

JUSTICE IN A WARMING WORLD

JUSTICE IN A WARMING WORLD: GLOBAL AND INTERGENERATIONAL
JUSTICE AND CLIMATE CHANGE

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ABSTRACT

Recent discussions on global climate change have brought to our attention the largely disruptive influence of human activity on the planet and its inhabitants. Moral philosophers have added to the discourse their concerns about the unprecedented environmental problem of global climate change which threatens, and increasingly so, human welfare and the stability of the planet. The circumstances should be of concern to all, including philosophers who beyond their own endeavours will be affected by climate change. There are good reasons to think that the circumstances surrounding global climate change are morally repugnant and that serious action is required to avert global catastrophe and widespread suffering.

Our discussion will draw attention to the ethical dimensions of climate change given present knowledge about the state of the global environment and human welfare across the planet, now and into foreseeable future. My aims in this paper are twofold. First, I will provide a survey of various arguments that fit under the umbrella of climate change ethics as a way to gauge their suitability to address the wider issues that should be of concern to us. Second, by seeking to refute these arguments on a number of theoretical grounds, I will make the case that the climate change problem is best understood through a welfarist lens. Climate change is fundamentally a problem of distributive justice for present and future generations and, as such, it is of great urgency to protect human welfare over the long run.

The main argument begins in the first chapter with an overview of climate change against the backdrop of existing realities. We will take a look at the economics and science of climate change to gain a better understanding of issue, namely its origins and implications for the planet across space and time. In subsequent chapters, we defer to a variety of principles of global and intergenerational justice which are thought to offer moral guidance for the successful resolution of the climate change problem. Having concluded in the third chapter that we must focus on considerations of distributive justice, indeed those that are ultimately but not only utilitarian, the final chapter explores the appropriateness of various mechanisms and systems which would constitute a fair global climate regime.

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CHAPTER 1 – A CLIMATE OF INJUSTICE

Nowadays it is the fashion to emphasize the horrors of the last war. I didn't find it so horrible. There are just as horrible things happening all round us today, if only we had eyes to see them.

-- Ludwig Wittgenstein

Introduction

The developments in the twentieth century have resulted in unprecedented change in how human beings live. Advances in science, medicine, political systems and economic structures have impacted most of the world's population, resulting in greater access to basic goods and a higher standard of well-being as compared to previous decades. There has been a growing concern, however, with how our actions are affecting the interests of contemporaries and future generations. A disturbing reality is that efforts to improve human welfare across the globe in recent decades is in danger of remission owing to inexorable widening disparities and global warming. The presence of socioeconomic imbalances is generally to blame for the human development crisis and, unless there is strong immediate action to modify existing practices, climate change threatens to exacerbate such imbalances into the future

My aim in this chapter is to survey the facts about climate change and, secondly, to draw attention to some of the problems it raises for philosophers and humanity at large. I shall present an overview of the most important and pressing issues relevant to philosophical work on climate change. I will make the case that human practices have long been contributing to disturbances in the global climate in a way that has discernibly adverse impacts on the availability of resources

and on human welfare across nations and generations. The threat to the global environment and human beings raise questions of justice concerning our obligations to present and future generations, and the appropriate grounds for governing the distribution of goods and resources. I shall not attempt the impossible by addressing these questions in this discussion. Rather, this chapter's goal is more modest: I wish to explore how climate change is a problem of justice and the approach we might take to deal with the issues we now face in an era of global warming.

A Planet in Peril

As I write this, the global human community is more unequal than it was several decades ago. The beginning of the twentieth century saw a nine-fold increase in the gap between the rich and poor, but within a hundred years this gap increased eighty-fold. The magnitude of current disparities of wealth and well-being is apparent in the disproportion of wealth and health between the global North (mostly industrialized nations in Europe and North America) and the global South (mostly developing nations in Asia, Africa, South America, and the South Pacific). While the richest fifth in the world possess over eighty percent of the world's income, the remaining four-fifths subsist on less than twenty percent. This 'champagne glass' distribution of world poverty reflects the deplorable state of human welfare that has been exacerbated by local and global social affairs for quite some time. A number of factors have limited the ability of economically and politically disadvantaged nations to improve the welfare of their communities

while allowing more wealthy and stable nations to achieve greater standards of well-being far beyond what is required to live a decent human life.¹

We can attribute the disparities noted above largely to the current state of contemporary globalization where economic and social forces are dominated by neoliberalism and a retreat from liberal social democracy. Rather than promoting fair responsibility for social welfare through economic and environmental protection, neoliberal globalization has been accompanied by non-redistributive laissez-faire politics linked to the mistreatment of people and the environment.² The binary of the global North and global South depicts the disparity between those who have profited from industrialization and globalization's rewards and those who paid the price of them. Despite some effort through ongoing charity and development assistance to alleviate global inequality, local conditions and international relations remain inimical to the development interests of poor nations.

Now, as economic forces continue to be detrimental for a large portion of the world's population, we have recently become aware that environmental conditions may well have a detrimental effect on present and future generations. There is widespread consensus that climate change, resulting from natural shifts in average global temperatures and hastened by human activity, will cause immense adversity to human and non-human life for hundreds, if not thousands, of years.³ The change relative to temperature has only been occurring considerably in the last one hundred years, but the consequences are likely to be severe across much of the world, for many species and long into the future. It is of little relevance that global warming is

¹ Benatar 2005, Doyle 2000

² Jagger 2003

³ U.S. NRC 2002; IPCC 2001

part of the Earth's geological cycle, but rather the more crucial fact is that humans have accelerated the degree to which such warming occurs.

In its influential Third Assessment Report (TAR), the Intergovernmental Panel on Climate Change (IPCC) added to the growing discourse on the scientific, socioeconomic, and environmental concerns of human-induced global warming. Among the many findings developed by the IPCC, the group found that – on the basis of numerous peer-reviewed studies and previous assessment reports – human activities are having a discernible influence on the global climate because of the way in which they are altering the planet's atmospheric composition and complex ecosystems. The vast majority of experts now hold that anthropogenic climate change is linked to the rise in global average temperatures of 0.6°C in the last century, and they predict that further warming of 1°C by 2025 and 5.8°C by 2100 is possible with little or no modification to human practices.⁴ Ordinarily, it would have taken a few thousand years for global temperatures to increase to the extent that they have, but instead they have exceeded the average.⁵ There is little doubt however that humans have created conditions which have not been seen in 650,000 years, and thus hastened the speed and magnitude of environmental change in an extraordinary way.⁶

While this ought to give anyone pause for reflection, the more immediate concern is that humanity is modifying the planet's biological and physical systems in an unprecedented and unsustainable manner. The cumulative effects from two-centuries-long economic activity, coupled with increasing urbanization and population growth, have altered the support systems of human and non-human life. At the most basic level, the source of global climate crisis is a growing imbalance in the earth's climate largely attributed to excess anthropogenic emissions of

⁴ IPCC 2001

⁵ Ibid; Houghton et al. 2000

⁶ U.S. NOAA; IPCC 2007

greenhouse gases which cannot be absorbed by the atmosphere's carbon sink. While the natural greenhouse effect of atmospheric gases is vital to maintaining Earth's life-sustaining temperatures, residual anthropogenic contributions are transforming the effect into an unnatural one by warming the planet and disturbing the balance of the global ecosystem.

Most discussions on global climate change focus on concentrations of carbon dioxide given its abundance and long half-life, which make it the greatest contributor to immediate and long-term global warming.⁷ With global emissions of carbon dioxide expected to rise 75 percent from 2003 to 2030 in the absence of policies to limit greenhouse gas emissions, this trend will likely force us into a scenario that will push the climate perilously close to a tipping point.⁸ Scientists have indicated that atmospheric carbon dioxide levels must be capped somewhere between 450 and 550 parts per million, or 9.4 gigatons annually, to avoid dangerous increases in the Earth's global temperature (two degrees Celsius or greater in the next century). The planet's biosphere captures nearly 4 gigatons a year through plant and ocean systems, and total global emissions stood at 6 gigatons in 2007. This leaves approximately a third of anthropogenic carbon dioxide in the atmosphere annually, adding to the current stock of carbon dioxide which has accumulated in the last two hundred years. Current projections of global population growth and economic growth of developing nations suggest that total global emissions will reach 9.8 gigatons by 2020, and consequently global temperatures will almost certainly climb above 2.0°C by 2100.⁹

⁷ Global environmental change also encompasses detrimental effects consequent to activities accompanying agriculture, animal farming, forest clearing, gas pipelines, landfills and mines, but the majority (75 percent) of anthropogenic carbon dioxide in the atmosphere comes from the combustion of fossil fuels for energy production, operating motor vehicles, and rainforest burning.

⁸ Lenton et al. 2007

⁹ IPCC 2007

As it stands, we have long since exceeded the capacity of the atmosphere to absorb waste gases and altered local ecosystems in a way that is causing the global climate to change with unfavourable consequences. Rising global temperatures will lead to local variations in temperature and precipitation, extreme weather events, and sea-level rises following global warming. Although we might think that is no reason to prefer a warmer (or cooler) planet, Stephen Gardiner notes that many millions of species are incapable of coping or, worse yet, surviving to climate change.¹⁰ The extent of damaging human-induced climate change is compounded by the fact that the phenomena will largely be irreversible for at least a thousand years after the cessation of emissions.¹¹ It is within this context that concern has been expressed about the way in which dramatic climate variability and gradual changes threaten a great many morally salient species, however their value may be understood.

It would be misleading not to admit that there are debates about climate change, both for and against. Critics have argued that the net long-term impacts of climate change might be negligible or mildly beneficial over hundreds, and perhaps thousands or tens of thousands, of years.¹² There is some merit in emphasizing the possible long-term benefits of global warming, especially if human beings could adapt to a warmer climate with better technology at their disposal. Nevertheless, some are sceptical altogether about the reliability of probability estimates from scientific research, citing uncertainty about the future, a relatively short climate record, and a less than perfect knowledge about complex ecosystems as the main problems.¹³ It would be a mistake to assume that projections based on weak empirical data represent absolute and precise

¹⁰ Gardiner 2004, 558

¹¹ Solomon et al. 2009, 1704-1709; The authors note that the cooling of global temperatures will be slower following a prolonged increase in planetary warming. This is because large oceans act as a large heat sink and, thus, they experience a loss of heat much lower than the atmosphere.

¹² Lomborg 2001

¹³ Lomborg 201, 258-324; Reilly et al. 2001; Gardiner 2004, 564ff

facts about the world as it exists today or in the future. The lack of rigorous scientific data might lend support for inaction because doing nothing might be a justified response to uncertainty.¹⁴

Fortunately, the scientific disputes do not involve the core of the climate change problem: the anthropogenic contributions of greenhouse gases in warming the planet. As Donald Brown suggests, “the issues most discussed by climate sceptics usually deal with the magnitude and timing of climate change, not with whether global warming is a real threat.”¹⁵ Even if we admit some measure of skepticism as regards to uncertainty about the implications of climate change, there is a flaw in the claim that climate change will bring about beneficial consequences over the long run. It would be rash to assume that we can measure and balance the loss of species or widespread suffering over potential future gains; nor can we suppose that people will generally be better off living in a less stable and less predictable climate, even with access to better technology for agriculture, transportation or genetic enhancement. In what follows, it should become clear that the existing body of evidence suggests that an increasingly warmer and polluted planet will pose serious challenges for environmental and human welfare over the long run.

The Unequal Costs of Climate Change

Although the global effect of disturbances to atmospheric and ecological systems for human welfare is surrounded by a great deal of uncertainty, the IPCC anticipates that effects on human welfare will be more severe in some regions and across time. Since the Earth’s climate exhibits

¹⁴ Gardiner 565

¹⁵ Brown 2002, 102

variation in different regions, this raises the intriguing possibility that climate shifts will be more (or less) disruptive depending on the structure of local environments and the effect of global warming on particular ecosystems. Prominent examples include the melting sea ice in the Northern and Southern polar regions, the inundation of coastal and low-lying areas throughout the globe, the melting of North American and Tibetan glaciers, the expansion of desertified regions in sub-Saharan Africa and East Asia, and the increase in severe storms in tropical and sub-tropical regions.¹⁶

As we consider that dramatic and rapid changes in the world's climate will have bearing on most, if not all, human populations across the globe, this fact should not obscure the more pressing issue concerning the differential impacts of such changes across human populations. To begin with, the present generation will likely be better off than persons in subsequent generations given the gradual nature of changes to the global climate. Even if the changes are already occurring at an accelerated rate, contemporaries will not experience the long-term socio-economic effects of net global impacts of carbon-intense activities and ecological degradation in the same way as their descendants. One important projection relevant to intergenerational ethics is that the climate is expected to change in the future, regardless of any efforts by existing or future governments for climate abatement or adaptation strategies.¹⁷ These strategies may reduce the future costs of climate change, but the existing excess concentration of greenhouse gases and the necessary of, at minimum, subsistence-related emissions into the near future will mean that the threat of climate change shall not be evenly distributed across generations.

¹⁶ IPCC 2001

¹⁷ Ibid

The temporal variation of the effects of rising global temperatures and subsequent shifts in the climate is only the tip of a much bigger iceberg. Experts predict that there will be significant inequality in who will be grossly affected by changes to the global climate. For instance, temperature increases are expected to be far greater in northern latitudes, which will lead to higher incidences of morbidity and mortality resulting from heat waves, air pollution, and weather extremes. At the same time, these regions will experience greater crop yields and reduced deaths during the winter period, offsetting potential increases in disease or death in the summer period attributed to higher temperatures.¹⁸ But while the effects of climate change in northern latitudes may be similar in kind to those across the globe, the possibility of adapting should be much greater and less difficult. To put it rather simply, the developed nations will bear fewer negative and extreme events, and they are more capable with their vast accumulation resources to reasonably cope with such events.

The reality is much different for the developing nations which are expected to suffer worst and first from climate changes and variability. Rapidly expanding populations in the global South will be most heavily affected by climate change because of the dramatic upswing in environmental shifts expected in the regions they inhabit. There is increasing evidence, for example, that climate change will exacerbate coastal and regional flooding, diminish water supplies, increase droughts and bring more dangerous storms to Africa, Asia, and Latin America.¹⁹ Many of these regions are already vulnerable to disturbances in the climate owing to a lack of socioeconomic resources and an increased reliance on the environment for subsistence and development.²⁰ It is rather obvious that the developing nations have experienced the double-

¹⁸ Kessel 159-160

¹⁹ IPCC 2001

²⁰ Bruce et al. 1996, 1-16; Metz et al. 2001, 1-14

bind of climate change and asymmetrical globalization for the developing nations, in contrast to the developed nations which have profited from past economic growth and will not bear the same costs of climate change.

Still, the unavoidably global nature of climate change creates a commonality of problems characterized by widespread variation and unequal benefits and burdens. Some have claimed that a warming climate poses “a challenge so far-reaching in its impact and irreversible in its destructive power, that it alters radically human existence.”²¹ This comes out clearly when we reflect on the 300,000 deaths and 3 million cases of disease that are attributed to global warming annually.²² While not yet the largest humanitarian crisis, climate change threatens to result in 500,000 deaths per year and to seriously affect nearly half a billion people annually. Many of those affected will include ‘climate refugees’ who are expected to suffer immeasurable loss of life and livelihood as a result of abrupt or frequent climate change. At the current rate of global warming, climate refugees will make up a substantially large percentage of the global population in the future. The threat of climate change will be a question of basic survival for many, and some will pay with their lives while others will pay with dollars.²³

Wet Feet Marching

We have seen that climate change is a ‘global public bad’ that has different impacts on human well-being across space and time. Yet, it is important to understand that the relation between economic growth and environmental degradation has bearing in climate change debates. In short, anthropogenic climate change is largely attributed to a narrow view of economic development as

²¹ Blair 2004

²² Cole 227

²³ Shue 1992; Baumert et al. 2003; Mwandosya 1999

an end in itself that benefits a minority of the world's population, rather than as a means for the promotion of goods whose benefits are distributed more justly. As Solomon Benatar argues, disproportionate economic development fostered by a pursuit of short-term self-interest continues to result in undervaluing long-term interests and compromising the well-being of whole communities.²⁴ This fact, coupled with the ubiquity of environmental degradation, has driven human development toward a path that is unsustainable and unfavourable into the future.²⁵

The above points provide a convenient springboard for discussing the inequality in who is most responsible for the perplexing and unprecedented problem we now face. It turns out that the developed nations are responsible for more than two-thirds of annual carbon dioxide emissions and over 80 percent of the carbon debt over time.²⁶ The asymmetry of emissions rates among the developed nations becomes more noticeable once we observe that the richest 20 percent of the world's population is responsible for more than 60 percent of annual global emissions. The largest contributor of greenhouse gases among the developed and developing nations is the United States, contributing over 25 percent of total global emissions while comprising only 4 percent of the world's population. Put another way, nearly 300 million Americans emit four or five times more greenhouse gases than the global average when looked at in aggregate, a figure that exceeds the combined contribution of 3 billion people in 136 developing countries.²⁷

²⁴ Benatar 2005, 1208 adds that there is a disjunction between massive economic growth and the distribution of wealth and health particularly in the global context.

²⁵ Ibid 1208

²⁶ Kessel, 158-9

²⁷ Ibid, 158-9

On top of all of this, conspicuous resource consumption is in danger of replication by the developing countries. Some suggest focusing our attention on “the pattern and consumption of the overdeveloped countries – rather than the threat that may come from the developing countries themselves.”²⁸ This is a questionable assumption, for there is an obvious risk in generalizing the lifestyle of the affluent living today across the world as well as important grounds to consider who would be most responsible for future global emissions. While the industrialized nations are responsible for the current accumulated stock of emissions of greenhouse gases, the bulk of future emissions will come from the developing nations, which will account for the majority of economic development and population growth by 2030.²⁹

It follows then that the risk of runaway climate change can only be averted if resource consumption and the emissions of greenhouse gases of countries are regulated. Climate change is the first quantifiable limiting case for restricting economic growth regardless of one’s position on the development ladder. The spectre of global disaster provides may provide strong justification for implementing whatever remedy can prevent misery and suffering among human populations in the long run. This raises the real possibility that an international climate regime could intervene to restrict the economic activity of less industrialized countries so as to minimize further disruptions to the global environments. Beyond any consideration about property rights or personal entitlements, the need for collective action to avoid global catastrophe might require some of the developing nations to curb their emissions growth and their economic activity accordingly.³⁰ Even if placing restrictions on less industrialized nations might strain our ethical

²⁸ C.f. Sell 1996, 108

²⁹ FAO 2011

³⁰ This applies, in particular, to China and India which threaten to exacerbate global emissions of greenhouse gases as they endeavour to meet their development needs and enhance social welfare.

common sense, this should not diminish our concern with any environmental damage attributed to present activities and policies.

Addressing the global climate crisis may be contingent on different burdens for abatement strategies (to reduce emissions of greenhouse gases) and adaptation strategies (to prepare for environmental change and respond to climate-related impacts). It is true that rich states rarely need the cooperation of their counterparts who are less developed and less powerful, and thus they are often able to support their own needs without external assistance.³¹ However, the growing recognition of global climate change has incidentally led some wealthier nations to appeal for global cooperation on the climate problem. There is a strong economic and environmental rationale to limit the net global impacts of climate change that should motivate most, if not all, nations to participate in a global climate regime. A collective response is seen as the only effective approach in dealing with a problem that threatens drastic changes in the climate system and human populations across the globe. This supports the idea that most nations have much more to gain in the long run from strong, immediate efforts to implement abatement and adaptation strategies.

It turns out that the inequality that exists between the global North and global South will continue to drive much of the non-cooperative behaviour surrounding environmental and global ethics.³² For presumably the developing nations are unable to work with more affluent nations to curb greenhouse emissions and promote environmental sustainability. On the one hand, less industrialized countries must deal with more pressing issues of human deprivation and a shortage of basic goods to support existing populations. On the other, the lack the proper infrastructure

³¹ Shue 531

³² Roberts and Parks 2007, 8

makes it impossible to provide human and physical resources required to support strategies designed to reduce emissions of greenhouse gases, let alone prepare for unavoidable climate shifts. Lastly, the developed nations seem unwilling to yield to the demands of the less wealthy and powerful developing nations for a mass reduction of profligate spending and emissions, and so much so that they have managed to resist efforts against them that require that they curb their excesses.

Turning Up the Heat

Having examined the nature and origin of the climate change problem, we now turn to consider more closely how it raises special problems within ethics. It is worth noting at the outset that a complete account of who should bear responsibility for climate change and potential options for abatement and adaptation involves various interpretations about the resolutions to climate change within and beyond the domain of ethics. In thinking about the ethics of global climate change, Stephen Gardiner points out “that [sic] study of climate change is necessarily interdisciplinary, crossing boundaries between (at least) science, economic, laws, and international relations.”³³ Our efforts to determine the appropriate path in our dealings with the environment and people will at some stage necessarily require input from other disciplines. This is evident as we reflect on the candidate causes for anthropogenic warming: the increasing rate of emissions of anthropogenic greenhouse gases, higher population growth and overconsumption, the lack of environmentally benign technologies, misguided economic policy, and distorted resource prices,

³³ Gardiner 555

and the unwillingness or powerlessness of many to alter (economic, political and social) conditions across the globe. The possibility of alternative conceptions of the climate change problem should not give us cause for confusion, since these problems raise issues that are pertinent to ethics.

The ethical significance of each dimension of the problem is reinforced by the IPCC statement that “natural, technical, and social sciences can provide essential information and evidence needed for decisions on what constitutes ‘*dangerous* anthropogenic interference with the climate system [...] *such decisions are value judgments*.”³⁴ No doubt, we rely on the sciences to understand how our decisions and actions alter the underlying dynamics of the planet on a local, global, and generational scale. The natural sciences allow us to determine what constitutes a safe level of greenhouse gas emissions and the measures required to preserve the global environment more broadly. Similarly, economics has insights into the underlying causes of socioeconomic imbalances and the relationship between environmental changes and economic practices. Cost-benefit analyses help model the adverse effects of anthropogenic global warming and the potential benefits of abatement and adaptation strategies to allocate resources favourably in the long run. At the same time, a detailed investigation of social and political systems can shed light on the relationship between human choice and global (not just environmental) change. Here, the political and social sciences offer insights into the course upon which we might embark as they proceed to deal with climate change.

Behind all the concerns in different disciplines lurk general questions about how we should respond to climate change and decide what steps to take. Any attempt to change the

³⁴ Watson and Albritton 2001, 2 (emphasis mine)

course of human activity requires debating a wide variety of issues concerning the choices we can make, but there are limits to what economics and the sciences have to offer. Although it is possible to formulate several kinds of interesting arguments in economics and the sciences about the problem posed by climate change, such arguments have limited bearing on the pressing questions about our dealings with people and the environment. It is not enough to rely on sound science or economic assessments when making choices about strategies related to social or environmental conditions. We need some way of making concrete judgements about the legitimate path that ought to be taken in addressing the issue of climate change, but such a method is unavailable through empirical analyses alone.

When we are presented with the need for combating climate change, ethics might provide the necessary grounds to judge various remedies toward abatement and adaptation. At a time when the characteristics of anthropogenic global warming are no longer questioned and the forces underlying it are fully known, it is easy to wonder about the role ethics might play in climate change discourse. The fact is that it is possible to formulate several kinds of interesting moral positions that might be used to form recommendations on global climate policy. These defining positions are themselves formed from various ethical assumptions about the acceptable way of framing the issue of climate change. Despite the variation in philosophical work on climate change, there is widespread consensus that the latter is a perfect moral storm involving a “convergence of independently harmful factors that threaten our ability to behave ethically” for a long period of time.³⁵ Many reasons and combinations of reasons are advanced for this claim, especially the irreversibility of climate disturbances, the increasing rates of morbidity and

³⁵ Gardiner 2006, 397ff

mortality, the geographical scale of global environmental change, and the ubiquity and prolongation of environmental exploitation.

As it stands, ethics has largely been overlooked in discussions of climate change, which have focused primarily on issues in economics, politics and the sciences. In contrast to the highly developed research in the latter subjects, philosophers have only recently begun to consider how climate change affects our moral responsibility to people and the environment.³⁶ There is something to be said about the absence of philosophical writing on climate change, as the latter has long been understood elsewhere to be an issue that commands serious and urgent moral attention. That climate change is a moral problem, both in itself and in virtue of the wider problems with which it is associated, might be the least controversial claim one could make in taking an ethical stance on the issue. By contrast, it is much less clear what, if anything, should be done to address this perplexing problem which exacerbates and obscures our sense of moral responsibility.

So it is prudent that we ask how moral philosophy may shed any light on the pressing problems we now face in an era of global warming, and hence fill the gap left in scientific and economic analyses. There are different approaches within ethical theory that could make practical contributions to well-defined problems, but I will approach the issue of climate change by focusing on the special problems raised by justice. This reflects the growing concern among philosophers and non-philosophers writing on the issue that the origin and impacts of climate change imply a failure, morally speaking, on the part of human beings to do more to promote justice. The concern here is not with humans altering the composition of the atmosphere and the

³⁶ Singer 2006, 415ff; Gardiner 2004, 555-556

underlying dynamics of local ecosystems per se, but the effects of modification of the global environment on human beings.

Our awareness of the relationship between social imbalances and ecological degradation provides a practical but nevertheless important reason for appealing to a notion of justice. Significantly, the prospect of ongoing disturbances to the global climate and the decline of Earth's environmental assets raise issues of distributive justice, namely the allocation of resources and the distribution of benefits and burdens in the long run. This is because it is assumed that people hold legitimate claims or interests that are binding on others within their own nation or generation, and thus contemporaries may be duty-bound to members of present and future generations not to withhold benefits or impose costs in a certain way. Depending on the understanding of the conception of justice to be applied, some members of the present generation could be obligated to do more to protect the interests and resource needs of their descendants.

It is also fitting that we explore the ethics of climate change with the concept of justice in our purview, since it is clear that the global and intergenerational situation we now face is the ultimate commons problem. It has been impossible to regulate the distribution of resources and the emissions of greenhouse gases, as the lack of a global governance system and the market-based economy of industrialized societies have allowed individual nations to exploit a common resource – the global environment – in a way that threatens disaster for everyone. The lack of restraint of past and present generations in using the commons is a tragic dilemma (or a tragedy of the commons) that can be only be resolved through reasonable deliberation about the way in which resources can be accrued across persons, indeed in a way that avoids minimizes further

interference with the climate. Since it is no longer possible for nations and generations to be free riders in their consumption of environmental assets – that is, without exacerbating a problem for themselves and others – global cooperation in climate investments becomes desirable and necessary for all concerned.

The commons problem is one reason for thinking that justice concerns should be central to the climate change ethical debate. At the same time, the potential for climate investments to create different prospects concerning the well-being and resource availability of subsequent generations raises problems for intergenerational justice. This becomes clear when we reflect on the options available to the present generation so as to successfully redress the climate commons problem. In general, it is reasonable to assume that the chief beneficiaries of abatement and adaptation measures will be people in the near and distant future; whereas the present generation which must employ such measures will consequently bear the greatest burden in the short-term and long-term. Hence, the philosophical problem inherent in discussions about climate change lies in determining how far the present generation must go to protect the interests of their children and the not yet born, even if they are likely to benefit the least or none whatsoever from such sacrifices.

Although the dilemmas of justice may well persist and are likely more acute on an intergenerational scale, it is important not to overstate the immediate gravity of the environmental problem we now face. There is no doubt that the inexorable consumption of resources in industrialized countries remains the greatest threat to the global environment and future generations. However, a holistic view of profligate growth reveals that environmental problems such as climate change are largely symptomatic of local and global conditions which

have led to the mistreatment of people.³⁷ Even if environmental behaviour is the direct cause of the degradation and modification of the global climate, the underlying factors of such behaviour are closely tied to conditions which sustain injustice among human beings.³⁸ Addressing ecological problems such as climate change requires rethinking basic moral practices, presumably in a way that fosters greater equality and sustainability among members of the present generation.

Therefore, there is a need to determine a legitimate path forward in our dealings with people and the environment. In the broad sense of the term, justice provides a sound basis for taking collective action on climate change. Aside from putative moral grounds to promote justice in climate initiatives, unjust abatement or adaptation strategies will likely be inadequate and ineffective to address problems arising out of the relations among people. Rawls maintains that “even if the grounds for consensus differ among different people, and each may use different arguments for accepting the schemes, they may agree on the very principle of justice.”³⁹ There is much more to his claim than this of course, since it is believed that justice is integral to ensuring proper relations among people and across nations and generations. This applies, in particular, to global problems such as climate change where competing interests among communities and nations might otherwise hinder opportunities for collective action. Without justice, it is believed that there will be diminished cooperation among relevant parties for a problem that should be widely shared.⁴⁰

³⁷ Rainbow 1993; Die Grunen 1980

³⁸ As Thompson and Rayner maintain, “social structures and values that allow for the abuse of nature are also responsible for gender discrimination, racism, xenophobia, social alienation, crime, and poor health” (296).

³⁹ C.f. Benestad 1994, 726

⁴⁰ Grubb 1995, 464, 473; Pan 2003, 3; Gardiner 2004, 556

The issue of climate change presents moral philosophy with the task of drawing attention to the ethical aspects of the climate change problem. The theoretical questions I want to discuss are closely related to the practical questions about how to manage the relations among human beings. These questions are usually formulated as follows: Do people have a moral obligation to members of present and future generations, and, if they do, what are these obligations? To what extent are we obliged to make sacrifices to protect present and future generations and, by implication, the environment? In particular, how should we guide the distribution of goods and bads and to whom in an era of global warming?

There are a number of approaches one might take in addressing the questions noted above, but we shall consider the relevance of ethical theories to philosophical work on climate change. In this paper, we shall not attempt to analyse in depth the possible bearing of some of the major ethical theories that have emerged in philosophy. The most that can be done here is to consider how a distinctive consequentialist moral theory has insights on our obligations to present and future generations and the normative criteria on which to guide the distribution of benefits and burdens in the long run. This reflects the focus of expanding literature on climate change as well the implicit view among moral philosophers that any practical judgment or moral responsibility must be tied to consideration of outcome.

Some Conclusions

To sum up: We now have fairly reliable knowledge that our economic and environmental behaviour will have a generally adverse effect on human well-being in the immediate and distant

future. Current discussions about global climate change draw attention to the responsibility of human beings in causing irreparable damage to the environment, which threatens to widen inequalities in the long run. Unless immediate and long-term measures prevent further warming and protect life-sustaining resources, climate change is expected to undermine the ability of future generations to protect their own interests. The same, however, is true for members of the present generation who are already experiencing the gradual effects of anthropogenic climate change, many of whom are vulnerable to disturbances in the climate and less capable of managing the impacts of such disturbances. Even if abatement and adaptation measures are put into place immediately, our activities will continue to affect human well-being and resource availability across space and time.

With the basic facts about the long-term environmental and social effects of human activity largely undisputed, it was reasonable to focus on the more pressing issue of the ethical dimensions of climate change. Although there are a number of ways we can approach the environmental problem, I have suggested that the problems raised by intra- and inter-generational justice are an integral part of philosophical work on climate change. One of the main reasons was the relationship between environmental degradation and social inequality. We saw that finding ways to resolve climate change requires addressing concerns of global justice more broadly. Insofar as injustice and profligacy are to blame for anthropogenic global warming, we might redress the problem by promoting justice and sustainability. At the same time, we know that climate change threatens to seriously affect the socioeconomic welfare and resource availability of future generations. The possibility, indeed inevitability, of long-term changes to

the global environment poses special problems of intergenerational justice regarding the nature and extent of our moral responsibility to present and future people.

CHAPTER 2 – ON THE RATIONALE OF THE ETHICS OF CLIMATE CHANGE

“The earth and all that is therein is given to men for the support and comfort of their being” yet they “have a right to what [labour] is once joined to, at least where there is enough, and as good left in common for others.”

--John Locke

“[Y]ou are lost if you forget that the earth belongs to no one, and that its fruits are for all.”

--Rousseau

Introduction

By now it should be clear that the facts about climate change are established and unequivocally true for the foreseeable future. The cumulative impact of human civilization in the last few centuries has paved the way for an increasingly harsh and unstable global environment for at least another millennium. While we can be certain of moderate climate change and its effects on local environments and human (and other) species, there is the potential for more devastation and suffering if, as remains the case today, the economic and social conduct of human beings is left unrestrained. These facts clearly underscore the need to radically and swiftly alter human activity, which is to blame for the linked issues of environmental destruction and social disparities.

Most philosophers tend to agree that there are strong grounds to alter our behaviour given a moral responsibility somehow or other to ensure a proper respect for people, and perhaps the environment as well. Our preceding discussion offered a brief glimpse on the reasons why notions of justice could address global and intergenerational problems such as climate change.

As we shall see, there are a number of moral theories which purport to offer satisfactory principles to guide human conduct, and thus propel us to take meaningful action in response to climate change in ways that produce similar recommendations about the desired outcomes. Yet, the differences among these theories are noteworthy insofar as they offer distinct views on the nature and extent of justice. If, as it is assumed, an understanding of justice is required to devise strategies for abatement and adaptation to climate change, then it is prudent that we consider candidate theories and their problems.

Where to Begin?

So far it has been said that the principal focus of a discussion on the ethics of global climate change is a matter of intra- and inter-generational justice. We have seen how the two principal issues regarding climate change – abatement and adaptation – inherently raise concerns about the effects on people in the present and future. Of great concern are the costs involved in preventing further global warming and dealing with its adverse effects on people and the environment over the long run. Much uncertainty exists, and will remain, surrounding cost-benefit analysis owing to the unpredictable nature of global climate change and the difficulty in predicting events in the future. Yet, we have sufficient knowledge about climate change to discern how people – in the present and future – might share the benefits and burdens from a set of policies aimed at curbing emissions and redistributing resources.

Many authors writing on climate change often overlook the important connection between abatement and adaptation strategies, in part because the latter are taken to be opposing

strategies for climate change policy. The standard treatment of these strategies as conflicting in their nature points to a fundamental flaw with the arguments that have been offered by environmental skeptics and some moral philosophers.⁴¹ The choice between reducing emissions and adapting to the effects of climate change is misconstrued because both must be part of a long-term strategy in avoiding moderate, if not catastrophic, global warming. Any attempt to limit the burdens of climate change hereafter must include a reduction of emissions, since a failure to do so would only escalate the degree of inequality and suffering across the globe.

Still, some have suggested that abatement strategies may be disregarded in climate change policy for the following reasons: the cost and inefficiency of preventing further climate change, and the ability of future generations to adapt to global warming without any preventative action taken by their predecessors. Economists such as Lomborg insist that people should simply deal with climate change as it happens rather than take meaningful action – in the present or future – to prevent global warming. Adaptation, it is argued, is less costly over the long run and provides more opportunities for people to live better off.⁴²

The first claim – that abatement is more costly and unnecessary to prevent further climate change – suggests that over the long run, the harms to people and the environment will somehow be outweighed by the positive consequences of global warming. On the one hand, Lomborg admits that a moral-legal framework such the Kyoto protocol if implemented *ad infinitum* will only delay economic growth by one year, even in the best case scenario with strong reductions in emissions and resource redistribution across the globe. Yet, he still suggests resisting such a framework on the grounds that helping the already disadvantaged and poor people today through

⁴¹ Gardiner 2004

⁴² Lomborg 2001

economic development will allow them to deal with climate change better than otherwise possible through abatement strategies. Insofar as they offer a strong economic rationale against abatement, economists such as Lomborg insist that it is far more beneficial to reduce poverty in the world today than to implement emissions reduction policies.⁴³

Claims such as the above are presented through an economic lens alone, and hence they offer a limited cost-benefit analysis. Philosophers are poised to argue that there are a number of problems inherent in economic methodology, especially those attempting to deal with intergenerational issues such as climate change. For one thing, the use of a social discount rate for future costs negates the benefits (and costs) that may arise from the strategies aiming for abatement and adaptation in the short-to-medium-term future.⁴⁴ Only the most extreme outcomes are considered, but one must wonder why modest costs or benefits (with the same or other degree of probability) must be excluded from consideration. It seems a far stretch to assume that people in future generations will not be better (or worse) off from certain strategies, and furthermore to exclude from the cost/benefit equation the effects on people and the environment that might otherwise be morally significant.

This leads us to question the validity of Lomborg's second claim – that future generations can adapt to global warming without any help from their predecessors. Should we ignore the effects of climate change on future generations based on limited knowledge of the future or, better yet, projections about the medium-to-long-term effects of different policies on climate change? There are limits, of course, to standard economic analysis since it relies exclusively on

⁴³ Ibid

⁴⁴ The conception of cost-benefit analysis that is used by economists is limited to purely monetary and fiscal considerations. As we noted in the first chapter and in the following paragraph, the reduction of costs and benefits to economic terms is not adequate from the moral point of view for many philosophers, since there are other features of human life and the world that must be factored into discussions about the nature of (un)ethical behaviour and decisions.

money to assess relative costs and benefits. Even if we can estimate the monetary costs of doing something (or nothing) on climate change, it is unclear how we might ‘price’ things like human morbidity, damage to ecosystems or the extinction of species. Such uncertainty points to a broader problem of assessing how much people will be affected by such events over the long run, which is a result of the unprecedented nature and magnitude of global climate change that will occur for at least the next millennium.

Doing No Harm

The above considerations suggest that a just approach to climate change must include a broader concern for protecting environmental and human welfare well into the future. As it turns out, many have turned to the precautionary principle, or “No Harm Principle” as Henry Shue calls it, to deal with the uncertainty about the future and the harms that people may otherwise experience in a warmer world. When faced with the problem of calculating probable outcomes, Shue’s principle would seem to have great appeal in addressing the fundamental moral problem of subjecting people – in the present and future – to any kind of harm. The precautionary principle builds on the idea that it is wrong to cause, or create risks of, harm when it might be otherwise possible to avoid subjecting people (or things) to involuntary harm.⁴⁵

In the case of global climate change, it would seem that the conditions of the precautionary principle give a wide endorsement of strategies to limit (threats of) harm to human and environmental welfare. For one thing, Gardiner points out that there are strong grounds for

⁴⁵ Shue 1999; c.f. UNFCCC 1992

limiting present emissions, insofar as abatement would provide benefits over the long run through reduced global warming into the next few centuries.⁴⁶ Any uncertainty regarding exact costs in the short-term and long-term would not prohibit a “no harm” approach unless somehow people would be better off with further global warming. Such a scenario is unlikely given the long-term effects of climate change on the economic development of poor nations, which on the whole will be adversely affected by the increasing instability and severity of climate forces. Even if some moderate global warming is already expected into the twenty-first century, it is simply not true that there could be any less or equal harm imposed on humanity through further warming, given the present state of global inequality.

Some have suggested that the precautionary principle also includes a requirement to ensure that people in the present and future have adequate means to adapt to climate change. This is because a “no harm” approach includes an injunction to take precautionary measures for protecting human and environmental systems in the future as well as the past. We may refer to another more recent formulation of the precautionary principle in the Wingspread Statement, which maintains that such measures are necessary despite a lack of information about cause and effect.⁴⁷ There is reason to think, then, that the aim to alleviate as much suffering as foreseeable and possible requires a lasting commitment to avoid further climate change and reduce its impact on human populations.

Despite the appeal of the precautionary principle and its widespread endorsement in recent policy frameworks, there are many instances where we are left wondering precisely what the principle requires of us. It is unclear just who must bear the responsibility of limiting threats

⁴⁶ Gardiner 2004

⁴⁷ Wingspread 1998; c.f. Gardiner 577

of harm and how much we must sacrifice to reduce any and all such threats. Gardiner is right to point out that the precautionary principle cannot effectively tell us how to reach a fair outcome (i) when dealing with indirect and latent harms, and (ii) between individuals across vast regional and temporal domains.⁴⁸ So, while Shue and others do well to capture a fundamental moral intuition about the wrongness of harms, there is no clear method in accordance with this principle by which we can assign responsibility, especially in cases where it is difficult or impossible to determine cause and effect of harmful activity. Should we go so far as to prevent farmers from raising any cattle because doing so could raise ocean water levels in the future through the release of methane in cattle excrement? In this example and others, a “no harm” approach would require extreme sacrifices in the name of precaution, while relying on an inadequately defined principle.

More importantly for current purposes, it might help to point out a more fundamental problem with a “no-harm” approach. The precautionary principle may be restricted to forward-looking considerations, but the core of the principle – the wrongness of introducing or permitting harms – might warrant blaming individuals and entire communities in the present for the harms their predecessors committed through actions in the past. Just as ignorance of cause and effect relationships is not sufficient to avoid precautionary measures for the future, so too might it be unreasonable to assign responsibility for redress to those who have benefitted from harms to others. Simply put, if it is wrong today to create threats of harm for people in the future, the same may be true of actions in the past that have brought suffering to people at some point in time.

⁴⁸ c.f. Gardiner 2004

Historical Responsibility

The no-harm approach outlined above puts too much emphasis on posterity while failing to provide moral guidance on addressing failures in the past as well as precisely how to avoid those in the future. It would seem necessary, as it may be claimed, to give proper attention to behaviours and events that occurred in the past. This may be true in the case of the climate change problem, which is largely a result of historical circumstances related to the economic and environmental conduct of the developed nations. A case could therefore be made for deferring to historical principles of justice to receive proper guidance for what constitutes a fair response among people inhabiting the planet today.

An historical principle of justice, as its name suggests, requires that we delve into the past to determine whether the present situation is just as a result of legitimate practices in the past. Historical principles involve examining the way resources were acquired, transferred or shared according to some ahistorical claims of people. The basic assertion of historical principles is that we cannot assign moral responsibility simply on the basis of current or future state of affairs. Rather, we must ask if any preceding events have since brought about undesirable outcomes. From there, we may be required to seek rectification or compensation from those who failed to respect claims of entitlements or desert by others, or simply by virtue of the responsibility perpetrators have for bad actions on the environment. These are the claims expressed by the “You Broke it, You Fix It” principle and the “Polluter Pays” principle, respectively, which we have room to consider in some detail.

Both the “You Broke it, You Fix It” principle and the “Polluter Pays” principle emphasize the important connection between present state of affairs and events in the past. In the case of climate change, the former principle suggests that those who have contributed to climate change, and their descendants who have benefited as a result, ought to bear the costs of its negative effects. This is because we live on a finite planet with finite resources – the atmospheric and ecological sinks – and are faced with competing interests among people, across space and time. These sinks belong to everyone in common and yet, many have used up the capacity of these sinks in a way that is detrimental to everyone over the long-run. Recall that this is a clear example of the tragedy of the commons, since a host of individuals have acted through rational self-interest to deplete common resources on which they all rely to sustain their own interests.⁴⁹ In seeking their own personal gain, individuals inhabiting a shared space create adverse outcomes for themselves as well as others. In light of global warming, it would seem reasonable and necessary, then, to share these resources in a fair manner and assign differential responsibilities accordingly.

Historical principles may offer a reasonable approach to intergenerational problems such as climate change. There is a need to understand the reasons why a problem like this can occur and, in so doing, hold those responsible for harms done to others. Climate change provides a clear case for corrective justice, since we can now definitively, yet imperfectly identify those agents responsible for harming people and the environment. It might be thought that the tragedy that is now climate change has developed over centuries at a time when people were simply unaware of the adverse impact of their environmental actions and no one likely conceived of any

⁴⁹ Hardiness 1994

wrongdoing as a result. Nevertheless, it is perfectly reasonable to regard our predecessors as morally culpable for their bad actions despite their ignorance of the wrongness of their conduct, given the historical fact of the ongoing misappropriation of the global atmospheric sink.

It would help to clarify this point further by considering the emphasis many scholars put on sustainable development when asking about the requirements of justice. While the idea of a “right to sustainable development” has figured prominently in discourse on intergenerational justice in recent decades, a much earlier theory proposed by John Locke insists that what matters in the end, from a moral point of view, is that we ensure “enough and as good” a life remains possible for others. More so, Locke believes that there are legitimate grounds for the acquisition and transfer of property, with the proviso that sufficient room must be left for others to inhabit and live comfortably in the world.⁵⁰ Humankind is entitled to the planet and its resources in common, and people must leave “enough and as good” for others as they conduct themselves in their individual affairs.

On first inspection, a Lockean approach to justice might suggest that the climate change problem is no less than a moral failure of human beings to sustain the commons. This failure bears some similarities to Hardin’s notion of the “tragedy of the commons,” since people cannot disregard their behaviour as they inhabit this planet. Indeed, Locke’s theory seems well suited to address intergenerational and environmental problems by offering an historical principle of fairness that aims at respecting the interests of living and future people.⁵¹ Even if human beings are entitled to property, they are responsible for ensuring that their economic and environmental

⁵⁰ A Lockean approach to justice provides a traditional account of justice whereby resources, including land, may be justifiably acquired through original possession or transferred to other parties so long as no coercion or deception is involved.

⁵¹ Locke 1980 (; c.f. Nozick 1974

activities do not compromise the rights of present and future persons. The concern with preserving the global environmental commons is an attractive feature of Locke's approach, yet the theory runs into a number of problems as we now consider.

First, there is a fundamental inconsistency with Locke's theory which obscures any judgements about intergenerational and environmental problems. As Peter Singer points out, the theory fails to properly address the conflict between rights to private property and the injunction to preserve the planet for others.⁵² Can we truly be justified in the acquisition and ownership of property when it is no longer possible to leave "enough and as good" for others? On the one hand, it might be thought that rights about private property are absolute so long as the acquisition and transfer of property was done in a fair or just way. This idea would not seem to bode well for taking action on climate change per se, since the unequal distribution of property worldwide may not be entirely problematic from an historical account of justice. On the other hand, it seems wishful thinking that we could leave "enough and as good" for others when thinking about justice through merely an historical vantage-point about property rights. Even if Locke's theory may justify the appropriation of resources in many parts of the world today, it appears the planet and its human inhabitants cannot be expected to flourish without some equitable distribution of property. The latter may well require some to give up their present stock of resources of which, according to Locke, they have legitimate ownership and control.

A second problem with an historical principle of fairness arises when attempting to make claims about rectification or compensation for past harms. First, we have seen that philosophical discussions on climate change naturally give rise to questions about historical misconduct

⁵² Singer 2002

surrounding global inequality and environmental degradation. On the first issue, much of the disparity between the rich countries and the poor countries is owing to the misappropriation of land and resources by those in the past who inhabited the wealthier nations. At the same time, there has been an ongoing failure by the developed countries to do anything to curb profligate resource consumption and the release of dangerous emissions into the atmosphere. While we may conclude that people in the past are clearly to blame for the direct harms and increased vulnerability to climate change today, they can no longer be held responsible for their wrongdoings and their victims may no longer exist to benefit from an historical compromise. In short, Locke's theory seems to leave us at an impasse with no plausible way to deal with intergenerational problems such as climate change.

Some may respond here by turning our attention to the present so as to make proper amends for historical wrongs. Once again, we are reminded that many alive today, most notably in developed countries, have benefited from the wrongful actions of their predecessors. The sustained increase in personal wealth and improvements to socio-economic systems in these countries is a result of the unjust expropriation of resources which presumably ought to be shared by all in common in some universal sense. It is also evident that the large majority of benefits that have gone to developed nations have brought diminished opportunities and resources for the developing nations. Thus, if people in the developed nations have shared in benefitting from practices which deprive others as well as themselves from having a decent and fair opportunity to flourish, they may be held responsible for addressing the current crises facing the globe. Here, the developed nations would have an obligation to fix the economic and environmental problems by helping the disadvantaged and poor people who have suffered from the mismanagement of

the global environment, while contributing to broader efforts to leave “enough and as good” for others.

If we take this weak view of historical justice, we need to ask how much is required of the developed nations to make amends in the name of historical compromise. The first question is, what knowledge could we reasonably expect to obtain about the past and how much we should delve into the activities of our predecessors? As it turns out, there is much uncertainty about the past owing to a lack of socio-economic and scientific data. The difficulty in acquiring information about earlier states of affairs becomes particularly acute when we attempt to gauge the environmental behaviour of past generations, specifically the cumulative contributions of emissions by the developed nations into the atmosphere. Yet we know that any claims about rectification or compensation to the developing nations must demonstrate the precise origin and cause of harms to people or the environment, so it is unclear on this account exactly how much and by whom resources should be redistributed.

The presence of large gaps in our knowledge about the conduct of our predecessors may give us no choice perhaps but to focus strictly on circumstances since the mid-twentieth century. Although this restriction in practical moral reasoning would exclude many facts relevant to an historical account of justice, most certainly in favour of the developing nations, one might argue that doing so would place sufficient blame and responsibility on the developed nations to fix the atmosphere. Recall that if we compare the contributions of emissions by the developed nations and to those of the developing nations from 1950 to 2000, the former are responsible for nearly 80% of the emissions while the population of the latter has quadrupled and is left with less than a

fair share of the atmospheric sink for the future.⁵³ The distribution of the atmospheric stock of gases and the allocation of resources in the fifty years leading up to the twenty-first century seems grossly unjust on a global and intergenerational scale, since people in the developed nations are mostly to blame for breaking the atmosphere and acquiring a larger share of something that must be shared in common. Though we find comfort in the strong data which points the finger of blame at the developed nations, it is less clear what it will take to truly make amends for such historical wrongs. What sort of historical compromise might take place in the present as well as future?

As it stands, the developed nations will remain the principal contributors of the atmospheric stock of emissions annually through all sources until the developing nations match their output around the year 2040. If we adjust the calculation to include the contributions that the developed nations have made thus far, it will take at least until 2100 for the developing nations to match the cumulative historical output of emissions into the atmosphere. Finally, a further adjustment to this calculation to include population considerations would lead us to conclude that not until 2105 would the per capita contributions of emissions in the developing nations equal those in the developed nations.⁵⁴ If we believe that people should pay for the damages to the environment in proportion to their responsibility for creating such harms, then it might seem that the developed nations bear the major burden of fixing the atmosphere (i.e. its capacity to absorb waste gases) while at the same time limiting their access to the atmospheric

⁵³ See Chapter 1

⁵⁴ See Chapter 1

sink so that the developing nations may move towards a more equitable appropriation of the shared atmosphere.⁵⁵

When thinking about the need for historical compromise, one must naturally fixate on the past and present without paying much attention to the future. What matters morally within a classic historical account of justice is a careful examination of the acquisition and transfer of resources; in particular, it matters whether the present situation arose from legitimate actions and, in cases where wrongs have occurred, how some future circumstances might lead us to meet those requirements. In either case, the goal to seek a fair distribution of goods is grounded solely on facts about the past and present, perhaps to the exclusion of matters in the future. The problem with leaving out considerations of the future is that we may fail to consider things of value, morally-speaking, which ought to have our attention. One might reasonably suppose that backward-looking principles of justice largely prevent us from making concrete judgements about our obligations toward the future. Although principles of reparation or restitution may be adequate to address the climate change problem given a long chain of misconduct in the last few centuries, for hundreds of millions, there is perhaps a better way to address our moral obligations to human beings through a commitment to posterity.

⁵⁵ This is the only plausible conclusion made by an historical principle of fairness since there is no alternative but immediate compensation and rectification for historical wrongs. This is because simply allowing developing countries to reach parity in terms of their appropriation of that common resource would serve to increase damages to their populations due to the effects of global warming over the long run. Simply put, when comparing two scenarios where one allows for historical compromise to occur over time and the other more swiftly, it is far better to seek immediate solutions to climate change through compensation and rectification.

What We Owe to Posterity

Most philosophical work in global ethics debates has focused on our moral obligations to existing persons without paying considerable attention to the question of whether present generations have any obligations to future generations.⁵⁶ In recent decades, the growing concern with global justice has brought forward a number of approaches with solutions to human suffering and economic inequality. Amid discussions about global justice are two putatively important assumptions about the scope of our moral obligations: (i) there is a natural tendency for human welfare to increase across generations, or (ii) that we are naturally inclined to focus on the circumstances of people who have inhabited this planet, say, because it is possible to determine in the case of the present generation how well their lives are going and how best to improve them. As a practical matter, we might even say that we have a general disposition as benevolent and sympathetic beings to respond to the suffering of those close to us, which in the globalized world today includes everyone on the planet. Consequently, our awareness of the lives of others and the capacity to make meaningful change in their lives often leads us to focus our moral attention on promoting the good for persons in the present generation.

One notable feature of the climate change problem is that it confounds our basic assumptions about the future: we can no longer believe that our descendants will inhabit a planet at least as good as our own. In fact, many in the future will experience greater distress and suffering owing to changes in the global environment unless the present generation takes serious action to tackle the climate change problem. By taking more than a fair share of the atmospheric

⁵⁶ It is obvious, I think, that we do not worry about our ancestors or the deceased because they will not – indeed, cannot – be around in the present or distant future to have their interests or well-being affected in any positive or negative way.

sink and ecological resources, the developed nations have already guaranteed that the effects of climate change will affect both the rich and poor into the future. Yet the developed nations cannot be entirely at fault *ad infinitum*, since their counterparts in the developing world are increasing their share of the atmospheric sink rather quickly. Since the cumulative contributions of emissions by the developing nations will soon surpass those of the developed nations, they must also share in the responsibility for reducing the future burden of climate change. Putting aside any putative claims by the already disadvantaged and poor, we need to ask whether and how the present generation must attend to the future consequences of climate change on people and the environment. It would seem reasonable, given the above considerations, that we should be trying for an account of justice that looks to the future, rather than to the past.

How are we to understand the nature and scope of our obligations to future generations? The answer to this question will depend on the view one takes on global and intergenerational justice. Later in this discussion, it will become clear that standards of justice require careful consideration about the way in which policies and practices will affect future generations. There is broad consensus that morality takes seriously the interests of future persons and the effects of our conduct on their lives.⁵⁷ It is particularly important for those who subscribe to consequentialist thinking to define approaches to intergenerational justice, insofar as it is argued that our concerns should focus on the outcomes of our actions on people as well as the broader environment. A case can be made for doing so by appealing to welfarism as the starting point for justice: what matters morally, first and foundationally, is the well-being of human beings. While we may include non-human beings or inanimate things as objects of legitimate moral concern, it

⁵⁷ Although there has been much discussion about the moral status of the not-yet born and future generations, it is wise to note that moral theories have not adequately been able to articulate our obligations to them.

is enough to look at the value we assign to human well-being to know that moral deliberation must include the interests of future generations as well as our own.

It might be argued, however, that there may be an inconsistency in thinking that the conduct and state of affairs in one generation will have a direct impact on the interests and welfare of other generations, near or remote. On the one hand, the implications of institutional policies and the combined effects of our individual conduct can have bearing on both the resources of future persons as well as their interests.⁵⁸ Although alternative policy approaches could affect how our descendants live, we may be mistaken to assume that contemporaries could somehow *harm* future generations. Furthermore, our ignorance of the composition or identity of future people makes it impossible to gauge the benefit or harm to actual persons in the future because their existence is largely determined by the conduct of earlier generations. It would therefore seem that the non-identity problem calls into question our obligation to future generations because there are no tangible preferences of people yet to be born to include in our moral deliberation.

As it transpires, our moral obligation extends to individuals across space and time regardless of whether we manipulate the composition of future generations and how we may do so. The commitment to universalism, as Sidgwick points out, makes clear that contemporaries have no special weight simply because of their temporal position. Moreover, a commitment to objectivity and impartiality would require that we take into account the interests of those alive

⁵⁸ As several theorists have noted, the effects of individual conduct are generally not enough to positively or negatively impact the well-being of subsequent generations. Instead, we ought to be worried about the implications of a moderate-to-large population of persons in global civil society engaging in similar conduct which, in combination or consistency, predictably result in benefits or losses for others. For instance, it would take more than one person or one thousand persons (not) exploiting resources continuously to (not) comprise the availability of resources into the future.

today and weigh them equally with their descendants.⁵⁹ While the non-identity problem does not weaken our obligations to posterity, it does require shifting our moral concern from a person-affecting view to an impersonal view when thinking about future generations.⁶⁰ In other words, if we are to take into account future interests, then it is only possible to think in terms of an attenuated consequentialism which is not sensitive to the actual interests of individuals in the future. It is clear that different persons are brought about as a consequence of collective choices of earlier generations, but an impersonal view dissolves the problem of non-identity by shifting the focus to what individuals *would* want when they inhabit the planet in their time.⁶¹

This, of course, raises the question of how far our concern for posterity should extend. If we believe that the interests of people in the distant future matter, and perhaps matter equally, to our own, then we may be required to make sacrifices for future generations. On any number of forward-looking accounts of justice, it may be that earlier generations must give up much for the sake of their descendants so that they may live comfortably on a planet with finite and limited resources. If we ask, “Is this commitment to posterity seen to be indefinite and absolute?”, some might think that answering “yes” to this question will force us into making large sacrifices if there is no way of knowing when we should stop investing for future generations, especially since climate change will undoubtedly have adverse effects on human and environmental well-being long into the future. In their defence, perhaps we can discount future generations on the

⁵⁹ Sidgwick 414

⁶⁰ Derek Parfit’s notion of the person-affecting view claims that our concern, from the moral point of view, lies with specific people. In contrast, the impersonal or world-affecting view does not require one to inquire into the lives of particular individuals, but rather we must gauge the circumstances of the world as a whole. Thus, what ultimately matters for the person-affecting view is how well or not some one person or thing is doing, and this presupposes the ability to examine that thing in existence, hence the reason why we cannot extend this view to posterity.

⁶¹ As I explain later in our discussion, the list of basic wants that humans beings share may include access to good shelter, medicine, education, hydration and nourishment, as well as social and recreational leisure. Although the exact manifestation of these wants are not explicitly defined, nor essentially the same, few would doubt that this list does not generally comprise the basic set of human interests.

grounds that there are limits to our responsibility to posterity?⁶² Since we cannot ascertain the impacts of our actions on subsequent generations, it is argued that we should simply discount future interests. Above all, it is difficult to conceive of moral obligations to people thousands or millions of years into the future, in which case we should not feel obliged to make sacrifices by giving up a large share of resources.

Once again, however, the impartiality and universalism that is deeply engrained in thinking about global and intergenerational justice precludes any discounting on the basis of an arbitrary threshold. The idea that a theory of justice must be neutral to considerations of space and time is echoed by Frank Ramsey, who argues that we should not “discount later enjoyments in comparison with earlier ones, which is ethically indefensible and arises from the weakness of the imagination.”⁶³ Similarly, Peter Singer holds that it makes no moral difference whether the people we help are alive today or a few thousands of years into the future.⁶⁴ Yet there may be legitimate grounds to give less weight to future interests if there is uncertainty of our effects on people in subsequent generations. The idea, as Sidgwick has put it, is that earlier generations must include future interests in their moral deliberation “except in so far as the effect of [their] actions on posterity – and even the existence of human beings to be affected – must necessarily be more uncertain.”⁶⁵ If we take this way, discounting should be applied only if we lack adequate information about the possible implications of our conduct on the interests of future generations. Therefore, uncertainty of outcome becomes the only basis for deviating from the standard position that justice should be neutral to the geographical and temporal position, and that

⁶² Dasgupta and Heal, 1979

⁶³ Ramsey, 1928, 543

⁶⁴ Singer 1972, 231-232

⁶⁵ Sidgwick 414

uncertainty must include uncertainty about the particular interests of future people which do not comprise the general and basic interests shared across the human species.⁶⁶ We cannot presuppose any knowledge about the idiosyncratic nature of people's lives or the pursuit of their own autonomous choices, but rather only the subset of interests that all persons, on careful reflection, would agree is necessarily most basic and universally shared among them. That is, barring any any alterations to the genetic make-up of future people by environmental factors or manipulation by earlier generations through technology, these globally relevant interests are: freedom and autonomy, adequate nutrition, safe housing, a safe and stable environment; good health and health care; education; income and wealth.⁶⁷

Putting Aside the Past

Taken together, the above considerations suggest that there is no basis for excluding from our moral consideration the concerns of future generations in our deliberations on climate change, since we cannot deny the existence of those fundamental concerns, nor give any reasonable grounds to discount them. It would seem therefore that we may reject both precautionary and historical principles solely on the grounds that they fail to accommodate the concerns about the not-yet born in some meaningful and consistent way. But, in their defence, proponents of historical principles might argue that, while we may assign moral status to future

⁶⁶ Few doubt, I think, that human beings do have similar appetites, needs, and motivations given their shared physical and psychological constitution. As Nagel notes, that "people are similar enough in their basic needs and desires so that something roughly comparable holds between one person and another" (65). This fact makes it possible to formulate broad, objective claims about the things people would, and indeed ought to, want with respect to their basic well-being; C.f. Harsanyi 1997, 141

⁶⁷ There is widespread consensus in both philosophical and scientific discourse that most, if not all, of the items included in this list are the basic contributors to human well-being. See, among others, WHO 1986 and Jones 2006, 25.

generations, we simply have no tangible obligations to the not-yet born. All that matters, morally speaking, is that we ensure resources are acquired and transferred through legitimate means, and that we rectify any transgressions that may have occurred in the present.

Yet, the historical view provides little comfort for those who think we should adopt a more sensible and holistic conception of fairness in our dealings with the rest of humanity. Rather than fixate on putative concerns about misappropriation or mismanagement in the past, we might instead appeal to ahistorical claims about how to deal with the current situation for (the sake of) people living in the present and future. The putatively historical grounds for justifying rectification and compensation of past injustices might therefore be reasonably cast aside as we search for a broader and more equitable agreement for people into the future.

It is worth noting that there has been much debate about the rationale of justice and the standards on which we depend to assess our conduct and the overall state of affairs. A number of philosophers have argued that we must reasonably disregard the past when deciding on the appropriate grounds for a fair distribution of goods and responsibilities. For those who subscribe to ahistorical or ‘time-slice’ principles, it is necessary as we attempt to ascertain the proper grounds for an equitable agreement among people that we focus on in the future, rather than on the past. Now we need to consider what reasons there are for adopting a time-slice approach and how such an approach might manifest itself.

One important reason for adopting a time-slice approach to justice was briefly touched on in the last section concerning the moral weight of human beings currently alive as well as those who will likely inhabit the planet in the future. A case can be made for thinking that the present should be the starting point for our reasoning about justice, given our acute awareness of the interests of a great many people in the present generation and those belonging to future

generations. The same cannot be said of our predecessors whose interests no longer hold moral weight and thus, have no bearing on our decision-making or conduct. Nevertheless, the kind of concern with posterity just mentioned seems self-evidently fair, at least insofar as we may have sufficient reasons not to ignore the actual, and likely forthcoming, moral concerns of human beings. In other words, while it may be acceptable to relinquish the interests of our predecessors following their death, it is not right to do the same for those currently alive or those who will someday inhabit the planet.

The critic might point out that this fact itself does not refute the claims for rectification or compensation for historical wrongdoings, nor does it give any reasons to ignore such claims by people in the present. But any attempt at providing solutions to the climate change problem through putatively historical grounds of justice will prevent many in the present and future from having a reasonable claim to a portion of the atmospheric and ecological sinks. And, as far as the future is concerned, a principle of justice based on considerations of historical processes cannot provide proper guidance on how to manage and share the planet within and across generations. There are already countless cases involving an unjustifiable acquisition and use of resources that have subsequently hastened the rate and extent of global climate change. Despite the fact that these cases may be dealt with according to historical principles so as to rectify the current series of transgressions, it is inevitable that we would lose sight of other, more salient forms of misconduct in the present while obscuring those in the future.

Are there any approaches that make precisely this claim, that there are more egregious mistakes regarding our conduct toward people which ought to bear our moral attention? For starters, consequentialism tells us that our concern must lie with the outcome of our actions or state of affairs and, in doing so, we must ensure that we do not exclude genuinely valid interests

of people in the present or future. Most discussions on time-slice principles, henceforth called consequentialist principles, assume a kind of equality among human beings as the starting point in our reasoning about justice. To put it simply, there is no basis for the unequal treatment of people on account of the arbitrary differences such as their spatial and temporal location. From the moral point of view, we must regard any and all human beings as having equal value and, furthermore, to count their interests equally in our efforts to satisfy the requirements of fairness in our dealings with people and the environment.

An historical view of fairness cannot accommodate the legitimate concerns that are shared by human beings for the rather simple reason that the scope of justice is limited to issues regarding the ownership and use of resources. It is true that there is no inherent prejudice toward human beings, namely their moral value, when relying on an historical principle to judge any preceding sequence of events. Nevertheless, any putatively equitable or fair arrangement among human beings based on backward-looking considerations will undoubtedly exclude many in the present as well as the future from being counted in such an arrangement.

As far as we are concerned, we need to look for an account of justice that does not restrict our moral attention to past transgressions or fail to include the valid and equal concerns of human beings in our moral deliberations. Rather than rely on historical grounds to determine the appropriateness of a given distribution of goods or responsibilities, we should focus on seeking fairness while accommodating the interests of people in the present and future, somehow or other. In other words, what matters in the end is not the manner in which people have acquired resources and used them. Ultimately, what matters is how a given distribution may provide for an equitable arrangement among people within and across generations.

If we take this view, then we need to ask what the appropriate object of concern for people might be and how this fact will enter into discussions on intergenerational justice. The first question may be answered rather straightforwardly by turning to the doctrine of welfarism to ascertain the starting point for our discussion on justice, and perhaps, as some consequentialists are poised to argue, as an end point as well. Many who advocate a consequentialist principle rely on welfarism as the basis for understanding the rationale and scope of justice. In general, it is thought that the welfare of individuals is the only thing we have a moral reason to value for its own sake and, insofar as human beings have comparable moral worth, we must count their welfare equally in our moral deliberations.

That human beings have a vested interest in their welfare and a general desire to avoid ineptitude and suffering over the course of their lives is glaringly obvious. It is equally evident that people in the future will also share these characteristics as they endeavour to lead a good life for themselves. Hence, if we are seeking fairness in our dealings with human beings across space and time, it is prudent that we focus on their profound shared concerns regarding their welfare. The consequentialist naturally accommodates such a position insofar as they believe that justice requires that we extend the notions of impartiality and universalism across human beings both in the present and those who may inhabit the planet in posterity. In other words, it is understood that justice involves providing equal consideration to the tangible interests of persons and, subsequently, ensuring a proper balance of their interests as much as possible.

Time-Slice Approaches

There are a number of moral frameworks under the umbrella of consequentialism that have emerged over the years which may offer a way to focus on what really matters for justice. If

we put aside historical considerations and focus our concern solely on the conditions of contemporaries and their descendants, we find ourselves seeking so-called time-slice principles of justice. In other words, these principles attend to considerations of welfare for living human beings and those not-yet born, and so we are putting aside, or “slicing” away, any claims about moral wrongs in the past. We have seen how it is prudent to align our thinking with forward-looking considerations precisely because justice consists of promoting fairness or equity among those in both the present and the future whose interests are worthy of moral consideration.

There are various time-slice or forward-looking principles that consequentialists are eager to adopt in order to guide human affairs and gauge the appropriateness of their activity. As it turns out, consequentialists may share a similar starting point about the rationale of ethics and human obligation, but they have different views on the method and scope of our commitment to human welfare over the long run. The most basic and controversial of matters that underlie the divergence in consequentialist moral thinking is the problem of trying to reconcile competing claims among moral subjects. If we assume correctly that the welfare of human beings has moral value for its own sake, insofar as we recognize that each individual human being ascribes inherent importance to their interests and to their life, then we are left in a peculiar position of trying to determine how we ought to treat people as individuals and as a community. In short, we need to know the most plausible and sensible way to promote welfare across human beings.

Historically, the concern among welfarist moral philosophers has been limited to differences in economic, social and political standing that affect the lives of people. Any attempt to determine what constitutes a proper respect for human beings would have involved an analysis, and only an analysis, of the above factors in how they produce better or worse

outcomes among people. The issue of economic standing has largely predominated the debate on justice and welfare, for the simple reason that there is no concrete position under welfarism as to how people should share resources. As mentioned in the previous chapter, there exists formal equality among human beings that precludes any arbitrary exclusion on the basis of social or political differences. Nevertheless, such equality does not immediately extend into the economic affairs among human beings.

The emergence of the climate change problem has introduced further complexity into the debate about legitimate entitlements of individuals within and across populations. While it remains unclear how we are to deal with economic wealth and its distribution among people, we must also consider how to share the global carbon sink and the management of the global environment more generally. Previously, it was only thought necessary to address economic inequality and the transference of wealth per se, that is, in support of the broader aims of justice. Such a myopic view of the scope of ethics is an untenable position to properly account for our moral obligations and act accordingly, and has prevailed in philosophical discussions owing to the prolonged adoption of the view and the relatively recent discovery of global warming.

At the same time, we find that the notion of environmental responsibility has been relegated to environmental ethics discourse where authors have been preoccupied with human interaction with the planet's inhabitants and resources. This is not to say that anthropocentric views of justice have ignored any concern for the harms associated with altering, or worse damaging, the environment. Many authors have written about the moral problems associated with excess atmospheric pollution and scarce resource use, and subsequently offer a diversity of principles from which to hold people accountable for their actions and shape policies more

broadly. Nevertheless, there has been a tendency to focus rather exclusively on the economic considerations when attempting to provide a framework of justice to ensure the ethical treatment of human beings. Also, there has been little in the way of discussion on how to share the environmental ‘wealth’ of the planet (that is, aside from monetary funds or resources) and take responsibility for managing it.

The problem with the present array of thinking is that we cannot think in purely economic terms or adopt an environmental approach that trivializes the role of economic activity for human development. Such a detached view, in either case, would prevent us from understanding what we are obligated to do for others. This is especially true during a period in which there are disastrous consequences for ignoring, on the one hand, the adverse impacts of economic activity and, on the other, the limitations and vulnerability of the global climate. Put simply, the scale of the impact of human activity on the global climate has required us to alter our thinking about justice involving human beings and the environment at large, insofar as we must give careful attention to both economic and environmental entitlements.

We may recall that our discussion on the topic of justice in the last chapter revealed that some moral theories cannot provide guidance on the various entitlements across individuals, while others fails to provide the necessary method so as to lead to their fair distribution. Fortunately, it may be shown that we can reasonably focus on a notion of distributive justice to determine entitlements across persons and regulating interactions between them. Various principles of distributive justice have made their way into debates among consequentialists who have taken up a primary concern with human welfare. It is believed rather importantly that their theories offer a proper foundation for instituting policies and systems as well as shaping human

practices in a just manner. Although they offer principles of justice that are anthropocentric in nature, insofar as they are intended to govern human beings purely for the sake of their affairs and interests, these theories can help us understand how to shape our conduct toward the environment.

A Proposal: Justice in Distribution

Before we attempt to ascertain which theory is most plausible, both as a standalone theory and a framework for climate change ethics, it is fitting to define the central questions that must underlie our discussion on distributive justice. On the one hand, we need to address a triad of concerns that form part of an investigation of different approaches to justice: *who* should get *what* and *how much*. In other words, subscribing to consequentialist thinking implies a *de facto* analysis of competing accounts of distributive justice. The fundamental concern with human welfare and the impact of actions, policies or practices on the satisfaction thereof naturally gives way to a concern about distributive justice. One might suppose further that any satisfactory theory must determine how much people should receive within and across global society or generations.

The fundamental role of distributive justice, then, is to determine the moral permissibility of social structures and the distribution of benefits and burdens across populations amidst competing claims to satisfy one's own interests and goals. It can be understood to concern questions of which persons, as bearers of value, ought to receive a given measure of advantage or disadvantage and how resources or goods should be allocated according to some principle of

justice. At the end of the day, providing an account of distributive justice supports the more foundational task of providing a substantive account of a particular theory in question.

As we shall see, the diversity among moral theories provides a vast number of approaches from which to guide human affairs and the global environment. It may help specify the issues at the core of debates about global and intergenerational justice in an era of global warming. Firstly, we need to know from a foundational point of view what kind of distributive scheme would allow for fairness in our dealings with people in the present and future. Should our economic and environmental behaviour be driven by a concern to minimize inequality across individuals, further the incidence of sufficiency of welfare, or help the worse off? Or, should we seek to maximize welfare over the long run?

Different theories of justice supply their own standard for promoting well-being on the grounds that there is an undeniable interest in aligning the distribution according to these ideals or norms. As noted in the above questions, supporters of consequentialism and in particular welfarism offer further suggestions about the precise method by which we seek to promote and protect human welfare. Although the guiding concern in our moral thinking is ultimately human welfare, there is disagreement among moral philosophers about the guiding principles that would serve to promote fairness in our dealings with human beings across nations and generations. Let us briefly consider what each of these principles means for global and intergenerational justice, as this will help us understand their shortcomings and seek an approach that overcomes the general problems that occur when relying on these principles to guide human affairs.

Although we may find ourselves sympathetic to welfarist thinking as the groundwork for global and intergenerational justice, there are some who claim that human welfare is not the only

thing of intrinsic value. Egalitarians embrace an ideal of equality on various grounds with the view that it is bad that some are worse off than others. It is of particular interest to us that we focus on what welfare egalitarians purport to be the ideal and necessary way toward justice. Specifically, they think that people should be compensated for undeserved bad luck that has contributed to a diminished or improved state of well-being. Welfare egalitarians postulate that differences in people's socio-economic status must always be reduced in cases where such difference was not brought about by fault or choice.

At first glance, it might be thought that egalitarianism does well to firmly recognize the formal equality among human beings, by inferring from treating persons equally that we ought to guide the distribution of outcomes along the ideal of equality.⁶⁸ Yet, endorsing any variant of welfare egalitarianism has important consequences, most notably the “levelling down problem.” The problem seems to be that accepting egalitarian principles would mean that, for example, it is better to eliminate welfare inequalities attributed to differences in eyesight by making an entire population blind given the unjust origin of blindness or the presence of equality. As Derek Parfit suggests, lowering the welfare of some without improvements to the conditions of others cannot possibly be a good thing in at least one respect; that is, it seems absurd to require whole populations to level down for the sake of some others even when no one benefits. And, an egalitarian distributive principle cannot tell us why it might be better to favour an outcome where some inequality persists, despite large gains in well-being rather than one where equality is attained by lowering the well-being of others. It appears at least in theory that the equality

⁶⁸ Some theorists assume that inequality, by itself, is always bad, adopting a moral theory known as telic egalitarianism. An egalitarian principle with this view assumes that it is always wrong if some individuals are better off (or worse off) than others. Those who militate in favour of deontic egalitarianism, by contrast, believe that inequalities are morally objectionable only if they arise from wrong-doing of some kind. Deontic egalitarians are more inclined to adopt less extreme views of equality because they restrict the scope of their principle to a negative requirement to avoid regrettable inequality, whatever it may be. Parfit, 1998 1-20

principle does not fit well with the idea that levelling up is a reasonable and intelligible route to equality, and so it is absurd to think that we should expect from justice a reality where things are worse for everyone.⁶⁹

The above points seem to make an egalitarian principle adverse to some existing persons as well as the general welfare of whole communities. It might be argued, however, that the pursuit of equality of welfare is well suited to issues of intergenerational justice.⁷⁰ The guiding thought by some is that equalizing welfare across generations is consistent with the commitment to impartiality and universalism that underpins morality, regardless of how much we might value equality. As it transpires, the counter-intuitive implications of welfare egalitarianism are blind to considerations of space and time. The levelling-down problem can easily be extended to populations across generations, and not just the global human community. Suppose that studies in economics or the sciences revealed that future generations will be better off than the present generation.⁷¹ According to egalitarianism, it is perfectly reasonable to prevent our descendants from living a life better than our own since it would reduce the inequality between generations!

So it would seem that the only way to overcome this levelling-down problem is to reject the application of a principle of equality in all cases. Rather than assume that equality must always and only be the pattern of distribution on which to focus, so-called ‘weak’ versions of egalitarianism hold that other objects of value could override the disvalue of inequality.⁷² But,

⁶⁹ Parfit, 1998, 16-18. Note that other versions of the objection have been discussed by Raz and Nagel. See Raz 1986 and Nagel 1979.

⁷⁰ Page 55

⁷¹ For the sake of argument, we might also suppose that our descendants may not enjoy a quality of life that is comparable (i.e. equal) to our own.

⁷² There are a number of interesting differences between variants of moderate egalitarianism resulting from the extent to which gains in other values are deemed acceptable to outweigh the loss of equality. Some theorists believe that there is only a weak presumption to bring about equal outcomes, while others hold that only particular cases such as the levelling-down problem admit of exception to following an egalitarian distributive principle.

though there are many forms of egalitarianism as there are views about equality, the distributional implications of welfare egalitarianism remain the same. Contrary to utilitarianism and other consequentialist theories, Stein believes that the principle that egalitarianism supplies is insensitive to relative or universal benefit, thus disregarding important considerations of priority or utility.⁷³ Either it will permit an inadequate redistribution to the worse off for the sake of realizing greater equality by levelling down, or it will warrant an excessive redistribution to the worse off even when those better off would benefit more, say, in cases of triage involving scarce resources. Both conclusions seem counter-intuitive and morally objectionable, as human interests are better served by promoting welfare by levelling up, and as such in the most successful way.

All of this may lead some to suggest that our distributional concerns must somehow be grounded, at a deeper level, with the ideal of sufficiency. Those who subscribe to this view are sympathetic to Karl Popper's view of the asymmetrical relation between happiness and suffering. That is, it may be claimed that our moral concern with human well-being must be tied to the putatively more urgent call to minimize the incidence of suffering resulting from a failure to realize the most basic requirements for a decent life.⁷⁴ Sufficiencyarians, as they are called, emphasize the importance of reaching a certain level of well-being both as a precondition to attain what it is we want or prefer in our lives and as a standard to guide the distribution of benefits and burdens across space and time. In this sense, they argue that our concern should be limited to whether individuals have enough to lead a life that contains no substantial distress or

⁷³ C.f. Stein 75-91

⁷⁴ Popper 1950, 570-71

dissatisfaction, rather than comparative or absolute differences in well-being which could extend *ad infinitum*.

Although sufficientarians offer a modest principle that seeks to offer a minimum threshold of moral responsibility into posterity, they fail to capture the extent of our concern for human welfare. As Roger Crisp points out, the sufficientarian must stipulate that the distribution of benefits and burdens must always be a valuable means to the end of sufficiency, regardless of whether some would benefit more beyond a specified threshold. In other words, it is irrelevant whether those who have enough could benefit from the distribution of resources, even if large numbers would gain more from those resources than a few below the threshold.

The implication of the sufficientarian view, however, is that giving priority to the worse off when, and only when, the worse off fall below the absolute sufficiency level will always trump concerns about the actual or expected of the distribution of resources. Where some people have less than enough, it is not unlikely that some persons *cannot* maintain, and perhaps even reach, the sufficiency level in their lifetime. In such instances, utilitarians and non-utilitarians will likely agree that it seems better to give resources to persons who are expected to have more than enough because maximizing the incidence of sufficiency may be realized more efficiently by giving resources to them. Nevertheless, the sufficientarian view commits us to regarding a world inhabited by people who are well above the threshold as no better than a world where most persons have barely surpassed the level of sufficiency.⁷⁵

⁷⁵ It may be further thought that the sufficientarian commitment to the threshold of sufficiency has counter-intuitive implications, for this might come at the some who arguably can be discounted because no matter what we do they won't reach sufficiency. This is a relevant feature of this imagined world that sufficientarians will no doubt have to agree with in order to make sense of their view, yet a discussion on this problem and possible responses is beyond the scope of this discussion.

Given the difficulties with applying the distributive principles examined above, we might be inclined at last to turn to a utilitarian theory of justice. A number of contemporary utilitarians rely on utilitarianism's own moral theory to supply a primary principle of justice.⁷⁶ In a recent discussion, Mark Stein refers to this first-order distributive principle as the "greater benefit criterion" since it stipulates that resources are to be (re)distributed to those who would most benefit from those resources.⁷⁷ Assuming that the greater benefit criterion can be deduced from the utilitarian injunction to promote greater well-being, both Singer and Stein defend the principle on two grounds: first, that it is the best route to promote the utilitarian goal and, second, it leads us away from positions with which our intuitions recoil.⁷⁸

There is no doubt that the greater benefit criterion is a distinct principle of justice on which to guide collective action and public policy. The distinction between utilitarianism as a theory of *morality* and utilitarianism as a theory of *justice* is not reduced to a question of interpretation. Rather, it is made possible by employing the utilitarian injunction, first and foundationally, as a moral standard and, second, as a distributive principle. This is what Singer means when he responds to the objection that the principle of utility cannot provide us with a consistent and compelling theory of justice.⁷⁹ It is fallacious to assume that utilitarianism has no theory of justice, as it already supplies a principle that recommends how much of a given measure of advantage people should receive.

⁷⁶ Singer 2005, 21; Harsanyi 1985, 115-127 and 125-6

⁷⁷ Stein 33

⁷⁸ ⁷⁸ Some think it is wishful thinking that secondary principles can be selected and justified according to the utilitarian criterion. Even if principles of everyday moral thought are quite similar to what utilitarianism recommends, it is unclear whether they could achieve the specific goal of maximizing welfare rather than simply contributing to welfare. Another concern relates to the possibility of violating secondary principles when doing so is expected to bring about more good. Critics often argue that this insecurity or defeasibility of principles of justice causes deliberative dissonance, that is, when we no longer can assume that an inflexible devotion to such principles does bring about good outcomes. (Cf. Smart and Williams 1973, 135; Rawls 1971, 158-60)

⁷⁹ Singer 2005, 180

While utilitarians are generally modest about the role of the greater benefit criterion in distributional ethics, Stein maintains that the greater-benefit criterion is insufficiently appreciated, noting that “utilitarianism is the only theory that will *always and only* use the greater-benefit criterion to make distributive judgements.”⁸⁰ Admittedly, Stein is right to note that the greater-benefit criterion offers a distinct principle on which to guide institutional policies and practices. For instance, in the case of conflicting claims about distributing resources between the rich and poor, utilitarianism’s own principle recommends that we give benefits to those who expect to gain the most from those resources. In general, we can expect disadvantaged persons to benefit more from resources than those who are better off, all things considered.

It may be remonstrated that such a strict application to the greater-benefit criterion would lead to counter-intuitive implications. There may be a great deal of uncertainty about the recipients of benefits (and burdens) through policies which affect large populations or those into the future. It may also be challenging to predict who will benefit more in difficult situations relating to triage cases, where there is no way to determine without a great deal of guessing, which individuals should be given what and how much help. Nevertheless, utilitarians would be poised to respond by claiming that the greater-benefit criterion remains a reliable and satisfactory principle, despite the possibility of discrepancies between expected and actual outcomes. They might argue that even the most efficient decision-procedure does not guarantee producing the best outcomes given the possibility of human error, the unpredictability of worldly events, and the inability to predict indirect or remote consequence.

⁸⁰ Stein 34 (*emphasis mine*)

The characterization of the greater-benefit criterion may differ depending on whether the principle is favoured as a consequentialist or procedural method of moral reasoning. As a consequentialist theory, we saw how utilitarianism naturally provides a clear standard of rightness to assess actions or rules according to their (expected) outcomes. Some proponents, of course, claim that utilitarianism is most plausible as a standard of rightness when assessing the *actual* consequences of an action and making comparisons with alternative actions. For instance, Brink believes that utilitarianism must minimally provide a criterion or standard of rightness, a view first expressed by Mill and Sidgwick when considering the role of the principle of utility.

Another way that utilitarians have responded to concerns about the problems of making reliable estimates of consequences has been to declare the indirect role of utilitarianism as a standard of rightness. Sidgwick claims that we should proceed to live by appealing to motives or methods other than “pure universal philanthropy” or “universal benevolence.”⁸¹ Rather than relying on the utility principle as our immediate guide to maximizing the value of our consequences, we should appeal to rules of conventional and common-sense morality.⁸² As we have noted, and will explore further in subsequent discussions, it might be reasonable to only rely on utilitarianism as a procedural theory to deliberate over probable consequences when conflicts arise between common-sense moral thinking and the utilitarian doctrine.

The difficulty with this position, which utilitarians might otherwise want to adopt, is that we are left wondering precisely what counts as ‘conventional’ or ‘common-sense’ morality, and whether the particular moral judgements that may be derived are reasonable and sufficient to guide human affairs. The claim that utilitarianism can be supplanted by conventional morality

⁸¹ Sidgwick 413

⁸²

seems like wishful thinking, if not profoundly vague, for our discussion on distributive justice. If one is to claim that the fundamental aim of our moral thinking and practice should be to bring about the best state of affairs for all concerned, it is imperative that we give a careful account of the nature of justice and our moral obligations more broadly. This is especially true in our present discussion where we are looking for ways to resolve the climate change problem and receive concrete guidance on questions of distributive justice in what, and how, much we owe to others. Nevertheless, it has been commonplace among utilitarians not to specify an account of justice which does not hold rigidly to the principle of utility. This much is also true of recent work by Stein in proposing a utilitarian theory of distributive justice through a direct application of the greater benefit criterion. So, it is unclear what satisfactory position utilitarians should take so as to give a cogent account of distributive justice.

Provisional Conclusions

To sum up: we have considered a number of prevailing ethical approaches that have entered in the debate on the climate change problem, those that also give us a broader sense about the different notions of justices which have been raised in philosophical discussions. Despite their initial appeal, I have suggested that there are a number of problems with the precautionary or “no harm” view as well as historical views characterized by the entitlement and “polluter pays” principles. Given the theoretical and practical inadequacies associated with these views, it became clear that we need to look for an alternative view that provides a sensible and plausible understanding of justice, or fairness, among human beings.

I have tried to show in the space provided that there are good moral reasons to focus on a conception of justice that is first and foundationally concerned with human welfare. The need for relying on ahistorical approaches becomes particularly acute when we consider how it may be necessary to promote fairness across humanity both now and into posterity. Furthermore, achieving fairness on this scale may only be possible by putting aside considerations about the past as we engage in a broader inquiry about how to seek a distribution that can be regarded as fair for the majority of the human population into the future. At present, we have attempted to give a satisfactory exposition of the different time-slice principles of justice which consequentialists have defended in philosophical debates. It is clear, however, that while each of these principles has some merit on its own, it is prudent that we adopt a distinctly pluralistic and utilitarian approach to distributive justice when thinking about our global and intergenerational obligations. What remains to be considered, of course, is what constitutes an equitable entitlement among human beings, the legitimate grounds for the use and protection of the global atmospheric sink, and how these would fit within a pluralistic framework of justice that should, all things considered, lead to the best state of affairs for all concerned.

CHAPTER 3 – ON WHAT MATTERS: JUSTICE IN WELFARE

The longing for justice is men's eternal longing for happiness. It is happiness that men cannot find alone, as an isolated individual, and hence seeks in society.

Justice is social happiness.

-- Hans Kelsen

Introduction

By now it should be clear that ethical discourse on climate change has been shaped by a number of prominent ideas on justice. We have considered a number of competing approaches to justice with the aim of exploring the reasons some offer in their defence and the various problems associated with them. I argued that prominent views in moral debates on the climate change problem – namely, the precautionary approach and historical approaches – fail to adequately capture the scope of moral value and human obligations. In other words, we cannot rely on such views as the starting point for our reasoning about how to address the problem of climate change and derive just solutions to such a problem.

As we saw in the last chapter, there are good moral reasons to subscribe to consequentialist reasoning as basis for developing a framework to guide human affairs. However, it is quite obvious that the principles of justice supplied by consequentialists are also subject to various moral quandaries that cast their validity into doubt. The present discussion will aim to show that a prudent analysis of utilitarianism can provide an adequate theory of justice and supply the principles needed to appropriately address our moral obligations. I will attempt to argue that we need to rely on pluralism in our approach to global and intergenerational

distributive justice, an approach that can truly only be accommodated by a broadly encompassing utilitarian moral theory. This will help in our defence of the view that we should not focus single-mindedly on any one principle when dealing with matters that span entire nations and generations. Far better that we embrace not one but many distributive goals that broadly serve people's interests over the long run.

Where to Begin, Again?

Our discussion in the last chapter attempted to capture the ordinary position adopted by moral philosophers, which in the broadest stroke meant that we should rely exclusively on a single principle of justice to guide human affairs both within and across generations. Just as we attempted to suggest that non-welfarist principles cannot adequately address the conceptual and practical challenges when faced with the problem(s) of justice, so too it is clear that there are a number of problems with ahistorical welfarist principles as applied to the global and intergenerational realms. Therefore, we are left wondering if it is prudent that we focus our concern with human welfare of contemporaries and our descendants in the conduct of our affairs, what would be the most plausible route to understand the nature and extent of our moral obligations to support the welfare of others? And, if there are inadequacies with any and all the welfarist principles just described, how is it feasible to make any conclusions about what justice consists of, and requires from us, over the long run?

One way out of this apparent dilemma is to reject the presupposition that distributive justice must be able to supply one and only one guiding moral principle for human affairs. The

tendency to adopt fixed and universal principles has long pervaded the discourse in moral and political philosophy; nevertheless, it should be regarded as a questionable position on which we expect to formulate a complete and cogent account of justice. Perhaps instead we may reason to believe that some or all considerations captured by various welfarist principles need to be included in our conception of justice, which could in due course give us the proper guidance for our global and intergenerational obligations.

As it turns out, there has been a long-standing concern among moral philosophers that illustrates the problem with adhering to a single overarching principle. Cohen and Sabel suggest that consequentialists who broadly support a single time-slice principle ignore the very real possibility that their theory may not yield the desired aim of justice.⁸³ Similarly, Helena de Bres has noted that while “welfare consequentialists are monists about morality, they need not – indeed, should not – be monists about distributive justice.”⁸⁴ Thus, properly understood, the objection runs as follows: a monistic theory of morality requires strict adherence to single fundamental norm of justice, even if promoting the theory’s ultimate goal or end is better served by applying different distributional constraints.

Although de Bres claims that a focus on promoting welfare should lead to some degree of pluralism, I am of the view that utilitarianism is the only moral theory that *could* adopt a non-monistic theory of distribution. Several theorists have argued that the only plausible and intelligible way to secure different distributive principles is to appeal to the utilitarian standard, not a pluralistic theory per se.⁸⁵ One must adopt a broad universal standard as prescribed by utilitarianism – the optimal furtherance of well-being over the long run – in order to be capable of

⁸³ Cohen & Sabel 7

⁸⁴ de Bres 14

⁸⁵ Brandt 374; C.f. Mill 56-57

justifying different distributive criteria. Other moral theories lack a similar conceptual apparatus or normative prescription that would permit them to accommodate more than one principle to bring about the desired states of affairs. The absence of these features does not necessary imply a general deficiency within the theory per se, since a number of views claim for it to be necessary only to adhere to a single principle to give a satisfactory account of justice. Nevertheless, it is prudent that we consider the strength of the claim that the moral particularities involved in giving an account of global and intergenerational distributive justice may warrant a certain degree of pluralism, and indeed in such a way that can only be accommodated by utilitarianism.

To illustrate this recent point further within the context of our discussion, it seems unlikely that any other welfarist moral theory could admit to there being any theoretical possibility of, or practical necessary for, a pluralistic method by which we can realize justice across humanity over the long run. For example, egalitarians want to believe that, because insofar as the existence of inequality of some kind is inherently bad, we should therefore eradicate differences between persons and achieve to a certain extent a comparable equality among them. The strict egalitarian cannot deviate from a concern for equality per se, and does not purport to tell us that we could achieve such an end by appealing to considerations of priority, that is, in the strict sense of helping those in an absolutely bad position. Similarly, the weak egalitarian or prioritarian postulates that we should help the worse off in all cases, except when more good can be attained by helping a greater number of persons who happen to be better off, but this is hardly a position that militates in favour of pluralism. And, finally, the sufficientarian's narrow moral position on moving people only toward the threshold of sufficiency could conceivably be guised as a concern for priority; nevertheless, it is a concern

that would only exist for a time when living human beings are not beyond a threshold of sufficiency and so there may reasonably be a point where no other consideration besides sufficiency would matter.

The above suggestions provide a convenient springboard to consider why we might turn toward utilitarianism to devise an all-encompassing framework of justice that would give us a deeper understanding of the complexities involved in fulfilling our moral obligations across space and time. First, it is prudent that we consider what traditional utilitarian philosophers might say in response to such an incongruous claim about their theory's accommodation of a pluralistic answer to the question of justice. Clearly, as we saw in the last chapter, prominent utilitarians such as Peter Singer and Mark Stein are unwavering in their position that the greater-benefit criterion remains a reliable and satisfactory principle despite the possibility of discrepancies between expected and actual outcomes.

At this point, one must wonder if the distributive requirements of utilitarianism must truly be similar in specification and implementation. We have seen that some utilitarians are inclined to deduce a distributive principle from their monistic theory, but non-utilitarians incidentally show that different principles of justice can be adopted to further human well-being. The issue between these approaches is not whether our conduct and affairs should be assessed in reference to well-being or whether there is a need to posit secondary principles; rather, they disagree on what basis the distribution should be made. Similarly, perhaps utilitarians should be poised to support their theory's goal by invoking different distributive requirements akin to what others have defended.

Although the claim that welfare consequentialists can prescribe several distributive principles might not be surprising, the claim that utilitarianism does might seem rather odd. That is, if morality is reduced to a single ultimate principle, then it is unclear how we might accommodate pluralism about distributive justice. Utilitarianism, as we know it, makes the specific normative claim that it is irrational to aim for less good if it is possible to realize more good.⁸⁶ If we have an obligation to promote the best state of affairs that result in higher (expected) welfare than otherwise possible in some situations, it seems rather imprudent and wrong to follow the measures supported by other distributive principles which standardly do not lead to the best state of affairs for all concerned.

One way out of this apparent difficulty is to adopt a more nuanced understanding of utilitarianism's requirements drawn from the thesis of indirect consequentialism. This thesis derives from the idea that the utilitarian criterion could be supplemented by indirect principles, and that everyday morality has gradually produced a set of rules and institutions that are amiable to the interests of human beings and conducive to the general good.⁸⁷ Indirect utilitarians generally defend their view by also noting that following the utilitarian injunction is impractical, owing to limitations in our cognitive capacities, the frequency of bias and ignorance, and the dependence on others to help coordinate our actions.⁸⁸ Consequently, the creation of institutional policies and practices should be selected and guided by considerations other than utility, even if they are judged standardly in terms of how well (or not) they promote the good over the long run. This would seem to make the inclusion of secondary principles less contentious, insofar as a

⁸⁶ Sidgwick

⁸⁷ Sidgwick 484

⁸⁸ Hardin argues that there are three kinds of cognitive limitations which make a utilitarian calculus unrealistic: (1) we lack the information required to carry out such calculations [...] (2) we lack relevant causal theories of the implications of our actions, and (3) we could not do the necessary calculations in any case because our minds have limited capacity [...] (see Hardin 1988, 8)

monistic moral theory may cohere better with different norms which have strong intuitive backing and strategic potential in promoting the theory's desired end.

For many amongst us, it might seem rather absurd that utilitarianism is concerned with different distributive principles when the theory is distribution-insensitive in the broadest sense of the theory's consequentialist imperative. The fundamental goal of optimizing welfare translates into a primary concern for the *amount* of advantage or disadvantage arising from our conduct rather than the *distribution* of advantage or disadvantage per se. Nevertheless, utilitarians should grant that a concept of distributive justice can be found within their theory in the broader goal of optimizing well-being. This is because utilitarians face the common problem of allocating goods and resources according to a goal or standard on which morality is founded, and thus addressing distributional concerns is a necessary feature of practical moral reasoning in utilitarian terms.

Contrary to the rigid view that has dominated discussions in the last two centuries, utilitarians should recognize the prudent need for pluralism that must be supported by their theory in the broader goal of optimizing well-being. Utilitarians face the common problem of allocating goods and resources according to goal or standard on which morality is founded, and thus addressing distributional concerns is a necessary feature of practical moral reasoning in utilitarian terms. The need for pluralism about distributive justice becomes noticeable when we consider how a particular moral goal – maximizing well-being – might be promoted across space and time. Particular social arrangements and other strategic issues can affect the allocation of benefits and burdens, and thus distributive concerns and requirements in one instance (i.e.

globally) may well be quite different in another (i.e. generationally) in the broader aim of promoting well-being over the long run.⁸⁹

So let us assume that it is both plausible and desirable to appeal to pluralism in our thinking about justice into posterity. What remains to be considered is what distributive principles may be justified in accordance with this goal, and the possible implications of different principles for an account of our obligations to present and future generations. In short, the next step is to determine which principles are most appropriate in governing the distribution of resources and goods given their broader role in supporting human welfare.

Priority, Equality or What?

Utilitarians have made considerable efforts since the twentieth century to challenge the notion of equality or else find ways to accommodate the notion within their theory. It is only recently that philosophers have sought to consider the merits of priority and sufficiency under a utilitarian theory of justice.⁹⁰ For the critic, this only reflects the general shortcomings of utilitarianism in its aim to promote the general good – in particular, the absence of a fundamental concern with comparative fairness or the separateness of persons. Further, these shortcomings cannot guarantee that the structure of local or global civil society will work to everyone's advantage.

⁸⁹ Few would deny, I think, the proposition that “different goods ought to be distributed for different reasons, in accordance with different procedures, by different agents” as Michael Walzer argues when considering the importance of historical and social particularity of norms, practices, or values. See Walzer 1983.

⁹⁰ This is not to say that utilitarians have not explored the plausible role of these two distributive constraints indirectly. However, some authors taken a more direct approach to develop a more sophisticated understanding of the content and implications of different principles. Two prominent examples include Roger Crisp's effort to entertain a sufficiency-constrained utilitarianism and Mark Stein's proposal for an unweighted welfarism (i.e. utilitarianism) which incorporates elements of the priority view. See Crisp 2002, 758 and Stein 189-90

The critic may point out that it may well be justified on utilitarian grounds to ignore the interests of some people for the sake of others and the greater good.⁹¹

As it turns out, utilitarianism provides a strong and convincing case for equality of welfare on several grounds. First, in situations where alternative systems of distribution could produce optimal results, utilitarians say we should opt in favour of the strategy which yields greater equality.⁹² To understand this suggestion, one should bear in mind that utilitarians adopt a relatively broad view of the role of a tie-breaking principle. They think that resolving *ties* more often than not entails resolving *uncertainties* about the various impacts of alternative policies in the immediate or distant future.⁹³ There is a persistent problem for institutions and policymakers in predicting which strategies will yield better outcomes and, hence, utilitarians will recommend that these strategies be based on considerations of equality.

Another reason to follow a principle of equality is unrelated to any pragmatic concern with choice-making. Utilitarians who embrace an objective conception of welfare might stress the importance of equalizing marginal welfare, not only because promoting basic well-being is easier to achieve in the global context, but also because doing so tends to bring about more welfare overall than the satisfaction of non-vital interests. As Geoffreyrey Scarre says:⁹⁴

[M]any of the positive things which do make lives go well, such as the formation of affections and relationships, the pursuit and attainment of goals, and the acquisition of self-respect and the respect of others, are things which an individual must largely secure for himself, other's capacity to assist him being mainly limited to the reduction of the obstacles (e.g. sickness, poverty, isolation, economic and social oppression) which stand in his way."

⁹¹ See, for contrasting discussions, Lyons 1994, 151-161; Hare 1979, 103-21

⁹² Sidgwick 416-417

⁹³ Shaw 120

⁹⁴ Scarre 1996, 18

In short, the failure to realize vital interests such as sickness, poverty, isolation, economic and social oppression prevent people from realizing much of what is required for a worthwhile human life and hinders the pursuit of many trivial interests that are part of a good life. Conversely, eliminating systematic inequalities brought on by deficiencies in basic well-being is by far and away the best way to promote greater welfare, for individuals and society as a whole.

It is important not to underestimate the importance of Sidgwick's suggestion that we should strive to produce as much good as possible with a narrow focus on the things we are always eager to pursue.⁹⁵ The prudent utilitarian might be poised to state more concretely that we should focus on the subset of interests which are common objects of desire as well as recognized as reliable sources of human well-being. If we think about informed choice-making and desire fulfillment while taking welfare as their common end, as well as introduce considerations of strategic interaction across space and time, it is expected that promoting basic interests across society would ultimately lead to the greatest net welfare.

Another reason that utilitarians might find a concern with basic interests appealing is that focusing on them makes it possible to limit the full range of moral desiderata that would otherwise be required to achieve their theory's desired end. This point is made especially clear when deciding on how to guide, as well as assess, the broad range of actions, policies and institutions which affect persons across the global human community. Just as there are good reasons for assigning different priority to interests at the level of personal choice-making and responses, so too will the general good be augmented if broader measures are taken to promote basic welfare across human beings. Hence, utilitarianism posits a relationship between the

⁹⁵ Sidgwick 404-405

urgency of basic interests of persons and the demands of morality to promote greater welfare, for individuals and society as a whole. It may well be easier to fulfil globally relevant interests when we focus on people's most valued preferences⁹⁶, but it is also true that utilitarianism already posits a relationship between the urgency of basic interests of people and the demands of morality to promote greater social welfare.

As for the burden of proof, the phenomenon of diminishing marginal utility of resources is thought to offer the necessary empirical justification. Economists and philosophers posit a relationship between the amount of income consumed and the relative benefit by a person or group of persons. Those who have low welfare tend to benefit more from an increased amount of resources, by virtue of their contribution to basic well-being; whereas their better off counterparts have less to gain from the same amount of resources, all things considered.⁹⁷ Accordingly, the diminishing marginal utility of resources serves to strengthen the standing argument in favour of a more equitable distribution of wealth and resources.⁹⁸

A sampling of global issues nevertheless reveals that a distribution of wealth which optimizes welfare requires giving more than an equal share to some persons. Since there are considerable differences in the welfare position of people, a utilitarian approach to global justice will recommend distributing resources unequally so as to equalize marginal welfare. However, the urgency in giving benefits to those with lower marginal welfare diminishes for the same reasons which initially justified giving wealth and resources to protect the interests of the worse

⁹⁶ C.f. Jones 27

⁹⁷ This view is not shared by everyone. Amartya Sen claims that a disabled person who has low marginal welfare by virtue of their disability will gain less from a share of resources than someone who is better off. In response, Mark Stein suggests this view is false, as it is tendentious to think that low marginal welfare implies low marginal utility. Even if persons are naturally worse off because of a disability or disease, they may benefit more from resources by coping with their condition. (Stein 42-45; C.f. Sen 1997, 16)

⁹⁸ Brandt 313-15

off. Considerations of marginal utility suggest that giving additional resources to help the disabled, to assist the poor, or to deal with environmental or political crises should, in turn, lead to more equitable shares of resources across individuals around the globe.⁹⁹

Leaving aside the implications of redistributing resources, it is worth noting that the possibility, indeed inevitability, of widespread differences in interpersonal welfare leads to the conclusion that utilitarianism, as applied to global and intergenerational affairs, must contain an element of the priority view. Significantly, utilitarianism's distributive implications are egalitarian, in part, because it requires giving priority to protecting the interests of the worse off. Utilitarians are in this sense 'accidental' prioritariums, but the unavoidable occurrence of natural inequalities across people locally and globally implies protecting basic interests. Hence, another reason to reject the view of an uncompromising utilitarianism, that is to say one that limits its distributive recommendations to the greater-benefit criterion, is that the prioritarian injunction to help the worse off has consistently proven to be a valuable means to promote greater welfare.¹⁰⁰

It follows that the moral requirements of utilitarianism as applied to the entire globe stipulate that public policies and practices must benefit the worse off. One way to achieve this, as Charles Jones proposes, is to aim standardly to distribute resources in a way that "maximize(s) the satisfaction of the basic interests of persons, their desires for the means to life itself and to the conditions for satisfactory functioning within one's society"¹⁰¹ This claim becomes more acute when we acknowledge the magnitude of deprivation and suffering around the world. It will be remembered that the 'champagne glass' distribution of world poverty has led to the undesirable

⁹⁹ Jones 33

¹⁰⁰ Singer believes that we should favour the utilitarian injunction because it is *simpler* to follow than the prioritarian injunction. This does not, I think, provide sufficient grounds to abandon the prioritarian injunction when supplementing the greater-benefit criterion. (Singer 2003)

¹⁰¹ Jones 31-32

effect of leaving economically and politically disadvantaged populations without enough while individuals in more wealthy and stable nations have achieved material standards far beyond the amount required to meet their vital interests. Consequently, there are good utilitarian reasons to demand a large-scale redistribution of resources from wealthy nations to poor nations, as it would be a major achievement to ensure as many people as possible realize their vital interests.¹⁰²

Taken together, the above considerations suggest that notions of equality and priority are closely tied to what a utilitarian theory of global justice recommends given the present and expected realities of people across the globe. The focus on securing greater overall welfare serves to strengthen the case for protecting vital interests and goals across the globe. However, consequentialists writing about global issues cannot limit their discussion to obligations to members of the present generation or take no notice of benefits or harms that might be passed on to subsequent generations. If we are to succeed in promoting well-being over the long run, then we may well have a moral responsibility to posterity which requires careful consideration of the distribution of benefits and burdens within and across generations. In what follows, we shall consider whether we have any moral obligations we have to posterity.

Sufficiency and Future Generations

Most philosophical work in global ethics debates has focused on our moral obligations to existing persons without paying considerable attention to the question of whether present

¹⁰² It would take less than 1% of surplus wealth in the developed world would be needed to help protect the vital interests of the less fortunate in the developing world, and much of this wealth could come from the very rich at very little actual cost to them. That is, we would require only a fraction of the 15 trillion US dollars owned by the world's wealthiest members to help the most impoverished and underprivileged people (approximately 3 billion globally) reach a decent welfare position.

generations have any obligations to future generations. Perhaps this is because it has been assumed that there is a natural tendency for welfare to increase across generations, or that we are naturally inclined to focus on the circumstances of those currently living, or that it is relatively easy to determine how well their lives are going and how best to improve them. As a practical matter, we might even say that we have a general disposition as benevolent and sympathetic beings to respond to the suffering of those close to us, which in the globalized world today include all members across the globe. Consequently, our awareness of the lives of others and the capacity to make meaningful changes in their lives often leads us to focus our moral attention on promoting the good for persons in the present generation.

How are we to understand the nature and scope of our obligations to future generations and the way in which benefits and burdens must be allocated within and across generations? First, there is reasonable consensus that the distributive implications of utilitarianism in matters of global justice will affect the interests of persons long into the future. The theory, to be sure, requires that we promote welfare in the most optimal way in any given period, but it is not impossible that the policies and practices which it recommends in one generation will affect both present and future people. To take an example, eliminating existing disparities might make the present generation better off, but current efforts to improve social conditions today might translate into long-term benefits for future societies. Failing to minimize the negative consequences of current human activity, by contrast, could compromise the prospects of later generations. In either case, there are important utilitarian reasons to assess the interests of future persons and the effects of our conduct on their life prospects.

As we saw in the last chapter, it was necessary to adopt a doctrine of sufficiency into posterity in order to avoid a potential regress of concern and, furthermore, because of the inherent difficulty in knowing the interests of the not-yet born aside from those most basic and universally shared across human beings. Many authors have taken for granted that the utilitarian criterion can be reformulated to cover dealings between different generations in a way that accommodates and explains beliefs about the importance of preserving the economic and environmental resource base of each generation. As such, utilitarian global justice recommends distributive constraints which ensure future generations, as with the present generation, inherit a world with enough environmental or social resources, so that the latter have the same opportunity to promote as much well-being as possible. This view is consistent with the contemporary notion of environmental sustainability which advocates for “development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.”¹⁰³ By the same token, utilitarians say that we should aim to sustain optimal well-being for people within generations into the future by making it possible for them to have no less than what is required for a worthwhile human life, though it is not clear what exactly would be required to achieve this goal.

When considering intergenerational obligations, there are good reasons for focusing on globally relevant interests that are expected to be valued most highly and required at the most basic level for a decent human life.¹⁰⁴ One apparently simple reason why we should not be content with protecting basic, or vital, interests of future persons is the difficulty in predicting

¹⁰³ Arrow et al. 1996, 140

¹⁰⁴ See Chapter 1; I assume here that many, if not all, future persons will share the same preference base as their predecessors. This might seem far-fetched, but it is not likely that basic interests will be consistent across generations and, furthermore, barring any alterations to the genetic make-up of future people by environmental factors or manipulation by earlier generations through technology.

what they might otherwise consider to be worthwhile in their lives. Because earlier generations lack proper knowledge of the particular interests and goals of their descendants, it is absurd to think the former should be held responsible for things that only future persons can determine for themselves. Promoting non-basic interests, whose variation is wide-ranging across space and time, is therefore best achieved by leaving persons or groups of persons within generations to promote their particular interests. A second reason why we should restrict our concern to protecting the vital interests of future generations stems in part from limitations to addressing issues of posterity. Specifically, some are of the view that we should aim to ensure that as many persons as possible in future generations have enough to lead a life with no substantial dissatisfaction, but not in a way that would require a preoccupation with weighing their interests with our own. In other words, we should not compromise the interests valued most highly by people

It may be granted that the ideal of sufficiency has intuitive appeal and is gradually being implemented in fiscal and environmental policies. However, the requirements of utilitarianism to protect the interests of future generations might lead to the classical objection that the moral theory demands too much both in terms of self-sacrifice and interference in people's lives. The stringency of the demands of the utilitarian goal seems especially acute when faced with intergenerational obligations which seem to eclipse any concern about the ordinary lives of contemporaries.¹⁰⁵ If our aim should be to sustain optimal welfare over the long run, the institutions created to ease the individual duty may well require persons to do all they can to

¹⁰⁵ Shaw 118-120

support these institutions in a way that might undermine the interests of those in the present generation.

On first inspection, investing resources for future generations could prevent persons today from having access to wealth and resources which they might otherwise use to support their trivial interests, even if distributive concerns are grounded in sufficiency rather than priority *across* generations. However, claims about what is too demanding raise the question of what is morally required. The accusations levelled against utilitarianism, that its requirements are seriously and wrongly burdensome, presuppose that there are limits on moral demands beyond the theory's own framework. Any distributive ethic will require people to do more to promote and protect the interests of others. Such actions may be demanding, but not too demanding, given the expected benefits to human well-being.¹⁰⁶

Another response to the over-demanding objection is to say that there are good reasons not to exclude from moral consideration the contribution or efforts of individuals to promote well-being for the sake of others. Consider the undeniable interest people have for motivation and enjoyment. That interest is promoted by incentives which compel individuals to support, in some direct or indirect manner, the institutional systems needed to create and sustain the resources within and across generations.¹⁰⁷ Consider, further, that historical considerations need not be irrelevant to the goal of welfare maximization as it may be necessary to identify those responsible for past actions which have had a positive or negative effect on the well-being of present or future generations. Any satisfactory utilitarian theory (indeed any satisfactory welfarist

¹⁰⁶ Jones 38

¹⁰⁷ Brandt 320

theory, utilitarian or otherwise) must be sensitive to the way resources are distributed, insofar as the extent and pattern of the distribution would affect human welfare over the long run.

Still, when presented with the need for pursuing intergenerational justice, we can be certain that there will be competing interests across persons in the present and future. If, as is indeed very possible, there is a conflict of interests across generations, there may be practical limits to accommodating trivial interests of contemporaries. This fact is compounded by the difficulty in allocating scarce resources – the atmospheric capacity to absorb waste gases and the physical assets of the environment – without threatening people’s interests over the long run. Both the likelihood of competing interests and the problem of scarce resources imply a need for trade-offs between the interests of contemporaries and the interests of future generations. Of course, this reaffirms the utilitarian position that claims of vital interests, by virtue of their priority in theoretical and practical reasoning, have greater urgency than claims of non-vital interests. Considerations of diminishing marginal utility and our intergenerational obligations suggest that those better off today should do more to protect human well-being at the most basic level.¹⁰⁸ And, in fact, diminishing marginal utility also works as a limit to what may be demanded, insofar as trivial interests of future generations would count less, even if we knew what they were likely to be.

¹⁰⁸ We should note that Singer’s argument for reducing global inequality stipulates that the well-off should redistribute wealth and resources up to the point where they would no longer avoid sacrificing something of comparable moral importance. By the same token, we might extend this view to require the better off to alleviate the suffering of the present generation while preventing, as much as possible, the deprivation or insufficiency of future generations.

Remarks About Utilitarianism and its Critics

Before ending our discussion, it is prudent that we consider some of the general arguments that have been levelled against utilitarianism, which might otherwise weaken the position we have taken in this chapter. It may come as no surprise that the theory is widely discredited on several grounds: that utilitarianism is dogmatic in its claim about what matters morally for human beings¹⁰⁹, that it is too demanding in asking what cannot be required of individuals¹¹⁰, too permissive in stipulating that which should otherwise be disallowed,¹¹¹ and ignores the “separateness of persons” by failing to treat people as individuals governing their own lives who decide and fulfil their own interests.¹¹² These objections, to be sure, only provide a glimpse of the concerns about utilitarianism, as there are other considerations which are held to undermine the theory. It is beyond the scope of this discussion to provide a defence of utilitarianism *tout court*; however, I will briefly respond to these above concerns before concluding the chapter.

The first objection concerns the notion that ethics can be represented by a set of abstract rules or principles, and that morality of actions and policies can be assessed by reference to them. Utilitarianism is questioned because it stipulates that individual or institutional practices ought to follow, in some more or less direct manner, a principled approach to promote moral value when the alternative can offer us a more stable and attractive way to evaluate ethical problems and to guide our conduct. Critics argue that we can construe well-being as foundational to ethics and seek its promotion by considerations other than, or instead of, reason per se. For instance, one

¹⁰⁹ Held 684

¹¹⁰ Rawls 1971, 572-3; Williams 1973 93-118

¹¹¹ Harman 1977, ch .13

¹¹² Rawls 23-27; Nagel 134; Brink 284

suggestion is that moral thinking and practice guided by compassion, empathy, kindness, mutual concern, trustworthiness, attentiveness, and responsiveness provides a more compelling and cogent account of what underlies morality than that guided by adherence to an exclusive goal or method for promoting the good.

While these points are worth making, it is the nonetheless true that the objection to principlism is generally directed at classical utilitarianism and its stipulation of strict utility calculations. One appealingly simple way of addressing these concerns is to accept the indirect utilitarian thesis that moral value is generally promoted better by individuals in their ordinary lives through realizing their own goals, projects and relationships. Preference utilitarianism incidentally shows that the demands of morality as understood by the theory are connected in some intimate way with how human beings are naturally disposed to make their lives go better. When, however, we construe utilitarianism to require appealing to principles and rules of ordinary morality to promote good outcomes, the concern should be with guiding the performance of institutions rather than individuals in their ordinary lives. For reasons which we discuss in the following chapter, the appeal to principles in the public domain reflects the conviction that institutional policies and rules are well suited, and perhaps necessary, to guide collective efforts to promote well-being over the long run.

Proceeding then to consider the tension between the core features of utilitarianism and a commitment to virtues, it would be well to observe that utilitarianism as with any other moral theory should regard virtues - in their expressed and embodied form – as connected to the pursuit of overall well-being. Rather than conflicting with the core of utilitarian moral theory, caring emotions or practices are valuable not only because they are themselves desired, but also because

they are connected in some intimate way with furthering the well-being of others.¹¹³ Surely, it is important not to underestimate virtues of care and the role they play in both our ethical theorizing and our dealings with others. This comes out clearly when we reflect on the implications of utilitarianism for domestic and global relations, and how the requirement to protect the interests of others seems more consistent with the human condition when we exercise care and compassion. When taking a stronger view of the relationship between (utilitarian) benevolence and caring, the latter might be understood as fundamental to doing good in the way advocated by utilitarianism. Viewed in this way, protecting the interests of people begins to look more plausible when we develop a real and proper concern for their well-being, and hence utilitarians should stress the significance of inculcating caring relations and practices across persons, regardless of their role or position in society.¹¹⁴

It may be remonstrated that this account of the relationship between care and utility is oversimplified, and that the stress put on making individual and collective self-sacrifices on account of furthering human welfare might easily justify forgoing special obligations and the caring relationships in which they are enmeshed. Thus, the objection is that promoting the greater good would encourage all sorts of sacrifices by individuals or groups, and our intuitions recoil at this prospect. The utilitarian answers that, in the domestic and global context, we should promote *everyone's* welfare but not by requiring persons to base all of their deliberation and

¹¹³ C.f. Sidgwick 433

¹¹⁴ Even if we assume that it is desirable for public officials to be neutral, impersonal, and detached when dealing with matters of public policy and decision-making, it does not follow that emotions or their related practices cannot be a valuable means to best practices. It might be the case that promoting the well-being of individuals and society requires that public servants be caring persons, but practical constraints limit the use of emotions as well as the development of caring networks. Others, however, disagree and argue instead that the latter should be embraced to the fullest extent in all aspects of life, including both private and public realms. Proponents of an ethic of care, most notably Virginia Held, argue that social relations exist prior to political intervention and are forms of caring relations which ought to play a prominent role at all levels of public life. (Held 2006).

actions on providing countless others with as much want satisfaction as possible. We can avoid making perpetual self-sacrifices if one construes the utilitarian injunction to require persons to support the interests of others and themselves, but not by denying them the ability to pursue and realize their personal projects or relationships, all things considered. As I have argued, the observance of interpersonal obligations, the development of autonomy, and a proper concern for one's own interests and welfare should lead to a utilitarian conclusion. Even so, it may well be necessary to require persons to forgo trivial interests if greater value may be realized by fulfilling the basic interests of others.¹¹⁵ No doubt, the occurrence of moral restrictions on purely personal or transient desires is not unique to utilitarianism, as many theories will require that people forgo certain things they might want in their lives.

Some philosophers are of the view that the moral injunction to promote the good is both a broad goal and collective responsibility which does not make excessive demands on particular persons, even if it true that these demands may be justified in theory.¹¹⁶ It may be thought that the best way to promote human welfare is to give individuals what they want to govern their own lives and minimize their burden through the performance of institutions. So, far from requiring individuals to have an unyielding commitment to the utility principle or to make excessive sacrifices when doing so, a utilitarian approach will emphasize the implementation of sensible public policies and institutions that promote basic want satisfaction for as many as possible. Indeed, part of what is appealing about utilitarianism in the public sphere is the way in which it can offset the collective burden to promote the good by reorienting people's choices and

¹¹⁵ In a broader vein, Brandt argues that moral education should motivate people at all levels to promote the good by increasing the extent of sympathy and altruism. Most people already proceed to govern their lives while expressing these sentiments in their relations with other persons, but moral habituation and personal motivation may not be enough to support best practices in utilitarian terms. What is required, therefore, is the implementation of economic and legal systems to enact measures which guide policy-making and individual conduct regionally or globally.

¹¹⁶ Singer 1972

obligations using social, economic and political systems.¹¹⁷ This dispersal of responsibility should limit the extent to which utilitarianism makes excessive demands on any one person, even if it remains a personal moral duty to bring about as much good as possible.

Some More Conclusions

We have seen that utilitarianism may recommend multiple distributive constraints – in particular, priority and sufficiency – in the broader goal of promoting well-being over the long run. Philosophers who subscribe to a monistic view of distributive justice, utilitarian or otherwise, might claim this proposal to have potentially counter-intuitive implications, namely that a pluralistic approach warrants different conceptions of advantage that sometimes fall short of what utilitarianism recommends. However, the indirect utilitarian thesis does embrace different distributive principles with the explicit recognition that achieving the broader goal of optimizing welfare across space and time requires careful consideration of the way in which goods and bads should be distributed across whole groups of people. The greater-benefit criterion may well be applied to claims of persons and groups of persons, but it cannot accommodate the moral demands of global and intergenerational justice. In thinking about intergenerational justice, it seems necessary to support different distributive goals if we are to have a good chance of sustaining optimal welfare within and across generations.

In sum, the utilitarian account of distributive justice given here provides an outline of the criteria for evaluating the distribution of benefits and burdens across persons in distinct moral-

¹¹⁷ Shaw 172; Goodin has recently argued that the theory is most plausible when applied to collective affairs rather than individual conduct, recommending the sort of institutional procedure and practices that most, but not all, agree work well within the public sphere. Goodin 1995, 8

social communities. This chapter did not provide an exhaustive account of distributive justice involving some of the more prominent concepts in contemporary philosophical literature, including desert and rights. My goal has been limited to specifying the distributive goals that utilitarianism would recommend in theory, which I have argued are pluralistic given the theory's broad and long-term goal. The result is a view that reflects some commonly expressed ideas about distributive justice which are appropriate to promoting well-being over the long term: seeking to reduce human inequality and protect the most vulnerable members of society. Both of these ideas will be put to use in the following chapter as we examine the nature and justification of various practical recommendations for combatting global climate change.

CHAPTER 4 – TOWARD A CLIMATE OF FAIRNESS

“The American lifestyle is not open to negotiation”
-- George H.W. Bush, Earth Summit, 1992

Introduction

The matter of global and intergenerational justice has been the principal focus of discussion in the last few chapters as we have sought to understand how we might respond to the climate change problem in a manner that is consistent with our moral obligations. Our task is not complete without incorporating the facts about the problem, surveyed in the first chapter, into discussions about the path toward justice, which we considered in subsequent chapters. It is necessary to look at the facts about climate change as we tackle the question of how we ought to behave, no doubt because the circumstances which have unfolded require modifying the course of our moral thinking. It is more clear than ever before that we inhabit a vulnerable planet that we must share and preserve for all those who shall ever inhabit it.

How, then, should people alter their present behaviour and who must take part in the journey toward securing a more fair and stable planet for all humankind? These are the questions now at the core of the debate. As we shall see, any meaningful response to these questions requires a careful examination of the position we took in the last chapter. This should give us a better understanding of the practical recommendations that may be derived from a theory of justice. It may also help to strengthen my position that the best approach of managing the global

climate and our dealings with people is utilitarian but carefully guided by a series of principles aimed at dealing with the broad and particular nature of our moral obligations to people.

Down from the Clouds

One major concern which occupies the minds of moral philosophers among others is the looming disaster(s) across the planet owing to the present and unchanging state of affairs. The other worry stems from, not a concern about the suffering that is attributed to increased global inequality and unavoidable climate change, but rather a concern about the responsibility and costs that some countries will have to assume so as to enable others beyond their own nation borders to reasonably cope with climate change.

It is no exaggeration that a just response to climate change necessitates immediate, if not drastic, measures to avoid causing unnecessary suffering where possible. The basic facts about the state of the global environment and human welfare worldwide only serve to reinforce arguments about the wrongness of the present situation. As we shall see, a successful resolution to the present crisis will involve a global regulative framework for greenhouse gas emissions (to limit avoidable climate change into the future) and a transference of resources (to ensure people adapt to its effects long into the future). To put it rather crudely, the only way out of this mess is to force those sitting on an abundance of wealth and throwing it away recklessly to cast it aside for a great many others to share into the future.

As far as we are concerned, it is no surprise that the unprecedented nature of the climate change problem might be met with a collective response that is similarly unparalleled in human

history. The circumstances in the world have only further strengthened the need for a global redistribution of resources to assist many who have been deprived of opportunities and a state of living of which any and all persons are deserving. The urgency of this call has been repeated for quite some time and climate change simply, but not inconsequentially, provides yet another impetus to take meaningful action on a planetary scale. As we rethink our handling of our relations with people and the planet, we are called upon to eradicate global inequalities and fulfill our intergenerational moral obligations.

A number of proposals have made their way into discussions on climate change policy in an effort to accomplish these goals. The motivation for these proposals is to give concrete guidance on the path that we must take in governing human affairs on a local and global scale. Significantly, we need direction on how to devise various abatement and adaptation strategies which are consistent with our obligations now and into the future. To help simplify our discussion, we shall turn to an early piece on the topic written by Henry Shue in order to grasp the general questions which have been the centre of climate change policy debates.¹¹⁸

The first set of questions is aimed more generally at assigning responsibility for dealing with climate change given the existing facts and our moral reasoning on the matter. We need to ask who ought to bear the burden of *preventing* further global warming otherwise possible through human activity. Similarly, there is the question of who ought to bear the costs of *coping* with existing global warming which likely cannot be avoided for the foreseeable future. It is obvious that the circumstances in which people are living will determine how much (or little) is required of them in support of abatement and adaptation strategies.

¹¹⁸ Shue 1994, 344

The remaining questions focus on the issue of an equitable management of global resources. We need to determine precisely *how much* wealth should be allocated on a global scale and, furthermore, *what* amount of emissions of greenhouse gases should be permitted on a global and intergenerational scale. It is rather obvious that the task of assigning moral responsibility to climate change involves a careful examination of resource allocation, since any redistribution of wealth and emissions will require some to make sacrifices in their lives.

UNFCCC: Make It or Break It?

There have been repeated attempts to develop a framework for a treaty on environmental sustainability alongside issues of economic inequality and global justice which have dominated policy debates since the mid-twentieth century. There has been a steady call among philosophers and non-philosophers to deal with runaway global poverty, which has left billions of people and entire nations to live in vastly distant and disparate worlds. Although the problems have evolved over the years across different nations, indeed with the identification of climate change, the narrative has not changed much in that time.

Consider that as early as the 1970's, there were concerns about the ongoing poverty crisis in Bangladesh that resulted in millions of deaths and millions more displaced. The issue of widespread poverty in Bangladesh has persisted, only to be trumped in subsequent decades by the far more devastating threat of climate change. While thirty years had passed, and with little to no change in the livelihood of its inhabitants, Bangladesh had been struck by several devastating

floods and storms that perished one hundred thousand and displaced tens of millions of climate refugees.

With a similar story resonating throughout the developing nations, it is not surprising that many are calling for us to address the plight of the world's poor. Ever since the first international environmental conference, the issues of poverty have been part of the debate on environmental protection and vulnerability. There is broad consensus internationally in support of a duty to aid those nations in need of assistance due to economic, environmental or political forces. Nonetheless, there is profound disagreement about who is subject to this duty and how much they should do, or give up, in order to fulfill that duty.

Not until the development of the United Nations Framework Convention on Climate Change (UNFCCC) was there a mention about a division of responsibility among the developed and developing nations. The framework was founded on the assertion that nations must protect the global climate for the benefit of all humankind, since the latter have a common interest in the preservation of the planet and a universal claim to its use in pursuit of human flourishing. It was agreed by most parties that a global climate regime would be based on a general principle of 'equity' in accordance with a principle of 'common but differentiated responsibility.'¹¹⁹ Let us digress to consider these principles in more detail.

Perhaps the most controversial issue at UNFCCC debates was the inclusion of a "first principle" that would impose strict standards on human activity at both the individual and collective level. The framework ultimately invoked a first principle, namely the principle of 'equity,' as a way to guarantee that people in present and future generations are in a reasonable

¹¹⁹ UNFCCC 1998, 2002

position to benefit from the use of the planet and its resources. The Framework called upon nations to acknowledge the entitlements of any and all persons who may ever live and, furthermore, ensure that policies and practices would not interfere with such entitlements. In short, it was agreed that an acceptable climate policy would have to provide for an equitable arrangement of resources to be shared among present and future generations.

By the same token, it was thought that a suitable approach to climate change would require careful consideration of the actual obligations that might be imposed on various nations and peoples. Climate change is undoubtedly a global and intergenerational problem that cannot be resolved successfully without taking immediate, and perhaps strenuous, action to prevent further damage to the atmosphere and protect present and future generations. For this reason, a principle of ‘common but differentiated responsibility’ was invoked to ensure that a collective problem such as climate change could be immediately dealt with, without necessarily involving all nations. It was thought that the developed nations would take the lead in abatement strategies, simply and only because they are in a better position overall to curb their emissions. However, since the developing nations required more resources and time to improve the conditions of their people, which comparably are in a worse situation than those in the developed nations, they would not be required to put in as much effort in the interim to tackle climate change.

The inclusion of these principles into a global climate regime provided a putatively realistic foundation to reach a strategy on the division of responsibility and resources. This foundation underpins what is now known as the Kyoto treaty, which calls upon the developed nations to take a lead role in reducing global emissions and helping people adapt to its adverse

effects.¹²⁰ The developed nations, however, were merely assigned a task for which there are no concrete goals or mechanisms for enforcing their role. There have been no negotiations about the global transference of wealth that is needed to help the developing nations cope with climate change.

As far as abatement strategies go, the Kyoto treaty embraces a grandfathering approach by calling on the developed nations to reduce their annual emissions relative to a baseline year, namely to 5% below 1990 levels.¹²¹ These targets were not established based on scientific assessments about a 'safe' level of emissions put into the atmosphere annually that would prevent further global warming; nor were they reached in accordance with a principle of fairness based on the UNFCCC's own principles, or any principle for that matter. The lack of a principle-based approach to a global climate regime also meant that it was next to impossible to prescribe what must be done by the poor nations. So to make matters worse, the present treaty does not provide binding emissions quotas for the developing nations, thus giving them *carte blanche* to exceed the annual emissions by the developed nations for many years to come. This was necessary since it was believed that any interference with the developing nations should be prohibited, that is, despite a universal requirement by all parties to take the necessary *precautions* to limit further global warming.

The Kyoto treaty and the UNFCCC principles themselves are not enough to resolve the problems facing the planet and humankind today. To begin, it is futile to build a global climate regime based on a concept of precaution without creating shortcomings in our moral reasoning and practical affairs. The marginal position that we must adopt with a precautionary approach

¹²⁰ Kyoto 2009

¹²¹ Ibid

clearly underwrites the present thinking and, yet, we already know that this approach is absurd and unacceptable. Despite a lack of certainty about the future costs and effects of climate change, we know enough about our moral obligations to do more than take precautionary action.

Many are right to criticize the Kyoto treaty for failing to establish a concrete universal framework to strategize about abatement and adaptation policies in a just manner. It is conceivable, for all intents and purposes, that the treaty relies too heavily on notions of national sovereignty and a right to sustainable development, thus making it impossible to accommodate a general principle of fairness that could successfully address the climate change problem.¹²² In any case, Kyoto's so-called principle of 'equity' does not constitute a plausible moral principle, since it lacks in justification and offers no account of actual obligations.

In the absence of a clear understanding of what would be considered an equitable arrangement today and into posterity, we cannot know what we owe people in the present or future and who bears the responsibility for ensuring people receive what they are owed. The status quo treaty fails to provide emissions targets to nations in a way that might be considered fair across nations and generations. Should the developed nations do more to reduce their emissions output, and is it permissible for the developing nations to be free to emit greater amounts of pollution for their own development? Also, if we are truly seeking a just response to climate change for humankind, must we not include broader social considerations into any treaty? It seems necessary to reconcile the issue of economic inequality with environmental mismanagement since they are both of importance to justice, together and independent of themselves, as we have seen.

¹²² C.f. Roberts and Parks, 2007; Singer 2002; Gardiner 2004

Perhaps the most important ethical flaw of the Kyoto treaty is that there is no forceful recognition of the fact that climate change is a result of socioeconomic imbalances (namely, gross economic growth and emissions output) as much as it contributes to others to the detriment of poor nations who face increased resource scarcity and infrastructure development. We know that a truly fair approach to a global climate regime must be built on foundational moral principles which can be applied to human affairs at all levels. Many of the theories we discussed before have offered principles which explicitly require that we rectify socioeconomic imbalances owing to an improper distribution of resources. Moreover, it is indisputable that we must pay careful attention to the pattern of distribution of benefits and burdens over time. We cannot expect a fair and efficient world without including such principles into global and intergenerational decision-making.

Since we know that there is no ethical basis for the present international agreement on climate change, let us consider the implications of a genuine framework of justice a little further. I have suggested that utilitarianism provides a reasonable account of the broader aims and requirements of distributive justice without giving much detail about the institutions and policies that utilitarians would support. So, we need to ask what recommendations might be offered from the utilitarian injunction to bring about the best state of affairs for all concerned. In keeping with good philosophical analysis, a number of objections raised by opponents and critics of these views will be considered.

Despite the mandate to maximize welfare over the long run, it has been shown that utilitarianism can provide a framework of distributive justice which is both fair and effective in managing our dealings with humankind and the global environment. Because it recommends a

number of distributive principles in different circumstances, namely given the particular circumstances within generations and the uncertainties across generations, it seems all the more fitting to rely on utilitarianism, at least insofar as the starting point for a global climate regime. The difficulties that underlie attempts to guide human activity in accordance with a general principle of fairness, and the shortcomings of a single moral principle in general, make the pluralism of utilitarianism more feasible for taking action on climate change.

A Less Divided World

Part of what has prevented a large percentage of the global population from living beyond a state of deprivation and suffering is the large resource gap between the wealthy and poor nations. Without taking serious action to reduce the reckless behaviour of the wealthy nations and thwart further increases in global warming, the present generation will be responsible for knowingly and willingly failing to prevent catastrophic suffering and loss of life for centuries to come. Such an outcome is not acceptable by any measure from a moral point of view, utilitarian or otherwise, but we must address the complexities of answering such a broad question about protecting the global environment and promoting human welfare.

As far as we are concerned, the route that is generally expected to produce the best outcomes in the global domain must be guided by a principle of equal distribution. Recall that an egalitarian principle may be justified in utilitarian terms when thinking about global matters, and thus it may serve as the criterion for allocating wealth and emissions.¹²³ Where there are

¹²³ See Chapter 3

differences among people in their welfare position owing to deficiencies (or excesses) in access to resources, those with less should be supported in their efforts to obtain more resources to improve their position.

Although we are relying on an egalitarian distributive scheme to further utility within our generation, we have also seen how this approach naturally gives rise to a concern about helping the worse off. Since people will benefit more from a resource they have less of, the closer they are to the “margin,” we should seek to give priority to those who are worst off.¹²⁴ In practice, this would support efforts to reduce disparities owing to gaps in resources, including those owing to an historical acquisition of wealth. But as we have noted, the laissez-faire economic system that prevails clearly does not encourage the developed nations to help their poorer counterparts, pushing instead for greater economic prosperity and the acquisition of personal wealth. This is neither a fair nor acceptable situation.

Since a reduction in global inequality is both desirable and necessary to support the goal of promoting human welfare, it is obvious that the developed nations must take the necessary measures to support the developing nations in their efforts to improve the conditions of their own people. Among the many proposals that would serve this goal, perhaps the most controversial proposal calls for a global transference of wealth from the wealthy to the poor nations. As a general matter, this would be an ideal path to secure greater welfare globally, since the poor nations have a great deal to gain from additional resources in their economy that might otherwise remain in the wealthy nations with those who would presumably derive less benefit from those same resources.

¹²⁴ See Chapter 3

One objection to this proposal is the undue hardship that might be imposed on the developed countries if called upon to redistribute huge amounts of resources that would reduce the inequality gap of the developing nations. It might be argued that forcing the developed countries to forfeit their ‘right’ to their riches or reduce their economic productivity would not produce favourable results for everyone on the planet. We should be aiming to augment the position of the developing countries, but not by punishing the developed countries. Perhaps a better method, it might be thought, would be to provide the developing countries more time to expand their economies and improve their infrastructure without imposing restrictions on their release of emissions.

Although some may think that a global redistribution of wealth is unfair for the wealthy nations and people,¹²⁵ the fact of the matter is that they would not experience so much suffering in the process as to outweigh the ongoing suffering in the developing nations. For starters, one might suppose that helping people in the poor nations acquire additional income and resources would bring about far more good overall than otherwise not doing anything and keeping the (very) well-off people in possession of the vast wealth.¹²⁶ It is not unreasonable, for example, to expect as a citizen of Canada to give up a morning cup of premium coffee so as to experience any real hardship in any way that is comparable to the hardship of a Somalian living in famine. By extension, it does not seem morally objectionable that a 1% redistribution of wealth from the developed nations could provide the developing nations with 90% of the funds required for a

¹²⁵ Nozick 1974

¹²⁶ To strengthen this point, let us take the most affluent nation (the United States) and its inhabitants as the standard case for this comparison. The average American household earns \$50,000 a year and needs to spend \$30,000 on household expenses. If Americans were to give up a modest portion of the remaining income, they would not be deprived of the most vital interests which would otherwise lead to a comparably bad outcome overall. At the same time, 98% of the world’s inhabitants only need access to \$2,000 a year to be in a position to acquire access to life-long education, proper health-care and medicine, and sustainable shelter. See Singer 1972, Conference Board 2009, and UNU-WIDER 2008

sustained reduction of poverty and suffering. The developing nations would have, at least, a real opportunity to fare better on the planet in a manner that is comparable to their richer counterparts, this being true without causing any long-term negative consequences for any party.

We would be mistaken to conclude that the redistributive measures mentioned above are adequate for the purposes of abatement or adaptation to climate change. Another important criterion must be satisfied to ensure a fair and effective response, namely the reduction of economic activity which results in the release of emissions into the atmosphere. The thinking is that, while a global redistribution of resources would help the developing nations better cope with the adverse impacts of climate change through improvements to their infrastructure and access to resources, there also needs to be a consistent effort to reduce those impacts through abatement strategies. Since global warming will be increasingly prohibitive for billions of people in the present and the future more so, there are good moral reasons to take drastic and immediate action so as to reduce excess consumption and energy-intensive activities which would otherwise unmistakably contribute to further suffering over the long run.

As a practical matter, this means that the developed nations, namely the United States, must halt their profligate economic expansion and find ways to pollute less while maintaining an acceptable level of economic activity that does not prevent people from enjoying a decent life. As we shall see, establishing targets for emissions reduction may be an easier and more efficient way to support abatement strategies. It is critical in so doing that the most resourceful of nations push for economic incentives, advances in technology, and improvements in transportation that would lead to a sustained global reduction in annual emissions.

These measures may not be enough to support what long-term obligations we have to future generations. Again, what some find objectionable about utilitarianism as a direct guide for global affairs is perhaps most desirable when thinking about the future, since it is vital that we do what we can to protect the interests of future inhabitants of the planet. Thus, it is possible to impose justifiable limits on the activities of people in the developed and developing nations, but not in a way that requires severe restrictions (savings) of resources as we witnessed with egalitarianism per se. Instead, it is necessary to ensure in the present that human activity and the global environment can support a decent life for our descendants as much as possible. Such a sufficientarian way of thinking requires all parties to make sacrifices in support of our moral obligations to posterity, even if the responsibilities and capacities differ from one nation to another.

This line of reasoning, however, has mistakenly been used among the developed nations to defend a minimalist position in response to climate change. While these nations are aware of the problem, it is thought that the best way to proceed must not involve any sharp and immediate measures which are prohibitive for them, or any country for that matter. Those who share this view believe that our awareness of climate change contributes to a sense of economic expediency given the anticipated problems with climactic degradation and instability for human activity. What comprises the carbon intensity approach is an assumption that a fair expectation of the developed nations would be a reduction of their cumulative emissions relative to their economic activity, say, through conservation and adoption of clean technologies.

It is ludicrous to think that we should expect the economic system to produce a fair outcome for all concerned, since the present laissez-faire system is driven by a concern for profit

rather than welfare per se. Significantly, a fair solution cannot be achieved through a reduction of carbon intensity by the developed nations in a manner that accommodates economic growth. We have seen the results of profligate economic activity on the welfare of human beings and the environment, and it is wishful thinking that a mere increase in the efficiency of human conduct alone will be enough to successfully respond to climate change. Neither technological improvements nor decreases in the size of the global population size will be enough to halt the destruction of the atmospheric commons, or sustain liberal individualism whose hallmark in the so-called “American lifestyle” which is thought to be sacrosanct for all humankind.

Sharing the Carbon Cake

It is illuminating to think about the trilemma that we now face regarding the global atmospheric sink. As we noted above, we cannot acquire the necessary methods and technologies to stop releasing emissions in the global atmosphere beyond safe levels without impacting the lives of billions of people. Such an outcome is not acceptable, from the moral point of view, for the reason that doing so in the absence of the vital technology, say, through stalled economic activity, limitations on private transportation, and power restrictions, would presumably impose widespread suffering or death on entire populations. This is in clear violation of our moral obligations toward human welfare and would otherwise represent a systematic failure on our part to support global and intergenerational justice. And yet, we know that allowing people to pollute the atmosphere for the foreseeable future will pose a considerable problem into posterity that threatens to get worse without taking serious action now.

All of this leads us to consider whether and how a fair system of emissions allocation could be devised in accordance with our moral obligations. As we noted earlier in our discussion, there are no reasonable grounds to give some people a greater claim to access the global atmospheric sink. Inasmuch as people must be treated equally and have the identical moral worth, everyone has the same claim to the atmospheric sink.¹²⁷ With this kind of equality dominating our idea on atmosphere, and perhaps more broadly the environment as well, it will become clear that there is no justification for the current level of emissions which far exceeds safe levels for the planet or the emissions quotas established by the Kyoto treaty. We must reject the grandfathering approach adopted by the Kyoto treaty and the carbon intensity approach as proposed by the United States and our own federal government, since both cannot properly accommodate scientific and moral facts on the strategies for fighting climate change. Far better perhaps to adopt a climate accord that is shaped by a universal notion of justice, rather than do so through political or economic expediency as noted above. Our goal should be to know what reduction in emissions, along with economic assistance, would ensure fairness within and across the present generation. This may clarify what would need to change in order for there to be an equitable allocation of emissions across nations.

In light of the above considerations, we must assume that an equitable system of entitlements for the use of the global atmospheric sink must be sensitive to physical characteristics of the atmosphere. It should also be expected to limit further global warming for the benefit of present and future generations in a manner that still ensures a proper respect of claims by all parties to access the atmospheric sink. A case can be made once again for adopting

¹²⁷ See Chapters 2 and 3

a principle of distribution that gives people the same emissions allowance in the same time period. In other words, the best way to determine how much each nation should be allowed to emit also happens to be the most egalitarian, insofar as everyone is entitled to the same share of emissions as everyone else.

The per-capita approach just described provides a rational measurement of the allocations of emissions for all parties, giving equal shares of the global atmospheric sink to all humans in any given year. Each and every person is entitled to the same share of polluting the atmosphere and provides them with a responsibility based on what they have (or have not) put into it. In contrast to the other approaches, the per-capita approach imposes a “hard cap” on all parties in accordance with their shared allowance of emissions. The per-capita share must obviously be responsive to the worldwide release of anthropogenic emissions in order to effectively prevent further global warming. So, an emissions allowance that would be considered both fair and safe is roughly one metric ton per person per year.

The existing distribution of emissions allocation is clearly not aligned with a per-capita distribution that would serve the best interests of present and future generations. With the global population expected to reach approximately 7 billion by 2015, the cumulative per-capita emissions of all nations would have to be capped to 7 billion tons.¹²⁸ If we take into consideration what may be considered a modest stabilization of the world’s population, the number is forecasted to be 9 billion by 2040 barring any major climactic events or widespread global conflicts.¹²⁹ For the sake of prudence, let us assume that per-capita allowance must not be permanently fixed to a baseline year, since we know that the planet’s human population will

¹²⁸ UN 2004

¹²⁹ Ibid

likely continue to grow several billions in the next few decades before levelling off. Therefore, the global cap of emissions would need to be stabilized at 7 billion metric tons today and increase accordingly to 9 billion metric tons by 2040.

Yet, we know already that the global emissions, some 30 billion tons in 2008, exceed the limit that would be morally acceptable as set out by the goals and standards of distributive justice.¹³⁰ The fact that the nations today exceed their output more than 5 times the global limit is simply not in the best interests of future generations. Significantly, we know it is not fair that many nations today benefit from more favourable climactic and environmental conditions without allowing others to do the same or, worse, taking it away from them with a great deal of permanence and cost.

It is true that members of the present generation are not acting responsibly in their collective and personal affairs by exceeding their annual emissions. One should take caution in assigning blame to individuals alone, since it is more prudent and efficient to scrutinize the activity of entire nations. It is difficult to determine whether an individual has exceeded their per-capita emissions allowance and what measures must be taken for them to reduce their emissions. Even if it were possible to affect individual behaviour in some benign and meaningful way, it is generally understood that our efforts are best served by looking at the level of collective agency and responsibility. In short, we need to restrict our concern to entire nations, given the important role that governments and institutions play in shaping individual conduct.

As things stand now, the world's worst culprits are nations with large populations and large economies, or both. Although there are a few exceptions to this generalization, it is true that

¹³⁰ See Chapter 1

most major polluters owe their excessively high per-capita emissions to more energy-intensive lifestyles, higher rates of consumption and greater population density. The situation today is different than it was a decade ago, since developing nations such as China and India are increasingly matching the output of the developed nations. Yet, even on an equal per-capita basis, the developed countries continue to exceed their share anywhere from 5 to 25 times the acceptable levels, in contrast to the developing nations where the gap is smaller and less profound. The average per-capita emissions output of 14.1 tons and 3.3 tons by the developed and developing nations, respectively, and so the former continue to take the blame despite recent scrutiny towards others.

Although some may think that a global dichotomy is appropriate to understand the relation among nations and the responsibility for their bad actions and failures, it is no longer possible or reasonable to assign one-sided blame to the developed nations. This was the tendency in the past, especially by those who subscribe to notions of historical responsibility and polluter pays, but there is no reason to believe that such traditional thinking should enter into our discussion. An equal per-capita approach gives all individuals and nations the same entitlements in accordance with collective moral obligations to future generations. Therefore, it is enough that we look at present behaviours to assign responsibility and blame for failing to prevent climate change or protect others from related harms and suffering.

The fact still remains that the developed countries ought to make sharp and immediate reductions to their level of emissions and that the developing nations must be allowed to continue their pursuit of economic development for the long-term benefits it will produce for future inhabitants. While the practical conclusions we have drawn from economic and

environmental considerations of global justice are seemingly more favourable to the developing nations, clearly it does not seem as though any or all of them should be given free rein to pollute the atmosphere for an indefinite period of time, since they too have a responsibility for their emissions. It will take several decades before the developing nations match the historical or present contributions of the developed nations, but such facts are meaningless and distracting as we focus more specifically on a pure equal per-capita approach.

It is worth noting, perhaps, that this approach makes the position of the developing nations seem rather odious from a moral perspective. The claim that a global climate accord such as Kyoto should be blind to the environmental conduct of the developing nations, such that there are no binding restrictions on emissions placed on them, seems rather unjustified to both members of the present generation and those of future generations. Although individuals in the developing nations are no different in their moral status or any less entitled with their interest to seek the preservation and use of the climate to warrant greater access to the atmosphere.

Despite the obvious simplicity and commensurateness of the per-capita principle, some may find that a global climate regime whose approach would be based on this principle would have counterintuitive implications for all parties. It may be claimed that developing nations are treated unfairly in the broadest sense by restricting their share of annual global emissions and, in effect, their economic development as well. If we adjust our thinking to include considerations about global and intergenerational welfare, one cannot refuse to consider the possibility that a purely equal per-capita approach may hinder the progress of the developing nations in seeking to promote and protect their citizens' basic interests over the long run.

Perhaps it is also true that the developed nations will be faced with enormous challenges when trying to reduce their emissions output to acceptable levels. Some may feel that requiring the world's wealthiest populations to change their infrastructure, reducing their lifestyle and spending, and shifting wealth to poorer populations across the globe will prove to be devastating for their economic and personal well-being. Not unlike the circumstances that may unfold for the developing nations, a per-capita approach would require the developed nations to make large sacrifices that could compromise the basic welfare of those of modest or poor means in those nations. This is especially true of nations such as Canada and Russia whose geography requires that people consume a greater amount of resources and produce more emissions to live comfortably, say, because they reside in harsh climates or remote locations.

A reasonable accommodation of these concerns is to note that it is prudent and necessary to take into account the greater hardship that could be imposed on people throughout the world. This is a critical issue that needs to be addressed in any practical discussion on the methods and procedures by which we conduct ourselves in a just way for all those concerned. As far as we are concerned, the consequentialist, utilitarian or otherwise, cannot discount or exclude such claims of hardship, despite any initial conclusions about what constitutes a fair distribution of emissions entitlements. Regardless of whom those claims come from, namely those in the developed countries who are better off than most, there are good moral reasons not to treat the particular concerns of some with any less consideration that would otherwise be inconsistent with the broader aims and requirements of our moral obligations, that is, to ensure that people's basic interests are fulfilled to the greatest extent possible and this means giving priority to the worse off in the world today.

One way in which we can address the above objections is to adopt an emissions trading system that would allow nations to better contend with a global climate regime based on a per-capita principle.¹³¹ The thinking is that emissions trading will provide the necessary buffer at any given time for nations to purchase or sell their allotted shares for the benefit of all. On the one hand, if a nation needs to consume more energy in a colder climate but is expected to (or actually) exceeds its annual quota, it may purchase a transferable quota from another nation which is below its share and willing to give up that share for a price. Many developing countries might find themselves exceeding their quota owing to their economic growth or energy production, and thus they will find it necessary to buy excess quota from another nation which does not need all of its share.

Many authors like to point to the strong relationship between levels of income per-capita and emissions per-capita as a way to underscore the important connection between wealth accumulation and the profligate release emissions, though not because they seek to justify forcibly limiting possession of wealth. Rather, we might focus on the important link between wealth and emissions in response to the objection that imposing restrictions on people, either through preventable or punitive measures, will result in a considerable financial burden that could have additional implications for human welfare. It is not unreasonable to suppose that the world's major emitters may well be in a sound economic position to live in a world that creates binding emissions targets for all concerned. Neither the emissions trading system nor the carbon tax would create tremendous hardship on people with the proper steps taken to ensure preventing as much harm as possible.

¹³¹ Edmonds et al. 1999

Why Per-Capita is Not Enough

So far, we have considered some of the more concrete proposals that would be justified on strong moral grounds to resolve the global environmental catastrophe that is quickly unfolding and that would halt the spread of human suffering. It is not clear whether these proposals are themselves consistent with utilitarian goals or whether further efforts must be taken to support them, yet we do know that there are good reasons not to adopt a single principled approach to distributive justice when trying to promote an optimal state of affairs for present and future generations. If that remains the case now, then it would be fair to suppose that the per-capita approach, per se, is not adequate to support people's vital interests maximally over the long run.

As it stands, there are good utilitarian reasons for upholding a per-capita approach which aims to cap emissions at a level that would prevent further warming of the planet. This is in keeping with the broader aim of promoting sufficiency of welfare for future generations, since we would presumably be limiting any long-term and non-reversible changes to the global environment through present use of the atmosphere's capacity and the planet's biodiversity. However, it is not desirable for the current generation to abruptly halt its economic activity, especially among the developing nations, in order to reverse the changes to the global environment. Even if such an outcome was within the realm of possibility, the best course of action for humanity would be to shift the current distribution of resources and emissions output in a manner that would curb profligate activity of the wealthy nations and aid the development of the poor nations, with the proviso that this is done without increasing annual global emissions.

It is true that future generations will still be affected by the warming of the planet that has already occurred, and little can be done to reverse such changes through natural or technological means. Such a tragic outcome will mean that many in the future will have to deal with increased morbidity and mortality, as well as ongoing challenges in coping with severe climate events. Even if we cannot target specific individuals in the future who may be affected somehow or other by climate change, and furthermore, if there is no means to establish a causal connection between present day affairs and future events, it is perfectly reasonable to argue on utilitarian grounds that we hold people in the present responsible for their bad actions.

At the collective level, then, people in the present owe it to their descendants that they minimize the burden on them into the future, or else face the consequences of failing to do so. Specifically, we have noted that it is wrong for the current generation to hinder the opportunity of future generations to enjoy a decent life by directly benefiting from the planet and its resources. The per-capita approach may provide one avenue to limit what further interference we could have on the ability of the not-yet born to have enough to lead a decent life over the long run. Nevertheless, there are other principles that may lead to the greatest net benefit across humanity, and it is important therefore that we consider the shape and appropriateness of their role in guiding human affairs.

First, it is worth emphasizing here that the equal per-capita principle examined in this chapter is the only emissions allocation system that could be regarded as fair, insofar as it is the only reasonable starting point for a framework of global atmospheric justice. The fundamental entitlements of human beings to access the global atmospheric sink, which are both universal and equal, provides the best and most plausible general response to the climate change problem. As a

practical matter, we saw that a more nuanced allocation scheme was required to answer such broad questions about how to ensure fairness across humanity, specifically in helping those who are disadvantaged by virtue of being deprived of their proper share of the global atmospheric sink. Paying attention to such nuances is unquestionably important for consequentialists for the simple reason that we must be careful in how a distribution of resources and responsibility would affect the welfare of all concerned. This point is particularly acute if we must aim, and truly so, to satisfy the long-term utilitarian goal of promoting the best state of affairs within and across generations.

At this point we need to remember that such a broad goal of justice that extends across entire populations and generations cannot be met by a single principle, utilitarian or otherwise. Because of the difficulty in specifying an account of our moral obligations to present and future generations, we saw how utilitarianism may point us to various distributive principles when engaging in a purely theoretical discussion on the nature and scope of distributive justice. So, our reader might be wondering precisely how these principles would fit into practical discourse on climate change, and whether they might come into conflict with the per-capita approach that has so far been shown to be the most plausible in dealing with the problem.

Clearly we saw in the preceding chapter that various principles can be justified in utilitarian terms given their appropriateness in governing human affairs at distinct conceptual levels, namely within and across generations. It was noted that in practice, utilitarians will largely endorse the principles defended by prioritarrians and sufficientarians, respectively, which instruct us to give priority to the worse off and ensure as many as possible reach the point of sufficiency. This is because the particular constraints imposed by these respective principles at

the level of global and intergenerational moral responsibility will support the best outcomes for present and future generations. In other words, the path that would be considered fair across humanity into posterity would involve supporting a principle of distributing resources to the worse off across contemporaries, as well another principle which seeks to protect the vital interests of our descendants.

As far as we are concerned, it is in keeping with the pluralistic route of utilitarianism that we adopt an equal per-capita approach, with the proviso that measures should be taken to ensure that it would lead to the greatest net welfare for all concerned. A strict and exclusive adherence to the per-capita approach would not be what utilitarians might favour, for a number of reasons. While it may be reasonable to begin by giving people the same share to the global atmospheric sink, neither this egalitarian distribution nor the approach itself is capable of supporting the long-term interests of humanity. Given the insurmountable task of finding ways to limit climate change and cope with its adverse effects, as well as the general challenges of promoting and protecting human welfare, it is prudent that we put proper emphasis on a careful examination of various approaches. In short, if we are to situate the per-capita approach under an account of distributive justice that is fashioned by utilitarianism, then it must be held to the same scrutiny and constraints as other principles.

Moreover, it was noted earlier that there are potentially deleterious consequences for all parties should we decide to rely solely on a per-capita principle in our response to climate change. The utilitarian cannot refuse to consider the implications of a per-capita approach, one way or another, because of the way that it would fail to secure the best state of affairs for all affected. There needs to be some mechanism by which institutions and nations could trade their

shares to others at a cost, and we saw that doing so would alleviate some of the general burdens faced by the developed nations while improving the overall position of the developing nations. The possibility of a carbon trading system would allow the wealthy nations to purchase additional emissions quotas from the poor nations, which would allow for a reciprocal benefit among all parties in the present generation. That is, the poor nations would have much to gain from acquiring additional wealth from their rich and powerful counterparts, while the latter could continue enjoying a decent standard of living and their income levels at a cost for their excesses.

Although the per-capita and carbon trading principles would provide a determinant standard for the legitimate use of the global atmospheric sink, and perhaps the planet's resources more broadly, we should not hastily conclude that these principles would be sufficient to address the issues facing humanity in a way that would lead to the optimal welfare over the long run. In fact, we have stated that one's concern must lie first and foundationally with welfare in seeking to promote justice across humanity, and that it is necessary to include any principles that would uphold the aims of justice. It is unlikely that one could expect that the environmental principles noted above would rectify all of the injustice on the planet, and similarly accommodate more general concerns that prevail across humanity. Hence, the utilitarian is wise to point out again that distributional principles such as priority and sufficiency give the best basis for addressing socio-economic imbalances that we know are deeply connected with the global environmental crisis. In short, the proposal that would promote the best state of affairs over the long run must combine both economic principles and environmental principles which can serve to guide the distribution of benefits and burdens. This is not an ideal compromise but rather a necessary step that must be taken to support the broader requirements of justice in the present and future.

Our awareness of climate change and efforts to find just solutions to the manifold problems surrounding it have lead us to consider a number of approaches, none of which independently provide a satisfactory account of our moral responsibility to the welfare of human beings and the planet as a whole. However, it is clear that the per-capita approach is the most ethically sound way of formulating a global and intergenerational framework of distribution, even though we cannot fully take into account the complete workings of a theory of justice. If we suppose that the per-capita approach is best suited to guide our environmental behaviour into the foreseeable future, that is, insofar as it provides the most logical and sensible method to control global warming, then it is necessary to indulge in an examination of the particularities involved in seeking to promote optimal welfare for people over the long run.

Significantly, we have seen how the per-capita system has built-in mechanisms that would permit us to address the specific moral concerns that are raised by utilitarians regarding the matter of global and intergenerational justice, without needing to consider the possible conflicts that arise between strictly environmental and welfarist principles of justice. A carbon trading system will undoubtedly force the wealthy nations to buy unused quotas from the poor nations, a measure that would support efforts to improve the level of the worst-off and reduce the burden of the wealthy nations by entering into such a system. At the same time, if such a system were to limit further global warming by capping global annual emissions to safe levels, clearly this would minimize any additional interference with the lives of the not-yet born. And, doing so would protect the interests of future generations in a manner that does not require considerable sacrifices by the current generation, even though it may require some wealthy members to do more than others to alter their economic and environmental behaviour.

In situations where some may abandon or avoid altogether their binding commitment to stay within their per-capita allotment, they will prohibit others from enjoying their fair share of use of the global atmospheric sink. It may be justified on utilitarian grounds to introduce punitive measures which hold those accountable for their bad actions so as to support efforts to undo the latent or actual damage caused by such actions. One such measure can be derived from the polluter pays principle, which is adapted from a “no harm” approach that we considered earlier in our discussion. The principle stipulates that individuals, institutions and other bodies may be held responsible for actions which are detrimental to the welfare of human beings and the planet, including events such as oil spills, coal burning plants, and ozone holes.

The polluter pays principle has been thought to provide a strong incentive to avoid causing pollution and damage to the environment for the explicit reason that such actions are inherently wrong for the avoidable harm they cause. However, we know that utilitarians would not support either line of thinking, but instead they would defend the polluter pays principle on the grounds that deterring such activity or implementing punitive measures would be to the general benefit of humanity in the present, if not into posterity as well. In other words, this principle would have an instrumental role in supporting broader measures to ensure fairness in the promotion of human welfare, which can be encapsulated by the general principles we have outlined in this chapter.

Final Thoughts

The aim of this chapter is to assist us in understanding that there is no justification for the current state of affairs around the world. There are no circumstances by which any party, rich or poor, can be excused from a moral responsibility to act somehow or other to assist humanity in the pursuit of a good life. All persons inhabiting the planet today are deserving of equal moral consideration and worth, just as they are all bound to the same obligations to humankind. This is unmistakably clear from an account of global and intergenerational distributive justice which regards human welfare as the aim and rationale of morality without equivocation. That account also makes it clear that the planet's current inhabitants must take responsibility to ensure they promote and protect the interests of their descendants as well as their own.

We saw that one way to respond to the questions “how ought we behave” and “what do we owe others” on the climate change problem is to delve more deeply into the notion of distributive justice. I have tried to suggest that focusing our attention on the problem of allocating resources across persons into the future provides the most plausible and sensible approach to understanding our moral obligations. Many proponents of welfarism have argued that human welfare should be the primary concern of our moral thinking and practice. In keeping with this view, it was shown that welfarist principles of distributive justice provide the necessary guidance for human activity. However, it was clear from our discussion that distributive justice should serve the best interests of all concerned and we may seek a variety of methods or principles to achieve this end.

Our discussion in this chapter sought to build on the preceding chapters with the aim to explore the implications of relying on a notion of distributive justice for our collective economic

and environmental behaviour. We noted that current proposals for dealing with the climate change problem are faced with a number of problems and are ethically indefensible solutions, despite support from some philosophers and non-philosophers that these are fair and acceptable proposals. Because it is necessary to support the basic interests of all human beings as much as possible and, furthermore, we are required to do so without prejudice, we may conclude that urgent action is needed to minimize global inequality and global climate change to the point where human activity does not hinder or prevent others from living a decent and worthwhile life.

From all the forgoing discussion in this chapter, it was said that both abatement and adaptation strategies are fundamental to any long-term investment to protect human welfare. One way in which we can address the climate change problem through adaptation strategies is to focus on the wider issue of global poverty. While global inequality may be regarded as a problem on its own, it shares a strong relationship with climate change that cannot be ignored. To put it in simple terms, solving the problem of global inequality can help solve the broader issue of climate change, and vice versa. Efforts to reduce both of these problems are consistent with our global and intergenerational obligations to support human welfare over the long run, though we noted there are clear and distinct responsibilities among nations today for how to achieve this.

Let us turn to the final issue of our discussion in this chapter, namely the issue of sharing the atmosphere with present and future generations. It was argued that the only fair and acceptable method is to give people the same access to the atmosphere, not more or any less. This equal per-capita approach creates an absolute limit by which people are allowed to pollute so as to limit further global warming as much as possible over the long run. But despite some lingering objections to establishing binding quotas, it would appear that an emissions trading

system would resolve the concerns that may arise against such an approach. There can be a fair distributive system that is unequal among parties, indeed this much is true in light of the circumstances facing the planet and its inhabitants. A global climate regime that aims to allocate emissions and wealth must serve the basic interests of present and future generations, and this much is enough to compel us to take serious and immediate action to protect the global environment and human welfare.

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