Chapter 3
Individual Obligation

In the previous chapter, I mentioned that John Broome, in his discussion of obligations regarding climate change, borrows a helpful Kantian distinction between duties of justice and duties of goodness. On his view, recall, institutions—which are able to make massive changes to emissions—are the primary bearers of duties of goodness, as individual emitters simply do not do significant good by directing their resources towards mitigating climate change (Broome, 2012). If the arguments of the previous chapter are on track, then Broome's argument appears to support the causal impotence objection: given the scale and complexity of climate change, virtually nothing an individual does could matter to the climate-related outcome. While each emitting activity makes a technical difference—resulting in slightly more atmospheric carbon than there was before—it does not make anything like a significant difference to the overall problem of climate change.

What Broome pointed out, though, is that even though we do not, as individuals, have duties of goodness regarding our emitting behavior, there are other candidate duties that individuals could bare. He calls these 'duties of justice', but this title can be slightly confusing, for a couple of reasons. First, 'justice' considerations are often taken to be more specific than merely the counterpart to 'goodness' considerations (in particular, justice is often taken to be related to 'fairness', 'desert', or 'equality'); so, for instance, *one* candidate principle below is a principle of justice, but there are others as well. And second: in exploring ways that each of us may have a moral burden or responsibility regarding our procreative behaviors, we might think that there are considerations other than 'duty'. Indeed, later in Chap. 5, I will borrow from Dale Jamieson the language of 'Green Virtues' to articulate the idea that perhaps we ought not to see ourselves as obligated to act in a certain way, but rather that we ought to develop certain character traits or virtues that predictably lead to our adopting environmentally-friendly practices. But having a virtue does not necessarily entail having any particular obligations. For these reasons, then, I will not discuss 'duties of justice' as the counterpart to duties of goodness; rather, I will first explore candidate non-consequentialist principles that seem plausibly to

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generate individual duties. Then, in Chap. 5, I will broaden the discussion further to consider other sorts of 'private moral burden'.

The goal of this chapter, then, is to propose three principles as plausible candidates for generating private procreative obligations in the context of climate change and the population crisis. That is: I will present three moral principles that would seem, given the facts about our climate and the global population, to have *some* implication for our procreative practices. The precise content of our procreative duties, however, will be a live question. Thus, in Sects 3.1, 3.2 and 3.3, I will simply present the candidate principles and argue for their plausibility. Only then, in Sect. 3.4, will I ask what they might entail specifically for our procreative behaviors. If any of the proposed principles is valid, then there seems to be good reason to believe that we ought to *restrict* our procreative behaviors; but does that mean that each of us is obligated to have no children? Or simply not too many (whatever that might mean)? Although I do not believe that there is an obviously correct answer to this question, I will suggest a sort of 'limit' to an acceptable answer.

Regardless of the particular content of the duty, however, the upshot of this chapter is that we may, in fact, have *some* obligations to limit our procreative behavior. That is: even if we have no duty of goodness to limit the number of children we have, there is still disconcertingly powerful reason for thinking that our procreative activity is subject to the demands of duty.

3.1 Duty Not to Contribute to Harms

The first candidate moral principle is a duty closely related to the duty not to harm. If it were the case that emitting carbon dioxide directly and obviously harmed, then there would be no problem making the case that we have a duty not to emit carbon dioxide (or to restrict our emissions in some way).[1] However, the first problem with utilizing such a principle was investigated in the previous chapter: the harms of climate change are the result of a massive collection of unrelated acts by uncoordinated individuals, and so it actually seems wrong to say that an individual act harms; this is why we focused above on the notion of 'making a difference' to the extent or severity of climate change. So in the context of a massively collective action that harms, we might think that our duty is not to make a significant difference. We discussed that candidate last chapter, and I am proceeding under the assumption that an individual act of procreation—like our other climate-related acts—makes no significant difference to the harms of climate change.

There is yet another problem with appealing to harm, however, and that is the *complexity* of the climate system, and the way in which our small, individual contributions of GHG get diffused throughout a massive system. Much of my individual emissions, for instance, may end up in a natural carbon sink, just through accident,

[1] Recall that this is how Broome actually gets to his conclusion that each of us is required to be a 'net-zero' emitter.

in which case my particular emissions didn't even causally contribute to the harms of climate change (since my emissions aren't warming the atmosphere). This radical complexity and uncertainty leads some ethicists, like Dale Jamieson, to claim that not only do we not harm anyone with our emissions, but we don't even partially *cause* the problem with our emissions, or reliably and predictably *raise the probability* of climate harms by our emissions (Jamieson, 2014, pp. 144–169).

This issue of causation is exceedingly difficult, and one might be skeptical that one's emissions, small though they are, play *no* causal role. After all, even if I get lucky, and my emissions get taken out of the atmosphere by a natural carbon sink such as a forest or the world's oceans, my emissions have just used up a small fraction of the earth's available carbon sinks, displacing other emissions into the atmosphere. In addition, not all ways of removing carbon from the atmosphere are equal; the forest that absorbs my CO_2 is a relatively short-term carbon sink, and the death of the trees in the future will release the gas back into the atmosphere; and the ocean is becoming more acidic as it absorbs more carbon dioxide.[2] So if I burn fossil fuels, I have liberated CO_2 from a long-term carbon sink; as a result, even if it gets removed from the atmosphere, it may displace other people's emissions from a carbon sink, or end up in the world's oceans, which acidify as they absorb carbon dioxide. In both cases, we might think that the very act of liberating plays *some*, *minute* causal role in the overall climate change problem.

But do these various fates of my emitted carbon dioxide constitute partially *causing the harms* of climate change? Again, the issue is clearly difficult. We would need a sophisticated account of causation, and any answer given would be subject to reasonable challenge. However, I don't think that we must focus on our causal role in harming in order to understand how we might have a duty not to *play a role* in the problem that causes harms. What could playing a role mean, if not partially causing the problem? Let's take a look.

There are a few different ways that we might think someone is playing a role in a serious moral problem, even if it was unclear whether her acts partially cause the problem.[3] One way might be acting in a way that would otherwise be innocuous, but which one knows produces something that is part of a massively problematic system. Consider the example of a low-level researcher who does basic science for a terribly corrupt corporation or political regime that uses all of its resources to harm innocent people. Given the kind of science she does, it is not the case that the scientist will produce a bomb or other mechanism of destruction for her tyrannical bosses; but she *is* producing something—knowledge—which will become part of a terrible system and which, through some convoluted and unpredictable causal

[2] Increased atmospheric CO_2 has led to oceans becoming about 30 % more acidic than they were prior to the Industrial Revolution. According to business as usual predictions, we may see a further 150 % rise in acidity by the year 2100, which would bring oceans to a pH level not seen in more than 20 million years (National Oceanic and Atmospheric Administration, n.d.)

[3] This line of thinking was originally inspired by Fruh and Hedahl (2013); the following explication of various ways that one can 'play a role' in systematic harms somewhat parallels that described in (Hedahl, Fruh, & Whitlow, 2016).

system, may someday help (in some very small way) the evil regime to do something awful. We can call this *contributing* to a system that harms.

In a different case, we can imagine German citizens during the Nazi occupation who are told to salute and chant, 'Heil Hitler' at various times. It is exceedingly implausible that honoring the Nazi regime in this symbolic way actually harms the Nazi's victims; however, doing it makes one an active participant in the abhorrent regime. It may well be that, given the particular costs of defecting in this case, it would be all-things-considered permissible to do as the Nazi's demand. But the moral reaction we have suggests that there is, in fact, a problem, and it is with the role that we play regarding the morally awful system. Call this a case of *participating* in a system that harms.

Finally, there is the even more standard case of standing idly by while massive harms are being perpetrated. It is likely that in the United States, prior to the Civil War, there were at least some individuals who understood the moral horror of slavery, but who said and did nothing about it. These individuals would have benefitted from the practice of slavery—buying cotton products and food at lower prices thanks to slave labor—but would not have harmed any of the slaves themselves. The moral disturbance in this case doesn't come from the causal role in harming—it comes from the failure to fight an injustice, especially when the injustice provides one with benefits. In this case, we might think that an individual benefitting indirectly from the practice of slavery is *complicit* in its massive, systematic harms.

Contributing to, participating in, and being complicit in massive, systematic harms all seem morally bad, but to varying degrees. Perhaps one is not obligated to avoid complicity in all harms, but that complicity generally reveals cowardice or other vices. And perhaps participating in a system of harm is more objectionable, but still understandable and even excusable if the costs of failure to participate are very high at all (as in the Nazi case). The case of contributing to a massive, systematic harm seems the worst, as the role that one plays is more significant; it may still be a stretch to say that such a person *caused* any particular harms, even partially; but she did actively *contribute* to the system that did the harming. Further, it's worth noting that it's not always easy to distinguish between these different ways of playing a role in systematic harms, and that there is likely significant overlap; indeed, *contributing* to a system of massive, systematic harms will likely typically include *participating* in that system and being *complicit* in its harms.

It seems plausible to me that each of the ways of 'playing a role' in massive, systematic harms discussed above is plausibly *prima facie* morally wrong.[4] Our

[4] Literally 'on its face', the language of *prima facie* was adopted by philosophers to denote the provisional character of duties that have not yet been weighed against the competing goods of the actual world. A *prima facie* duty, then, is one that I am required to follow, if it is not outweighed by some other consideration. *Prima facie* duties are contrasted with *all-things-considered* duties, which emerge at the end of the weighting and balancing process among the various, relevant goods and reasons, and which tells us what we must, in the end, do. While some *prima facie* duties seem to always imply an all-things-considered duty ("do not murder," for instance), others are so all-encompassing that they regularly admit of trade-offs ("promote the good," perhaps). What we seem to be learning at this point is that the duty not to contribute to massive harms seems to be

moral reactions to each of the cases are, I think, evidence that the action in question violates a duty—a duty not to play a role in massive, systematic harms. However, I did admit that complicity seems less bad than participation, which seems less bad than contribution to systematic harms. So I will formulate my candidate principle in the weakest way possible, and suppose only that there is a **Duty Not to Contribute to Massive, Systematic Harms**. This is not a duty not to *cause* harm—even partially—but is rather a duty not to inject oneself as an active contributor into the large, causally complex machine that is doing the harm.

This duty would make sense of how we judge many acts that either don't make a significant difference to a moral problem, or don't partially cause a serious moral problem at all. The example from the previous chapter was recycling: it seems I am obligated to throw my waste in the recycle bin rather than the trash can, even though my throwing a single piece of refuse into the trash would not make a significant difference, and would not clearly cause any harm. The justification is that waste management is a massive moral problem, and by throwing away my trash, I am contributing to it. Those who oppose factory farming might make a similar argument for the duty not to buy certain meats. Although some philosophers have argued that the very small causal role that one plays in the continued harm of animals justifies the duty not to purchase meat (see, for instance (Norcross, 2004, pp. 232–233)), the causal complexity of the system of factory farming might make the principle under investigation seem to be a more plausible justification. Factory farming is a system that generates massive harms for sentient creatures, and so we have a duty not to contribute to that system, and our small marketplace exchange is a form of contribution.

The duty not to contribute to massive, systematic harms makes sense of many of our environmental obligations, even if most individual activity does not make a 'significant difference' to the extent or severity of those harms. Now, it is merely by bringing the act of procreation into the discussion of emissions activities that we see its implications for our procreative behaviors. If a duty not to contribute to harm can ground my duty to recycle, then surely it could ground an obligation to limit our much more carbon-expensive activity of making babies. Of course, to what extent our procreative activities must be limited is, as I said in the introduction, an interesting question in itself, and so I will come back to it after having discussed the other candidate principles.

3.2 Duties of Justice

Another possible consideration in favor of procreative restrictions is that of justice. Now, the language of justice is admittedly broad, and we have already seen one way in which different concepts may be intended: Broome discussed duties of justice as

more like the latter than the former, and so discussion of its relative justificatory burden is important.

counterparts to duties of goodness, in which case very many possible duties may be considered duties of justice. However, we often invoke justice to mean something more particular, concerning fairness and various kinds of equality.

When I refer to justice, I intend this narrower sense of the concept. And while I cannot here provide a particular theory of justice, I will employ the language of justice to cover considerations of fairness and some degree of equality among all persons. My hope is that this will allow me to suggest what seem to be plausible moral principles, but while maintaining a level of abstraction that prevents theoretical in-fighting.

In some ways, the demands of justice are the easiest to describe. The grounds for thinking that justice applies to the procreative context are simple, and the language of fairness and equality are intuitive. I will suggest two, related grounds for thinking that justice might issue demands on our procreative behaviors.

Firstly, overpopulation is a problem that disproportionately harms the poorest and most vulnerable of the world's population, even while their procreative activities contribute least to the problem. That the world's poorest are most harmed is easy to see: as the world's resources become depleted, and as climate change worsens, it is not the wealthy elites of the first-world who will suffer first. It is the poorest residents of Bangladesh who will simultaneously deal with food shortages, lack of access to fresh water, and increased incidence of devastating storms and flooding (Intergovernmental Panel on Climate Change, 2014, Chap. 24: Asia). It is the island inhabitants of the Maldives and Kiribati who will lose their homes to rising sea water. And it is those without access to sanitation and health care who will be most affected by changing disease vectors.

Regarding their contributions to the problems of overpopulation, one might be surprised to see the claim that the poor and vulnerable have contributed least; after all, the fertility rate of wealthy nations is typically between 1.5 and 2.0, while the fertility rates of poor regions of Africa, Asia and the Middle East regularly approach 6.0–7.0 (United Nations, Department of Economic and Social Affairs, Population Division, 2015). Doesn't this suggest that, although the poor may suffer early and badly, that they also have largely contributed to the problem?

In fact, the answer is 'no'. The problems of resource use and climate change are problems that depend not only on the number of people contributing to the problem, but also their levels of contribution.[5] The high fertility rates of West Africa, then, do

[5] We should be careful to recall from the introduction, that there are many resource-related reasons to be concerned with overpopulation, and I have chosen to focus on only one of them—climate change. So it could be argued that the poor residents of the world who have five, six or seven children are still contributing more to *overpopulation* than most Americans are, even if that overpopulation isn't as relevant to the particular problem with climate change. However, all of the problems with overpopulation have a similar structure as the one I am dealing with here: it is not the sheer number of people that is problematic, it is the number of people given the limited availability of some resources (clean water, food, energy, etc.). And so it is actually quite difficult to argue that the high-fertility-rate poor population is contributing to the problems of overpopulation in *any* way, since they consume so few of the available resources. Thus, while I deal explicitly in the main text only with the case of climate change, the reader may choose to pursue another issue of resource

not necessarily entail large contributions to the problems of overpopulation, as their citizens use a fraction of the resources that, say, American citizens use. Take Niger and the US as an illustrative example: although Niger has the highest fertility rate in the world, at 7.6, and the US has a relatively low rate of 2.1 (United Nations, Department of Economic and Social Affairs, Population Division, 2015), the variation in the two countries' *per capita* CO_2 emissions is even more staggering. The average American emits around 17 metric tons of CO_2 per year, while the average Nigerien (not to be confused with Nigerian) emits an astounding 0.1 metric tons of CO_2 per year (The World Bank, 2011–2015). The average US citizen thus emits nearly *200 times* the amount of CO_2 of the average Nigerien, and so the average procreative behavior of an American (having two children, who together will emit around 34 tons of CO_2/year) is vastly more damaging to the problem of climate change than the average procreative behavior of a Nigerien (having seven children, who together will emit a mere 0.7 tons of CO_2/year).

The first point, then, is that the world's wealthy do much more to contribute to the problems of overpopulation than the world's poor and vulnerable, and yet the poor and vulnerable will be harmed the worst. This situation should strike us as *unfair*, and is a central violation of what ethicists often call *social justice*. If anything seems clearly true in the realm of justice, it's likely that this structure is morally bad, and so we have one reason for worrying that procreative activities are subject to the demands of justice. Before asking exactly how, let's consider the second, related, way of formulating the justice concern.

Recall from Chap. 1 the models of population sustainability. The primary upshot of that discussion was that the Earth cannot sustain a population of 7.3 billion wealthy citizens—and in fact, cannot likely even sustain our population under the current distribution of wealth. We are in an ecological 'overshoot', in which we are using 60 % more resources each year than would be sustainable. So what does this fact entail for my procreating?

Well, given that my child will be an American, I can predict that she will use an incredible amount of resources—an amount that could not be used by each inhabitant of earth. What this means is that my having an American child, against the backdrop of overpopulation, *depends on the abject poverty of others*. When I create a wealthy, resource-expensive person, I am doing something that *requires* either a smaller population, or a radically unequal distribution of resources. Another way to put the point: my having an American child is *incompatible* with very many others doing the same. And this, too, seems unfair.

Justice, then, raises two, related worries for procreation by the global wealthy: by making a new person, I both (1) contribute relatively largely (relative to those being harmed, not relative to the scale of the problem) to a problem that will harm the world's poor first and worst; and (2) create the kind of person whose existence depends on a radically unequal distribution of resources. On its face, then,

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shortage on her own, in order to see whether the populations of, say, the poorest countries in West Africa, might really be contributing to the *problems* of overpopulation, given these peoples' lack of access to resources.

considerations of justice look to condemn unfair levels of procreation by the world's wealthy. Again: what 'level' of procreation is unfair is a difficult question, on which we will hold off until after discussion of the final candidate principle.

3.3 Obligations to Our Possible Children

Thus far, we have investigated possible procreative obligations as a result of how procreation affects unrelated *others*; by procreating, we contribute to a system that will cause massive harm to millions of others—in particular, to those who are already badly off. The kind of reasons that such concerns provide one with are 'agent-neutral', in that they provide the same reasons to everyone. The fact that climate change will drown the islands of Kiribati and the Maldives provides everyone with the same reason not to make (especially carbon-expensive) new people.

However, the facts of overpopulation and climate change may justify yet another sort of duty, as a result of the effects on the children that one does have. In short: the dire moral threats of today lend real credence to the classical cynic's worry that being brought into existence may not be in one's interest. This sort of moral worry, however, is *not* agent-neutral: it concerns *my* child, and invokes the obligations that I have as a result of becoming a parent. According to this worry, then, I may have special moral reason to protect my own children from living lives that involve certain kinds of harms. In the current section, we will investigate the case for the existence of 'agent-relative' reasons not to procreate.

In a controversial essay in *The New York Times*, philosopher Peter Singer raised the question of whether the current generation should be the last one. His own answer is 'no', that it should not, because he thinks a world with human life on it is better than one without (Singer, Last Generation?, 2010). However, he made vivid the pessimist's worries that climate change, overpopulation, and the myriad of other threats to human life make bringing a child into this world distinctly risky for that child. What kind of life is my child likely to live? Can I provide my child—the being that I will predictably love the most, and most want to protect from harm—anything like the kind of life that I would want for it? In a follow-up article, Singer quotes a thoughtful commenter, who expressed the worry well, saying, "I love my children so much that I didn't have them" (Singer, Response, 2010).

On the one hand, the idea here is clear: the problems investigated in this book—climate change and overpopulation—in addition to many problems not here discussed (such as the threat of superbugs, nuclear war, terrorism, etc.) make the prospects of a good life for future people seem increasingly dim. All of these threats seem to make it likely that any child I have will suffer serious harms. But, of course, as a parent I will want to protect my child from harm. And so, perhaps the correct course of action is to protect my children in the only way that is guaranteed to work—namely, by not creating them.

This worry is certainly not new. Cynics and misanthropes have long wondered whether we are cruel to bring new people into this terrible world. But the catastrophic

and global threats of the day—in particular, of climate change—lend what may otherwise be seen as a fairly unserious, if wry, commentary on our world rather more credibility. If, as seems virtually inevitable, the next generation will see global average temperatures rise at least 2 °C (and perhaps as much as 4 °C, if we do not act swiftly), the world will become a distinctly worse place, and the population will suffer. Does that, in fact, make it cruel to have a child? Does one have an agent-relative reason, based in the obligation to protect one's child, not to procreate?

In fact, the question is philosophically quite complex. The reason for this complexity is that whether an obligation to protect one's child applies to the procreative context requires us to determine whether or not coming into existence can be a *harm*. After all, if it can't, then there would be nothing that a parent need protect her child from. So: can coming into existence be a harm?

A quick argument claims that the answer is 'no'. This is because we tend to think that the concept of 'harm' (and the mirror concept of 'benefit') is *comparative*—that is to say, that it requires a comparison between two states. So I am harmed only if I am taken from a state of relative goodness to a worse state; and vice versa with benefitting. This seems to be how we use the concepts in ordinary contexts: I am harmed if you hit me with a bat, because you moved me from a state in which I did not have a head injury into a state in which I do have such an injury.

The problem with claiming that procreating can harm, then, is obvious: by procreating I do not move my child from one state into a worse state; indeed, I do not move my child between two states *at all*. This is because *non-existence isn't a state that one can be in*. It is the lack of having a state at all! This very sort of consideration has been used to justify the creation of a child with disabilities, even when the parents could have avoided it, since being created with a disability simply is not a harm. It may be worse than being created without a disability, but that doesn't imply that creating such a person harms them. This counter-intuitive implication is often referred to as 'The Paradox of Harm'.

So at first glance, it looks as though these very strange, abstract, philosophical considerations entail that one cannot harm her offspring by procreating, and so no duty to protect one's child could generate a reason not to procreate. But that would be to move too fast. For in response to The Paradox of Harm, one might wonder whether it's really plausible that *no* procreative acts can really be thought to harm the created individual. What about a child who is born into a life full of massive, debilitating suffering, who lives in this state for a few months and then dies? Such a child's short life is nothing but misery; is it really plausible to hold that creating such a child does not harm her?

In response, some philosophers claim that such cases do show that procreation can harm the child created, but *only if the child's life is not worth living*.[6] In the case

[6] This is the structure of Derek Parfit's oft-cited discussion in (Parfit, 1984). There, Parfit was concerned primarily with what he called the 'non-identity problem'; however, in setting up the problem, he noted that it doesn't seem we can harm a child by creating it, unless its life would be not worth living. The non-identity problem, then, is the tension between our belief that one perhaps ought to wait to have a child, if doing so would result in a healthier child, and the fact that such

of a short, miserable life, what we judge is that existence is worse than non-existence, and so our comparative notion of harm actually applies: by creating such a person we make her worse off, and so harm her. In such radical cases, the parents may, in fact, be given a reason not to create such a child by the general duty to protect one's offspring.

If the above is the correct way to think about harm and benefit in the procreative context, then very many of us likely are not given reason not to procreate by the dangers of climate change. After all, I—and likely anyone reading this—can expect that any children we have will have lives worth living, even if they would be worse than we might ideally want them to be. But if their lives will be worth living, then existence is not worse than non-existence, and so creating them does not harm them.

I want to suggest, however, that the question of whether we harm or benefit our children in creating them is not particularly helpful. I said earlier that the difficulty of thinking about harm and benefit in the procreative case is that, prior to procreation, one's child does not have a situation to be changed; non-existence is not a state. But that makes the above diagnosis of 'having a life not worth living' as being what harms a child seem very strange. After all, if non-existence is not a state one can be in, then just because one's life is so bad as to be not worth living does not mean that creating such a person moves them from a better state to a worse state; we just said that non-existence isn't a state. So if we are thinking of harm comparatively, then a child's having a life not worth living doesn't explain how creating that child harms her. If there is something wrong with intentionally creating such a child, then, we must discover the wrongness elsewhere.

We might, then, abandon the language of harm and benefit, and ask instead whether we seem to *have reason* to create or not to create in various circumstances. So let us return to the case of the child whose life we called 'not worth living'—and let's call such a child the 'miserable child' instead. Most people seem to have the strong intuition that we have very good reason not to create the miserable child, if we can avoid it. That is: if you were to find out that getting pregnant right now would result in the creation of the miserable child, you would likely take that to be decisive reason not to get pregnant right now. The serious badness of such a life seems to generate a reason not to create it.

The idea that one has reasons not to create certain children does not seem limited to the case of *miserable* children, though. Consider: if you found out that, by getting pregnant right now, you would create a child who will have very serious, painful, medical complications, doesn't this seem to provide you with a reason not to get pregnant right now? This seems true even if such a child's life, though filled with medical hardships, would be overall worth living. That is to say: there seems to be

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advice is surprisingly difficult to justify. By changing the time of conception, one changes the identity of the child. And so long as the first child would have a life worth living, then creating that child would not harm it. So it becomes surprisingly difficult to justify the intuitive claim that, say, a 15 year old girl ought to wait until she is older to get pregnant, as doing so 'would be better for the child'.

reason not to create children who will suffer in various ways, even if they will not be 'miserable'.

In response, it might be thought that, while true that the suffering of a potential child provides that child's parents with a reason not to create it, the happiness of the potential child provides countervailing reasons *to* create it. Thus, for a child who will not be miserable, there may yet be, on balance, reason to create it. However, this second claim seems false. As I sit here, it is true of me, given facts about my life, my health, and my environment, that a child I have is likely not to be miserable, and indeed, even to have a life with significant joy in it. Do I thereby, right now, have a reason to make a baby? The answer seems to be obviously 'no'—for all of us, who throughout our lives could be making new people with relatively happy lives, this fact seems to provide *no reason* to go about making those people. While adding happiness to the world by, say, making a sad person happy (perhaps by feeding her, or providing her with medicine) seems obviously good, and something that I obviously have reason to do, it does not seem true that I have a reason to add happiness to the world by *adding happy people* to it.

The result of this analysis of reasons generates the very strange, but very intuitive claim that philosopher Jeff McMahan (1981) has called **The Asymmetry**, which is the following:

The Asymmetry: Although the prospect of pain and suffering in the life of a child provides one with reason not to create that child, the prospect of happiness in the life of a child provides one with no reason to create that child.

The Asymmetry is theoretically very strange, and for this reason has been rejected by some (including McMahan, who named it—see his more recent (2009)). However, it is so intuitive that most people find it hard to deny. Indeed, philosopher Melinda Roberts observes that even those who would like to reject it, based on its theoretical strangeness, feel compelled to accept it, based on its intuitive appeal (Roberts, 2011, p. 336). For rejecting the asymmetry would require accepting either that there is no reason not to create the child who will suffer, or that there is reason to create every child who would be reasonably happy. And both of these options seem unacceptable.

If **The Asymmetry** is true, however, then it has deep implications. Every person or couple considering whether to create a child should consider the interests of their prospective offspring, but it appears that the reasons generated by such a consideration will always be lopsided: each of us will always have *some* reason not to create a child, as that child will experience at least *some* suffering in its life, and no one will have any reason to create a child *for the child's sake*.[7]

[7] The strongest argument to be made on the basis of this sort of consideration would look like that of the philosopher David Benatar, who holds that, for each of us, it would be better never to have been born, and so we are each obligated not to impose life on anyone else. The morally best world, then, is one in which the human species goes extinct (Benatar, 2006). Although there is much philosophically interesting to discuss in this proposal, it has convinced very few philosophers. For present purposes, we may simply note it as a 'book-end'—the most radical position that one could take on the basis of some sort of procreative asymmetry; but I, instead, will suggest that one need

But we might think that such considerations, in the best situations, will be relatively unimportant. If my parents, for instance, took such considerations seriously, they may have admitted that my interests generated some reason not to create me (and no reason to create me), but that these reasons were relatively weak. After all, they were able to predict (accurately, it turns out) that I would have a pretty good life, and so the suffering that I do endure does not provide anything like the strength of reason that one has to avoid creating the miserable child. In such a case, we might think that the parents' own interest is of sufficient weight to make procreating permissible. My parents wanted to have a child badly enough that these desires outweighed the relatively weak reasons generated by the suffering that my life would contain. Such a story does not seem implausible.

Unfortunately, our situation today is not like my parents' situation. While my parents had every reason to believe that my life would be even better than theirs, the threats of climate change and overpopulation make such a belief much more questionable today. If my child lives 80 years, then it is overwhelmingly likely that she will live to see and experience food and water shortages, increased disease outbreaks, an increase in deadly heat waves, frequent, catastrophic storms, massive migration by climate refugees, and the economic and political destabilization that is likely to result from these eventualities. Now, even though I can predict that my daughter will be better protected from these harms than the world's poor, she is unlikely to be completely protected from all of them. And the calculation will only get worse with each new generation, until we set ourselves on a sustainable path. Do the interests of my potential children give me reason not to create them, then? Do yours? What about the generation that will bear children in, say, 20 years? As the global situation gets worse, it will become more difficult to believe that the reasons not to have a child—grounded in that child's interests—are negligible. It is harder for me than it was for my parents to believe that my own parenting desires outweigh the reasons generated by the suffering my child will endure. And as this belief gets less reasonable, it will seem more likely that the duty to protect my child will require sacrificing one's own parenting interests for the sake of not exposing a child to the suffering that comes with existing in our world.

3.4 What Might Our Obligation Be?

If any of the candidate moral principles articulated above are plausible, they would seem to have some relevance for our procreative behaviors. Having a large, wealthy, carbon-expensive family would seem to contribute (relatively largely) to a massive systematic harm, to be unfair, and to place many children at risk of serious harm simply by being in the world. Is that all that can be said, though? Vaguely, that there is some moral concern with having a 'large' family? More pointedly: do the moral

not accept such a contentious view in order to be driven towards the conclusion that we each have procreation-limiting obligations.

principles articulated in this chapter entail that each of us has a duty to have *no* children? Or perhaps just one or two? In what follows, I will not argue for having some specific number of children, but will articulate the reasons for thinking that we ought to limit ourselves to zero, one, or two children per couple. On the basis of these reasons, I will conclude that, whichever precise number may be correct, it seems plausible that the principles articulated here entail a duty for many of us to have *at most two* children.

Let's begin with the putative duty to protect one's child, as it may seem the most demanding of the candidate obligations. Consider: if each of us is obligated to protect our children by not putting them into a predictably dangerous environment, then the normative implication seems clear: each of us is obligated not to procreate, *period*. Numbers don't seem to matter a lot here—the obligation isn't in terms of minimizing the number of new children exposed to risk; rather, the duty is to *protect one's children*. Each potential child, then, is owed protection in the same way, and it doesn't make sense to say, "Well, I didn't expose *too many* children to harm."

If we have a duty to protect our children (even from existence), and if the world that such children will live in is likely to be sufficiently dangerous to trigger such a duty, then it would seem to be the case that each of us is obligated to refrain from procreating altogether. This would be intensely demanding. But we should note several things at this point.

Although the duty to protect one's children is not, *per se*, attentive to numbers, that doesn't mean that numbers will be completely irrelevant. In the following chapter, we will explore the kinds of considerations that could defeat a *prima facie* duty, and it will be argued that it may matter whether refraining from having any children at all is too costly in various ways. In this way, we might think that interests other than the potential child's can determine the precise content of the duty.

In addition, we can note the uncertainty about the future, and the relevant differences in our predictions at various times. I suggested above that my parents likely had no reason to think they were obligated to protect me from existence, but that I may have *some* reason to think that about my own (potential) children. But these reasons may yet be uncertain or relatively weak, compared to what the next several generations will face.

Finally, it is worth noting that just because 'protecting one's children' is a duty that applies to each child, that doesn't mean that one can't do better or worse by this duty. If a child being exposed to danger is bad, then presumably two children being exposed to danger is worse, and three is worse still. While this doesn't mean that one can discharge her duty by 'protecting most children', it does mean that there are additional reasons not to expose *more children* to danger. If we combine this thought with those above, then, we might think that the obligation of a parent today is to take seriously the future risk and to expose no more children to it than is necessary in pursuing one's own interest.

I'm not sure how successful we should take each of these considerations to be in pushing towards some particular number of permissible children. On the one hand, the duty to protect one's children seems to imply a very demanding obligation: that each of us, if the future is bleak enough, refrain from exposing any new child to our

world. However, we might think that, at least for now, the future is sufficiently uncertain that parental desires could outweigh the risk to our children (especially if we have greater-than-average means to protect them throughout life). And in this case, perhaps it is permissible to have a child, even in light of the coming danger. But could it be permissible to have more than one? The case gets more difficult. We will discuss, in the following chapter, how a parent's projects and desires might play a role in justifying the choice to have some number of children; but for now, we can simply note that each procreative choice is a choice to expose *another* child to danger, and so the justificatory bar is raised. The duty to protect one's children, then, plausibly demands that we refrain from procreating altogether, and it at least pushes us to have few children.

The remaining two candidate principles raise the question of 'how many children is permissible' more directly. Consider first the issue of justice from earlier. According to such considerations, it may look like procreating at all would be to commit an injustice, as each new person contributes unequally to a problem that disproportionately harms the poor, and depends on radical inequality. So perhaps justice considerations entail that we have a strict moral obligations not to procreate; this would be an extreme view, but it also looks disconcertingly defensible.

Perhaps, though, we could take a page from Broome's playbook, and say that justice simply requires one to be a 'net-zero' procreator. Because a strict obligation not to procreate would be so demanding, perhaps we could allow the global wealthy to procreate provided that they offset their procreative behavior somehow. This could be through reducing other emissions activities, for instance; or, as Broome suggested in the non-procreative context: one could purchase carbon offsets. Of course, offsetting one's carbon is not a perfect solution, for reasons that have already been mentioned: Offsetting carbon that was liberated from fossil fuels replaces long-term carbon sinks with short-term sinks. In this way, it may be misleading to call emission + offsetting 'net-zero', and so likely could not justify giving the world's wealthy a *carte blanche* concerning procreation. However, procreation + offsetting would be much better than simply procreating, and so perhaps it would allow wealthy individuals to prevent the existence of their children from contributing (as much) to the problem, while not requiring so severe a procreative restriction.

As with the duty to protect one's children, the goal here is not to settle whether justice requires that one *not procreate*, or whether we might be limited to relatively few children; the goal, rather, is simply to demonstrate that considerations of justice seem to imply *some moral restriction* on one's procreative behaviors; it appears that justice points in favor of *limiting* one's procreative activities.

Finally, consider the duty not to contribute to massive, systematic harms. Overpopulation is causing massive, systematic harms, and so we have a duty not to contribute to overpopulation. But what does it mean to contribute to overpopulation? Well, it's unclear. On the one hand, by procreating at all, one becomes a procreator—someone who has engaged in the activity that is ultimately causing the problem. So maybe our duty is not to procreate. This, again, would be an extreme view. But there are other ways to understand what it would be to contribute to overpopulation.

One might, for instance, think that procreating past 'replacement' would contribute to the problem, since the issue is not making people, but making people at a rate that grows the population. So, perhaps our obligation is to have no more than two children per couple. Unfortunately since our current population is already unsustainable (especially given the radical inequality discussed above, and the incredible resource-expense of the global wealthy's children), each couple having two children might actually still constitute contributing to overpopulation. So perhaps each couple must have no more than one child, since having one child is compatible with reducing the population to a sustainable level.

Each of the positions laid out above seems at least initially plausible, and I'm unsure on what grounds we might take one of them to be obviously correct. What does seem clear, however, is that having any more than two children would be 'contributing to overpopulation'. And so, if there is a duty not to contribute to massive, systematic harms, then it seems plausible that we each have an individual obligation to limit our own procreative behaviors to the creation of two new children per couple.

Before closing out the chapter, I want to revisit an issue from Chap. 2—that of the difference that one can make towards the harms of climate change thought of in *relative* rather than *absolute* terms. The motivation for exploring the moral principles in this chapter was the admission that having a child may not make an absolutely significant difference to the harms of climate change, and so we needed to see whether **Significant Difference** is true. If the principles investigated here are plausible, then it is not—we sometimes have obligations to refrain from contributing to a moral problem, even if our contribution doesn't make a significant difference.

Now recall that procreating does seem to make a *relatively* significant difference to the harms of climate change, in that it has a larger impact than anything else we are likely to do in our lives. What is important to see now is that this relative significance turns out to matter, if we have an obligation not to contribute to massive, systematic harms. Why? Because not all obligations are equal, and it's overwhelmingly plausible that the relative contribution to the problem *does matter* when thinking about how seriously we take such an obligation.

In motivating this chapter's non-consequentialist principles, I used examples like recycling, or wasteful driving, in which one's actions are both absolutely and relatively insignificant. And we may in fact think that there is a duty to recycle and not to engage in wasteful driving. However, we might also not take those duties very seriously, as a result of how little they contribute to the relevant moral problems. If taking my motorcycle to the race track gives me a lot of pleasure, then we might shrug off the fact that there is a duty not to contribute to massive, systematic harms, as very many of my other actions could have a much greater effect in the fight against climate change.

The issue here is that, when we specify moral principles into guides for action, there are almost always competing goods: I may decide to eat meat so as not to offend a host, even if morality requires vegetarianism; or I might commute further than would seem justifiable, in order to make my spouse's commute more reasonable. And not all justifications need be high values; our pleasure, joy, and ability to

lead flourishing lives matters as well, which is why we might think that the occasional pleasure-cruise is permissible, or even that one could live in a larger house than she strictly requires.

Now certainly, if there is even a *prima facie* duty not to contribute to massive harms, and things like pleasure cruises, large homes, vacations, etc. contribute to climate change, then we would expect that there is a justificatory burden on anyone who wants to do these things. Meeting this burden, then, may require that one not do all of them, or not very often, and that one attempt to minimize the cost (buy a fuel-efficient vehicle, increase the energy efficiency of one's home, etc.). But the primary point here is that if we really have a duty as wide-ranging as the duty not to contribute to massive harms—and if, as is the case, virtually everything we do contributes to the harms of climate change—then it seems plausible that the duty will be sensitive to various features of one's contributions, such as the relative significance, as well as whether one attempts to offset and/or compensate for those contributions.

Clearly, this final point is relevant to our discussion of procreative ethics. What seems plausible in many of the examples of emitting activity given is that the increase in significance of one's contribution as a result of various actions increases the justificatory burden of those actions. If I want to jet-set around the world, doing so would seem to demand much stronger justifications than taking my bike to the track; while the modest joy I get from the latter may do the justificatory trick in that case, the jet-setting would seem to require that I have much better reasons for acting.[8] And of course, if that story sounds plausible, then the decision to have a child is perhaps the most in need of justification of all our potential actions. According to the study of 'carbon legacy' from the previous chapter (Murtaugh & Schlax, 2009), in the near term, having a child may make one responsible for as much as 9441 metric tons of CO_2, while a flight from Washington, DC to Paris increases one's carbon footprint by approximately 1 metric ton. While one ton is nothing to sneeze at (recall that the average Nigerien has an *annual* footprint of 0.1 tons!), having a child is nearly *10,000 times* more costly. If flying across the ocean requires justification (and it seems to), then having a child requires *much, much more*. And this, I take it, is a surprising conclusion.

3.5 Conclusion

A serious puzzle about moral problems like overpopulation and climate change are how they can generate individual obligations, given that one's personal contribution to the problems are vanishingly small. After all, what makes these issues

[8] Note that this need not imply that the justificatory burden could not be met. Physicians who work for Doctors Without Borders presumably have a large carbon footprint as a result of their international travel; I would think that their relatively large contribution to climate change is justifiable in the way that flying from New York to Paris for a fancy lunch would not be.

problematic in the first place is that they cause harm; so if my individual actions don't actually cause any of that harm, or make a significant difference to the problem, how could they be wrong?

In this chapter, I have argued that, intuitive though such an objection is, it relies on too simplistic a view of what grounds individual moral obligation. Although I have not argued that any particular moral theory is correct, I have tried to show that according to three, plausible moral principles, we inherit moral obligation from the problems of overpopulation and climate change. In short, it seems plausible that we have duties (a) not to contribute to massive, systematic harms; (b) not to act unjustly; and (c) not to have children who will have bad lives. If any subset of these arguments seems convincing, then each of us likely has an obligation to limit our procreative behaviors, even if our individual actions don't make a significant difference. And while it is unclear whether there is some particular number of children the creation of which is permissible, the clear justificatory push is for *small families*. Indeed, considerations of justice and protection of one's own children push in the direction of having *no* children, while the duty not to contribute to harms suggests a limit of two children per couple.

The candidate moral principles here investigated, then, suggest that each of us is obligated *at least* not to procreate past replacement, with some non-trivial chance that the moral burden is even stricter than that. If true, such a conclusion is morally profound, and to many, likely disconcerting. It will seem to many that there must be good justification for having children, which seems so valuable. And indeed, we have just seen that the existence of a relevant duty does not mean that one *must absolutely do* what is required; but rather, that one must do that thing unless she meets the appropriate justificatory burden. However, we have also seen that, due to the relative contribution of procreating to the problem of climate change, the justificatory burden is very high—likely higher than for any other single activity that most of us will take in our lives. Could any reason for procreating meet that justificatory burden? It is to precisely this question that we now turn.

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