

Problems in Population Theory

Juha Räikkä

1. Introduction

The number of people alive today is greater than the number of people who have ever lived and died in the entire history of humanity, and every day there are more and more of us on a finite planet with finite space and resources.¹ From a philosophical point of view, two kinds of normative issues arise from this. First, there are questions of intergenerational justice. How should welfare be distributed across generations? Are we morally justified in placing less importance on benefits that will come in the distant future than those in the present or near future? What kind of theoretical framework can we construct to deal with future generations? Second, there are ethical questions of population policy. Since the determination of the number of people in the world is partly a matter of individual and social choice, it is subject to moral evaluation.² How many people should there be? What kind of moral theory could provide a sensible solution to the problem of optimum population size? How should the burden of achieving a demographic goal be distributed? Obviously, questions of intergenerational justice and the ethics of population policies are interrelated. To give a simple example, if, according to intergenerational justice, every future individual is entitled to a considerable amount of material goods, this suggests, in the face of scarcity, that there should be fewer rather than more people (and that they should not consume too much). This said, however, it is important to note that intergenerational justice concerns current and *future people*, people who will live in the future, whereas the ethics of population policies concern *potential people*, entities that have the potential to become a person, and *possible people*, people who will live in the future if we so decide.³

In what follows, I would like to make a brief review of philosophical debates about the ethics of population policies, henceforth, *population theory*. I will consider both the arguments concerning the goals of population policies and the arguments that estimate the acceptable means. In particular, I would like to ask exactly which of the various problems considered when discussing population theory are *genuine moral problems*, that is, moral questions that (1) are open in the sense that there are various plausible answers to them and (2) have practical relevance in the sense that they concern the issue of what should actually be done. The claim I will try to defend may at first sight seem quite eccentric, for I will try to show that current discussion in population theory does not concern genuine moral problems at all, and in this respect is different from the debates in, for instance, biomedical ethics, professional ethics, and environmental ethics. This claim is not unique:

a thesis proposed by radical greens covers similar ground, arguing that discussion about population theory is merely academic speculation,⁴ and recently Brian Barry has argued that in fact there is widespread agreement on what should actually be done in population policy.⁵ According to Barry, “it is not terribly difficult to know what needs to be done, though it is of course immensely difficult to get the relevant actors (governmental and others) to do it.” Barry does “not deny that there are large areas of scientific uncertainty,” but he claims “that virtually everybody who has made a serious study of the situation and whose objectivity is not compromised by either religious beliefs or being in the pay of some multinational corporation has reached the conclusion that the most elementary concern for people in the future demands big changes in the way we do things.” In short, Barry argues that we “know the direction in which change is required” in issues of population policy. The aim of my paper is to show the support for Barry’s remarks in existing literature: although many contributors appear to be motivated by the claim that they are discussing genuine moral problems, it seems that in fact most agree on what should be done.

2. Social Problems

In the past, population policies have caused serious social problems, and unfortunately the same is true today. Far too often policies have been and are painful to individual persons, and many of them can be condemned outright as morally blameworthy. Of course, a *laissez-faire* population policy—a policy of nonaction—may cause serious problems, but so do more active policies. Betsy Hartmann’s well-known book *Reproductive Rights and Wrongs* (1995) introduces a whole range of misuses of population policies, their roots and consequences. Eugenics and sterilization are familiar examples of doubtful means of birth control, and they were widely used both in Europe and North America in the twentieth century. But eugenics and sterilization constitute just one example; there are many others: the unknown side effects of contraceptives used in population programs of certain developing countries, for instance, and the relationship of some pills to cancer. Typically, women have not been fully informed of health risks; indeed, coercion of women has been a general feature in many programs. Control-oriented programs have been common, whereas democratic and service-oriented programs have been rare. “Compensation payments” have linked sterilization to poverty, highlighting and increasing social inequality. Certain programs have led to sex selection and to the killing of female newborns.⁶

To claim that issues of population policy do not raise genuine moral questions is to deny neither the existence of serious social problems certain population programs have caused nor their questionable moral status. The point here is simply that it is completely futile to *ask* whether killing of babies and so on is morally wrong, for we all know perfectly well that it is wrong and that it should not happen. In this sense, social problems are not *moral problems*, that is, they do not seem to raise particular ethical questions—although it is evident that they raise all kinds of other dilemmas. How do

we improve the programs? How was what happened possible? How do we prevent mistakes in the future? How do we make the relevant actors do what they should? How can the programs earn public support? These kinds of questions are very difficult, and answering them would be of great practical relevance, but it is important to differentiate between moral problems and social problems.

3. Questions of Moral Theory

Nor should genuine moral problems be equated with *questions of moral theory*, the discussion of which is based—in the area of population theory—on three approaches, themselves interrelated: first, the consideration of whether the implications of moral theories are consistent with our intuitions concerning the future and future people; second, the study of the paradoxes that conflicting intuitions appear to create; third, questioning the underlying values and normative background of our intuitions. All of these approaches assume that we know what should be done. The aim of the discussion has not been to determine the correct intuitions concerning population policies. Instead, philosophical problems have arisen, in part, exactly because our intuitions are clear.⁷ Let us consider an example of each of the three approaches.

The Repugnant Conclusion

The most widely noted argument in the philosophical discussion of population theory has been Derek Parfit's virtuoso reasoning that classical utilitarianism (i.e., the "total theory") implies the "repugnant conclusion." It is telling that in 1998–1999 the repugnant conclusion was discussed in different contexts by Robin Attfield, Alan Carter, Partha Dasgupta, David Heyd, and Torbjörn Tännsjö, among others,⁸ although Parfit originally formulated the argument in 1973.⁹ The repugnant conclusion is the claim that for "any possible population of at least ten billion people, all with a very high quality of life, there must be some much larger imaginable population whose existence, if other things are equal, would be better, even though its members have lives that are barely worth living."¹⁰ According to (this hedonistic version of) classical utilitarianism, we should maximize happiness; that is, we are obliged to produce as many children as possible, as long as their happiness exceeds their misery and adds to the total sum of happiness on Earth. So long as average happiness declines slowly enough, numbers under classical utilitarianism are encouraged to increase indefinitely no matter how low the average has fallen. But most of us think that we do *not* have an obligation to create this kind of overcrowded world.¹¹ Thus, there are two ways to react to Parfit's argument. One should either reject (or modify) classical utilitarianism—as Parfit suggests—or show that it does not, strictly speaking, lead to the repugnant conclusion.¹² The important point here is that independent of which side we choose, we seem to share the intuition that there is no moral obligation to promote total happiness through huge additions of people with gradually decreasing average happiness.

The Paradox of Future Individuals

The paradox of future individuals (or the “identity problem”) is another of Parfit’s contributions, but it is also discussed by Trudy Govier, Gregory S. Kavka, and Jeff McMahan, among others.¹³ The paradox is that there seems to be a logical route from intuitively plausible premises about personal identity and morality to a strongly counterintuitive conclusion. It is clear that the identity of a person is in fact partly dependent on the timing of his or her conception.¹⁴ The implementation of any large-scale social policy must affect the timings of numerous conceptions. Thus, the adoption of different social policies effectively determines who is born. Whichever policy we choose, therefore, no one is worse off in 200 years’ time than he or she would have been had we chosen a different one, for any other policy would have meant that he or she would not have existed at all. So it follows that we are free to do whatever we wish; no one is ever entitled to complain about our decisions. This conclusion, however, is positively bizarre: surely we *should* care about the future and should not choose a “let’s party” policy; we are *not* justified in squandering resources, producing massive pollution, and destroying other species.

One may try to solve the paradox of future individuals, for instance, by rejecting the “person-affecting principle,” according to which policy decisions can be criticized only if someone is worse off because of them, or by claiming that *current people* are worse off if a “let’s party” policy is chosen (because they do not *like* it). What is of interest here, however, is not whether and how the paradox could be solved. The important point is simply that, again, all parties seem to share a common intuition, namely, that we are not free to do whatever we wish with the future. There is no genuine moral problem here.

The Asymmetry View

According to the so-called asymmetry view, there is a duty to refrain from bringing into existence a person whose life would not be worth living but no obligation to bring into existence a person whose life will be a happy one. The unborn happy child cannot be said to have lost anything by not being born, whereas the unhappy child brought into existence will actually be suffering. Among others, Jan Narveson has defended the asymmetry view from a utilitarian point of view.¹⁵ However, there are well-known grounds for thinking that utilitarianism is unable to justify the asymmetry view,¹⁶ and it has been argued, furthermore, that the theory of rights is no better in this respect.¹⁷ Thus, although our common sense and intuitions support the asymmetry view, its theoretical basis is unclear. (It is not necessary to go into details of the debate here.) Hence, as with the other questions of moral theory, a question of the justification of the asymmetry view does not concern genuine moral problems but assumes that, from a moral point of view, we know what we should and should not do.

4. Empirical Uncertainty

No doubt, there are many open *empirical* questions that are relevant to decisions concerning the right course of action. Solving social problems caused by past population policies requires empirical study, as does the proper implementation of the values and norms we think should guide entirely new population policies. Some empirical questions can be said to be micro-level problems, such as how to avoid the short-term side effects of a particular drug used in contraception.¹⁸ Other questions are macro-level problems, such as the relation between local population growth and economic growth.¹⁹ Of course, empirical claims have always played a central role in normative issues of population policy. Plato, for instance, in characteristically Pythagorean fashion,²⁰ concluded that there should be exactly 5,040 inhabitants in a city-state, the reason being a (pseudo) empirical claim that a population of this size would be the most effective “for purposes of war and every peacetime activity.”²¹ *Empirical questions*, however, should not be confused with *moral questions*, whatever the relevance of the former to the latter, and whether or not moral values and norms can be justified (and not only defended) by referring to empirical facts in the final analysis. In circumstances of empirical uncertainty, conflicting parties often *share* moral values and norms, even if they do not agree on *what* should be done (i.e., the practical norms) or *why* something should be done. Let us consider two debates.

Population Growth and Environmental Problems

Perhaps the most common argument in population theory today is the reasoning that population growth causes environmental and ecological problems at a local level, especially in the Third World (empirical statement), and since we have strong moral grounds for taking care of the environment (moral statement), we must control population growth (practical norm). This is an argument recently presented by Norman Myers, who writes that “population growth plays a prominent, and probably predominant part in engendering environmental problems,”²² and the same point appears in a number of recent contributions.²³ The argument is not universally accepted. It has not been uncommon to point out that the relation between population growth on the one hand and environmental and ecological problems on the other hand is unclear. The well-known environmental philosopher Robin Attfield, for instance, argues that “population growth is sometimes held to underlie or even cause ecological problems” but that “there is reason to doubt this theory.”²⁴ Similarly, Betsy Hartmann, in a book already mentioned, writes that “population growth is not the root cause of development problems” such as “environmental destruction.”²⁵ Of course, no one denies that there are strong moral reasons to take care of the environment. The disagreement here is in the first place empirical—and to a certain degree conceptual, since it is not always clear what should count as an environmental or ecological “problem.”

Population Growth and Poverty

Another familiar argument in favor of slowing population growth (especially in the Third World) is based on the premises that population growth causes poverty and that there is a moral obligation to avoid poverty and its side effects, in particular, famine and disease. As Amartya Sen has shown, questions of extreme poverty should not be confused with questions of economic growth, since poverty may be a distributional or entitlement failure rather than a failure of the economic system in general.²⁶ It is widely accepted (indeed a commonplace) that poverty causes population growth,²⁷ but the more controversial claim that population growth causes poverty is defended, for instance, by Valeria Menza and John R. Lupien. According to them, slowing down population growth “improves child and maternal health, and ultimately improves the overall health and welfare of the entire family,” thus decreasing poverty.²⁸ Among others, Dennis A. Ahlburg, however, has argued the opposite view. In his words, “it is not clear whether population growth *causes* poverty in the long run or not” (although high fertility increases “the *number* of people living in poverty in the short run”).²⁹ Again, there is no disagreement whether something should be done to make poverty disappear (moral question); the important questions are whether slowing rapid population growth as such really helps (empirical question), and, to a certain degree, what should be understood by “cause” in this context (epistemological question).

5. Ideal Theories

Now, it is obvious that there are also moral *disagreements* on issues of population theory, and it would be plainly wrong to claim that all the disputes in the field concern moral theory or empirical questions in the sense explained above. The existence of moral disagreements does not, however, mean that there are genuine moral problems in population theory in the same sense as there are genuine moral *problems* for instance in practical (applied) ethics—a point that is neglected in most contributions.

It is useful to distinguish between moral debates that concern ideal states of affairs and debates that concern the question of what is a morally right course of action in nonideal circumstances. A philosopher may ask, for example, whether civil disobedience is morally justified in ideal circumstances, that is, in a perfectly just society, or whether civil disobedience is morally justified in nonideal circumstances, say, in Finland today. Suppose philosopher A argues that, even in a perfectly just society, civil disobedience is justified, whereas philosopher B argues that it is not. In this case, we may say that they have different *ideal theories*. However, they may both think that, given nonideal circumstances, civil disobedience is justified; that is, even if they have different ideal theories, they may still have similar *nonideal theories*.³⁰ If they do agree on nonideal theory, they do not really face a genuine moral problem. They know how to continue.

In practical ethics, the moral issues under discussion are often such that answering them requires an argument that represents nonideal theory.

Consider the problem of whether euthanasia should be legalized. Usually the debate is *not* about whether euthanasia would be legal in the ideal society. The debate is whether euthanasia should be legalized given nonideal circumstances, say, in the United States this year, and contributors disagree about what should actually be done. Many arguments have some plausibility, even if they conflict with each other. Participants in the discussion face a genuine moral problem and must decide what kind of nonideal theory is acceptable. In population theory, however, moral debates seem to be different. Typically, there is a widely shared understanding of what should be done, that is, there is agreement on nonideal theory. Moral controversies concern ideals. If there is no consensus on what should actually be done, this is probably because of empirical uncertainty. Let us consider two well-known moral debates in population theory.

Sustainable Development and the Problem of Optimum Global Population

No one claims that the global population can continue to grow indefinitely, if the world is to be sustainable. The question is not whether there are limits on how many people the Earth can sustain, for everyone knows that such limits exist; the problem is where the limits lie. Attempts to determine the limits by referring to the notion of sustainable development raise not only many empirical questions and questions concerning decision theory and risk evaluation but also difficult moral problems. Is the idea of sustainable development consistent with the common practice (in economics at least) of discounting all the future costs and benefits exponentially by a fixed annual rate?³¹ What is the level of welfare future people deserve to enjoy? Does sustainable development require that *all* species be preserved at the expense of human beings?³² These and similar questions have recently been discussed by Wilfred Beckerman, Andrew Dobson, Nigel Dower, Koos Neefjes, and Bryan G. Norton, among others.³³ It has become evident that the problem of optimum global population is a very complex question and that there is remarkable moral disagreement here.

It is important to note, however, that disagreement on optimum global population and sustainability does not necessarily imply that there is also disagreement on what should actually be done. Suppose that I think a doubling of the number of people living today is not necessarily too many from the point of view of sustainable development, whereas you think that it is too many. Does it follow that we also disagree on concrete questions such as whether we should try to control growth? Of course not. I *may* think that, at the moment, control policies are not necessary, but I may equally well think that they are. I may have dozens of reasons to agree with those who think that control policies are needed, even if I do not believe that sustainable development requires population growth to stop. Similarly, you *may* think that control policies are necessary, but you may equally well think that they are not. Even if you believe that a doubling of the number of people living today is too many from a point of view of sustainable development, you may still have plenty of reasons to conclude that, after all, control policies

are really only needed in the future. Thus, the problem of optimum global population and sustainable development need not be a problem of nonideal theory.³⁴

Justice and the Problem of Population Control

The relation between considerations of justice and population control has been unclear. As commentators have rightly pointed out, there are “nasty disagreements” on these issues,³⁵ and opinions “vary widely.”³⁶ Among others, Marcel Wissenburg has recently argued that “population policies are incompatible with stringent conditions of liberal democracy” and that “any population policy” does “what seems to be the moral thing at the social level yet at the level of individuals it punishes the innocent and rewards the guilty.”³⁷ In Wissenburg’s view, control policies are unjust because they conflict with people’s procreative right: that “each and every individual capable of procreating should have a universal, absolute and complete liberty to do so.”³⁸ On the other hand, Brian Barry, for instance, writes that so “long as a policy restricting women to one child is operated consistently across the board, it does not contravene any principle of intragenerational justice, and is a requirement of intergenerational justice.”³⁹ Thus, Wissenburg’s and Barry’s claims do not seem to have much in common.

Those who think that complete “procreative rights” would be just and those who think that they would be unjust may well agree at a *practical* level, however, as Wissenburg and Barry do. According to Wissenburg, although population control would be unjust, there is one “admissible strategy,” namely, a strategy of appealing to “citizens’ feelings of responsibility,” which can be supported by “providing information and education, instigating public debate and making preservatives and other alternatives to procreation available to those who, as yet, do not actually have the freedom to choose.”⁴⁰ Similarly, Barry writes that the right method of stabilizing population growth is based on “voluntary choices made by individuals” and that women “have to be educated and to have a possibility of pursuing rewarding occupations outside the home.”⁴¹ Thus, the problem of justice and population control seems to be another problem in ideal theory that does not have immediate practical relevance. (Of course, this is not to deny that there are many open questions. What kind of individual choices should be counted as “voluntary”? Are indirect economic incentives and deterrents coercive?⁴² Can strategies based on voluntary cooperation plausibly be effective?⁴³ By what criteria should we assess their efficiency? If noncoercive methods fail, what should be done?⁴⁴ Obviously, different answers to these questions may lead to disagreements at a practical level too.)

In general, there is relatively good understanding of what should be done to reduce family sizes in areas of rapid growth.⁴⁵ Among other things, one can try to increase social approval of small families, to reduce the opportunities for children to be productively employed, to make social security payments available for the elderly, to reduce costs of contraception, to increase knowledge of contraceptive techniques, to improve social

standards involved in the raising of children, to increase the cost of products used by children, to educate young women, to create well-paid jobs for young women, to speed up urbanization, and to make education of children compulsory where the cost of this education is partly paid by parents.

6. Concluding Remarks

I have tried to show that the usual debates on the ethics of population policies do not really concern genuine moral problems—even if they may seem to. My argument is based on the view that there is a distinction, first, between genuine moral problems and social problems, second, between genuine moral problems and questions of moral theory, third, between genuine moral problems and empirical questions that have moral relevance, and finally, between genuine moral problems and problems that concern moral ideals. I have claimed that in the literature on population theory there is, after all, considerable agreement on what should actually be done, although empirical issues sometimes divide contributors.

If, as I have claimed, debate on population theory does not concern genuine moral problems, it follows that writers should not motivate their discussion by claiming that they clarify “substantive moral problems”⁴⁶ or “moral problems of population”⁴⁷ that have “practical importance.”⁴⁸ For they do not even concern genuine moral problems—whatever the value of their contributions may otherwise be. Another conclusion, and the more important one, is that no one should defend a policy of nonaction by claiming that too many moral questions remain unanswered. At least in the academic literature on population theory, there is widespread agreement on what should *actually be done*, although there are indeed many controversial issues, as indicated above. Of course, agreement among scholars does not mean that there is agreement among political actors as well, and suggestions made in public civic discussions may also vary widely.⁴⁹ Different viewpoints come from different religious and cultural backgrounds, and these different backgrounds should clearly be taken into account to some degree when policy recommendations are made on a global scale—however “wrong” they may be.

In order to avoid misunderstandings, I would like to finish my discussion by pointing out what I have *not* claimed. First, it has not been my intention to maintain that no one has presented arguments that go against the consensus. Of course, various extreme views have been defended in various contexts. Some of the extreme arguments are based on religious reasoning, whereas others are secular. Malthusian alarmists, for instance, have claimed for years that the “population bomb” is already here and will soon cause a total catastrophe if we do not panic and stop growth immediately everywhere.⁵⁰ On the other hand, the cornucopian school of thought has been based on the idea that, because of technical advances, material conditions might be able to keep up with a population many times bigger than the current one, and hence there is no need to control growth even with programs based on voluntary cooperation and education.⁵¹ These kind of extreme arguments are rare, however, and in general they have not been taken

seriously. As I see it, the existence of highly implausible extreme views does not mean that there are genuine moral problems.

Second, I have not claimed that there has been no discussion of genuine moral problems that are *relevant* to issues of population theory. Abortion, for instance, *is* a genuine moral problem and obviously intimately connected to population theory. One perennial issue is whether the claim that we should allow unrestricted access to abortion, because the unborn have no rights, is consistent with the other claim that we should take the interests of future people seriously, because they have a right to a decent life.⁵² I would say, however, that the problem of abortion is not a population theory problem in the first place—although there is a theoretical link between the topics. No one would suggest that abortion should be used as a primary method in population control, and one's view on the moral status of abortion need not determine one's views on population policies, even if it sometimes does.

Finally, I have not claimed that there are *no* genuine moral problems in population theory. I have only claimed that the usual debates have not been *concerned* with genuine moral problems. By "usual debates" I mean, for instance, discussions on the repugnant conclusion, the paradox of future individuals, the asymmetry view, population growth and environmental problems, population growth and poverty, sustainable development and the problem of optimum global population, and justice and the problem of population control. These debates have concerned questions of moral theory, empirical questions, or questions of appropriate moral ideals. But this is not to say that there are no genuine moral problems in population theory. For instance, the question of who exactly should pay the costs of population programs used in the Third World has been strangely underrepresented in the discussion, although the answer to the question is unclear and its practical relevance enormous. Does international justice not require developed countries to pay more than they currently do? What is the moral responsibility of multinational corporations in this context? Perhaps population theorists will have more to say about these questions in the future.

I would like to thank Charlotte Beauchamp, Heta Gylling, and Martin Schönfeld for helpful discussion and written comments for an earlier version on this paper. The paper was originally presented at the AMFITAN conference on development ethics in Dar es Salaam, February 2000.

Notes

¹ Global population is now growing, on average, by 1.6 percent per year. In a number of developing countries, however, growth rates persist at 2.1–2.5 percent or even more. As much as 95% of future growth in human numbers is fully expected to be in developing countries. The current global human population is over six billion (where a billion is a thousand million). See, e.g., Nafis Sadik, "Population Growth and Global Stability," in N. Polunin (Ed.), *Population and Global Security* (Cambridge University Press, Cambridge, 1998), 1–15, 4; Shridath Ramphal, "Where Is the Time-Bomb Ticking?" in Polunin, *Population and Global Security*, 79–91, 81.

- ² According to David Heyd, though, issues of population policies cannot be treated in moral terms. See his "Procreation and Value: Can Ethics Deal with Futurity Problems?" *Philosophia* 18 (1988), 151–170, 152.
- ³ For a discussion on future people, potential people, and possible people, see, e.g., Derek Parfit, "Rights, Interests, and Possible People," in S. Gorovitz et al. (Eds.), *Moral Problems in Medicine* (Prentice Hall, Englewood Cliffs, N.J., 1976), 369–375, 369; Mary Anne Warren, "Do Potential People Have Moral Rights?" *Canadian Journal of Philosophy* 7 (1977), 275–289; Derek Parfit, *Reasons and Persons* (Clarendon Press, Oxford, 1984), e.g., 487–490; Robin Attfield, *The Ethics of Environmental Concern*, 2nd ed. (University of Georgia Press, Athens, 1991), chap. 7; Jonathan Glover, "Future People, Disability, and Screening," in P. Laslett and J. S. Fishkin (Eds.), *Justice between Age Groups and Generations* (Yale University Press, New Haven, 1992), 127–143.
- ⁴ Marcel Wissenburg, *Green Liberalism* (University College London Press, London, 1998), 78–79.
- ⁵ Brian Barry, "Sustainability and Intergenerational Justice," in A. Dobson (Ed.), *Fairness and Futurity* (Oxford University Press, Oxford, 1999), 116.
- ⁶ Betsy Hartmann, *Reproductive Rights and Wrongs*, 2nd ed. (South End Press, Boston, 1995), 79, 83, 87, 166, 198, 219, 232 (originally published in 1987).
- ⁷ Of course, to point out that questions of moral theory differ from genuine moral questions is not to claim that moral theory has no place in the context of population policies. Moral theorists are concerned with discovering the truth—a valuable project in itself—and it is certainly important to define and clarify the bedrock of common moral intuitions.
- ⁸ Robin Attfield, *The Ethics of the Global Environment* (Edinburgh University Press, Edinburgh, 1999), esp. 119; Alan Carter, "Moral Theory and Global Population," *Proceedings of the Aristotelian Society* 99 (1999), 289–313; Partha Dasgupta, "Population, Consumption and Resources: Ethical Issues," *Ecological Economics* 24 (1998), 139–152; David Heyd, "Population and Ethics," in E. Craig (Ed.), *Routledge Encyclopedia of Philosophy* (Routledge, London, 1998), 540–542; Torbjörn Tännsjö, *Hedonistic Utilitarianism* (Edinburgh University Press, Edinburgh, 1998), esp. 160–162.
- ⁹ Derek Parfit, "Overpopulation: Part I," unpublished manuscript, 1973.
- ¹⁰ Derek Parfit, "Overpopulation and the Quality of Life," in P. Singer (Ed.), *Applied Ethics* (Oxford University Press, New York, 1986), 148–151; "Future Generations: Further Problems," *Philosophy & Public Affairs* 11 (1981), 113–171; *Reasons and Persons*, 387–390.
- ¹¹ Bill Anglin and Torbjörn Tännsjö have both argued that the repugnant conclusion is not so repugnant after all, apparently *not* sharing the intuition that we are not obliged to produce as many happy children as possible. Neither of them, however, says that we should promote total happiness through huge additions of people until the final end. Anglin writes only that there is *one reason* to think that repugnant conclusion is not "all that repugnant," and in Tännsjö's view an *actual increase* in the world population may "mean a loss of welfare." See Anglin, "The Repugnant Conclusion," *Canadian Journal of Philosophy* 7 (1977), 745–754, 754; Tännsjö, *Hedonistic Utilitarianism*, 160–162.
- ¹² Cf., e.g., R. I. Sikora, "Utilitarianism, Supererogation and Future Generations," *Canadian Journal of Philosophy* 9 (1979), 461–466; Partha Dasgupta, "Savings and Fertility: Ethical Issues," *Philosophy & Public Affairs* 23 (1994), 99–127; Robin Attfield, *Value, Obligation, and Meta-Ethics* (Rodopi, Amsterdam, 1995), 158–163; Avner de-Shalit, *Why Posterity Matters: Environmental Policies and Future Generations* (Routledge, London, 1995), 68–72.
- ¹³ Parfit, "Future Generations: Further Problems," 113–117; Jeffersson McMahan, "Problems of Population Theory," *Ethics* 92 (1981), 96–127, 98; Gregory S. Kavka, "The Paradox of Future Individuals," *Philosophy & Public Affairs* 11 (1981), 93–112; Trudy Govier, "What Should We Do about Future People?" *American Philosophical Quarterly* 16 (1979), 105–113, 110. Govier talks about "Parfit's paradox." See also David Boonin-Vail, "Don't Stop Thinking about Tomorrow," *Philosophy & Public Affairs* 25 (1996), 267–307.

- ¹⁴ See Parfit, "Future Generations: Further Problems," 115.
- ¹⁵ Jan Narveson, "Moral Problems of Population," *The Monist* 57 (1973), 62–86, 73; "Future People and Us," in R. I. Sikora and B. Barry (Eds.), *Obligations to Future Generations* (White Horse Press, Cambridge, 1996, originally appeared in 1978), 38–60. Cf. Matthew Hanser, "Harming Future People," *Philosophy & Public Affairs* 19 (1990), 47–70.
- ¹⁶ See, e.g., Heyd, "Procreation and Value: Can Ethics Deal with Futurity Problems?" 157–161.
- ¹⁷ McMahan, "Problems of Population Theory," 100.
- ¹⁸ Cf. Hartmann, *Reproductive Rights and Wrongs*, 203–206.
- ¹⁹ See Tom Tietenberg, *Environmental and Natural Resource Economics* (Harper Collins, New York, 1992), chap. 5.
- ²⁰ Cf. Dasgupta, "Population, Consumption and Resources: Ethical Issues," 140.
- ²¹ Plato, *Laws* (Penguin Classics, London, 1970), book V, 738a.
- ²² Norman Myers, "Global Population and Emergent Pressures," in Polunin, *Population and Global Security*, 17–46, 27.
- ²³ See, e.g., Koss Neefjes, "Ecological Degradation: A Cause for Conflict, a Concern for Survival," in Dobson, *Fairness and Futurity*, 249–278, 250.
- ²⁴ Attfield, *The Ethics of the Global Environment*, 116. Attfield acknowledges, however, that population growth may contribute to global warming, forest erosion, and pollution of rivers. *Ibid.*, 122.
- ²⁵ Hartmann, *Reproductive Rights and Wrongs*, xix–xx.
- ²⁶ Amartya Sen, *Poverty and Famines: An Essay on Entitlement and Measurement* (Basil Blackwell, Oxford, 1982).
- ²⁷ Robin Attfield, "Development and Environmentalism," in R. Attfield and B. Wilkins (Eds.), *International Justice and the Third World* (Routledge, London, 1992), 151–168, 159.
- ²⁸ Valeria Menza and John R. Lupien, "World Population and Nutritional Well-Being," in Polunin, *Population and Global Security*, 157–171, 165.
- ²⁹ Dennis A. Ahlburg, "Population Growth and Poverty," in R. Cassen et al., *Population and Development: Old Debates, New Conclusions* (Transaction Publishers, New Brunswick, 1994), 127–147, 127.
- ³⁰ Notions of ideal theory and nonideal theory can be used in various ways.
- ³¹ For a discussion on the ethics and rationality of discounting, see, e.g., Tyler Cowen and Derek Parfit, "Against the Social Discount Rate," in Laslett and Fishkin, *Justice between Age Groups and Generations*, 144–161; John Broome, "Discounting the Future," *Philosophy & Public Affairs* 23 (1994), 128–156; Robin Attfield, "Discounting, Jamieson's Trilemma and Representing the Future," in T. Hayward and J. O'Neill (Eds.), *Justice, Property and the Environment* (Aldershot, Ashgate, 1997), 85–96; Eerik Lagerspetz, "Rationality and Politics in Long-Term Decisions," *Biodiversity and Conservation* 8 (1999), 149–164.
- ³² See also Holmes Rolston III, "Feeding People versus Saving Nature," in R. S. Gottlieb (Ed.), *The Ecological Community* (Routledge, New York, 1997), 208–225; Robin Attfield, "Saving Nature, Feeding People and Ethics," *Environmental Values* 7 (1998), 291–304; Andrew Brennan, "Poverty, Puritanism and Environmental Conflict," *Environmental Values* 7 (1998), 305–331; Holmes Rolston III, "Saving Nature, Feeding People, and the Foundations of Ethics," *Environmental Values* 7 (1998), 349–357. Cf. Holmes Rolston III, "Winning and Losing in Environmental Ethics," in F. Ferré and P. Hartel (Eds.), *Ethics and Environmental Policy* (University of Georgia Press, Athens, 1994), 217–234.
- ³³ Bryan G. Norton, *Toward Unity among Environmentalists* (Oxford University Press, New York, 1991), 112–113; Andrew Dobson, *Justice and the Environment* (Oxford University Press, Oxford, 1998), 102–131; Nigel Dower, *World Ethics: The New Agenda* (Edinburgh University Press, Edinburgh, 1998), esp. 159; Wilfred Beckerman, "Sustainable Development and Our Obligations to Future Generations," in Dobson, *Fairness and Futurity*, 71–92; Neefjes, "Ecological Degradation," 250–259. See also Attfield, *The Ethics of the Global Environment*, chap. 6.

- ³⁴ As a matter of fact, most (if not all) participants in the debate share the view that it is reasonable to control population growth. So the problem of the optimum global population really is pretty theoretical. The agreement can be partly explained by the fact that many contributors believe in the so-called precautionary principle (it is better to err on the side of caution). Cf. Sadik, "Population Growth and Global Stability," 5.
- ³⁵ Norton, *Toward Unity among Environmentalists*, 113.
- ³⁶ Dobson, *Justice and the Environment*, 116.
- ³⁷ Marcel Wissenburg, "The Rapid Reproducers Paradox: Population Control and Individual Procreative Rights," *Environmental Politics* 7 (1998), 78–99, 79.
- ³⁸ Ibid., 86. See also Wissenburg, *Green Liberalism*, chap. 6; and "An Extension of the Rawlsian Savings Principle to Liberal Theories of Justice in General," in Dobson, *Fairness and Futurity*, 173–198. The claim that there are "universal" procreative rights sounds plainly false: why should teenagers have a right to have babies? Cf. Claudia Mills, "The Ethics of Reproductive Control," *The Philosophical Forum* 30 (1999), 43–57. See also Sirkku Hellsten, "Can We Do Wrong by Bringing Children into Being?" in V. Launis, J. Pietarinen, and J. Räikkä (Eds.), *Genes and Morality* (Rodopi, Atlanta, 1999), 29–42.
- ³⁹ Barry, "Sustainability and Intergenerational Justice," 110. (There is a typing error in the original text that I have corrected in my citation.)
- ⁴⁰ Wissenburg, "Rapid Reproducers Paradox," 97.
- ⁴¹ Barry, "Sustainability and Intergenerational Justice," 109.
- ⁴² Wissenburg seems to think that indirect incentives and deterrents are coercive, whereas Barry assumes that they are not. Wissenburg, "Rapid Reproducers Paradox," 94; Barry, "Sustainability and Intergenerational Justice," 109.
- ⁴³ According to Barry, "stabilization of population is perfectly possible as a result of voluntary choices," whereas in Wissenburg's view "no one can guarantee that non-coercive policies will be effective." Wissenburg, "Rapid Reproducers Paradox," 97; Barry, "Sustainability and Intergenerational Justice," 109.
- ⁴⁴ According to Attfield, noncoercive methods failed in China, which "suggests that situations in which coercion would be justified are not too distant from the real world." Attfield, *The Ethics of the Global Environment*, 128.
- ⁴⁵ Clement A. Tsiddell, "Population, Economic Change, and Environmental Security," in Polunin, *Population and Global Security*, 93–116, 104.
- ⁴⁶ Carter, "Moral Theory and Global Population," 289.
- ⁴⁷ Narveson, "Moral Problems of Population," 62.
- ⁴⁸ McMahan, "Problems of Population Theory," 96.
- ⁴⁹ Judging from the results of the International Conference on Population and Development in Cairo in 1994, there seems to be widespread consensus among political actors too regarding what should actually be done. (A report by the Finnish Ministry of Foreign Affairs: Kansainvälinen väestö- ja kehityskonferenssi Kairossa [International Development and Population Conference] 1994, *Ulkoasiainministeriön julkaisuja* [Reports by the Finnish Ministry of Foreign Affairs] 5 [1995].)
- ⁵⁰ See, e.g., Paul R. Erlich, *The Population Bomb* (Ballantine Books, New York, 1968), esp. 131. See also Garret Hardin, "Lifeboat Ethics: The Case against Helping the Poor," in W. Aiken and H. LaFollette (Eds.), *World Hunger and Morality*, 2nd ed. (Prentice Hall, Upper Saddle River, 1996), 5–15 (originally published in 1974).
- ⁵¹ Julian L. Simon and Herman Kahn, *The Resourceful Earth* (Basil Blackwell, Oxford, 1984).
- ⁵² See, e.g., James P. Sterba, "Abortion, Distant Peoples, and Future Generations," *The Journal of Philosophy* 77 (1980), 424–440, 437; William Grey, "Possible Persons and Problems of Posterity," *Environmental Values* 5 (1996), 161–179.