# Obligations to Future Generations and Intergenerational Justice

The question of obligations is a difficult one. We prefer to talk about rights and entitlements, about what we can do for ourselves, rather than about obligations and duties, about what we should do for others. Obligations are often an afterthought, rather than the first thing we consider. Nevertheless, it is often the case that each bundle of rights carries with it a whole series of obligations. This brings us to the crucial question in relation to human impacts on environment: to whom and to what we are obliged. Conventional liberal ethics has a particular focus upon the way we define the boundary of the moral community. Membership of the moral community carries with it both entitlements and obligations. For instance, membership of contemporary societies means that each individual has certain rights regarding free speech and assembly as well as welfare rights. Nevertheless, there are a series of corresponding obligations regarding the limits on free speech (such as laws on libel and slander), the need for public order and the expectation that employed individuals will pay taxation to finance welfare provision. The welfare example raises a relevant way of thinking through some of the problems addressed in this chapter. Welfare involves the recognition of the needs of strangers in a way that private philanthropy does not, for it expresses our obligations to all other members of our society.

### On the needs of future strangers

Entitlements and obligations are considered to be relevant only to those who can be considered to be members of this moral community. The membership criterion has often been defined in terms of species membership, in this case the human species. In practice, it is quite difficult to identify an unquestionable foundation for this boundary. For instance, many animals possess the attributes of many humans. The difficulties this poses will be explored more in the next chapter. The present chapter will focus upon the obligations that present generations have towards future generations. In this case we should focus upon how we define the boundary within the human species. The status of children and those individuals who are considered, in one way or another, as 'mentally unfit', presents difficulties for conventional ethics if membership depends upon full use of 'rational faculties'. In a similar way, future generations, whether these are our immediate successors or distant future generations, raise interesting questions in relation to our present obligations. Future generations are potential people, for our actions in the present will determine which potential people can come into existence. We can begin to formulate questions with these issues in mind. Can we regard future generations as members, like children, so that in the meantime we should act as their guardians? In what ways can we balance our present needs with the needs of future strangers? How much of the earth's finite resources can we set aside or how much pollution can we avoid in the name of establishing an acceptable level of intergenerational justice? If we accept that the waste we are presently producing will be around and dangerous for a long time, then we have to consider the effect on potential people. Nuclear waste is likely to be a danger for a million years, therefore in this case we should consider the implications for about 30,000 generations.

A comparison is often made between the relationship between present and future generations and how we see the relationship between Western moral communities and the needs of strangers in other parts of the globe. The argument for Western overseas aid is, in part, based upon self-interest – that overseas aid is necessary to avoid instability, maintain supplies of important resources and even for the maintenance of markets for Western-manufactured products. Nevertheless, overseas aid is also justified in more general

terms of the obligation, placed upon all members of humanity, to address the needs of strangers who are unable to meet their own needs. Famine relief is often addressed solely in these terms. Similarly, future generations can be seen to be equally worthy of such obligations on the grounds that, as part of humanity, their needs should be taken into consideration. Indeed, it could be argued that these obligations should be taken more seriously because the condition of future generations is a direct product of the decisions and activities of present generations. Present generations will be largely responsible for the benefits and harms experienced by future generations.

The example of the long-lasting impacts of nuclear waste has already indicated some of the difficulties which future generations will have to face. Resource depletion and pollution will have a wide range of effects upon future conditions. Specifically, a slow buildup of levels of chemical toxicity from industrial activities in the midto late twentieth century has begun to manifest itself. The sideeffects of the presence of 'oestrogen-like compounds' in the water supply (derived from products such as household paint) are already altering the sexual balance of many species. In addition, this has been tentatively linked with declining human sperm counts and the rise of congenital abnormalities in male human offspring in western Europe. In a similar way, the difficulties raised by genetic engineering of plants and animals are likely to have a substantial effect upon the extent of biodiversity. In instrumental terms alone, the existence of diversity is essential to future human uses of natural things and yet agricultural practices are undermining this. A series of plantation crop disasters due to infestation were aggravated because of the uniformity of the crops involved. Immunity from the infestations was achieved through cross-breeding the genetically modified plants with wild varieties of the same plants. Once the conditions for biodiversity are eliminated, this option will no longer exist. Rather than present generations passing on a rich and diverse range of potential crops, future generations are likely to inherit a narrow selection of genetically modified plant types.

The recognition of obligations to future generations differs in certain fundamental ways from the ways in which we recognize our relations with our contemporaries. Whereas contemporary moral communities are based upon an equality of status, the relationship between present and future generations involves an unequal

relationship in two senses. The first is inequality of power, for generally the activities of present generations can only do things to benefit or harm future generations, while the latter can only affect us in so far as they assess our reputations in posterity. Future generations cannot directly harm or benefit present generations in a material sense. The second sense is inequality of knowledge, for present generations have little awareness of the impact of their activities on the lives of future generations. This means that existing generations tend to weigh the positive and negative consequences of present activities more heavily than the consequences in the future. For instance, in environmental economics, it is common to engage in the practice of attributing a monetary value to environmental impacts such as the extraction of raw materials or the costs of repairing ecological damage. In particular, the comparison of costs and benefits is built into the assumptions of environmental economics. In relation to estimating the costs and benefits of large-scale projects which operate for a considerable time, it is also common to discount the costs and benefits of the project in future years. This operates in a similar way to the practice of discounting in insurance. It is assumed that our ignorance of the future and the risks involved in identifying costs and benefits in future years means that they should be weighed less heavily the further we estimate them into the future.

When we look at how we examine the costs and benefits of largescale energy projects we can see some of the implications of this practice. All energy projects have large start-up costs, although some have greater short-run costs in terms of immediate ecological change and damage. While nuclear power stations tend to have massive short-term costs, these are adequately compensated for by the benefits of cheap nuclear power in the medium term, during the operational life of the power stations. However, there are very large costs in the long term because of the difficulties involved in the decommissioning of nuclear power stations and the storage of nuclear waste. By comparison, tidal barrages and windmill plantations involve considerable immediate impact upon the ecosystems in which they are located and which are only likely to be offset in the medium term. The benefits of these projects, particularly cheap renewable power, are much more apparent in the long term because there is little waste and the costs are limited to routine maintenance and updating of machinery. In the case of nuclear

power, discounting decreases the weighting of the large long-term costs, whereas in the case of alternative renewable energy projects, discounting decreases their long-term benefits. The proliferation of nuclear power stations in the mid- to late twentieth century and the scarcity of renewable energy projects is a testament to the consequences of discounting. This raises important questions about whether present generations are acting in a just way towards future generations.

### Intergenerational justice

The idea of justice provides social life with its underlying normative order, for it acts as the point of reference for defining appropriate behaviour within that community. The concept of justice rests upon the idea of regard for and fairness towards other members of the same moral community. Justice is an essentially contested concept and, as such, is ineradicably evaluative (Lukes 1974). The concept of justice serves as an important reference point for establishing the core values of a moral community or, for that matter, a particular social theory. There is a clear difference between the arguments in favour of social justice and advocating individual justice. So, rather than seeing justice as something fixed, we can examine the various ways in which it is defined in order to highlight the limits and possibilities of each approach. When we examine justice we are, in effect, examining the horizon of our moral considerations. This can be illustrated by focusing upon the way in which John Rawls develops the argument for a 'just savings principle'. This serves as a means of resolving some of the difficulties in dealing with the impact of human activities on the environment and of understanding the legacy we leave for our descendants.

The concept of justice provides a way of working out the principles upon which a social contract between all members of a moral community can be established. In *A Theory of Justice* (1971), Rawls focuses our attention on the question of the sort of society in which we would like to live. He constructs a scenario in which all members of a moral community are placed in a situation before any social arrangements have been fixed. This position he describes as the 'original position', behind the 'veil of ignorance'. Initially we will assume that the moral community is composed of present generations. In this original position, Rawls asks us to consider 'what sort

of society would we consider to be just?', before we have any idea about what position or attributes we would hold in this society. In this hypothetical mind game, we are put in a position where we have to describe in advance how egalitarian our own society should be even though we have no idea whether we would be placed at the top or the bottom of the society we choose to construct. In such a situation, rational actors would opt for a social contract which is broadly egalitarian just in case they are placed at the bottom of that society. However, this could pose some difficulties if we created a society in which we all received the same rewards despite the variation in the form and intensity of the effort we put in. In a strictly equal society, there are few incentives for self-improvement. In order to address this without contradicting the first decision, he introduces the 'difference principle'. This permits individual members of the moral community to pursue self-interested actions, but only in so far as these actions also benefit the least well-off. A 'just social contract', according to Rawls, would be one in which the benefits of material progress were spread throughout society and in which the lowest in the social hierarchy were not left out. Rawls is, in effect, identifying a redistributive social order as a just one, rather than the inegalitarian social orders which tend to characterize Western industrial societies.

In considering whether our actions are just in relation to future generations, it only remains to extend the moral community from actually existing generations to include future generations as well. In this way we should consider what sort of relationship present generations should have with future generations, if we did not know which generation we would be in. The argument developed by Rawls stops short of this, for he only goes so far as recognizing the ties of sentiment between present and future generations. Rawls devises the 'just savings principle' to address the ways in which present actions could harm the interests of future generations. The idea of 'just savings' refers to the setting aside of natural assets in the same way as responsible decisions by a generation of a family should ensure the security of the next generation. This means that each generation should not start off in a situation worse than the previous generation. In this way, present generations should leave a share of finite natural resources and an environment which is largely unspoilt for future generations to enjoy. However, it is difficult to decide exactly what share of finite resources can be exploited for present needs and what should be left for future generations. Much depends upon how many generations we should wish to consider in this calculation. The more future generations we include, the more the share of finite natural resources which we can presently exploit shrinks. In this account of justice, we should refrain from actions which are likely to have adverse effects on others.

The view of justice developed by Rawls has been most notably challenged by the anarchist individualism of Robert Nozick. In Anarchy, State and Utopia (1974), Nozick argues that a just outcome is one which follows from a series of individual voluntary contracts regardless of whether the outcome is broadly equal or not. This approach assumes that the entitlements enjoyed by individuals are inviolable. Nozick draws upon the natural rights of life, limb and property identified by John Locke. The acquisition and possession of private property is identified as an important component of a free individualistic social order. To demonstrate the extent of each individual's obligations to others, Nozick uses the analogy that every individual is an island. The impact which each individual has upon others is conveyed through the metaphor of sea currents between islands. The activities in each case may create a range of impacts and the side-effects may be carried from one place to another. A key characteristic of the condition of anarchy is the assumption that each individual is free from authority. However, it is possible to establish authority, if it is based entirely on the consent of all those involved, and for all members to be able to renounce it, if their consent is no longer forthcoming. In addition, it should not infringe natural liberties such as private property. Consequently, the impact of environmental pollution places no obligation on polluters to clean up the effects of their activities, unless it infringes such natural liberties. In such situations, where damage to private property has occurred from pollution, the owner of the affected property is entitled to seek some form of compensation. In this account, present generations have no obligations towards future generations. For Nozick, no principle of justice can be legitimately established which would require that a proportion of existing resources should be set aside for our successors to use. Since potential people are not yet alive and cannot be said to be owners of property, they possess no entitlement which we can respect and claims for compensation are not valid.

So far we have contrasted two approaches towards intergenerational justice with very different assumptions about what constitutes a social contract. In the case of Rawls, we are justified in recognizing obligations to future generations, especially if we include future generations in the 'original position'. Rawls applies the contractarian assumptions of Kant, that if something is to be applied at all, it must apply to all members of the moral community. However, in Nozick's account, obligations to future generations are not binding because future human generations fall beyond the restricted criteria for membership of the moral community. It remains possible to justify obligatory commitments to a limited number of generations on a variety of grounds. If we retain the individual as the focus of analysis and regard obligations as limited to our own immediate descendants, it can be argued that each successive generation represents a 50 per cent reduction in our own genetic legacy and a corresponding reduction in obligations. Similarly, arguments for limited obligations based on the protection of family inheritance are usually left to a single blood line rather than all future offspring. The principle of primogeniture establishes that the eldest male has certain entitlements with regard to the inheritance of the assets of a family and, with that, a corresponding series of obligations to manage those assets for the benefit of future generations.

## Selective obligations

Martin P. Golding developed a case for selective obligations to future generations, based on the cultural values of present generations. Golding argues that if we disapprove of the values of future generations, then no obligations exist. Golding's argument is interesting for it explicitly considers the nature of obligations as well as the boundaries within which they apply. He clearly addresses the difference between obligations to our contemporaries and to those who cannot share a 'common life'. Nevertheless, he finds the exclusion of all future generations unjustifiable because it fails to differentiate between the various forms which communities of the future can take. If some future generations were identical to present generations in terms of the values they hold then some obligation to them must exist. If this is the case, Golding argues, then such obligations are, by definition, connected to the 'rights' of future

generations. Such future generations still have claims upon present generations even though they cannot literally make claims upon the living. Whether such claims are tantamount to rights, he argues, depends upon whether they originate from other members of the same moral community.

Golding accepts that the boundary of a moral community is always under threat from new claims for recognition and attempts at exclusion. Such disagreements are an expression of values as to who is worthy of consideration and who is not. This is the nub of the questions over obligations to future generations. For Golding, obligations to strangers are unclear in any case and a good guideline is to examine whether there is sufficient 'fellow-feeling' to warrant an obligation. This 'fellow-feeling' extends beyond 'sympathy' and 'mindless altruism' for it involves the expression of 'genuine concern and interest' in the condition of others so that there is an awareness of what would be good for them. This implies that if we are not in a position to empathize with other people and understand their conditions of life, then our minimal obligation would be to avoid interference. In any case, they may hold very different conceptions of the good life from our own. Golding does not see this relationship as a 'catalogue of rights' but as a responsible attitude, in the same way as the responsibility for promoting the 'good' of the child which exists for parents. Specific obligations then follow as an expression of this basic principle.

When we apply these principles to the relationship between present and future generations, Golding suggests that we do have an obligation to our immediate successors, to our born and unborn children. In these cases we may wish to conserve the natural land-scape, so that it provides as much pleasure for them as it does for present generations. However, when confronted with the issue of further obligations to future strangers, Golding argues:

The more distant the generation we focus upon, the less likely it is that we have an obligation to promote its good. We would be both ethically and practically well-advised to set our sights on more immediate generations and, perhaps, solely upon our immediate posterity. After all, even if we do have obligations to future generations, our obligations are undoubtedly much clearer. The nearer the generations are to us, the more likely it is that our conception of the good life is relevant to them. There is certainly enough work for us to do in discharging our responsibility to promote a good life for them. But it would be

unwise, both from an ethical and a practical perspective, to seek to promote the good of the very distant.

(Golding 1972: 98)

Reconsidering the earlier example in this chapter on meeting the needs of strangers through overseas and humanitarian aid, Western governments usually apply some criteria of selection. It has been common to select societies as deserving on the basis of the affinity which they have with Western values. For example, American humanitarian aid has been denied on the basis of poor human rights records and the ideological beliefs of a number of governments. Such arguments would limit obligations by being selective about the kind of future generations to which present generations would be obligated and, in Golding's case, there is a cut-off point at which obligations should end. Other arguments which develop such selective criteria for moral consideration, however, focus more on the number of generations to which we have obligations and hold that present generations are only obliged to all members of those so selected.

In Man's Responsibility for Nature (1974), John Passmore develops a case for consideration of and obligations to our immediate posterity, based upon what we love. This is in part derived from Golding but also draws upon the insights of the utilitarian approach, developed by Jeremy Bentham and John Stuart Mill, for drawing our attention to the consequences of human actions. The utilitarian approach focuses upon the promotion of collective human happiness or welfare and seeks to identify the ways in which pain can be minimized and pleasure can be maximized. Some of the decisions we make have contradictory consequences, that is, they can involve negative consequences for some and positive consequences for others; they may even have both positive and negative consequences for each individual. In such a situation, utilitarians argue, we need to compare the various consequences of our actions and come to a decision as to whether the consequences provide grounds for acting or not acting. This means that we have to find ways of measuring such consequences in order to make decisions which maximize human happiness. When this is applied to the future, considerable problems can be identified in measuring the likely future consequences of present actions. Because of the uncertainties involved in predicting the future, utilitarians tend to weigh unknown consequences less heavily than known outcomes, as in the illustration of discounting techniques earlier in this chapter. Passmore recognizes the uncertainties involved in calculating likely consequences, when he argues that we do not know for certain that 'a beggar will not choke on the bread we offer' (Passmore 1974: 50). He draws the conclusion that obligations should be limited to immediate posterity.

The utilitarian case for the limitation of obligations to our immediate descendants fits Passmore's own argument that we can only love a limited number of generations of our own offspring. He argues that we cannot love what we do not know and understand. This means that future uncertainties are a key criterion for identifying obligations. Consequently, since we cannot love beyond our immediate posterity we have no obligations towards distant future generations. However, if we were to apply this criteria to present conditions, which are complex and uncertain as well, then claims to obligations within existing moral communities are also undermined. Brian Barry argues against this position:

Of course, we don't know what the precise tastes of our remote descendants will be, but they are unlikely to include a desire for skin cancer, soil erosion, or the inundation of low-lying areas as a result of the melting of the ice-caps.

(Barry 1977: 274)

Such arguments seem to rest upon a common position regarding what we can know and understand about the present condition and the ethical standards appropriate towards it. They imply that the present is simple rather than complex, certain rather than uncertain, and static rather than changing. In fact both the present and the future are characterized by complexity, uncertainty and change. Barry's argument applies as much to the here and now as to the distant future.

# Rethinking intergenerational obligations

The case developed by Richard and Val Routley draws upon the recognition that we should treat the conditions of future generations in the same way as we would consider the conditions of the living. In this 'intuitionist' approach, the attempt to draw any

boundary between present generations, immediate posterity and even distant future generations is fundamentally mistaken. To demonstrate this, they developed the powerful analogy of the intergenerational bus journey. They ask us to consider a bus on a very long journey carrying both passengers and goods. The bus stops at various points on its long journey and the passengers and driver change a great number of times. At some point someone places a package on the bus for a destination towards the end of the journey. This package contains

a highly toxic and explosive gas ... packaged in a very thin container, which as the consignor well knows is unlikely to contain the gas for the full distance for which it is consigned, and certainly will not do so if the bus should encounter any trouble, for example if there is a breakdown and the interior of the bus becomes very hot, if the bus should strike a very large bump... or if some passenger should interfere deliberately or inadvertently with the cargo or perhaps try to steal some of the freight, as also frequently happens. All of these things, let us suppose, have happened on some of the bus's previous journeys. If the container should break, the resulting disaster would probably kill at least some of the people and animals on the bus, while others could be maimed or contract serious diseases.

(Routley and Routley 1978: 133)

This analogy of a bus journey for intergenerational storage of chemical and nuclear waste is geared to prompt an intuitive response from the reader. The act of placing this package appears to be without regard for its potential impact on others, particularly in the future. What Routley and Routley wish to emphasize with this analogy is the standard way in which the long-term storage of toxic and radioactive waste is defended in contemporary Western societies. Such defences range from the complacent belief that the unexpected troubles and consequent leaks are unlikely, to the view that those on the bus might have an accident anyway or die before the package becomes dangerous. They may even go as far as to suggest that it is the responsibility of the passengers and the driver to ensure that the journey is a smooth one. Alternately, it is possible to dehumanize the victims of the leak, by suggesting that their harm is of little or no consequence. These arguments would appear to be unacceptable, yet they have been used in one way or another in defending the storage of toxic chemicals and nuclear waste. It should not be a surprise to discover that waste is often stored in

environments which contained marginalized social groups or in developing societies.

Routley and Routley identify the most common justification as a business imperative. The productive process inevitably results in such wastes, which have to be stored somewhere. This is usually couched in terms of 'all industry produces waste' and, since we do not wish to be a pre-industrial society, we are stuck with the problem. The assumption that waste is inevitable is often combined with the argument that all opponents of, say, nuclear waste dumps, are simply engaged in 'nimby' politics (that is, 'not in my backyard'). In particular, Routley and Routley argue that the risks involved in the long-term dumping of nuclear waste closely match this bus journey analogy in terms of the moral dilemmas and the excuses used to justify dumping of the nuclear waste and associated contaminated materials. The time-span for the storage of the massive amount of waste produced is estimated to be in excess of a thousand years, and for plutonium much longer. The safe storage of this waste requires constant human maintenance and has to take into account the possibility of long-term changes in climate, geology and possible disturbance. The transformation of human lives over the last few thousand years gives a good indication of the uncertainties involved. All this waste, they argue, is equivalent to a thousand Hiroshimas produced from each power station each year, for just thirty years of power. In addition, the potential catastrophic consequences from a relatively small leak are huge. According to Routley and Routley, the legacy for future generations is twofold. Nuclear waste is still going to present a burden in terms of its careful storage. We have also, as a consequence of present energy orientations, initiated a form of global development based on high resource use and high energy use. This will make any attempt to convert the future global economy towards renewable energy sources even more difficult than today. Routley and Routley conclude with the recognition that 'time bombs with long fuses', such as nuclear waste and toxic chemicals, are morally unacceptable solely in terms of their effects on the future.

We can see from these positions, that there are intense disputes over the extent and nature of our obligations to future generations. When present generations make decisions and engage in activities with beneficial short-term consequences, but which could seriously harm or burden people in the long term, they are discriminating against future generations. The existence of a moral boundary between present and future generations of human beings is hard to substantiate. This is a reflection of the way in which the idea of a moral community is open to contestation. In addition, there are disagreements as to whether we should discuss these issues in terms of 'a just system of rules' or in terms of 'human happiness', as well as disputes as to what these mean. I wish to argue that, in practice, all the criteria used to identify the conditions of future generations, in order to justify the privilege of the already existent, are also characteristic of present generations. If the same moral dilemmas apply to potential people and our contemporaries, then the case developed by Routley and Routley is strengthened. Certainly, this means that we should not discriminate against future generations, although it does not help us to work out what the impacts will be, so far in the future.

This means that we at least need an initial set of new guidelines which will serve to avoid some of the problems identified above and make sensible decisions between alternative courses of inaction and action. Daniel Callahan (1971) provides four useful guidelines on avoiding future jeopardy, which express greater respect for future generations and which have been adapted slightly for the purposes of this chapter:

1 Present generations should not act in ways which jeopardize the existence of future generations.

2 Present generations should not act in ways which jeopardize the ability of future generations to live in dignity.

3 Present generations, in defence of their own interests, may have to act in ways which jeopardize future generations but should do so in ways which minimize this risk.

4 In attempting to determine whether present activities do jeopardize the existence or dignity of future generations, present generations should act in responsible and sensitive ways as if each action with uncertain consequences could harm one's own children.

In each guideline, it is assumed that human beings who are alive should act with restraint in case they harm human beings who are not yet alive. These guidelines provide a basis for fostering a new attitude towards potential people. However, this remains an anthropocentric criterion, which limits moral consideration to human beings and ignores claims for consideration by non-human animals and other natural things. Many of the same problems and issues developed in relation to future generations are relevant in the debates on animal welfare and animal rights. It is to the problems and issues raised by placing animals within the moral community that we now turn.

Ecologism

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# Human and Non-human Animals

This chapter explores one of the most emotive and controversial issues in environmental ethics. The conditions in which animals live and the treatment of animals by human beings have recently provoked intense discussion. The issues of hunting, vivisection and vegetarianism have become the most passionate areas of conviction politics. A whole range of human practices and institutions have been called into question. This has produced a lively debate about the ethical system that underpins societies which engage in the use of animals for human needs and purposes, with little or no consideration of the implications of this for animals themselves. When we raise questions about whether or not human beings should eat meat, wear furs, laugh at monkeys confined in a cage or elephants standing on their hind legs in a circus, we are also raising questions about the very way of life in those societies. In short, this chapter addresses the debates about whether we should consider nonhuman animals in moral discussion and, if so, on what grounds human beings should attribute moral consideration to them. In particular, this chapter focuses upon whether animal suffering is the key issue or whether animals have an intrinsic value which endows them with rights and entitlements to which human beings have obligations.

The recent wave of activism in the UK on this issue can be dated from the early 1960s alongside other environmental movements which emerged at this time. The publication of Ruth Harrison's *Animal Machines* (1964) and its serialization in *The Observer* newspaper raised public awareness about animal welfare and the effects of factory farming. Of particular concern were the ways in which