

Précis Population Ethics

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One of the most important insights to emerge over the past hundred years is that the actions of the current generation could have profound and far-reaching effects for future generations. Perhaps it was during the 1970s, with the debate on nuclear power, that this insight took firm root in public consciousness. The problem of nuclear waste brought with it a longer time perspective than any previous generation had to consider. It is expected that high-level radioactive waste needs to be isolated from people and nature for at least 100,000 years – a mind-bogglingly long time. More recently, climate change has emerged as the cardinal example. Nowhere else is the sense that even distant future generations are at our mercy more visible and pressing.

To be sure, climate change is already underway and affecting people. As noted by the latest report from the Intergovernmental Panel on Climate Change (IPCC), the Earth's surface is now on average 0.85°C warmer than it was 100 years ago, the sea level has risen by 0.19 meters, and many glaciers and ice sheets are losing mass at an alarming rate (IPCC 2013, 37-46). Still, climate change is primarily a problem for future people. The effects of climate change intensify over time as the concentrations of greenhouse gases – in particular carbon dioxide – build up in the atmosphere. Current climate models suggest that, even with unchecked growth in emissions, warming of 3°C or more will not occur until the final decades of the 21st century (IPCC 2013, 85-90). This means that how to deal with climate change necessarily involves the question of our obligations to future generations and how to value future lives in our decisions. How much we ought to reduce emissions, for example, depends on the weight we should accord future people's wellbeing.

The potential significance of climate change for future generations is difficult to overstate. The IPCC (2014b) notes that a global warming of 2°C risks producing substantial and long-lasting damage to many ecosystems, threatening human and nonhuman animals alike. It is estimated that a 2°C warming would lead to, among other things, more extreme precipitation events, more heat waves, compromised agriculture in tropical and temperate regions, and widespread species extinction. Warming of 4°C or more – which is where current climate models suggest we are heading unless global emissions are drastically reduced – would lead to more dramatic changes still. For example, in such a world the sea level is estimated to rise by up to 1 meter by the turn of the next century, threatening coastal areas. Moreover, higher temperatures constitute an elevated risk for abrupt and irreversible changes to the Earth System, such the collapse of the Greenland Ice Sheet. If the latter occurs, the IPCC suggests that we can expect sea level rise of up to 7 meters.

My book *Population Ethics* concerns our obligations to future generations, how we should morally evaluate different alternatives that will have consequences for many generations to come. As noted above, the news we receive from empirical climate scientists is almost exclusively bleak and alarming. I wish I could say that the situation is better in the field of politics and moral philosophy but unfortunately the findings are also troubling in these areas. It has proven to be surprisingly difficult to find a theory regarding our moral duties to future generations that satisfies even the most minimal adequacy condition for such a theory. Moreover, all the classical moral and political philosophies yield very counterintuitive results and prescriptions. Let me explain.

In the discussion of, for example, a fair distribution of economic resources, the number and the identities of people has usually been taken for granted and held fixed. The question has been how to distribute the benefits and burdens among an already given group of people. When one is considering policies that affect future generations, however, one cannot take the affected group as given since our actions not only affect the living conditions of future people but also the number of people and who these people will be. Hence, different people and different number of people might exist in the alternative outcomes that we have to consider. This complication is quite obvious with respect to policies such as China's one-child rule and decisions about having children in general, but there are many other political and individual decisions that may have huge demographic effects. Major social decisions which affect the welfare of future generations will also affect the identity and the number of the people who are going to exist. It is no coincidence that the world's population has increased so dramatically in the last century.

It is hardly controversial to claim that the current generation consumes resources at the expense of future generations, especially when we consider possible climate change scenarios. Combined with a significant increase in population, this could lead to an over-populated world, perhaps ten billion people per generation, where most people's lives are barely worth living since life is short and the hardships are barely compensated for by the brighter moments in life. Suppose that we could avoid this development and instead create a future with a smaller population where the vast majority of people have very good lives. In this scenario there will be, after a certain adjustment period, around one billion people per generation, and these people will on average enjoy very good, long lives – similar to those that the most fortunate among us are living today.

Which future is the best one? Which one should we aim for? Most people would probably agree that the latter is preferable; that is, a smaller population with a high quality of life is better than a much larger population with a much lower quality of life. Many of the classical theories of morality yield, however, the opposite result.

Classical utilitarianism, which often appears as a more or less explicit principle in economic thought, is one example. According to this theory we should try to maximise the overall welfare in the

world. The overall welfare can be increased in two ways, however, when the size of the population is no longer held fixed: by keeping the population at a constant size and making people's lives better or by increasing the size of the population with lives worth living (as the old Swedish saying goes: many small brooks will form a big river...). So, according to utilitarianism, a future with an enormous population with lives barely worth living could be better than a future with a sizeable but smaller population consisting of very good lives. But the idea that we have a moral obligation to radically increase the size of the world's population at the expense of the individual welfare of future people seems repugnant and rather a reason to reject utilitarianism.

Many different theories have been proposed over the years, all of which claim to avoid the classical theories' absurd results. The problem, however, is that the theories that avoid these results have other strange implications that are at least as absurd and counterintuitive. We know this for sure through a number of so-called impossibility theorems, which are among the more important results of my research and presented in the book. The proofs of these theorems show that there is no theory that fulfils a number of intuitively compelling adequacy conditions – conditions which everyone seems to agree that a reasonable moral theory must fulfil. Examples of such conditions are that one future is better than another if everyone is better off in the former as compared to the latter, or that it is better to create lives worth living rather than lives not worth living.

These results seem rather troubling and may elicit some form of moral nihilism, the view that there are no correct answers to moral questions and that morality is merely a matter of personal opinion. We then end up in the position that we have no moral obligations to future generations, and that we are doing nothing wrong if we waste the earth's resources in a way that leads to misery and suffering in the future. The question "Why should I sacrifice anything for posterity when they have never done anything for me?" then becomes a question without an answer. However, this conclusion is also very hard to accept. Rather, it is a very reasonable demand on a moral theory that the well-being of future generations is given at least some weight.

It might be tempting for those who have little sympathy with utilitarian thought to try to set the problems raised by the impossibility theorems to the side. They might think that they are only problems for utilitarians or for those committed to welfarism, the view that welfare is the only value that matters from the moral point of view. However, since we can assume that other values and considerations are not decisive for the choice between the involved populations, as I show in the book, this is not true. The impossibility theorems are a problem for all moral theories which hold that welfare at least matters when all other things are equal. Since, arguably, any reasonable moral theory has to take this aspect into account when determining the moral status of actions, the study of population ethics is of general import for moral theory.

The research on how to interpret the impossibility theorems and what conclusion to draw

from them is still in its infancy. Fortunately, nihilism is only one of many possible conclusions. The results coming from empirical environmental research suggest that we probably need to radically reconsider how we live our lives. Similarly, one might say that the troubling results from moral philosophy regarding our obligations to future generations indicate that we also in this area need to think in radically new terms and reject entrenched and seemingly reasonable ways of thinking. Perhaps the question is rather whether we dare set off on a new search for the truth with an open mind. Whether we will succeed and what the result of this search will be remains to be seen, perhaps only by future generations.