My discussion will be limited in at least three important respects. First, except briefly in the final section, I will not consider the effects of climate change on people who are alive now or who will begin to exist in the near future. These effects are of course of the utmost importance but, as they are not relevant to the issues in population ethics that are my primary concern in this essay, I will discuss them only cursorily. In the remainder of this essay, therefore, I will use the term “climate change” as an abbreviation for “catastrophic change in climate conditions a century from now.”

Second, I will assume that the proportion of people who will exist a century from now if we do cause climate change whose lives as wholes will be worth living will be roughly the same as the proportion of those people now whose lives are worth living. This assumption may be unrealistic. Yet it is supported by the observation that, both in the distant past and in the contemporary world, the great majority of people who live in conditions of extreme deprivation and violence find their lives worth living and struggle to prolong them, even if they expect those conditions to persist.

Third, and finally, I will not discuss the effects of climate change on animals. These effects are also highly important morally but they raise further issues that I cannot discuss here, though I intend to discuss them elsewhere.

As virtually all moral philosophers are now aware, the threat of climate change raises the problem known as the Non-Identity Problem.¹ Suppose that industrial countries (led, to its shame, by the United States under the odious Trump administration) do not immediately and drastically reduce their emissions and thus do cause climate change 100 years hence. Let us refer to the people who will suffer the effects the “climate-change people.” These countries could, of course, take immediate and drastic action to reduce emissions and thus avoid causing more than minimal change in climate conditions in 100 years. The changes in policies throughout the world that would be necessary for this would affect, to varying degrees, the lives of virtually everyone now living. The differences in people’s daily lives would mean that different people would meet one another, different romantic partnerships would be formed, and, as a result, different children would be conceived from different genetic materials. Even within those partnerships that would be the same, conceptions would occur at different times so that, again, different children would

1 The full philosophical significance of this problem was first recognized by Derek Parfit. Although he discussed it in earlier work, his most extended discussion is in *Reasons and Persons* (Oxford: Oxford University Press, 1987 reprint), chapter 16. Also see Derek Parfit, “Future People, the Non-Identity Problem, and Person-Affecting Principles,” *Philosophy & Public Affairs* 45 (2017): 118–57.

be conceived from different genetic materials. In short, the shifts in large-scale energy and social policies would result in the existence in the future of different people from those who would have existed if the shifts in policy had not occurred. It is reasonable to suppose that, after 100 years, the vast majority of people who would exist would be different people from those who would have existed in the absence of the changes in policy. For simplicity, and not altogether unrealistically, let us assume that the entire population of the world who would exist 100 years from now would be different, apart from those who already exist now. We can refer to these different people who would exist if industrial countries did change their policies as the “stable-climate people.”

Although it will be helpful to refer to the climate-change people and the stable-climate people, it would be a mistake to suppose that either of these labels designates a determinate group of specific individuals. There are indefinitely many combinations of different policies that would all result in climate change. But each would also result in the existence of different people, though with some overlap in certain cases, 100 years hence. The label “climate-change people” could refer to any of these populations that would suffer the effects of climate change. (If we do cause climate change, the “lockdown” in response to the coronavirus pandemic in which I am now writing will result in different climate-change people from those who would have existed if the pandemic had not occurred.) Similarly, there are indefinitely many combinations of policies that could avert climate change, each of which would result in a different population a century from now. The label “stable-climate people” could refer to any of these.

The identities of the people in either group are not important. What matters is that if our policies do cause climate change, this will not be *worse* for the climate-change people, whoever they may be, for it is not the case that, if we had not caused climate change, that would have been better for them. If we had not caused climate change, they would not have been better off; rather, they would never have existed and different people – the stable-climate people – would have existed instead. Of course, our having caused climate change would cause the climate-change people to experience many effects that would be *bad* for them, such as disease, injury, and premature death. But it would also be a necessary condition of all that would be good in their lives, which, assuming that their lives would be worth living, would outweigh those bad effects. If anything, therefore, our having caused climate change would, overall, be *good* for the climate-change people, as it would have resulted in their existing with lives that would be *good* for them.

The Non-Identity Problem, in its application to this case, is the problem of explaining what reason there is either not to cause climate change or to

prevent it, given that it would be neither worse nor on balance bad for those who would suffer its effects (again, setting aside the effects on people whose existence is independent of the policies and acts that cause those effects). If, moreover, we can identify the reason not to cause climate change, we will then need to determine how strong that reason is. Is it, in particular, as strong as the reason we would have not to cause climate change if there were no Non-Identity Problem, so that climate change would be worse for the climate-change people?

2 The Right to a Minimum Level of Well-Being

Even if climate change would be neither worse nor on balance bad for the climate-change people, many philosophers who write about climate change and are aware of the Non-Identity Problem nevertheless claim that climate change would violate the climate-change people's rights. Henry Shue, for example, writes that

While the identities of future individuals are not yet determined and are thus not knowable, we know that as humans they will all be entitled to human rights, including rights that depend on a functioning economic system, which itself depends in turn on a planetary environment within which those future humans can adapt and support themselves.

At the end of this passage, there is a footnote:

As far as I can see, our current lack of knowledge of particular identities in later centuries has no implications at all for what we ought to do now about future climate change. At most, it has some implications for how we explain our basic moral judgments.²

We can set aside Shue's implied suggestion that the Non-Identity Problem is a matter of our *knowledge* of the climate-change people's identities. The Non-Identity Problem is not an epistemic problem. It is instead that, whoever the climate-change people may be, they will owe their existence to climate change and thus will thus not have been affected for the worse by our having caused it. We can understand what Shue says in his text as the claim that, whatever

² Henry Shue, "Human Rights, Climate Change, and the Trillionth Ton," in D. Arnold, ed., *The Ethics of Global Climate Change* (Cambridge: Cambridge University Press, 2011), p. 293.

particular people the climate-change people turn out to be, and irrespective of whether they would have existed had we followed different policies, they will have basic human rights, many of which will be violated because of events caused by climate change.

Perhaps surprisingly, what he says in the footnote seems quite different. There he says, in effect, that the Non-Identity Problem makes no difference to what we ought to *do* about climate change, though it may make a difference to *why* we ought to do it. This is what Parfit thought. According to Parfit, the Non-Identity Problem never makes a practical difference – a difference to what we ought to do – but it does make a theoretical difference, in that it undermines traditional accounts of the moral reasons we have in the cases in which it arises, forcing us to find and defend different explanations. This is important because, as he understood, these alternative explanations sometimes have implications for other moral issues that are at variance with, and thus challenge, common sense intuitions.

It is with Parfit's view – the view to which Shue gestures in his footnote – that I will be most concerned in this paper. But I will first consider, and argue against, the common view, stated in Shue's text, that the wrongness of causing or failing to prevent climate change can be explained by appeal to the rights of the climate-change people. I believe, as Parfit did, that this form of explanation is precluded by the Non-Identity Problem.

The quotation from Shue does not specify which particular rights of the climate-change people might be violated by acts and policies that cause climate change. In the philosophical literature on population ethics, particularly the earlier writings that appeared before there was widespread awareness of the threat of climate change, it has often been argued that policies that would cause a substantial reduction in the general quality of life in a century or more would violate the rights of future people, whoever they might be, to a certain minimum level of well-being.³ According to this view, our causing climate change is wrong primarily because it will condemn many or most of the climate-change people to lives below the minimum level of lifetime well-being to which they, like everyone else, will have a right.

There are, however, serious problems with this way of understanding the rights that would be violated by climate change. Although the lives of the climate-change people will, if they exist, be worse on average than the lives of the

3 Authors who have argued that there is a reason not to cause people to exist if their lives would be worth living but below some minimum level of well-being include Michael D. Bayles, "Harm to the Unconceived," *Philosophy & Public Affairs* 5 (1976): 292–304, and Gregory S. Kavka, "The Paradox of Future Individuals," *Philosophy & Public Affairs* 11 (1982): 93–112.

majority of people alive now, it seems likely that their lives would not be worse than those of the great majority of people who have lived throughout human history until comparatively recently. Even as recently as five or six centuries ago, the lives of most human beings were quite short and were continuously occupied with the struggle for subsistence, plagued by untreatable diseases, and lived in conditions in which violence and killing were prevalent to a substantially greater degree than they are now.⁴ It is nevertheless implausible to suppose that all these people's parents violated their rights in causing them to exist in conditions in which these features of their lives were in most cases unavoidable.

One might reply that the minimum level of well-being to which people have a right varies with what is possible in the conditions in which they – and those who caused them to exist – live. According to this view, the level of well-being to which people had a right in earlier stages of human history, when it was virtually impossible for anyone to have a level of lifetime well-being as high as that which most people enjoy now, was lower than the level to which contemporary people have a right. But if the minimum level varies with what is possible, parents in the past did not violate their children's rights simply by causing them to exist in conditions in which certain levels of well-being were, for most people, unattainable.

This view, however, has two problematic implications, at least one of which shows that the view cannot serve the purposes of those who claim that climate change would violate the rights of the climate-change people to a certain level of well-being. First, it might be that there are large areas of the world in which it is impossible, even with a concerted global effort, to raise the well-being of many people, within their lifetimes, to the level to which we believe people in affluent societies have a right. If that were true, the view we are considering would imply that the minimum level of well-being to which a contemporary American has a right is higher than that to which a contemporary inhabitant of some poorer region has a right. That, however, seems implausibly inegalitarian.

The view's second problematic implication is that the climate-change people cannot have a right to a level of lifetime well-being that is higher than that which would be realistically possible for most of them in conditions of climate change (by which, recall, I mean the catastrophic conditions in which they would live). For the climate-change people are, by stipulation, those who, whatever their particular identities, would exist in those conditions. It is impossible that those particular people, whoever they might be, could exist in conditions in which *they* would be better off. The idea that the minimum

4 Steven Pinker, *The Better Angels of Our Nature: Why Violence Has Declined* (Viking, 2011).

level of well-being to which people have a right is variable cannot, therefore, support the claim that climate change would violate the rights of the climate change people to some minimum level of well-being.

Those who argue that climate change will violate the rights of the climate-change people to some minimum level of well-being might revert to the view that the minimum level is universal and invariant and try to exclude the implication about procreation in the remote past in a different way. They might argue that parents in the past did not violate their children's rights to the minimum level of well-being because those parents did not cause, and thus were not responsible for, the conditions that made it unavoidable that their children's well-being would be below the minimum level. All the parents did was to cause their children to exist in conditions in which their children's rights could not be satisfied. By contrast, if we cause climate change, we will cause both the existence of the climate-change people and the conditions that ensure that their lives will be below the minimum. In causing those conditions, we will have violated their rights.

I believe, however, that there are certain rights that entail a duty not to cause a person to exist if the person's rights of that sort could not be satisfied. The most obvious instance of such a right is the right to a life that is worth living. Suppose conditions were such that if a person were caused to exist, that person's life would not be worth living but would instead be intrinsically bad. Even if a potential parent were in no way responsible for those conditions, it would be wrong for that person to have a child and this can plausibly be explained by the claim that to do so would be to violate the child's right to a life worth living.

This claim does not of course apply to all rights. It would be absurd to suppose that it would be wrong to have a child because that child's right to freedom of speech would unavoidably be violated on one occasion. But it is not absurd to suppose that the claim applies to highly important rights such as the right to a life worth living. And the right to the universal minimum level of well-being is arguably in the same category, so that to cause a person to exist in conditions in which that right could not be satisfied would be wrong. If that is right, one cannot appeal to the right to a universal minimum level of well-being to explain the wrongness of causing climate change without being committed to accepting that parents in the remote past violated their children's rights by causing them to exist. One could consistently deny that those parents acted culpably, but I find it impossible to believe that they acted wrongly, even if excusably.

Although this is controversial, I believe that it is not wrong, if other things – such as effects on others – are equal, to cause people to exist whose lives would be below some specified level of well-being but nevertheless worth living, *provided that* it is not possible either to cause these same people to exist with better lives

or to cause *different*, better-off people to exist instead. Similarly, there is no objection to *saving* the lives of people whose subsequent lives would be worth living but unavoidably below the claimed minimum, even if it is impossible to know their desires or obtain their consent. As Parfit and many other philosophers have argued, if it is wrong to cause someone to exist whose life would be worth living, that must be either because doing so would be worse for others, or because it would offend against some distributive principle, or because it is possible, without unreasonable cost, either to cause that same person to exist and be better off or to cause a different person or persons to exist who would be better off.⁵

Indeed, as Parfit's seminal discussion of the Depletion-Conservation case implies, the objection to causing people to exist that appeals to the possibility of causing better-off people to exist instead applies with equal force even when those caused to exist would have lives above the level to which people might be supposed to have a right. We have been assuming that the climate-change people's lives would be below the claimed minimum and that the stable-climate people's lives would be better to some determinate degree. But we can instead imagine that the climate-change people's lives would be just barely above the minimum, so that their rights would not be violated, while the stable-climate people's lives would be better to the same degree. It may be that the reason not to cause climate change would be somewhat stronger in the first case, and the explanation could appeal to the right to a minimum level of well-being. But there is an alternative, prioritarian explanation that seems more plausible – namely, that it is more important to cause better-off people to exist rather than less well-off people the worse off the latter people would be. This explanation is compatible with the claim that what is fundamentally wrong in both cases – and wrong to an equal degree apart from the prioritarian consideration – is causing less well-off rather than better-off people to exist.⁶

3 Rights Against Specific Harms

If an appeal to the rights of the climate-change people is to have any chance of explaining why it is wrong to cause climate change, or not to prevent it,

5 An early argument of this sort is in Jeff McMahan, "Problems of Population Theory," *Ethics* 92 (1981): 96–127, pp. 126–27.

6 See Parfit, *Reasons and Persons*, pp. 361–66. That the comparative objection applies equally whether the less well-off people (such as the climate-change people) are above or below the minimum level is noted by Brian Berkey in "Human Rights, Harm, and Climate Change Mitigation," *Canadian Journal of Philosophy* 47 (2017): 416–35, pp. 420–21.

the argument must be that our causing or allowing climate change will violate rights not to be caused particular harms, such as the right not to be injured and the right not to be killed. If our causing climate change eventually results in certain of the climate-change people being painfully injured and debilitated and ultimately killed by some natural disaster that would not have occurred in the absence of the climate conditions we caused, it is certainly arguable that our action will have violated their rights even if they would not have existed had we not taken that action.

I will nevertheless argue, as I indicated earlier, that this claim is mistaken. It is challenged by examples of acts that kill innocent people but do not seem to violate, or even permissibly infringe, their rights. The first such example is

Poisonous Cure

I know that in five years I will need a heart transplant to survive. I know that there is a particular man – a stranger to me – who has the same very rare tissue type that I have. One day I find him unconscious. He will die unless I give him a pill I have. This pill is extremely valuable and expensive. I am poor and have planned to sell it for an amount of money I can live on for years. Assume that, in these conditions, I am not morally required to give him the pill. But I realize that if I do give it to him, it will not only save his life now but also unavoidably introduce a slow-acting poison into his body that will kill him in five years, thereby making his heart available for transplantation, when I will almost certainly be the only person for whom it will be suitable for transplantation. Giving him the pill will thus enable me to save my own life in five years.⁷

7 This case and certain variants of it raise important questions that I cannot adequately address here. One is whether, if it is permissible for me to give the unconscious man the pill, it is also obligatory for me to do so. Although the pill is very expensive, my giving it to him will save my life in five years. Giving it to him is therefore in, rather than against, my interests; thus, there is no reason to suppose that it is supererogatory. Next suppose that I have two pills: one that will kill the man in five years and a second that will save him without later killing him. Both are very expensive and I am not required to give him the second one. Suppose that I am unwilling to make the supererogatory sacrifice in giving him the second pill. Is it permissible, or obligatory, for me to give him the first, given that I will be saving him only on condition, and perhaps with the intention, that my act will also later kill him as a means of saving my life? Finally, suppose that again I have two pills: one that will save the man's life temporarily but will become ineffective after five years, so that he will die at that time, and, again, the second pill that will cure him permanently without killing him. Assuming that both are very expensive, so that I am not required to give him the second, is it permissible for me to give him the first, given that I would be intentionally allowing him to die in five years as a means

It seems obviously permissible for me to give the man this pill, even though (1) my doing so will kill him in five years, (2) he has a right not to be killed, (3) he cannot consent to ingest the pill (except perhaps retroactively), and (4) in giving it to him I will be acting entirely for reasons of self-interest. The reason why it is nevertheless permissible for me to give him the pill is that my doing so is the only way of enabling him to have five more years of good life and thus to have any life to lose when the pill will kill him. That is, in killing him, the pill will not deprive him of life he could have had without the pill. Giving him the pill is on balance better for him than any other option I have, even though it requires me to kill him. Giving him the pill is what Kasper Lippert-Rasmussen calls a “life-prolonging killing.”⁸

Poisonous Cure is an example of an act that enables an individual to *continue to exist* and then later kills that individual. Next consider an example of an act that enables an individual *to exist* and then later kills that individual.

Fertility Pill

A couple can have a child only if the woman takes a fertility pill that will unavoidably release a slow-acting poison into the bloodstream of the embryo that will kill the person who will develop from it at the age of 60. (Assume that there is no prospect that during these 60 years a way will be discovered to extend the child’s life.) They desperately want to have a child and adoption is not an option in their society. So she takes the pill.

Again it seems permissible for the woman to take the fertility pill, even though (1) her doing so will kill her child at the age of 60, (2) the child will then have a right not to be killed, (3) the child cannot waive that right (except perhaps retroactively), and (4) the couple are motivated primarily by a self-interested desire to have a child. The reason it is nevertheless permissible for her to take the pill is that it is the only way of enabling the child to have any good life and thus to have any life to lose when the pill will later kill him. Her taking the pill will not deprive the child of any good life he could have had if she had not taken it. In this case the act that will kill the child is not *better* for him than any other

of saving my own life? I am inclined to think, though without being able to give the arguments here, that it would be permissible to give him the temporary cure in this second variant; and I suspect, though with less confidence, that it would also be permissible to give him the poisonous pill in the first variant. If it is *obligatory* to give him the poisonous pill in the original example, how could it be *impermissible* to give it to him in the second variant, given that the only difference between the two is that in the latter case there is an additional option that is clearly supererogatory?

8 Kasper Lippert-Rasmussen, “Life-Prolonging Killings and Their Relevance to Ethics,” *Ethical Theory and Moral Practice* 2 (1999): 135–47.

option. An option can be better for an individual only if some alternative to it would be worse for that individual. But the only alternative to this child's being killed by the pill is for the child never to exist, which would not be worse for him. But on the assumption that it can be *good* for a person to be caused to exist with a life worth living, taking the pill, which will kill the child, is the only option that is good for the child.⁹ We might refer to it as a "life-conferring killing."

There is, of course, an important difference between Fertility Pill and Poisonous Cure, which is that the reason to save the man's life in Poisonous Cure is stronger than the moral reason, if any (and most people seem to think that there is none), to cause a child to exist in Fertility Pill. It is in part on this basis that I suspect that it is obligatory to give the man the pill in Poisonous Cure but only permissible, and not obligatory, for the woman to take the fertility pill. But the relevant questions for our purposes are simply whether the acts that kill a person in the two cases are permissible and, if so, why they do not violate those people's rights not to be killed.

In both cases, it does seem permissible to act in a way that will kill an innocent person (perhaps even as an intended means in Poisonous Cure) who will, at the time the act will kill him, have a right not to be killed. In most cases in which it is permissible to kill a person who has a right not to be killed, the right is either waived by the person herself or it is overridden by morally more important considerations. For example, a person who requests euthanasia may waive her right not to be killed. And a person's right not to be killed may be overridden if killing her is necessary to prevent significantly greater harms to others or to prevent substantially more, or more serious, violations of the rights of others. But in my two cases the person who will be killed cannot waive his right before the act that will kill him is done and there is no morally more important consideration that overrides his right not to be killed, thereby making it the case that his right is not violated but is instead permissibly infringed. It is, for example, doubtful that, in the circumstances as I have described them,

9 Michael Otsuka has called my attention to the argument by Arrhenius and Rabinowicz that what follows from "it is better for *p* to exist than not to exist ... is only that non-existence *is* worse for her than existence (since 'worse' is the converse of 'better'), but not that it *would have been* worse if she didn't exist." (Gustaf Arrhenius and Wlodek Rabinowicz, "Better to Be Than Not to Be?", in H. Joas and B. Klein, eds., *The Benefit of Broad Horizons* [Leiden: Brill, 2010], pp. 405–6.) They accept that nonexistence can be better or worse for *p* only if *p* actually exists (406, note 16). But if *p* actually exists, it is hard to make sense of the claim that nonexistence *is* worse for her. She cannot now both exist and not exist. Her existence now might be better or worse for her than her not existing *was*, or *would have been*, or *will be*. These comparisons are intelligible, though I think only the last can be true. The claim that existence can be good or bad for a person, even if it cannot be better or worse than never existing, is suggested in McMahan, "Problems of Population Theory," p. 105, and in Parfit *Reasons and Persons*, p. 489.

the man in *Poisonous Cure* has a *right* that I save him. And even if he were to have such a right, it would be unlikely to override his right not to be killed, since a positive right to be saved is almost always weaker than the negative right not to be killed. Nor in *Fertility Pill* do the couple have a right to procreation that overrides the right their child will have not to be killed by them. In short, it seems that in these cases the act that kills an innocent person in no way infringes that person's right not to be killed.

This, of course, requires some explanation. For if a person has a right not to be killed and that right is neither waived, forfeited (for example, because the person has made himself morally liable to be killed), nor overridden, it seems that doing what one knows will kill that person is to infringe and indeed to violate the person's right. One possibility to which I have referred parenthetically is that in *Poisonous Cure* and *Fertility Pill*, the act that later kills the person does not infringe that person's right because the agent can confidently predict that the person will waive the right retroactively.¹⁰ In both cases, but particularly in *Poisonous Cure*, the person who will be killed by an act that gave him life would have to be pathologically irrational to complain that the act ought not to have been done because it will violate his right not to be killed.

But because the waiving is only conjectural at the time the agent must act, this is not the best explanation. The best explanation is that the right not to be killed is implicitly restricted. It does not prohibit acts of killing that are necessary for the victim to exist with a life worth living or to continue to exist with a life worth living. These acts, as I have noted, do not deprive the people killed of any life they could have had in the absence of the acts. They do not threaten what the people's rights protect – namely, their interests and their autonomous choices. These acts are therefore outside the scope of the right. The restrictions on a right cannot, however, be indicated in the label of the right. It would be absurdly cumbersome to have to refer to “the right not to be killed except by acts that...”. So we use “the right not to be killed” as an abbreviated label for a right that is in fact somewhat narrower in scope than the label suggests.

4 An Alternative Explanation

Even though *Poisonous Cure* and *Fertility Pill* are not among them, there are cases in which an act that both causes an individual to have a period of good life and also ends that life by killing the individual is clearly impermissible. An example is

¹⁰ This explanation is discussed in McMahan, “Problems of Population Theory,” p. 127, and by Parfit in *Reasons and Persons*, p. 365.

Pleasure Pill

There is a pill that greatly enhances the pleasure of sexual intercourse but certain chemicals in it remain in the woman's body and are then unavoidably introduced into the bloodstream of the embryo if one is conceived, damaging the embryo in a way that is highly likely to cause it to die at the age of 60. A man and a woman each take this pill before having sex, knowing of the likely effects on the child of the woman's taking it. They then realize that they must wait for the pill to take effect, so they postpone the act of conception for several hours. Because of this delay, a different sperm cell fertilizes the egg. We can assume that, because of this, the child they conceive who will in fact die at 60 is a different person from the child they would have had if they had not taken the pill and had conceived a child a few hours earlier.

It is impermissible for the couple to take the pleasure pill. Yet this case is exactly like Fertility Pill in most relevant respects – in particular in the effects on the child who is caused to exist. In both cases,

- the couple's taking a pill is necessary for a particular child to exist;
- the child who is caused to exist has a right not to be killed, yet the woman's action in taking the pill later kills the child;
- the woman's taking the pill is *not worse* for the child, as the child would never have existed had she not taken the pill;
- the woman's taking the pill is not, on balance, *bad* for the child, as her taking it causes the child to exist with a life worth living and this is, if anything, *good* for that child; and
- the couple are motivated, not by a concern for any particular child, but by reasons of self-interest: they want to have their own biological child to enrich their lives and they desire pleasure in the act of sex.

In short, the parents' motivations and modes of agency, as well as the effects of their action on the child, are the same in both cases. Because of this, if the explanation of why the woman's taking the pleasure pill is wrong is that her doing so will violate her child's right not to be killed, then the other woman's taking the fertility pill must be wrong for the same reason. But it is not. Rather, there is one obvious difference between the two cases that is unconnected with anyone's rights that explains why taking the pleasure pill is impermissible while taking the fertility pill is permissible. This is that the couple in Pleasure Pill, but not the couple in Fertility Pill, have the option of having a different child whose life would not be limited to 60 years, and the cost to them of pursuing that option is minor. (In Poisonous Cure as well there is no alternative option that would be better for anyone, or better in any way.) It is

the availability in Pleasure Pill of a better alternative – albeit one in which a different person would exist – and not anything that the couple do *to the child*, that makes the woman's taking the pill impermissible.

Just as the explanation of why it is wrong for the couple to take the pleasure pill makes no reference to the rights of the child, so I believe that the explanation of why it is wrong to cause catastrophic climate change 100 years from now makes no reference to the rights of the climate-change people. Even if we assume that every one of the climate-change people will suffer injury, disease, or death as a result of natural events resulting from climate change, it is not these facts on their own that would explain why our having caused climate change was wrong – just as the fact that the pleasure pill kills the child is not on its own the explanation of why the woman's having taken it was wrong. Our having caused climate change will be a necessary condition of the existence of each of the climate-change people. Those who will be killed by natural events associated with climate change will not lose good life they could, in practice, have had in the absence of climate change. Those who will suffer from injury or disease because of events associated with climate change will, assuming that their lives are worth living, also enjoy good things in their lives that offset and outweigh these bad effects – good things they would not have enjoyed in the absence of climate change.

Because of this, it would make no sense for them to think that we ought not to have caused them to exist because of the effects that our doing so will have had *on them*. We can perhaps appreciate this more vividly if we imagine that catastrophic climate change in 100 years is now, as a result of acts done by people now alive, unavoidable. Imagine further that, because of this, every person who exists 100 years from now will be injured, develop a disease, or be killed by or because of natural events caused by climate change. Yet assume that virtually all of them will, overall, have lives worth living. Assuming that it is now unavoidable that, if the climate-change people exist, they will all suffer injury, disease, or death because of our action, and given that they will have rights not to be caused to suffer injury, disease, and death, it is natural to suppose that our having caused climate change will have violated their rights. It is, moreover, not just that we would have caused them to exist in conditions in which their rights would inevitably be violated; rather, it would be our previous action that would violate their rights. If that is so, it seems that we would have a strong moral reason not to cause them to exist, or to prevent them from existing – that is, to bring about human extinction voluntarily. Darrel Moellendorf has stated the case for this claim. He asks us to suppose that

we have a duty not to violate a person's right, but the right can be violated only if we bring it about that the person exists. If we do not bring it about

that the person exists, we have not violated his right and therefore have not done what we ought not to have done. In this case, we can do wrong by bringing the person into existence, but do no wrong by not bringing him into existence.¹¹

It may not be true that we would “do no wrong” by refraining from causing people to exist in the future. Most of us believe that there are reasons – indeed very strong reasons – not to cause human extinction. These reasons could in principle be sufficiently strong to override the rights of the climate-change people, making it permissible, all things considered, to cause them to exist, thereby allowing our previous action to violate their rights. But this presupposes a mistaken understanding of the reasons we would have in these imagined conditions. It is not that there would be a reason to prevent the existence of the climate-change people that would be outweighed by our reasons to ensure the continued existence of our species. There would, rather, be *no* moral reason to prevent the climate-change people from existing – *no* reason to bring about human extinction – provided that their lives would be worth living and that it would be impossible to cause different, better-off people to exist instead. Because the acts and policies that would cause them harms would also be necessary for them to have lives worth living, those acts and policies would neither violate nor even infringe their rights.

5 Two Understandings of the Basic Objection

Just as the objection to the woman’s taking the pill in *Pleasure Pill* is that, if she does not take it, she will have a child who will be able to live well beyond 60 rather than a child doomed to die at 60, so the objection to causing climate change is that, if we restrain ourselves and do not cause it, the better-off stable-climate people will exist rather than the less well-off climate-change people. The core objection to causing climate change is that it involves causing less well-off people to exist rather than different, better-off people.

This claim bypasses the difficult issue of how to determine whether one group of people is better off than another when the groups contain different numbers of people. Whatever else is true, if the climate-change people exist, the number of them who will exist at any particular time will be different from

¹¹ Darrel Moellendorf, “Common Atmospheric Ownership and Equal Emissions Entitlements,” in Arnold, *The Ethics of Global Climate Change*, pp. 114–15.

the number of stable-climate people who might have existed at the same time. How might we measure, if only very roughly, the levels of well-being of these different populations – by their total well-being, average well-being, or some other more complicated criterion? Is a group of people as a whole better off if it has more members, provided that they all have lives that are well worth living? Parfit thought it unproblematic to determine which of two groups is better off when they contain the same number of people; and he proposed a principle that could govern choices between causing one group of people to exist and causing another of the same size to exist. But he never succeeded in identifying the extended principle – which he dubbed “Theory X” – that would both subsume his proposed principle and also apply to choices among groups with different numbers of people.¹²

It is not my ambition here to succeed where Parfit failed. I must leave it open how to determine whether one group of people is better off than another group of a different size. For my purposes here, it is sufficient to make these realistic assumptions: that both the climate-change people and the stable-climate people would be very large groups, each containing billions of people, that the smaller group would be substantially more than half the size of the larger, and that the great majority of the stable-climate people would have a level of lifetime well-being substantially higher than the average lifetime well-being of the climate-change people. On these assumptions, it is relatively uncontroversial to claim that the stable-climate people would be better off than the climate-change people, even if they were less numerous. And it is this claim that provides the core explanation of why it is wrong to cause climate change.

There are, however, two ways of understanding this explanation. The simpler understanding is that it is morally objectionable to cause less well-off people to exist when one could cause different, better-off people to exist instead, assuming that other relevant considerations, such as costs to the agent, are equal. The other understanding cites two distinct considerations that both contribute to making an act or policy wrong: (1) that the act or policy causes less well-off people to exist rather than better-off people and (2) that it also causes, and makes the agent morally responsible for, the conditions or effects in the lives of the less well-off people that make their lives less good than those the better-off people might have had. I will refer to the first of these explanations as the “single-condition objection” and to the second as the “double-condition objection.”

¹² *Reasons and Persons*, p. 360–61.

It is natural to think that, because it cites two “wrong-making” considerations rather than one, the double-condition objection is the stronger of the two objections. If that is so, the objection to causing climate change is stronger than it would be if causing climate change involved only causing less well-off people to exist rather than different better-off people. But of course, in causing climate change, we not only cause the climate-change people to exist rather than the stable-climate people but also cause the conditions that make their lives substantially less good than those the stable-climate people could have had.

There are, however, reasons to doubt that the objection to knowingly causing people to exist in conditions that make it unavoidable that their level of well-being will be relatively low is strengthened if the action that causes them to exist also causes those conditions. Consider, for example, a variant of Fertility Pill in which the woman has an alternative option for having a child.

Fertility Pill 2

A woman who wants to have a child lives in a closed, totalitarian society in which, because of environmental conditions, children who are born there invariably die by the age of 60. She cannot escape from this society without damaging her reproductive system in a way that will require her to take the fertility pill to become pregnant.

If this woman decides to remain in the totalitarian society and have a child there, the child can be expected to die at 60. The cause of death will be environmental conditions for which the woman bears no responsibility. If she escapes and has a child using the fertility pill, she will have a different child who will also die at 60. But in this case, it will be her action in taking the pill that will kill the child. Suppose that, because the only society into which she can escape is also politically oppressive, the quality of both her own life and that of her child would be much the same whether she remains or escapes. If, as the double-condition objection implies, it matters whether, in causing a child to exist who will predictably die prematurely, her action will cause the premature death, then it seems that she clearly ought to remain where she is and have a child there. But suppose that, if she were to escape, she would be slightly better off, or that the child she would conceive using the fertility pill could be expected to live slightly longer than the one she would conceive were she to remain. If the double-condition objection is correct, neither of these minor differences, nor perhaps even both together, would be sufficient to outweigh the fact that, in taking the fertility pill, she would be the cause of her child's premature death. Yet I believe that, if there would be even a slight advantage

in her escaping, it would be permissible for her to escape and indeed that the balance of reasons would favor her doing so, even though the child she would then conceive would later be killed by her own action rather than by conditions for which she would not be responsible.

Another pair of choices that challenges the assumption that the double-condition objection is stronger than the single-condition objection is

Tormented Individuals

- (1) For reasons of self-interest, a person acts in a way that she knows will both cause an individual to exist and create conditions that will cause that individual to experience continuous agonizing suffering for two years and then die.
- (2) For reasons over which a person has no control, conditions are such that if this person causes an individual to exist, that individual will unavoidably experience continuous agonizing suffering for two years and then die. Knowing this, and acting for reasons of self-interest, this person acts in a way that she knows will cause an individual to exist.

If the double-condition objection is a stronger form of objection than the single-condition objection when all considerations not identified by the two objections are equal, then the action of the first of these two persons is more seriously objectionable than that of the second. Yet the two seem equally objectionable.

It seems to me, therefore, that the wrongness of causing climate change is fully explained by the single-condition objection. If we cause climate change, we will cause a vast number of people to exist who will together be substantially less well off than different people would have been if we had caused them to exist instead. Our reason not to cause climate change is not strengthened by the fact that, in causing it, we would not only cause the less well-off climate-change people to exist rather than the better-off stable-climate people but also cause the conditions that would make the lives of the climate-change people less good.

6 The Strength of the Objection

I have argued that the Non-Identity Problem compels us to reject the view that the objection to causing climate change is that our causing it would violate the rights of the climate-change people. As we have seen, Shue concedes, in the footnote quoted earlier, that the Non-Identity Problem might affect the nature

of the explanation of why it is wrong to cause climate change; but he also suggests that this should make no difference to the strength of the objection to causing it, or to the strength of the reason not to cause it. This, as I noted, is also Parfit's view. Parfit accepts what he calls the "No-Difference View." Although he never gave a precise formulation of this view, he came close to doing so when he wrote that

There is an objection to any act which causes a future person to be badly off, even if this act will not be worse for this person than any possible alternative. And this objection is *as strong* as it would be if we imagine away the Non-Identity Problem: if we suppose that ... this act *will* be worse for this person. These claims express what I called "the No-Difference View."¹³

Even this statement is problematic; for the No-Difference View applies to acts that do not cause a future person to be badly off. It applies to acts that cause a future person to be well off, though less well off than a different future person would have been if that person had been caused to exist instead. Even if causing the less well-off person to exist is not worse for her because the alternative is that she would never exist, there is an objection to causing her to exist rather than the better-off person. And this objection is, according to the No-Difference View, as strong as it would be if the alternative were instead that she would have existed and been better off to the same extent that the different better-off person could have been. The objection is the same whether *she* could have been better off, so that the actual outcome is worse for her, or whether the only alternative is that someone else could have existed and been better off.

Suppose we "imagine away the Non-Identity Problem" in the case of climate change. What we imagine is that the same people will exist a century from now whether we cause climate change or not. On this assumption, we can suppose that the objection to causing climate change is that our doing so will be worse for these people, and will violate their rights. Given the scale of the harms, this objection is extremely strong. Now reintroduce the Non-Identity Problem. The objection to causing climate change must be different. I have suggested that it is the single-condition objection: that to cause climate change is to cause less well-off people to exist rather than different, better-off people. According to

13 Derek Parfit, "Comments," *Ethics* 96 (1986): 832–72, pp. 855–86. This passage concludes with a parenthetical citation of *Reasons and Persons*, pp. 366–71, where he first discusses the No-Difference View.

the No-Difference View, this objection is just as strong as the objection that would apply in the absence of the Non-Identity Problem.

When I think about climate change, I find the No-Difference View intuitively compelling. Like Parfit and Shue, I find that my intuitions about the strength of the objection to causing climate change are unaffected by my understanding of the Non-Identity Problem. Yet when I reflect on certain other, relevantly similar examples, the implications of the No-Difference View seem to me less plausible. In other cases I find them counterintuitive.

Suppose that policies that would prevent climate change (bearing in mind that by this I mean catastrophic climate change a century from now) have been identified and that all states but one have agreed to adopt them. The one recalcitrant state is so large and so developed industrially that without its cooperation the efforts of the other states will fail. In the world I am imagining, there are no weapons of mass destruction; hence it is virtually certain that if some of the cooperative states were to go to war against the recalcitrant state, they could compel it to exercise sufficient restraint that it would not undermine their efforts to prevent climate change. We can call this the “Climate War.”

Suppose that the Climate War would be a very large-scale and protracted war. Fighting it would require the cooperative states to kill a very large number of the recalcitrant state’s combatants. Military action by these states would also unavoidably kill or injure an even greater number of innocent civilians as side-effects. And it would of course provoke the recalcitrant state to kill or injure comparably large numbers of combatants and civilian citizens of the cooperative states. If we again imagine away the Non-Identity Problem, we can suppose that whether the cooperative states fight the Climate War will determine whether or not a very large number of particular people in the future will be injured or killed by natural events. But suppose that the number of people whom the Climate War would prevent from being killed or injured is just barely sufficient to make the harms that would be inflicted by the cooperative states proportionate. (There would have to be two distinct assessments of proportionality, one for harms inflicted on those who are morally liable to some degree of harm and another for harms inflicted on those who are not liable to be harmed.¹⁴ I ignore this complication here.)

If we now reintroduce the Non-Identity Problem, we understand that the Climate War would not determine whether or not particular people who will exist in the future will be gravely harmed. If the cooperative states do not fight

14 On the distinction between these two forms of proportionality, see Jeff McMahan, “Proportionate Defense,” in Jens Ohlin, Larry May, and Claire Finkelstein, eds., *Weighing Lives in War* (Oxford: Oxford University Press, 2017): 131–154, section 3.

the war, the climate-change people will exist, many of whom will suffer injury, disease, and premature, often violent death as a result of climate conditions. If these states do fight the Climate War, the stable-climate people will exist and have lives free from these bad effects of climate change. The important question is whether, assuming that the Climate War would be just barely proportionate if its good effects were to consist in the prevention of grave harms to particular people, it could also be proportionate if its good effects were the prevention of the existence of people whose lives would contain grave harms and the causing to exist of different people whose lives would be free of those harms.

There is a difficult theoretical issue here to which I can only call attention, without attempting to resolve it. This is the issue of how, in the assessment of proportionality, bad effects that are not worse for anyone (such as the coming into existence of less well-off people rather than different, better-off people) weigh against good effects that are better for people (such as preventing people from being gravely harmed). This issue has scarcely been recognized, much less addressed, in the literature on the ethics of war.¹⁵ Yet it is a central problem in the determination of proportionality in war. All wars and even many campaigns and missions in war cause bad effects extending far into the future and also have extensive effects in determining who will exist in the future. The Non-Identity Problem is therefore a pervasive problem in the ethics of war. Obvious examples of campaigns that raise the Non-Identity Problem are the atomic bombings of Japanese cities by the United States in the Second World War and the use of the defoliant Agent Orange by US forces in the Vietnam War, both of which had persisting effects through genetic damage to future people. The No-Difference View offers one answer to the question of how to weigh good or bad effects that are neither better nor worse for people against effects that are better or worse for people. But, as I am endeavoring to show, there are reasons to think that it is the wrong answer.

Among these reasons is that it seems to make a difference, particularly to the justifiability of killing large numbers of innocent people as side-effects, whether the good effects to be achieved by the Climate War consist in the prevention of

15 I am profoundly indebted to Michael Robillard for enabling me to see this problem and to appreciate its significance for the assessment of proportionality in war. In "Proportionality in War: Revising Revisionism," *Ethics* 131 (2020): 1-28, Patrick Tomlin recognizes the relevance of the Non-Identity Problem to proportionality but argues that while it always affects judgments of proportionality in the resort to war (*ad bellum* proportionality), it may often not affect the proportionality of particular acts of war (*in bello* proportionality). These facts together, he argues, have surprising implications for the relation between *ad bellum* proportionality and *in bello* proportionality.

grave harms to particular people or whether they consist in the existence, in the future, of better-off people rather than different, less well-off people whose lives would contain grave harms. When I think about the Climate War, it makes a difference to my intuitions about proportionality in the killing of innocent people whether I imagine away the Non-Identity Problem. The intuitive difference may, however, arise more vividly in structurally similar but smaller-scale examples.

Before Parfit enabled us to appreciate the significance of the Non-Identity Problem, we would have thought that the Climate War was a large-scale analogue of

Twenty Murders

A culpable wrongdoer is about to kill 20 innocent 50-year-olds who would otherwise live to 80. The only way to prevent him from doing this is to kill him. And the only means of killing him will unavoidably kill an innocent bystander as a side-effect.

Almost everyone accepts that the wrongdoer is morally liable to be killed as a means of defending the 20 potential victims. I will assume that the killing of the innocent bystander is proportionate in relation to the prevention of the killings of the 20 others. (Most who disagree with this assumption can simply increase the number of killings that would be prevented.) If we imagine away the Non-Identity Problem, we can see the recalcitrant state's thwarting of the efforts of the cooperative states as a large-scale analogue of the action of the wrongdoer in *Twenty Murders*. And we can see the fighting of the Climate War as a large-scale analogue of the killing of the wrongdoer, together with the innocent bystander.

But when we do not imagine away the Non-Identity Problem, we realize that the small-scale analogue of the Climate War is actually closer to

Twenty Shorter Lives

If no one intervenes, 20 people will come into existence and live to 80. A wrongdoer is about to act in a way that will both prevent these people from existing and instead cause 20 different people to exist. The act by which he will cause these 20 different people to exist will, like the taking of the fertility pill or the pleasure pill, also kill these people at the age of 50. The only way to prevent the wrongdoer from intervening in this way is to kill him. And the only means of killing him will unavoidably kill an innocent bystander as a side-effect.

According to the No-Difference View, there is no relevant difference between killing the wrongdoer in *Twenty Murders* and killing the wrongdoer in *Twenty*

Shorter Lives. It seems to me, however, that the justification is stronger in Twenty Murders. While it seems obvious that the potential murderer in Twenty Murders is morally liable to be killed to prevent him from acting, it is less clear to me that the wrongdoer in Twenty Shorter Lives is liable to be killed. He is certainly liable to great harm but it is at least arguable that killing him would be disproportionate. And while I accept that killing the innocent bystander as a side-effect is proportionate in Twenty Murders, it seems doubtful to me that it is proportionate in Twenty Shorter Lives. While the prevention of 20 murders seems sufficient to justify killing one innocent person as a side-effect, prevention of the substitution of 20 shorter lives for 20 longer, different lives in the future seems insufficient. Imagine that you are the innocent bystander in each case and that the intervening agent, who is an earnest contractualist, seeks in each instance to justify her action to you before she kills you. I suspect that you would find her justification in Twenty Murders more convincing than her justification in Twenty Shorter Lives. If so, you should concede that we should be less likely to judge the Climate War proportionate if we recognize rather than imagine away the Non-Identity Problem. For when we recognize the Non-Identity Problem, we see that the Climate War is just Twenty Shorter Lives writ large.

7 A Final Argument

I have, in the preceding section, compared (1) the strength of the justification for killing people as a means or side-effect of preventing others from killing people with (2) the strength of the justification for killing people as a means or side-effect of preventing others from causing less well-off people to exist rather than different, better-off people. Contrary to what is implied by the No-Difference View, I suggested that the first justification is stronger than the second. In this penultimate section, I will present a more direct challenge to the No-Difference View that is also grounded in its implications for the ethics of killing. In an earlier essay, I argued against the No-Difference View by comparing two choices.¹⁶ In the first, a person will come into existence whatever one does. If one does nothing – that is, if one does not intervene – a person will come into existence who will live for 50 years. But one can intervene in a way that will neither harm nor wrong anyone to ensure that a different person will

16 Jeff McMahan, "Causing People to Exist and Saving People's Lives," *Journal of Ethics* 17 (2013): 5–35, pp. 12–13.

come into existence instead who will live for 80 years. In the second choice, if one does nothing, an existing person will die at the age of 50. But one can intervene to save this person, thereby enabling her to live to the age of 80. Suppose that each of these three people would have roughly the same high level of well-being at most times during their lives and that neither intervention would require a significant personal sacrifice.

In each of these choices, one's intervening would make the difference between a person's living for 50 years and a person's living for 80 years. In the first case, these would be different people, so one's not intervening would be worse for no one. In the second, they would be the same person, so one's not intervening would be worse for that person. According to the No-Difference View, this difference does not matter. If other things are equal, one's reason to cause the better-off person to exist rather than allow the less well-off person to exist is as strong as one's reason to save the existing person rather than allow him to die. If, therefore, one could do one of these things but not both, it would not matter, according to the No-Difference View, which one chose. This seems to me implausible. One's reason to save the existing person is stronger.

When I presented this argument some years ago, I failed to develop it further by altering the mode of agency. I will do that now. We can again compare two choices. In the first case, a person will again come into existence whatever one does. If one does nothing, a person will come into existence who will live for 80 years. But one can intervene, in a way that will neither harm nor wrong anyone, to ensure that a different person will come into existence instead who will live only to 50. We could even suppose that the act that would cause this person to exist would, like the act of taking the fertility pill or the pleasure pill, also be the cause of the person's death 50 years later. In the second case, if one does nothing, an existing person will live to 80. But one could kill him now, at the age of 50. Suppose that the side-effects, and in particular the harms to other people, of killing the person at 50 would be no worse than those of intervening to cause the person to exist who would live only to 50.

In each of these choices, one's intervening would make the difference between a person's living for 80 years and a person's living for 50 years. In the first case, these would be different people, so one's intervening would not be worse for anyone. In the second, they would be the same person, so one's intervening would be worse for that person. According to the No-Difference View, this difference does not matter. One's reason to allow the better-off person to exist rather than cause the less well-off person to exist instead is as strong as one's reason to allow the existing person to live rather than kill him. This is highly counterintuitive. If the No-Difference View has this implication, we should reject the No-Difference View.

One might argue that there are special objections to killing people that are outside the scope of the No-Difference View and thus block the extension of the original comparison between causing a person to exist and allowing a person to die to the comparison between causing a person to exist and killing a person.¹⁷ The challenge, however, is to identify these objections. The two obvious objections to killing – that it is bad or worse for the victims and that it wrongs the victims or violates their rights – come within the scope of the No-Difference View. Recall that, if we were to “imagine away the Non-Identity Problem,” we would believe that, because climate change would inflict injury, disease, and death on the climate-change people, our causing it would be worse for these people and would violate their rights. But when we recognize the Non-Identity Problem, we see that this is not true; yet, according to the No-Difference View, this makes no difference to the reasons we have not to cause climate change. Another objection to killing is that it typically has bad side-effects. But I have stipulated that the side-effects of the killing would be no worse than those of causing the person to exist who would live less long. Yet another objection to killing is that it fails to treat a person as an end in herself. If we were to imagine away the Non-Identity Problem, we might believe that to cause climate change would be to fail to treat the victims as ends in themselves. Yet when we recognize the Non-Identity Problem, we understand that causing climate change is, if anything, *good* for the climate-change people and thus does not involve a failure to treat them as ends. Yet the No-Difference View implies that causing climate change is just as wrong as it would be if it involved treating the climate-change people as mere means. Because in causing climate change we would be causing the deaths of many of the climate-change people, and thus at least indirectly killing them, I suspect that there are no significant objections to killing that do not come within the scope of the No-Difference View.

8 A Possible Response

In a recent article, Michael Otsuka has provided different reasons from those offered here for rejecting the No-Difference View.¹⁸ Yet, like me, he is troubled by the apparent implication that the objection to our causing climate change is weaker than it would be if there were no Non-Identity Problem and climate

¹⁷ This objection was suggested by a reviewer for the journal.

¹⁸ Michael Otsuka, “How It Makes a Moral Difference That One is Worse Off Than One Could Have Been,” *Politics, Philosophy, and Economics* 17 (2018): 192–215.

change would be worse for the climate-change people. He therefore concludes his article by suggesting an objection to causing climate change that is not weakened by the Non-Identity Problem. He rightly observes that it is only large-scale policies of states and corporations that have extensive effects over a relatively short time in determining which people will exist in the future. The acts of individuals that release greenhouse gases may or may not have local effects in determining who comes to exist but, even if they do, those effects are quite limited, affecting the identities of at most a small fraction of the world's population over a period of only 100 years.¹⁹ Therefore, to the extent that these individual acts contribute to or exacerbate climate change, their bad effects in the lives of people in the future are highly likely to be worse for those people. He then cites John Broome's estimate that "the typical lifetime carbon emissions of an individual in a developed country can be expected to shorten human lives by about 4 months in total" over the course of 100 years. This total harm to people whose existence is independent of the acts that cause it "provides grounds for morally significant complaints," Otsuka writes, even if the "losses are spread out more thinly among a number of people."²⁰

I am skeptical of the force of this objection. I am an individual who has lived for many decades in developed countries. I assume that it is true that, as Broome estimates, the millions of my individual acts of eating, bathing, driving, and so on have together resulted in the release of hundreds of tons of carbon dioxide into the atmosphere. Over 100 years, however, those pollutants will have been widely dispersed over the globe. Let us assume, conservatively, that the number of people who will exist over the 100 years after my birth is 10 billion. And let us further assume, again realistically, that the effects on the climate of the emissions for which I will be responsible over more than six decades will not be concentrated in any geographical area. On these assumptions, the average loss of life per person attributable to my emissions is 1/1000th of a second. That loss may be worse for a person but it is not a significant harm and

19 This idea – that even when large-scale courses of action determine who will exist in the further future, the individual acts that are constitutive of those courses of action are nevertheless likely to affect people in the future whose existence will be independent of whether those particular acts were done – was articulated independently some years ago by Patrick Tomlin. It is defended, and its implications are explored, in his paper, "The Impure Non-Identity Problem," which was presented at a conference in honor of Derek Parfit in Oxford in May 2018, and will appear in Jeff McMahan, Tim Campbell, James Goodrich, and Ketan Ramakrishnan, eds., *Ethics and Existence: The Legacy of Derek Parfit* (Oxford: Oxford University Press, 2021).

20 Otsuka, *op. cit.*, p. 210. The period of time (100 years) over which Broome estimates that lives would be shortened by four months is not given in the book in which the estimate appears (*Climate Matters* [New York: Norton, 2012]). It comes instead from private correspondence between Broome and Otsuka in which Broome also revises the estimate he gave in the book.

it is not the basis of a morally significant complaint. The loss of four months of life is very bad if it is suffered by one person. But it is a vastly lesser evil if it is dispersed among many billions of people. A person might be morally liable to be killed as a means of preventing him from depriving another person of four months of life, but he would not be liable to be killed as a means of preventing him from depriving each of 10 billion people of 1/1000th of a second of life.²¹

Furthermore, many or most of the people who may be affected by my emissions over 100 years will overlap in time with me, some for substantial periods. So just as my emissions may affect them adversely, theirs may affect me adversely. When that is the case, their complaints against me are weakened.

There is, I suppose, some probability that my individual emissions could be just sufficient to take climate conditions in one geographical area slightly over a critical threshold, thereby making the difference between a moderate storm and a more destructive storm, thereby causing significant harms to some individuals. But I think that the probability of that being true of the acts of any single individual is less than negligible. It is not this possibility that explains why I ought to reduce my emissions and work politically to change the policies that threaten to cause climate change.

In summary, I doubt that our intuitive sense of the strength of the objection to causing climate change can be vindicated by appealing to the ways in which the individual acts of individual persons are worse for the future victims of climate change. While unnecessary individual acts of driving or flying are morally objectionable, they are not seriously objectionable. The acts that are seriously objectionable because of their effects on people more than 100 years from now are those that set the policies that allow or enable vast numbers of individuals to continue to do the individually trivial but collectively catastrophic acts that will bring about climate change. And these acts do have the extensive effects in determining who will exist that constitute the Non-Identity Problem.

I am left with a tentative but to me distressing conclusion. The acts that make morally significant contributions to causing climate change also determine who will exist in the future and suffer the bad effects of climate change. Because these people would not have existed had these acts not been done, the acts are not worse for them. The moral objection to these acts is therefore

21 Some readers will be reminded here of Parfit's discussion of the Harmless Torturers in *Reasons and Persons*, pp. 78–82. For a detailed discussion of cases in which individuals cause tiny harms to a large number of different people, and in particular of what it might be proportionate to do to such people to prevent them from inflicting those harms, see Jeff McMahan, "Defence Against Parfit's Torturers," in Jeff McMahan, Tim Campbell, James Goodrich, and Ketan Ramakrishnan, eds., *Principles and Persons: the Legacy of Derek Parfit* (Oxford: Oxford University Press, 2021).

weaker than it would be if the acts would be worse for those people. Although I have arrived at this conclusion, I would be happy to be proved wrong.

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Biographical Note

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