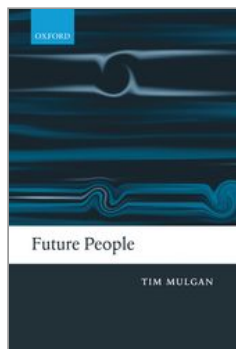


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## Future People: A Moderate Consequentialist Account of our Obligations to Future Generations

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## Reproductive Freedom

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### Abstract and Keywords

This chapter first establishes a strong *prima facie* Rule Consequentialist case in favour of reproductive freedom. Arguments against reproductive freedom are then examined and found wanting. Rule Consequentialism does not seek any precise population target, although the next generation must be large enough to provide cultural continuity and small enough not to overburden the environment. The empirical evidence suggests that in a stable society governed by an ideal code where women are provided with adequate education and a wide range of opportunities, a sustainable birth rate can be achieved. Reproductive freedom is thus no threat to the survival of society.

*Keywords:* Rule Consequentialism, reproductive freedom, coercion, lexical, population size, public policy

### 6.1. Compulsory Reproduction Revisited

Rule Consequentialism seeks a code of rules to maximize value. Rules regarding reproduction obviously affect the number of future people, and the size of the population is one factor affecting the total value of a possible outcome. So Rule Consequentialists must address the issue of optimal population size. How many future people should there be? It

looks as if Rule Consequentialism must give a very demanding and unpalatable answer to this question.

We are operating with a traditional Consequentialist value theory, where the addition of extra lives worth living always increases total value. Other things being equal, the population should be as large as possible. If it incorporates such a value theory, then Rule Consequentialism tells us to strive to produce as many children as we possibly can, even if their lives are barely worth living. The maximum feasible fertility rate for a human population is usually estimated at between 13 and 17 children per adult woman.<sup>1</sup> Unconstrained reproduction at this rate would lead to a vast increase in the population. Whatever we may think of the underlying value theory, the resulting theory of moral action can seem both extremely demanding and intrinsically morally repugnant.

Our first reply is to deny that, as a matter of fact, the best Consequentialist value theory yields these results in the actual world. Our value theory only implies that it is desirable to maximize the population if other things are equal. In the actual world, other things are far from equal. Limitations on resources, and other problems resulting from overcrowding, almost certainly prevent even the Total View from advocating a population explosion. In practice, anything approaching Parfit's Z-world is not ecologically sustainable.

Furthermore, I argued in Chapter 3 that the best Consequentialist value theory may depart from the Total View by incorporating a lexical level. Environmental constraints suggest that the global population cannot grow too much (if at all) without a serious negative impact on the average quality (p.162) of life over the long run. Any value theory designed to avoid the Repugnant Conclusion will not countenance unconstrained population expansion nearly as often as the Total View. Rule Consequentialism need not recommend population growth if the result would be that everyone fell below the lexical level. Even if the Z-world and the A-world are both feasible, an ideal code may aim for the latter not the former.

A second reply is that the ideal code will not generally include purely maximizing rules. The code must be teachable to, and internalizable by, the next generation. This puts severe limits on the complexity or psychological demandingness of its rules. The best feasible outcome is not the best logically possible outcome, and the optimal rules probably will not even aim directly at the best feasible outcome. The code that maximizes value is unlikely to be a code that tells agents to maximize value. For instance, a rule requiring every woman to have as many

children as she possibly can, while simple enough to grasp, would almost certainly be prohibitively difficult to inculcate in a broad population, especially as it would run directly counter to the general liberal tenor of the ideal code, as we shall see in Sections 6.2, 6.6, and 7.2.

The ideal code will thus not advocate the maximum feasible level of fertility. However, if we seek any particular precise population size, then we will still need a very prescriptive rule regarding reproduction. For instance, to achieve a population of precisely six billion (or precisely ten billion, or any other specific target), a considerable degree of coercion might be required. (Actually, it is far from clear that any rule, however rigid, could ensure that a precise population target was achieved, given the unpredictability of the natural processes involved.) A restrictive rule might also be necessary if we sought the precise maximum population consistent with (almost) everyone living above some specific target, such as the lexical level or the zero level.

On the other hand, the next few sections establish a strong *prima facie* case in favour of reproductive freedom. If this case is sound, then the ideal code will favour a freely chosen lower rate of reproduction over a higher rate imposed by coercion or moral obligation. Given the significance of autonomy, a world where five billion people enjoy broad reproductive freedom could well be better than a world where six billion people enjoy otherwise equivalent lives without reproductive freedom. If the denial of reproductive freedom is the only way to get a population of six billion, then the ideal code will not aim for the larger population.

We thus cannot assume that Rule Consequentialism seeks any precise population target. The next generation must be large enough to support the present generation in its dotage, and to provide cultural continuity. It must be small enough not to overburden the environment. Between these two (p.163) extremes lies a wide range of possible population sizes. We should interpret the ideal code, not as seeking to achieve a particular optimal population size, but as seeking to avoid a population which is too large or too small. Depending on the circumstances of a particular society, some modest population increase may be desirable. I defer further discussion until Section 8.2.3, where I will argue that the specification of precise population targets should occur in public debate within the ideal society, rather than built into the ideal code in advance. (This is one obvious point where further departures from the Total View, such as explicit holistic evaluation of different possible futures, would reinforce our defence of Rule Consequentialism.)

Rule Consequentialism thus sets itself a comparatively modest goal. I shall argue that the ideal code should permit a wide range of reproductive options, and accommodate significant reproductive choice. The empirical evidence suggests that, in a stable society where women are provided with adequate education and a wide range of opportunities, a sustainable birth rate can be achieved.<sup>2</sup>

## 6.2. Rule Consequentialism and Reproductive Freedom

The cornerstone of my Rule Consequentialist account of the morality of reproduction is a commitment to reproductive freedom. Section 6.2 establishes a *prima facie* case in favour of such freedom. Rule Consequentialism advises us to follow a code of rules whose internalization by everyone would maximize value. Initially it seems obvious that the rule regarding reproduction will be something like the following.

***The Simple Reproductive Imperative.*** Have a child whenever that child's life would be worth living.

If the population has a finite optimal level (or an optimal *range*), perhaps due to resource constraints, then we might amend this slightly to yield the following rule.

***The Conditional Reproductive Imperative.*** Reproduce if and only if (a) the population is below its optimal range; and (b) your child's life would be worth living.

Rules such as these deprive everyone of reproductive choice. If the population is below the lower limit of the optimal range, then we have an obligation to (p.164) produce any possible (barely) happy child. If the population is above that level, then we are forbidden to do so. As many people regard reproductive choice as a basic value, this is a highly counterintuitive result.<sup>3</sup>

There are two ways to make room for reproductive choice. The first is indirect. In our actual situation, the way to produce the optimal population in the next generation is for some to reproduce while others do not. (Or, perhaps more accurately, at least some must reproduce and it must not be the case that everyone has as many children as they can.) Some but not all of the possible members of the next generation must become actual. The way to maximize the total happiness of the next generation is to create the happier possible people and leave uncreated those who would have been less happy. Suppose that *n* is the optimal number of people in the next generation. We then imagine the possible people arranged in descending order of quality of life, from 1

to  $m$ , where  $m$  is the number of possible people ( $m$  is obviously much greater than  $n$ ). Rule Consequentialism will then recommend the following rule.

***The Ordered Reproductive Imperative.*** Have a child if and only if the value of that child's life is at least as great as the value of the  $n$ -th possible person on our ordered list of possible people.<sup>4</sup>

This rule leaves no direct role for choice. However, as a matter of fact, children are much more likely to be happy if their parents wanted to have them. Most of the happier possible people will be those whose parents wanted them, while most of the unhappier possible people are those who would have been unwanted. In practice, then, this rule will generally tell people to have children if and only if they want to.

This connection between reproduction and choice is too contingent. Those who could make comparatively good parents will still be *obliged* to reproduce even if they do not wish to. Commonsense intuition, reinforced by the considerations advanced in Chapter 4, suggests that, if at all possible, we should seek a more direct role for reproductive choice. The easiest solution is to argue that the ideal code would include the following rule.

***The Simple Reproductive Choice Rule.*** Reproduce if and only if you want to.

We begin with general reasons why the ideal code might include a rule similar to this one. We then move on to ask what particular form that rule might (p.165) take, and how it would be applied. If the ideal code is to be plausible, then this simple rule will need to be constrained.

The advantages of reproductive choice are obvious. If the members of the first generation are able to choose for themselves whether they will have children, then this will improve the quality of their lives. Given the significance of autonomy, the particular significance of being morally free to make major life choices, and the significance of this particular life choice, this additional value is not negligible, as we saw in our discussion of the Hybrid View in Chapter 4. The significance of reproductive freedom both justifies a general prerogative permitting sub-optimal reproduction, and explains why the Rule Consequentialist ideal code is likely to favour reproductive choice.

There is a more general point here. Autonomy can be significant for both instrumental and intrinsic reasons. Autonomy is intrinsically good for an individual, because it is an independently valuable component of a worthwhile life.<sup>5</sup> Autonomy is instrumentally valuable because it

greatly enhances an individual's likelihood of successfully achieving other valuable ends. The ideal code is thus likely to have a strong liberal component.<sup>6</sup> A liberal code is both more efficient in its operations and easier to teach. One strength of Rule Consequentialism is that it does not rest its case for individual moral freedom solely on the intrinsic value of autonomy.

Reproductive freedom is thus significantly better for the present generation than any alternative. It can only fail to maximize well-being if some alternative approach produces a significantly greater total well-being for the second generation, or subsequent generations. There are several reasons why this is unlikely. The first is that happier parents who have chosen to have children are more likely to provide a good life for their children. A second reason relates to the nature of goals. Before an individual is born, it is very hard to evaluate precisely how valuable his or her life will be. It is almost impossible to tell which of two possible future people will have the better life, once we have been assured that each will be provided with the basic necessities of life, including the necessary background conditions for the successful pursuit of goals. (If we believe in genuine incommensurability, then such comparisons may be impossible in principle, and not just in (p.166) practice.) If there is a form of reproductive choice which can ensure that these conditions are met, then it is very unlikely that any alternative principle produces an increase in value for the next generation sufficiently large to outweigh the loss of freedom for the first generation. I am confident that we can construct such a principle, as part of a broader liberal code.

We should also note that the disvalue of any loss of reproductive freedom would fall on each subsequent generation in its turn, and not just on the first generation. This raises the general issue of intergenerational continuity. We must assume that the ideal code, as taught to the next generation, includes rules for what they will teach their own children. The code is chosen because it maximizes well-being across all generations. A code denying reproductive freedom to all generations would be very undesirable, unless it produced some much greater benefit. It might also be very hard to teach such a code to the second generation, once they had seen the negative effects of a lack of reproductive freedom on their parents.<sup>7</sup>

### 6.2.1. Constraining Reproductive Freedom

Our intuitive objections to the Hybrid View (Section 4.1.3) showed that a principle of total reproductive freedom is too permissive. It would allow people knowingly to create children with horrific lives, or to have

children solely in order to sell them into slavery for monetary reward. Any morally acceptable principle of reproductive freedom must be constrained.

These constraints will be of two types, addressing two key questions.

1. When are agents permitted to have children?
2. How are parents permitted to treat their children?

These two questions are obviously related: whether one is permitted to have a child may depend, in part, on whether one would be able to treat that child appropriately. We addressed the second question in general terms in Section 5.7. Our focus now is on the first question.

At a bare minimum, agents should only be permitted to reproduce if the life they are creating can reasonably be expected to be worth living. Can Rule Consequentialism accommodate this result? Why should we expect the ideal code to include constraints on reproduction? We begin our inquiry with the following very limited constraint.

(p.167) ***The Zero Reproductive Choice Rule.*** Reproduce if and only if you want to, but only if your child's life will be above the zero level.

If the ideal code contains only the Simple Reproductive Choice Rule, with no constraints, then some people will create people whose lives are not worth living. This has a negative impact on total well-being. Rule Consequentialism will thus endorse some constraints unless these have some countervailing negative consequence. The negative effect of any constraint is the loss of reproductive freedom. All constraints on reproduction limit the choices of potential reproducers.

The particular loss of freedom involved in the Zero Reproductive Choice Rule is unlikely to be very morally significant. Most people will still retain a wide range of reproductive options. They can still choose whether, and to a large extent in what way, they will reproduce. Furthermore, the option which is removed is an intrinsically undesirable one. Creating people with worthwhile lives is a very worthwhile project. I argued in Section 4.2.2 that the importance for autonomy suggests that the decision whether or not to embark on such projects should be morally open. By contrast, creating people with lives below the zero level is intrinsically undesirable. If the valuable exercise of autonomy consists in the choice between competing projects which are themselves independently valuable, then the Zero Reproductive Choice Rule does not impact negatively on autonomy.

The problematic case for this constraint concerns people who wish to have children but are only able to have children whose lives would be below the zero level. The Zero Reproductive Choice Rule effectively deprives such people of the option of reproduction. Rule Consequentialists have two options at this point. The first is to hold that the constraint imposed by this rule does not apply to such people, as the disvalue of their loss of reproductive freedom outweighs the possible disvalue of allowing some subzero lives. This line of argument seems implausible. For the reasons stated above, losing the option of creating people whose lives are not worth living does not impact negatively on autonomy. The real loss of autonomy is caused by whatever it is that deprives some people of the option of creating worthwhile lives. Once this deprivation has been suffered, permitting those people to create lives below the zero level is not a solution.

This suggests a second response. If the creation of children whose lives are not worth living is not a worthwhile project, then embarking on that project does not improve the quality of one's life. Nor does it enhance one's autonomy to leave morally open the decision whether or not to embark on it. A moral rule prohibiting such reproduction thus has no negative effect. The only way genuinely to enhance the autonomy of people with such (p.168) limited reproductive options is to give them the ability to have children with worthwhile lives. This suggests that, other things being equal, Rule Consequentialism will strongly advocate support for, and research into, alternative methods of reproduction. Alternatively, it might recommend that society be organized so as to improve the lifestyle options available to those unable to have children of their own. One central aim of the ideal code is to ensure the availability (both practical and moral) of a wide range of valuable lifestyle options. (We return to public policy in Section 6.6.)

Some might argue that a *rule* against having children whose lives are not worth living would be redundant, as no one would be tempted to do so anyway, especially not if they have been raised in the ideal society. As we saw in Section 5.7.2, objections of this kind misinterpret the status of the ideal code and the nature of its rules. For the Rule Consequentialist, the crucial question is not 'Would those in the ideal society want to do x?' but rather 'Would they feel morally free to do x?' Someone who had internalized the ideal code would not just have no desire to create a child with a sub-zero life. They would also recognize that it would be wrong to do so. This would be seen most clearly in their response to someone who did create such a life. An inhabitant of the ideal society would not be likely to regard such a person as merely



someone with eccentric desires. If someone who had internalized the ideal code would not feel morally free to do x, then Rule Consequentialism says that x is forbidden.

### 6.2.2. More Stringent Constraints

Rule Consequentialism will not permit agents to create people whose lives are not worth living. We must now ask whether the ideal code will include a more stringent constraint. Perhaps agents will only be permitted to have children whose quality of life is greater than x, where x is above the zero level.

There are several arguments in support of more stringent constraints. If a more lenient constraint would lead to overpopulation, then a prohibitive constraint may be the best way to achieve an optimal population level while maximizing average happiness. In light of the value theory presented in Chapter 3, and bearing in mind the potential looseness attached to the expression 'lexical level' as foreshadowed in Section 5.4, we will be especially interested in the following rule.

***The Lexical Reproduction Rule.*** Reproduce if and only if you want to, so long as the child you create will live above the lexical level.

From now on, we will focus on this rule, unless otherwise stated. Our first task is to ask why the ideal code might include the Lexical Reproduction Rule instead of the Zero Reproductive Choice Rule.

(p.169) If most people in the ideal society are able to create children whose lives are above the lexical level, then this extra constraint will add value without significantly diminishing reproductive freedom. Although not as bad as creating children whose lives are not worth living, the option of creating lives between the zero and lexical levels is clearly sub-optimal. For those who can create lives above the lexical level, the really morally significant choice involves, not the decision whether to create a life above or below that level, but rather whether to create lives above the lexical level as opposed to not reproducing at all. So long as *this* choice is left morally open, autonomy is not significantly compromised. The main effect of removing the sub-optimal option is that some people will have happier children than they might otherwise have had. The net impact on well-being is thus positive. On the other hand, some people who have internalized the Lexical Reproduction Rule instead of the Zero Reproductive Choice Rule might respond by not having children at all, rather than having children who live below the lexical level. We are operating with a value theory on which the

addition of extra lives worth living typically increases aggregate value. So this change would make things worse.

To evaluate the Lexical Reproduction Rule we thus need to know how people would respond to the removal of the particular option of creating people whose lives fall between the zero and lexical levels. Many will be unaffected, as they would not have chosen the lesser option anyway. Of those who would have opted for sub-lexical reproduction under the more permissive Zero Reproductive Choice Rule, some will choose supra-lexical reproduction instead. Others may opt not to reproduce at all. Of these two changes, the first seems to enhance overall well-being, while the second reduces it. We thus need some idea how prevalent the two responses will be. The higher the threshold below which reproduction is forbidden, the more likely it is that people will respond by declining to reproduce at all.

Proponents of any constraint more stringent than the Zero Reproductive Choice Rule face a potential dilemma here. If very few people would be attracted to sub-optimal reproduction, then the benefits of the new constraint are limited. We must then ask whether it is necessary to complicate the ideal code in this way. In general, there is a strong *prima facie* case against the addition of new rules. Every extra clause increases the cost of inculcating the ideal code, and reduces the likelihood of compliance. This reluctance to add extra rules is essential if Rule Consequentialism is to avoid the Collapse Objection (Section 5.2). On the other hand, if sub-lexical reproduction would be a common choice, then any constraint more stringent than the Zero Reproductive Choice Rule will meet with considerable (p.170) psychological resistance. It will thus be very difficult to get such a constraint internalized by most people. At some point the costs of inculcation will outweigh any benefits.

More stringent constraints on reproduction face a further problem. For any value of  $x$  between the zero level and the lexical level, there will be some people who can have children whose lives are worth living, but are unable to create anyone whose life exceeds  $x$ . A rule forbidding the creation of people with lives worth less than  $x$  deprives such people of any chance to reproduce. As before, we have two options. We might accept that such people are not allowed to reproduce. This option only seems plausible if this additional restriction is necessary to avoid overpopulation. Alternatively, we might argue that the original Lexical Reproduction Rule does not apply to such people. Instead, they should obey the following rule. (So should everyone else, though for most

people the following revision is identical to the original Lexical Reproduction Rule.)

**The New Lexical Reproduction Rule.** Reproduce if and only if you want to, so long as the child you create will live above the lexical level. Unless you are unable to have a child who will live above the lexical level, in which case you may create if and only if (a) the value of your child's life is greater than  $x$  (where  $x$  is between the zero and lexical levels); and (b) you could not have given any child of yours a better life.

This seems the appropriate option for Rule Consequentialists to take here. Unless this amendment would lead to overpopulation, it is hard to see any negative effects. Lowering the threshold enhances the autonomy of this group of potential parents, and the lives of their children are worth living. The alternative is a world where autonomy is reduced and no extra lives are added. These extra lives may be well below the average for their society. However, even if there are times when the creation of below-average lives is undesirable in itself, this does not seem to be one of them. (As we shall see in Section 6.2.3, condition (b) is actually too strong. However, some condition of this type is necessary to avoid having people gratuitously create lives well below the lexical level.)

We need to ask why these additional lives would be below the lexical level. Suppose the lexical level is defined in terms of the successful pursuit of valuable goals, as suggested in Chapter 3 (and supported by Chapter 4's discussion of the significance of such pursuit). If an adequate social framework exists within which people are able successfully to pursue valuable goals, then any normal person can live above the lexical level if provided with an adequate start in life. If social conditions prevent some people from accessing (p.171) the opportunities provided by the framework, then a rearrangement of those social conditions will almost certainly enhance overall well-being. The ideal code is thus likely to be designed to ensure that everyone has access to the social framework of opportunities. This suggests that people will live below the lexical level only if their physical or cognitive limitations cannot be remedied by any feasible rearrangement of social conditions. Our value theory implies that the addition of such lives, considered in isolation, would increase total value. However, given the significance of autonomy within the ideal code, this additional value would not be sufficient to justify an *obligation* on potential parents to create such children. The ideal code will thus leave the decision to individual potential parents. (If there is no general obligation to

reproduce, then there will not be an obligation in this particular case.) So the ideal code is not too far from conventional morality.

A common reason why many people have lives below the lexical level in the contemporary Western world is because their parents fail to provide them with a good start in life. If their parents are able to provide a good start, then the New Lexical Reproduction Rule clearly requires them to do so. If one knows in advance that, although one could provide a good start for one's children, one will fail to do so, then the situation is less clear. Obviously, if I know that I will leave my children below the zero level, then I ought not to reproduce, under any plausible constrained principle of reproductive freedom. If I know that I will do a fair job of raising my children, so that they live between the zero level and the lexical level, then it is tempting to assimilate my situation to that of someone who cannot give their children a better start in life. However, there are sound Rule Consequentialist reasons for distinguishing the two cases. A complete code of rules will tell agents whether or not to treat their own predictable (and perhaps even unpreventable) future failure to behave properly as morally distinct from external factors impacting on the consequences of their actions. A code which tells agents not to excuse their future failings in this way may produce better consequences overall—as wishful thinking and a reduced sense of responsibility might lead too many people to fail to take adequate steps to improve their character or future behaviour. Accordingly, someone who had internalized the ideal code might read the New Lexical Reproduction Rule as forbidding one to create people who, as a result of one's own future parental failings, will have lives below the lexical level. (Such failings would arise even under perfect full compliance, as successful compliance with parental obligations may be beyond the capacities of some parents.)

On balance, in spite of these difficulties, I am inclined to believe that the ideal code will adopt the New Lexical Rule, combined with parental (p.172) obligations (to children who already exist.) There are three general reasons to include these constraints and prohibitions.

1. Those who have internalized the ideal code are not saints. They will often be tempted by sub-optimal inclinations. If the code included no prohibitions, such inclinations would always lead to sub-optimal actions (Section 5.7.2).

2. Prohibitions provide security to third parties that they will not suffer at the hands of those who, for all they know, may have sub-optimal inclinations. In this case, the third parties are children, who need to know that their parents feel morally bound to raise them above the lexical level if at all possible. Psychologically, it would be hard to combine the belief that one had an obligation to raise one's existing children above the lexical level with the belief that one was morally free to gratuitously create a child who would live below the lexical level. The most stable combination will thus involve the Lexical Reproductive Rule.

3. Even in the ideal society, some people will have inclinations contrary to those of someone who had internalized the ideal code. To prevent such inclinations leading to undesirable behaviour, it is desirable that such people know that, because the action is forbidden by the ideal code, it would be morally censured (at least) by other agents.

#### 6.2.3. Maximizing Reproduction

We can imagine even stronger constraints, urging people to create the best possible lives. These constraints are implausible if they would prevent some people who are unable to create extremely worthwhile lives from reproducing at all. A maximizing rule is plausible only if cast in the following form.

***The Conditional Maximizing Rule.*** Reproduce if and only if you want to, so long as (a) the child you create will live above a certain minimum threshold (which will be between the zero and lexical levels); and (b) you create the happiest child you can.

Whether a particular act of creation is morally acceptable will thus depend largely on the nature of the alternatives, not just on the intrinsic value of the life created.

The arguments supporting this new rule are comparatively obvious. It seems to maximize the well-being of the next generation. Every parent will have the happiest children they could have had. The rule seems to achieve this by leaving reproductive freedom intact. Everyone who is able to have children whose lives would be worth living is morally free to choose (p.173) between reproduction and non-reproduction. In the area of reproductive freedom, this is the most significant decision, as it most clearly involves a choice between genuinely valuable, but radically different lifestyles.

There are several arguments against this new rule. Some will argue that it leaves too little reproductive freedom. Such freedom should not be limited solely to the decision whether or not to reproduce. It also covers a range of decisions regarding how to reproduce, and what sort of life one wants for one's children. A rigid rule requiring one to maximize the well-being of one's children removes this freedom. Such a rule is also extremely demanding, as it will impose enormous burdens once a child is born. There are no other circumstances where the ideal code is likely to require any agent to maximize someone else's welfare regardless of the cost to herself. While it does seem reasonable to place parents under special obligations to their children, the obligation to maximize well-being may seem extreme. (We return to the demands of the ideal code in Chapter 10.)

The extreme demands of this rule count against it at an intuitive level. They also suggest that it will not form part of the ideal code. Extremely demanding rules are very difficult to inculcate in the population as a whole. The costs of inculcating such a rule may well outweigh the benefits. Even if people could be taught such a rule, the consequences of their acting on it might well be undesirable. If their only choices are an extremely demanding form of reproduction or no reproduction at all, many people will opt for the latter. This suggests that the next generation may be too small. The ideal code could respond by placing a moral obligation on some people to reproduce. However, this would make the ideal code even more demanding. If one is only permitted to reproduce if one provides one's child with the best possible life, and if some people are required to reproduce, then the demands of Rule Consequentialism threaten to approach those of Simple Consequentialism.<sup>8</sup>

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#### 6.2.4. Uncertainty

All human choices are made under uncertainty. Reproduction is no exception. No potential parents can predict with certainty the well-being of any child they might have. There is always some possibility (however remote) that (p.174) one will have a child whose life falls below the zero level, perhaps due to an untreatable genetic condition which cannot be detected in advance.<sup>9</sup> If lives below the zero level reduce value, and lives above zero add no value, then no act of creation is ever permitted if there is *any* chance it will produce a life not worth living. As this risk is ever present, Simple Consequentialism can accommodate the asymmetry only by forbidding reproduction.

Rule Consequentialism can easily avoid this result. The consequences of everyone refraining from reproducing would be the extinction of the human species. The consequence of everyone feeling free to reproduce even if there is a slight possibility of having a child whose life is below zero (or a higher probability of a child below the lexical level) is a world where most people live above the lexical level, some live between zero and the lexical level, and a tiny number fall below zero. On the theories of value we are working with, the latter is the better world. (As we saw in Section 3.3, value theories that avoid this result fall foul of the Reverse Repugnant Conclusion.) Unlike Simple Consequentialists, Rule Consequentialists need not resort to asymmetric value theories to accommodate the asymmetry.<sup>10</sup>

To accommodate uncertainty, we could amend our rule regarding reproduction as follows.

***The Expected-Value Lexical Reproduction Rule.*** Reproduce if and only if you want to, provided the *expected value* of your child's life is above the lexical level. If you are unable to have a child whose life has an expected value above the lexical level, then you may create if and only if (a) the expected life value for your child is greater than  $x$  (where  $x$  is between the zero and lexical levels), and (b) you could not have created a child with a substantially better life.

However, it is almost certainly not feasible to advise agents to constrain their reproductive freedom by reference to expected value calculations, for reasons sketched in Section 5.6. Such a rule simply cannot be followed. It is thus much more likely that the ideal code will include a rule such as the following.

***The Flexible Lexical Rule.*** Reproduce if and only if you want to, so long as you are *reasonably sure* that your child will enjoy a life above

the lexical level, and *very sure* that the risk of your child falling below the zero level is *very small*.

This rule is, of course, very vague. In practice, much will turn on the interpretation of the emphasized phrases. However, I argued in Section 5.6 that (p.175) such elements of vagueness are a strength rather than a weakness in the context of an ideal code. (See also Section 6.4.2.)

Having established the general form of the best case *for* reproductive freedom, we turn now to the case against.

### 6.3. The Ideal Code and Child-Rearing

Several areas of the ideal code will affect or interact with the rule regarding reproduction. The most obvious overlap is with rules regarding child-rearing and education. The ideal code is conceived of as a complete moral code, governing all aspects of life. It will thus cover such issues as the significance of parenthood, the distribution of child-rearing responsibilities, and the structure of families. The practices of any society in this area obviously impact on people's decisions regarding reproduction, and greatly affect the lives of their children.

The previous section established a strong *prima facie* case for reproductive freedom. Consideration of wider social issues might undermine this case in two distinct ways.

1. A change in background social conditions might open up other equally valuable alternative lifestyles not involving reproduction. This would reduce the significance of the choice between reproduction and non-reproduction, and thus undermine the moral significance of reproductive freedom.
2. The need to ensure an optimal population size in all future generations might generate a strong case for coercive policies regarding reproduction. If reproductive freedom is inconsistent with the maintenance of an optimal population, then this could well outweigh any positive case for reproductive freedom.

We begin with the first potential threat. In many ways, the case for reproductive freedom is stronger against a background of social services and support networks than in their absence. Such services and networks significantly reduce the possibility that reproductive freedom will lead to some people having lives not worth living. The ideal code is likely to produce such support services, as they clearly promote the interests of children. (While this reinforces the case for reproductive freedom under full compliance, it also increases the distance between the ideal society and the actual world. As we shall see in Chapter 9, this



makes it much harder to tell what Rule Consequentialism demands of us, and to be confident that its demands are moderate.)

(p.176) On the other hand, some ways of providing support for children and parents may undermine one of our key arguments in favour of reproductive freedom. Consider the following two possible extremes.

**The Parental Extreme.** All children are raised exclusively by their biological parents. In this world, the alternative to reproduction is to deny oneself any ability to develop any of the human excellences relating to nurturing.

**The Social Extreme.** All social parenting is undertaken equally by all adults, without any distinction between those who are biological parents and those who are not. In this world, the alternative to reproduction deprives one only of the gestational and other purely biological aspects of parenthood.

The availability of reproduction is much more significant in the Parental Extreme than in the Social Extreme, as the choice one makes here has a far more wide-reaching impact on the overall shape of one's life. In the Social Extreme, a life without reproduction is also a life without any real involvement in the raising of children. Both in everyday debate, and in our form of Rule Consequentialism, one of the main arguments for reproductive freedom is based on the significance of autonomy (Sections 4.2 and 6.2). That argument assumes that the decision whether or not to reproduce is morally significant. This claim may be largely undermined if the ideal code recommends the Social Extreme. We would then need to ask whether those who have internalized the ideal code will regard reproduction as a significant choice. Will they regard parenthood as significantly different from non-parenthood?

Some political theorists seek to sidestep issues of family structure and the domestic division of labour by confining their theory to a public or political realm, leaving the family outside politics.<sup>11</sup> Rule Consequentialism cannot sidestep these issues. It must admit the possibility that the ideal code would recommend family structures radically different from our own. In particular, we might expect those who have internalized the ideal code to show considerably more concern for the plight of the worst-off children than is the norm in any Western society. Our value theory creates a strong presumption that the ideal code will be designed to ensure that no lives slip below the zero level. Anyone who had internalized such a code would be disposed to support charitable organizations caring for disadvantaged children, to

vote for public officials implementing child-centred policies, and to accept some curtailment of reproductive and/or parental freedom to enable the state (or other reliable agencies) to protect children at risk.

Rule Consequentialism is often presented as a moderate alternative to Simple Consequentialism. This is ironic, as it actually has the potential to be (p.177) far more radical. The Simple Consequentialist only asks me to imagine possible variations in my own actions and their consequences. Everything else is kept constant. The Rule Consequentialist, by contrast, invites us to imagine all possible variations of *everyone's* behaviour. This threatens to lead us to a social world unlike anything we have ever known.

We explore these broader features of the ideal code further in Chapters 6 to 10. Our immediate concern is that the ideal code may be so radical that our case for reproductive freedom will be undermined. Fortunately, several factors limit the radicalness of the ideal code.

1. The most significant is that we must imagine the code being internalized by a society of ordinary human beings, with all our psychological and cognitive limitations. Since Aristotle, many philosophers have argued that, whatever its abstract merits, the Social Extreme is not a possibility for ordinary human beings. On this view, it is no coincidence that all successful human societies give parents and other close relatives a significant role in child-rearing. The cost of inculcating the rules required for the Social Extreme would be prohibitive. Our knowledge of human beings suggests that, however a society chooses to arrange to care for its children, most people will still regard reproductive decisions as a significant choice for creatures such as ourselves.

2. The autonomy of potential parents is only one of our grounds for favouring reproductive freedom. The other is that the combination of reproductive freedom and strong parental obligations is the most efficient way to meet the developmental needs of children. As Roger Crisp notes,

children are brought up within traditions and cultures, and all the traditions and cultures that have yet developed among human beings have embodied partiality. Parents, teachers and others in society establish special relationships with children which make it possible to bring them up to be rational. It is hard to imagine a system of education which did not rest on such partialities, or to

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imagine partialities and attachments which could be shed once the capability to think rationally were achieved.<sup>12</sup>

3. Recall that our primary aim is only to find the best code to inculcate in the next generation. We are interested in the impact that our teaching a particular code to the next generation might have on the welfare of all subsequent generation, including any alterations in the content of their moral code and the way it is interpreted. But the code Rule Consequentialism will ultimately tell *us* to follow is the code we teach to the next generation, not (p.178) the endpoint of a process of moral evolution within the ideal society indefinitely into the future. The content of the moral code operating in the ideal society many generations down the track is relevant to our determination of the desirability of any given code, but the fact that the far distant code seems strange does not show that Rule Consequentialism's advice to *us* will be counterintuitive. (Indeed, in Chapter 8, I argue that the very possibility that the moral code of the ideal society can be expected to evolve in the future increases the intuitive plausibility of Rule Consequentialism, by grounding a Rule Consequentialist defence of open-ended democratic decision-making processes.)

4. A further factor is Hooker's wary Rule Consequentialism: the use of closeness to conventional morality as a tie-breaker. This clause, especially if combined with widespread uncertainty and/or incommensurability, suggests that the ideal code will be relatively close to conventional morality. Perhaps there is no radical alternative which we could reasonably expect to provide greater aggregate well-being than the status quo.

This raises the obvious question: what is the conventional morality with respect to family structures? Hooker's formulation seems to presuppose that conventional morality is a unified framework. As James Griffin has pointed out, this seems overly optimistic in general.<sup>13</sup> It is especially optimistic regarding reproduction and future generations. Modern societies contain a wide range of distinct, and incompatible, views about reproduction and 'family values'. The best solution is to settle on a set of very general uncontroversial principles, which Rule Consequentialism must accommodate if at all possible. We have seen that, at least as regards individual reproduction, Rule Consequentialism succeeds here, while most of its rivals fail. Under a refined version of Hooker's scheme, only closeness to these uncontroversial aspects of conventional morality would count, and then only as a tie-breaker. Other aspects of 'conventional morality' may be clearly sub-optimal from a Rule Consequentialist point of view. If so, Rule Consequentialism

is justified in rejecting those conventions.<sup>14</sup> (In the terminology of Chapter 1, we might say that wary Rule Consequentialism need only be guided by decisive intuitions.)

5. Even if the ideal society would contain institutions radically different from our own, the ideal code's general rules regarding behaviour within existing institutions may still be comparatively close to our own. As ever, we must distinguish between what those in the ideal society would do, and (p.179) what the ideal code tells us to do in our situation. (We explore this point further in Section 10.4.)

I conclude that, while we must be aware of the impact of broader social conditions on the interpretation of the ideal code, those conditions are very unlikely to directly undermine the case for reproductive freedom. While we cannot know exactly what the ideal society would look like, we can be confident that it would be a place where reproductive freedom has very significant intrinsic value for most agents. We now ask if reproductive freedom involves indirect costs sufficient to outweigh this important benefit.

### 6.4. Reproductive Freedom and Population Size

On the face of it, it seems wildly unlikely that any given reproductive freedom rule will yield any particular population size. The Lexical Reproduction Rule says nothing directly about how many children each person should have. Under such a rule, the population size depends very largely on the details of people's preferences. It would be a miraculous coincidence if those preferences just happened to yield the replacement rate, or any other desired rate of population increase.

If reproductive freedom rules cannot guarantee that the population will remain within the optimal range, then it is doubtful that the ideal code will include such rules. This section explores the connection between reproductive freedom and population size. I conclude that, while reproductive freedom is not inconsistent with the attainment of any desired population range, it is likely to be inadequate on its own. We must turn to the public policy of the ideal code for an adequate response.

#### 6.4.1. Can Freedom Guarantee Population Size?

We begin with a simple argument that reproductive freedom *does* reliably yield an appropriate rate of population increase. Any mortal species which fails to reproduce at (at least) the rate required for replacement will die out very quickly. This creates a *prima facie* case that evolutionary pressures will have left human beings with a strong psychological propensity not to fall below a replacement level of

reproduction. Human beings will also be disposed not to reproduce too fast, as creatures which reproduced at too fast a rate would overburden their environment and also die out. The population will remain within the optimal range.

Unfortunately, this argument fails. The fact that the behaviour of our ancestors was once in long-term equilibrium does not guarantee that our (p.180) present behaviour is sustainable, even in the short term. The conditions of human life have changed radically in recent times. Two changes are especially significant. The first is a reduction in mortality rates. Traditional ethical codes do not directly govern the number of adults to be produced in the next generation. At most, they offer guidance regarding the number of children one should aim to have. When mortality rates are high, an injunction to have as many children as possible could be necessary to ensure an adequate number of adults. If the psychological or social norms underlying that injunction remain constant when mortality rates fall, the result may well be an unsustainable population explosion. The history of Western nations over the past two hundred years suggests that, when infant mortality rates fall, patterns of reproductive choice eventually change to bring the population back toward equilibrium. But there is certainly no a priori reason to assume that this will always happen in time. The later equilibrium will be at a higher population level, which may not be ecologically sustainable in the long term.

The second crucial change is the unavailability of uninhabited areas to expand into when the population grows. Population pressure has been a major cause of most human migrations. Almost everyone alive today is the descendant of groups which outgrew their local environment and moved to new pastures. This strategy worked very well for a long time, given the largeness of the earth, the smallness of the initial human population, and their limited ability to affect local environments. Only very recently have we run out of other places to go.

Most significantly, this argument addresses only population size. The simple decision whether to reproduce does not exhaust the morality of reproduction. There is certainly no a priori reason to expect full compliance with other aspects of the ideal code dealing with the treatment of children or with broader social arrangements. *Homo sapiens* might have survived indefinitely without a social framework sufficiently sophisticated to enable anyone to rise above the lexical level, or even the zero level. Partha Dasgupta suggests that hundreds of millions of people currently live well below the zero level:

‘disenfranchised, malnourished, and prone to illness, but surviving’.<sup>15</sup>  
Although they live in societies where infant mortality rates are high and

life expectancies low, many of these people manage to reproduce, and to raise children who (p.181) themselves reproduce. A human society might thus survive indefinitely even though everyone lived well below the zero level. If they followed the Lexical Reproduction Rule, these people would no longer reproduce.

We must conclude, then, that there is no good reason to be confident that reproductive freedom, in the context of any plausible ideal code, will guarantee a population within the optimal range. If some other rule *can* guarantee an optimal population, then this will be a very significant strike against reproductive freedom. Before examining alternative rules, we first ask if reproductive freedom is even consistent with the maintenance of an optimal population. If it is not, then any alternative rule which is consistent will have a potentially decisive advantage.

### 6.4.2. Is Freedom Inconsistent with Optimal Population Size?

The ideal code must maximize expected value across a plausible range of possible futures. In particular, it must respond appropriately to the possibility of significant fluctuations in human living conditions. Suppose we are designing the ideal code to be taught to the first generation. That ideal code must be robust, designed to ensure the survival of the moral community, and the maintenance of the population within the optimal range, across a wide range of possible futures. The original Lexical Reproduction Rule seems inadequate here. If conditions improve, then too many people will reproduce, as they will find it much easier to create a child whose life is above the required threshold. Even more seriously, a deterioration in conditions would mean that no one reproduced, as no one would be able to create a life above the threshold.

There are two possible solutions. The first is to retain the original Lexical Reproduction Rule (in whatever formulation we finally choose in light of the complexities examined earlier in this chapter), but add an explicit reference to the optimal population size. Reproduction becomes obligatory if the population is too small, and is forbidden if it is too large. (Call this the *Disaster Avoidance Solution*.) The second option is to build reference to changing social circumstances into our description of the conditions under which reproduction is permitted. This seems to guarantee a population within the optimal range, even if social conditions change markedly or in ways we cannot now predict. (Call this the *Relativized Solution*).

Both solutions aim to ensure that the human species will not die out if there is some catastrophe in the future. So long as compliance with the

ideal code remains high, enough people will always reproduce, even if they are unable to provide their children with an acceptable life from the standpoint of the first generation in the ideal society.

(p.182) The Relativized Solution is superior to the Disaster Avoidance Solution. Even under full compliance, the Relativized Solution produces better consequences. There are two relevant possibilities. The first is that, even in the ideal society, there is always a possibility of environmental or other catastrophe. The future prospects for human life may take a sudden turn for the worse. Either the Relativized Solution or the Disaster Avoidance Solution would then come into play. If the ideal code contains the Disaster Avoidance Solution, then the creation of children whose lives would not previously have been regarded as acceptable will be seen as an undesirable emergency measure. If our ideal code adopts the Relativized Solution, by contrast, then this pattern of reproduction will be seen as a part of normal ethical behaviour.

In such a situation the Relativized Solution is easier to comply with, psychologically healthier, and likely to produce a better-adjusted next generation. Instead of believing that their lives are unacceptable, but required for the future of the human race, this first post-catastrophe generation will see their lives as worthwhile in their context, however much they may regret some features of that context.

We seek a moral code to teach the next generation. However, the consequences of teaching any given code extend to later generations. We should assume that the ideal code is taught, not just to the first generation, but to subsequent generations as well. It seems undesirable to bring the next generation up to regard their entire life situation as a catastrophic situation where the normal moral rules do not apply, especially as the new environmental conditions may persist for some time.

Our second possible scenario is the opposite of the first. In a world of full compliance with the ideal code, in the absence of catastrophes, the quality of life can be expected to improve dramatically, not just in the first generation, but over subsequent generations. Not all improvements in social conditions will take place immediately. If the ideal code is chosen to maximize well-being overall, then it will include an emphasis on investment and research designed to produce long-term benefits.

Our two rules come apart in this possible future. Under the Relativized Solution, as social conditions improve, the interpretation of the lexical level will become more demanding. Each generation of potential parents will thus feel obliged to provide a higher quality of life for their children, so long as they are able to do so. By contrast, those adopting the Disaster Avoidance Solution, with its non-relativized interpretation of the lexical level, will continue to set a lower threshold, even once a much higher quality of life is almost universally attainable. This difference has two negative consequences.

1. By setting a lower threshold that parents feel obliged to achieve for their children, the Disaster Avoidance Solution is likely to lead to lower (p.183) expectations of quality of life in subsequent generation, and thus to a lower overall level of well-being.
2. At some point in the future, the lower threshold may well lead to overpopulation, as the cost of morally acceptable reproduction to potential parents is much less than it would have been under the Relativized Solution. (The Disaster Avoidance clause then comes into play, once again depriving potential parents of the option of morally sanctioned reproduction.)

Some general considerations about Rule Consequentialism also favour the Relativized Solution. Consider two possible rules regarding reproduction.<sup>16</sup>

**Mechanical Rule.** Create if and only if the life you create is worth more than *c*, or has the following specific features ...

**Flexible Rule.** Create if and only if the life you create is *well worth living*.

The value of flexible rules is that the general terms they contain may be applied differently in different situations. These rules are thus much more versatile than mechanical rules. This feature plays a similar role to the traditional disaster avoidance clause, by avoiding an absurd rigidity in partial compliance situations (Section 5.2 and Ch 9.) Flexible rules are also useful under full compliance when circumstances change—a common theme of Chapters 7 to 9.

The shift to flexible rules reflects the fact, stressed by Hooker,<sup>17</sup> that rules need to be applied to particular cases, and that such application requires judgement and sensitivity. To determine what we should do, we need both a set of rules and a judgement applying those rules to our situation. Our set of rules is the Rule Consequentialist ideal code.



Whose judgement should we use to apply that code? It may seem obvious that we can only use our own judgement. However, things are not so simple. Should we apply the rules in the optimal code as we ourselves would apply them? Or should we seek to apply those rules as they would be applied by someone who had been brought up in a society where they were commonly accepted? These two procedures may produce quite different results.

I shall now argue that Rule Consequentialism must refer to the judgements of those living in the world of the optimal code, as well as to their rules. The main reason is that the distinction between rules and judgements is (at best) vague. Given any complete description of the beliefs, actions, and (p.184) judgements of the inhabitants of any society, there will be many different ways to categorize their moral system in terms of abstract rules and particular judgements. Some of these categorizations will be more natural than others, but there may be no unique set of rules and judgements capturing their morality. If we keep rules and judgements together, then this indeterminacy does not matter very much. However, if we seek to separate the rules of a society from judgements applying those rules, and then replace the latter with our own judgements, we must make an arbitrary choice. The consequences of widespread acceptance of a set of rules depend crucially upon how they are applied. A given set of rules will be optimal only because it is applied in a certain way. It thus seems odd for a moral theory to select a set of rules because of the consequences of one method of application, and then instruct us to apply those rules in a completely different way. Such a theory would be very ad hoc.

I conclude that the Rule Consequentialist criterion of rightness should be as follows:

an act is right if and only if it would be judged to follow from the optimal set of rules by someone who had internalized those rules and had grown up in a society where such internalization was the norm.

In our present comparison, the Relativized Solution is a flexible rule, while the Disaster Avoidance Solution is more mechanical. A general preference for flexible rules over mechanical rules thus favours the former.

A second general argument for the Relativized Solution comes from value theory. I argued in Chapter 3 that Consequentialists who seek to use value theory to avoid the Repugnant Conclusion will adopt a lexical level suitably relativized to the agent's situation. In the context of such

a value theory, the phrase ‘reproduce if and only if your child's life will be above the lexical level’ lends itself automatically to a relativized interpretation. For someone who has internalized the best Consequentialist value theory, the most natural interpretation of the Lexical Reproduction Rule thus already incorporates the Relativized Solution.

The Relativized Solution is not a peripheral addition to the Lexical Reproduction Rule. Our current rates of unprecedented technological advancement and unprecedented impact on the natural environment suggest that the quality of life available to future generations will be very different from today. It is possible that technological improvement and environmental degradation will exactly balance out, but this seems unlikely. It is much more likely that one or other will predominate, and one of the two scenarios discussed in this section will eventuate. The expected value of an ideal code thus depends very heavily on its ability to respond appropriately (p.185) to either scenario. (We shall return to the question of the comparative likelihood of the two scenarios; see Sections 7.8, 8.2.)

Circumstances can change over generations, as well as within the same generation. The ideal code must respond to such long-term changes. There are two ways to accommodate this possibility. The first is to adopt a Relativized Solution regarding reproduction, indexed to the state of society. The second is to change the ideal code with each new generation. The second option is not inconceivable. Perhaps each generation would appoint a Rule Consequentialist commission to draw up a new moral code to be taught to the next generation. However, any such procedure has obvious drawbacks. A moral code is much easier to teach if it is passed down across generations with a high degree of continuity. This suggests, once again, that the relativized code will win out.<sup>18</sup>

All these suggestions are very speculative. However, they are not entirely ad hoc. The Relativized Solution wins out because it is better suited to human psychology, seems more fair, and fits in with the appropriate value theory. We could also defend the Relativized Solution by appealing to Hooker's Wary Rule Consequentialism. This solution is certainly closer to conventional morality than the Disaster Avoidance Solution.

## 6.5. Prescriptive Rules

Our approach thus far has been to picture an agent making a series of isolated decisions regarding reproduction. This is artificial. The ideal code is meant to guide agents in planning their lives, not in a series of

unrelated one-off choices. For most people, the primary decision here is, not so much whether to reproduce at time  $t$ , but how many children to have over the course of their life. To borrow a distinction from Garrett Cullity, the ideal code must examine reproductive rules 'aggregatively', not 'iteratively'.<sup>19</sup> This shift in perspective makes room for a potential rival to our reproductive freedom rules.

If the ideal code aims to ensure that the population stays within a certain range, then one obvious set of rules would have the following form.

**Numerical Reproduction Rule.** Have  $x$  children over the course of your life.

For instance, if we aim for the replacement rate, then we might set  $x$  equal to 2. For manageable short-term population growth  $x$  might be made equal (p.186) to 3. Numerical rules seem simple to learn and to follow. They also distribute the benefits and burdens of the task of producing the next generation equally.

Unfortunately, such rules are unsatisfactory. One serious problem is that, by severing any link between reproduction and preference, they will ensure that many people have either more children than they wanted, or fewer. If everyone has exactly two children, then both those who wanted none and those who wanted four will be unhappy. As we saw earlier, there are strong Rule Consequentialist reasons for avoiding this situation. In particular, the ideal code should aim to avoid the existence of unwanted children.

Furthermore, numerical rules cannot even accomplish the task for which they are explicitly designed. Suppose our target is the replacement rate. The first thing to note is that not everyone can have children, even if they try. It seems inefficient for the ideal code to place agents under obligations they cannot fulfil: this would merely cause distress, and perhaps a reduction in respect for an impossible moral code. So numerical rules should actually be phrased as follows.

**Numerical Rule Two.** Aim to have two children over the course of your life.

If everyone follows this rule, then the birth rate is likely to fall *below* the replacement rate. Not everyone will succeed in having two children. So the birth rate will be less than two children per adult woman. Yet the replacement rate is above 2. Even in the ideal society, not all children will live long enough to reproduce themselves.<sup>20</sup>

One might think these negative factors will be counterbalanced by several factors pointing to a higher birth rate: contraceptive failure by parents who already have two children, multiple births, and non-compliance. However, these factors are unlikely to be sufficient. Those who have internalized the ideal code will take their parental and reproductive responsibilities seriously, and will be careful to avoid any pregnancy they regard as morally wrong. The ideal society is likely to include reasonably effective family planning education. Contraceptive failure is thus likely to be extremely rare. Non-compliance is certainly relevant, but it is at least as likely to point in the opposite direction, with some people who do not desire to have any children refusing to reproduce. (And perhaps avoiding public censure by pretending to have been unable to.) Multiple births may be a factor, but it would be an (p.187) astonishing coincidence if their statistical frequency exactly matched what was required to achieve the replacement rate.

If we retain numerical rules, and hope to avoid a population decline, then perhaps we should move up to the following rule.

**Numerical Rule Three.** Aim to have three children over the course of your life.

After all, given what has just been said, we certainly should not assume that this rule would lead to an actual birth rate of 3. Under-compliance and inability to comply are bound to be more prevalent for this rule, while over-compliance will be less likely. So we should expect an even greater shortfall than with Numerical Rule Two. Therefore, Numerical Rule Three might well yield the replacement rate.

Given the range of factors involved, and the difficulty of extrapolating from existing data to precise patterns of behaviour under full compliance with any particular ideal code, we cannot say definitively that Numerical Rule Three would *not* yield the replacement rate. However, it would be an extraordinary coincidence if it did. It would be better if Rule Consequentialism did not need to rely on such extreme serendipity. It might well yield an unsustainably high rate of population increase.<sup>21</sup>

Numerical rules fail to guarantee that the population will remain within the optimal range. This removes any advantage of numerical rules over reproductive freedom rules. Yet this is not enough to vindicate the latter—we must still ask if they could form part of an ideal code that resolves the population problem.

## 6.6. Public Policy

Reproductive freedom is not inconsistent with the achievement of an appropriate population size. However, reproductive freedom alone cannot guarantee that we will meet that goal. The Relativized Solution is inadequate. Fortunately, as we have just seen, numerical rules fare no better. Indeed, the two approaches face the same problem. Nor is this a coincidence, as there is good reason to think that any rule governing individual morality will face that problem. The birth rate is a collective feature of a society, not (p.188) a property of particular individuals. Uncoordinated individual action cannot hope to deliver a desired birth rate, unless circumstances are so bad that we need either maximal reproduction or no reproduction at all. It is much more likely that what is required is a gradual small increase or decrease in the birth rate. This calls for a coordinated shift in public policy to slightly alter people's incentives or inclinations. Even flexible rules are not flexible enough. Collective problems call for collective solutions. The ideal code must look beyond individual morality to the political realm. Two things follow.

1. It is no objection to an individual morality of reproductive freedom that it cannot guarantee an optimal population size.
2. If it is to be included in the ideal code, any reproductive freedom rule must be compatible with the most effective collective approach to the problem of population size.

### 6.6.1. Why the Ideal Code Needs Public Policy

Desirable individual moral dispositions are not sufficient to safeguard the continuation of the ideal society. We must turn to public policy. Fortunately, the ideal code must include public policy for more general reasons. So there is nothing ad hoc about using it to solve the population problem. Public policy is needed to cope with both non-compliance and coordination problems.

Even in the ideal society there is a certain degree of non-compliance with the ideal moral code. Non-compliance has two key sources.

**1. Imperfect Idealization.** Rule Consequentialism idealizes to widespread compliance, not perfect full compliance. Even in the ideal society, some people have not internalized the ideal code, and cannot be relied on to act in accordance with it. The ideal code must include sanctions or other incentives for these people.

**2. Imperfect Internalization.** We imagine the ideal code being internalized by ordinarily fallible human beings. Even people who accept the code cannot be relied on always to act in accordance with it,

especially when doing so would be contrary to their own personal interests.

The code must therefore respond to non-compliance. It cannot simply rely on individuals to obey all moral rules voluntarily. In some cases, informal sanctions will be most effective. In other cases, however, the most efficient way to enforce compliance with the ideal code will be some form of institutionalized sanction.

In addition to non-compliance, public policy is also needed to solve coordination problems. In any complex society, there are many problems (p.189) where a variety of solutions are available, and the choice between them is essentially arbitrary. It is more important that we all follow the same code of rules, than that we follow any particular code. (In game theoretic terms, we often face coordination problems with multiple equilibria.) It doesn't matter whether we all stop on red lights or on green. But it does matter that we all obey the same traffic conventions. The ideal code must provide a way to resolve these coordination problems.

We are imagining a code of rules, not for a small technologically primitive society, but for the next generation in our own post-industrial world. In that context, centralized institutions are often the best solution for these enforcement problems. A world where all take the law into their own hands, or try to select coordination equilibria on an ad hoc basis, will be worse than one where an efficient set of institutions provides coordination.

It may seem that these solutions could be built directly into the ideal code, in the form of particular rules governing particular coordination problems. This procedure is unsatisfactory. In particular, it assumes that those who design the ideal code are able to predict all the coordination problems likely to arise in the ideal society, and to determine adequate solutions to those problems. This assumption is implausible. We have only a very general idea of what life will actually be like in the ideal society, and we have no way of predicting the coordination problems that may result from social or technological developments, or environmental changes. Under full compliance with any moral code designed to maximize human well-being in the long run, technological advances are likely to be even more common than in the actual world, especially in areas leading to social changes.

These familiar considerations are especially significant in relation to future generations. We cannot hope to inculcate an individual moral code that responds well to all possible future global problems relating

to environmental and population policy. Such problems call for coordinated collective solutions based on a careful evaluation of complex empirical data, much of which is simply not available this far in advance.

If the ideal code is to work effectively, then it must include general principles for solving coordination problems as they arise. The ideal society must have some way to choose public policy. It is reasonable to expect a flexible political system to produce better consequences than a rigid set of rules for particular cases. The ideal society needs public institutions.

On the other hand, even if enforcement is sometimes handed over to institutions, many aspects of the ideal code will not be subject to those institutions. A moral code allowing third parties to enforce all of an agent's moral obligations is likely to be extremely cumbersome, and to leave far too little room for moral autonomy. Better results are likely if each person's practical (p.190) autonomy exceeds their moral autonomy, so that people are left alone to do as they please, even when what they please may not accord with all their moral obligations. Furthermore, many obligations which are appropriately enforced by third parties are better enforced by informal social sanctions than by force.

### 6.6.2. How Public Policy Might Aid Reproductive Freedom

For our present purposes, the crucial question is whether public policy in the ideal society can combine with reproductive freedom to yield an acceptable fertility rate.

One very robust empirical result is that public policy influences population growth. In particular, in the developing world, increases in female literacy and female labour force participation rates are both strongly correlated with a sharp decline in the birth rate from unsustainable levels toward the vicinity of the replacement rate.<sup>22</sup> There are several causal explanations for this correlation. One is primarily economic. As we saw in Chapter 4, in poor, rural, underdeveloped economies, children have significant economic value. This value is reduced by such diverse factors as compulsory schooling, the provision of free school lunches, urbanization, the introduction of social security (especially old age pensions), and more profitable employment opportunities for adult household members (Section 4.2.1.1). The general benefits of economic and social development, in terms of increased life expectancy, material prosperity, and opportunities for the exercise of autonomy, are such that, other things being equal, we should expect the ideal code to encourage economic

development. Such development has a strong negative impact on fertility rates.

Reducing the economic value of children is not the only, or even the most significant, way to reduce the birth rate. The most effective route is via the empowerment of women, especially through increased literacy and opportunities for employment outside the home. The most popular explanation for these correlations is that, as women's education and opportunities (p.191) increase, they achieve a greater influence in household decision-making, with the result that they are able to choose to have fewer children. Greater influence also enables women to ensure adequate nutrition for their children.

Full compliance with the ideal code thus could enable a developing society with an unsustainably high birth rate to reduce its fertility. However, some will argue that the same reduction can be more effectively, and particularly more quickly, achieved by a coercive public policy. If this were true, it would undermine the reproductive freedom of the ideal code. The moral freedom to control one's reproductive decisions would have little meaning if the ideal code sanctioned coercive state interventions. Furthermore, some will argue that, even if a combination of reproductive freedom and liberal public policy suits the developing world, it is not appropriate for the quite different problems facing developed nations. We address these two objections in turn.

### 6.6.3. Why Coercion Doesn't Work

Coercive policies regarding fertility have been adopted in many countries. The Chinese government's one-child-family policy is a striking example.<sup>23</sup> Our emphasis on autonomy creates a strong *prima facie* case against coercive public policy.<sup>24</sup> If non-coercive means are available, then they are to be preferred. (In particular, if, as I argue in Section 8.1, the ideal code embodies democratic decision-making, then it is very unlikely that coercive measures will be freely adopted unless there is no alternative.) In some cases, however, it is tempting to think that policies based on reproductive freedom will not reduce the birth rate sufficiently quickly.

In a number of countries, the impact on fertility of an improvement in education and opportunities has been more complicated than the simple negative correlation presented in Section 6.6.2. Some studies have found that, while *large* increases in education for women do reliably reduce fertility, small increases in female education can actually lead, at least temporarily, to an *increase* in the birth rate.<sup>25</sup> The most likely explanation is that, even when (p.192) the birth rate is as



high as 7 or 8 children per adult woman, some social mechanism must be keeping the birth rate below its maximum possible level. These existing mechanisms can be undermined by an increase in education. If the increase is insufficient, then the traditional mechanisms will not be replaced by equally, or more, reliable alternatives. In many traditional societies in sub-Saharan Africa, for instance, the main factor keeping the birth rate below the maximum possible is a combination of prolonged breast-feeding and sexual abstinence following the birth of a child.<sup>26</sup> The evolution and persistence of such traditions may be due to their impact on the birth rate. However, breast-feeding and abstinence are not deliberately chosen because they reduce the birth rate. Rather, the motivation is a set of mistaken beliefs about the health needs of mother or infant. Small increases in female education tend to undermine these beliefs. This undermines the practices based on them, leading to an increase in fertility.

Proponents of coercion might argue that, in such circumstances, reproductive freedom will take too long to reduce the birth rate. If the population ever stabilizes, it will be at an unsustainably high level. This objection is unlikely to bother us at this stage of our inquiry, as full compliance with the ideal code should lead to a very significant increase in female education, sufficient to produce reductions in fertility even in the first generation. However, it does highlight the fact that partial compliance with the ideal code might have very undesirable effects—a fact that will return to trouble us in Chapter 10.

For our present purposes, the main objection to coercive policies is that, even if non-coercive policies cannot guarantee an acceptable fertility rate, there is no evidence to suggest that coercive alternatives could do a better job.

1. Even if coercion does affect behaviour, the resulting decline in fertility is not as sustainable as a similar decline resulting from education. This is because, as coercion largely leaves people's inclinations unchanged, the coercive policy must be continually maintained, and adapted to defeat people's determined efforts to avoid it. For instance, Sen quotes the architects of China's family policy as admitting that 'the birth concept of the broad masses has not changed fundamentally'.<sup>27</sup>

(p.193) 2. Correlation is not causation. In particular, the reduction in the fertility rate in China has also followed significant improvements in education, health care, and female job opportunities. In fact, general development policy in China shares many of the features of the

Socialist government in the Indian state of Kerala. Yet Kerala's fertility rate has declined even faster than China's, despite the fact that coercive policies are not followed in Kerala.<sup>28</sup>

3. The correlation between coercion and decline in fertility is not universal. For instance, many northern Indian states have followed very coercive family planning policies, yet they still have very high birth rates.<sup>29</sup> Coercion alone is certainly not sufficient to reduce the birth rate significantly. Yet once appropriate development policies are in place, there is no reliable evidence that coercion produces any additional reduction. Indeed, coercion may even undermine development. For example, evidence from India suggests that the use of coercive family planning policies can undermine the effectiveness of voluntary programmes.<sup>30</sup>

Even if we reject state coercion, or interference by other third parties, this still leaves the possibility of moral coercion. Why not endorse an obligation not to reproduce in developing countries, or an obligation to reproduce in developed countries? Aside from the general undesirability of a coercive moral code in this area, the challenge for proponents of this suggestion would be to formulate a *flexible coercive moral rule*, designed to produce whatever the optimal birth rate may happen to be in different circumstances. Population policy requires a collective response. This suggests that it must be addressed collectively, rather than individually. The failure of coercive policies suggests that the most effective way for the ideal code to achieve this is by a general moral disposition favouring reproductive freedom, together with public policy initiatives designed to create an incentive structure where that reproductive freedom will produce the desired birth rate.

An individual morality of reproductive freedom is thus not only consistent with the best approach to public policy—it actually reinforces it, as public policy based on changing people's incentives is more likely to be effective in a population whose moral code encourages people to consider themselves morally free to respond to those incentives.

**(p.194) 6.6.4. Underpopulation**

Many countries in the developing world face the threat of overpopulation. Some countries in the developed world seem to face the opposite problem. Reproductive freedom, combined with increasing employment opportunities and education for women, threatens to bring the birth rate unsustainably low. The ideal society is likely to correspond more to the developed world than to the developing.

Accordingly, the real problem will be maintaining a high enough birth rate, rather than preventing overpopulation. This suggests that those in the ideal society will seek public policy initiatives designed to lessen the financial and other burdens placed on parents in order to encourage an increase in the birth rate. The development of such policies would be seen as a high priority in the ideal society. We cannot predict the precise details of these policies, but there seems no good reason to assume that they cannot be devised.

On the contrary, except in extreme circumstances, the birth rate in the ideal society, even in the absence of specially targeted policies, is likely to be fairly close to the desired level. Modest changes to the incentive structure should be sufficient to produce that desired rate. If the aim is slightly to increase the birth rate, these policies might include subsidies or tax breaks for parents, or subsidies on activities particularly undertaken by parents. If the aim is slightly to reduce the birth rate, suitable policies might include subsidies or tax breaks on activities likely to compete with parenthood. (For instance, if tertiary educated women have fewer children than less educated women, subsidies for tertiary study might reduce the birth rate.)

Owing to the significance of reproductive freedom, these measures are unlikely to be designed to prevent people from having children, or force them to have children. However, if the birth rate is too high, measures to discourage people from having more than two children might be considered acceptable. (We saw in Section 4.2.2.1 that the cost to the agent from settling for two children rather than three is almost always less than the cost involved in settling for no children rather than some.) Of course, these have to be balanced against the need to ensure that the needs of all resulting children are met.

A suitable combination of reproductive freedom and public policy support seems likely to bring the fertility rate into the optimal zone, and to keep it there. Furthermore, independent reasons to do with the welfare and development of children lead us to expect the ideal society to provide more facilities for young children, and thereby reduce the burdens faced by parents.

The preceding discussion is very vague. Indeed, throughout this chapter, I have emphasized the impossibility of predicting exactly what life would be (p.195) like in the ideal society, especially beyond the first generation. (This impossibility is further highlighted several times in subsequent chapters.) We cannot hope to estimate the expected value of any proposed ideal code. This may seem a fatal blow for Rule Consequentialism. However, it need not be. Rule Consequentialism

does not require us to have any idea of the expected value of a particular code. It merely requires us to establish that this code has at least as high an expected value as any competing code. Our proposed code combines reproductive freedom, strong parental obligations, and broadly liberal public policy. For each of these features, we have seen good reason to believe that any code lacking that feature will produce distinctly worse results over a wide range of plausible possible futures. By contrast, for none of our features is there any good reason to believe that its absence would produce valuable results. Reproductive freedom and parental obligations may not guarantee that the right number of children will be raised well by the next generation, but there is no reason to prefer any alternative code based on coercion. We don't know what the world will look like under our ideal code, but we can be confident that it would not be better under any competing code.

The specification of the ideal society is not an end in itself. Rule Consequentialism is not designed to sketch a detailed Utopian vision. Its primary purpose is to provide us with a code of moral rules. The underlying ideal code sketched in this book is surprisingly simple, as its response to different circumstances flows from flexible rules and public debate rather than mechanical rules. Rule Consequentialism does not seek a detailed map of the perfect road ahead. It merely asks for the first step. We can be confident that a certain set of flexible rules and dispositions is the correct first step along the right road, even if we have only the faintest idea where that road would lead.

### 6.7. Conclusions

I conclude that Rule Consequentialism can accommodate a plausible principle regarding reproduction. We still need a more detailed account of the notion of 'an acceptable life in our own society', as this would be applied by the inhabitants of the ideal society. In general terms, we can easily sketch the features of such a life. It will come as close as possible to life in the ideal society, and be characterized by the ability to live an autonomous life pursuing independently valuable goals. We may find it impossible to specify the precise degree of autonomy or value required for a life to qualify as acceptable. Fortunately, such specification is unnecessary. The ideal code is designed to ensure that the population remains within the acceptable range in all (p.196) environments. The population will obviously not remain within the acceptable range for long unless most people regard themselves as morally free to reproduce. We can thus reasonably assume that any life not too far below the average in our own society should count as acceptable in our circumstances.

The ideal code thus reflects all of our intuitively plausible principles regarding reproduction. It incorporates an appropriate degree of reproductive freedom, including the permissibility of sub-optimal reproduction and the obligations of parents to care for their children. The ideal code also explains the asymmetry between the permission to refrain from having happy children and the obligation not to create wretched lives, and provides a moral foundation for our commonsense attitudes to risk. No other extant moral theory comes even close to delivering this combination of plausibility and explanatory power.

This concludes our preliminary investigation of the place of reproduction in the Rule Consequentialist ideal code. We have seen that Rule Consequentialism delivers an intuitively plausible account of the broad limits of reproductive freedom. We have also seen that Rule Consequentialism must cover public policy as well as individual morality. Our next task is to explore the public policy of the ideal society, especially as it relates to future generations.

### Notes:

- (1) Jolly and Gribble, 'The Proximate Determinants of Fertility', 81.
- (2) For summaries of the evidence here, see Sen, 'Population: Delusion and Reality'; and Sen, *Development as Freedom*. For other references, see the footnotes accompanying Section 6.6 (nn. 22–30).
- (3) Even in extreme circumstances, the ideal code is very unlikely to include obligations to reproduce for other reasons, as such obligations are an inefficient way to guarantee any given optimal population. (See Section 6.6.)
- (4) The discussion in the text is obviously an oversimplification, and requires an artificial way of enumerating possible people. Nothing of substance turns on this oversimplification, as the rule requiring such enumeration is rejected on other grounds.
- (5) If our value theory incorporates holistic evaluations of the life of a community, then autonomy might also be intrinsically valuable at a societal level, because autonomous deliberative processes are an independently valuable component of a good communal life. Once again, departures from the Total View would reinforce the conclusions reached in the text.
- (6) Riley, 'Defending Rule Utilitarianism'. The connection between Consequentialism and liberty is most famously associated with J. S.

Mill. For good contemporary introductions to the debate, see Riley, *Mill on Liberty*, Ch. 7; and Crisp, *Mill on Utilitarianism*, Ch. 8.

(7) The ideal code could include a rule of the following form. 'Do x, but teach the next generation to do y (where x and y are quite distinct).' However, such a rule would be very difficult to internalize in a whole population. Even if the first generation did internalize the rule, their attempt to teach the next generation to do y while doing x themselves would be unlikely to succeed.

(8) The Conditional Maximizing Rule may also be redundant. If incommensurability is widespread, then it may not be true, of a range of possible lives above the lexical level, that one is the best. To accommodate this possibility, we might amend the rule as follows: *The Revised Conditional Maximizing Rule*. Reproduce if and only if you want to, so long as (a) the child you create will live above a certain minimum threshold (which will be between the zero and lexical levels); and (b) you could not have created a child with a substantially better life. In practice, incommensurability and uncertainty may combine to leave this principle equivalent to the New Lexical Reproduction Rule.

(9) This raises serious problems for Simple Consequentialist attempts to accommodate the asymmetry by appealing to an asymmetric value theory. For further discussion, see Heyd, *Genethics*, 59–60; and Parfit, *Reasons and Persons*, ch. 18. See also the works cited in Ch. 1 n. 12.

(10) This is not to say, of course, that Rule Consequentialism itself is incompatible with prioritarianism, as Hooker's own theory shows.

(11) For a devastating critique, see Okin, *Justice, Gender and the Family*.

(12) Crisp, *Mill on Utilitarianism*, 106.

(13) Griffin, 'Replies', in Hooker and Crisp (eds.), *Well-being and Morality*.

(14) I am not sure how this proposal relates to Hooker's original notion of 'wary Rule Consequentialism'. However, the modifications I suggest seem necessary if Rule Consequentialism is to retain the potential to criticize the status quo.

(15) Dasgupta 'Savings and Fertility: Ethical Issues', 116. See also Ng, 'What should we do about Future Generations?' Dasgupta himself uses the fact that such people strive to keep themselves alive as evidence that the notions of 'a life worth living' and 'a life above the zero level' are not identical, as the context of the passage quoted in the text makes plain. 'A person whose life is barely worth living has a *very low, negative* living standard. She is one of the wretched of the earth, and there are hundreds of millions of such people today, disenfranchised, malnourished, and prone to illness, but surviving, and tenaciously displaying that their lives are worth living by the persistence with which they continue to wish to live.' (For more on the zero level, see Section 3.3.)

(16) The distinction between mechanical and flexible rules is introduced in ch. 3 of Mulgan, *The Demands of Consequentialism*, where the latter bear the less informative label of 'subtle rules'. (I owe this change in terminology to an anonymous reader.)

(17) Hooker, *Ideal Code, Real World* (2000), 88; and 'Ross-style Pluralism versus Rule Consequentialism', (1996) 543–6.

(18) The Relativized Solution thus provides a more elegant and practical approach than that suggested by Jonathan Riley, who argues that the ideal code will evolve and change over time, and thus must include rules enabling it to be updated in each generation (Riley, 'Defending Rule Utilitarianism'). If the ideal code contains flexible rules, this updating occurs automatically.

(19) Cullity, 'Moral Character and the Iteration Problem'.

(20) The gap between the replacement rate and a birth rate of 2 depends on rates of child and adolescent mortality. In the developed world, the replacement rate is usually only marginally above 2. The ideal society would probably have even lower morality rates, but even there the replacement rate will be higher than 2.

(21) This discussion is very significant for some Kantian moral theories. Kant's Categorical Imperative, on some interpretations, rules out any reference to the agent's empirical desires, or any other empirical circumstances, in the formulation of moral rules. Reproductive freedom rules would fail this test, as they explicitly refer to the agent's desire to have (or not have) children. Any such Kantian theory would thus be restricted to numerical rules, as only these can genuinely be willed as universal laws for a community of purely rational agents. If numerical

rules are inadequate, as the discussion in the text suggests, then this is a serious blow to Kantian moral theory (Section 1.5).

(22) For useful surveys, see Sen, *Development as Freedom*, chs. 8 and 9; Dasgupta, *Human Well-being and the Natural Environment*, ch. 6; Dasgupta, *Well-being and Destitution*, ch. 12; and Jolly and Gribble, 'The Proximate Determinants of Fertility'. See also Murthi, Guio, and Drèze, 'Mortality, Fertility and Gender Bias in India'; Caldwell et al., 'The Bangladesh Fertility Decline'; Cleland et al., *The Determinants of Reproductive Change in Bangladesh*; Bongaarts, 'The Role of Family Planning Programmes in Contemporary Fertility Transition'; Greenhalgh, *Situating Fertility*; Barro and Lee, 'International Comparisons of Educational Attainment'; Bongaarts, 'Trends in Unwanted Childbearing in the Developing World'; Easterlin, *Population and Economic Change in Developing Countries*; Birdsall, 'Economic Approaches to Population Growth'; Cassen et al., *Population and Development*; Jeffrey and Basu, *Girls' Schooling, Women's Autonomy and Fertility Change in South Asia*.

(23) Sen, *Development as Freedom*, 219–21.

(24) Furthermore, coercion is especially undesirable in some social circumstances. In China, for instance, the one-child family policy has exacerbated an existing trend toward sex-selective abortions, leading to a significant distortion of the sex ratio in the population as a whole. (Sen, *Development as Freedom*, 221.)

(25) Jolly and Gribble, 'The Proximate Determinants of Fertility', 89, found this second pattern in Burundi, Kenya, Liberia, Mali, and Ondo State. See also Cochrane, *Fertility and Education*; Cochrane, 'Effects of education and urbanization on fertility'; Dasgupta, *Well-being and Destitution*, 355–6; and Hess, *Population Growth and Socioeconomic Progress in Less Developed Countries*. Dasgupta notes that the prevalence, and even the existence, of this second pattern of the impact of female education on fertility is controversial. In the text, the existence of this pattern is granted for the sake of argument. Obviously, if the pattern does not exist, that merely strengthens our case for reproductive freedom.

(26) This explanation is offered by both Jolly and Gribble, 'The Proximate Determinants of Fertility', 89, and Dasgupta, *Well-being and Destitution*, 355–6. In their analysis of data from twelve countries in sub-Saharan Africa, Jolly and Gribble found that the national average period of 'postpartum nonsusceptibility' ranged from 11.7 months for Kenya to 23.9 months in Ondo State (p. 74). They concluded that, 'In all



of the ... sub-Saharan African populations included in this analysis, except Zimbabwe, the proximate determinant having the greatest fertility-inhibiting effect is the postpartum nonsusceptible period.'

(27) Sen, *Development as Freedom*, 220.

(28) Ibid. 219–26. Kerala has been extensively discussed in the development literature. For a taste of the debate, see Jeffrey, *Politics, Women and Well-being*; Ramachandran, 'Kerala's Development Achievements'; Krishhan, 'Demographic Transition in Kerala'; Bhat and Rajan, 'Demographic Transition in Kerala Revisited'; Das Gupta and Bhat, 'Intensified Gender Bias in India'.

(29) Sen, *Development as Freedom*, 223.

(30) Ibid. 224.



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