

# Do we have responsibilities to future generations?

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Presented at *Philosophy Café*,  
The Gate Arts Centre,  
Keppoch Street, Roath, Cardiff  
15 July 2008

## A. Introduction

Aristotle proposed over two thousand years ago that philosophy was born out of a contemplative feeling of wonder at the universe. As an aristocrat, he obtained the opportunity to contemplate the wonder of the universe because he had slaves to ensure his contemplative moods were not disturbed by having to heat the bathwater or fetch wine. His teacher Plato represented philosophy in a different way. Perhaps his most famous work, the *Republic*, can be read as a response to the defeat of democratic Athens in the Peloponnesian War by the militaristic Spartans. It's an attempt to ask: *what went wrong?* in the face of great, inexplicable tragedy. So philosophy can enter onto the stage as a reaction to loss, and a kind of expression of grief. Which means that anyone who experiences loss can be a philosopher – and as loss is not something unique to aristocrats, this means anyone can be a philosopher. You could say even that everyone *will* become one.

The question which is tonight's session title is one which comes from a sense of having lost something important about the relationship between the present and the future. Since the 18<sup>th</sup> century, a cultural assumption about the future has spread throughout cultures across the world, spread by industrialisation and political revolution: namely, that the future is ours to create, and that the path ahead is one of progress. This wasn't always the case: human cultures have often seen the future as preordained in some way, or at least in the gift of supernatural forces. For such cultures, the relation between present and future is settled largely by inherited moral codes: you keep things going for the next generation by doing largely what your ancestors did. The belief that the future can be radically different from the past, and that transforming it is in the gift of people who are alive now, means that a different

relationship with future people is possible. In other words, we should make the world a better place for them, using the different kinds of knowledge promised by technology, economics and so on.

But over the last 50 or so years, this faith has, I want to suggest, been shaken. Why this might be I won't go into right now, though it's something we could talk about later. But, faced with problems like climate change, how to generate sufficient energy in the face of dwindling fossil fuels, and the loss of biodiversity through species extinction, the loss of this faith in inevitable progress has left us asking, if we can't be sure we can just make the world better by providing more, bigger, better versions of the economies and technologies we have now, what do we owe future generations? Do we owe them anything, or should we just get on with our lives now? These questions only become askable in the first place because we've lost a certain faith in the future, one which itself replaced traditional Christian understandings of the world to come. What we want to do tonight is just to look at how these moral problems might be framed, allowing us all to debate how we could address them.

## **B. The issue: nuclear waste disposal**

The specific issue we're looking at tonight is nuclear power, and more specifically, high level nuclear waste, the type that remains dangerously radioactive for many hundreds to many thousands of years. How to safely deal with this legacy? We might think about storing it deep underground, 'out of sight out of mind'. One thing we can be sure of in this scenario is that the containers will eventually fail. When this is likely to be, we cannot be sure of; as the canisters will be deep underground for many hundreds or thousands of years, we cannot predict with certainty what will happen as a result of such a failure, as we only have computer models to work with, given that no-one in human history has had to deal with the burial of nuclear waste before. We have no past experience to go on.<sup>1</sup> Geology is, as they say, a historical and not a predictive science: the chances of waste getting into the water table, for example, are largely unknowable. Or we may decide to keep it near the surface in accessible

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<sup>1</sup> On the reasons for being sceptical about computer modelling as a way of predicting what will happen in such cases, see Shrader-Frechette, 1993.

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storage, repairing canisters etc. as needed. But how can we be sure that this can be done so long as the waste is dangerous? Even if this is only a matter of centuries, that's still a lot longer than the term of office of a government or even the lifetime of most *systems* of government. Where do our responsibilities lie on this issue, and how can we best discharge them?

### **C. A consequentialist response**

One way we might look at the problem is in the terms used by economists, particularly those who are interested in the microeconomic problems of what motivates and satisfies people. This branch of the discipline is generally referred to as 'welfare economics', as it is interested in how to best ensure that people get from the economy what they want, rather than with how to manage the money supply or maximise trade. It thus relies on two basic ideas, one drawn from the tradition of ethical thought known as utilitarianism, the other from a still broader tradition referred to as consequentialism. From utilitarianism it draws the idea that what matters is what is good, and what is good is that actions should produce a maximum amount of happiness. This implies the other basic idea, the consequentialist notion that it is the outcomes – the consequences – of actions that allow us to judge them as right or wrong.

A textbook utilitarian view of responsibility might be that it's a matter of keeping in mind that the best thing to do is whatever maximises happiness for the greatest number of people. Welfare economists who agree with this would say that the best thing to do for the future is whatever has the best outcome in terms of distributing happiness between present and future.

Is this idea, that maximising happiness for the greatest number of people, a good way of thinking about responsibilities to future people? The emphasis placed by consequentialist arguments on consequences is problematic when the consequences are difficult to predict, which is particularly true of the long-term future. Economic forecasting operates by selecting what features of the economic environment might be important in determining how things are going to turn out, building a working model

of these features, and seeing what happens. The problem lies in the process by which significant bits of the economic world get selected. Some simplification is inevitable, because maps are not the territory - not everything can be in the model. Some simplifications are arguably pernicious ones.

An example might be future discounting, in which the future costs and benefits of an activity are treated as of less value than present ones, on the basis that it makes sense to understand society's preferences in the same way as individual preferences. In general, it's assumed people will place greater weight on the satisfaction of their needs now than on the satisfaction of those needs in the future, and if they have to pay costs, will prefer to put payment off as long as possible.

So, if nuclear power is cheap and low-carbon, then it makes sense for the welfare economist to go ahead with building nuclear plants even if when they come to be decommissioned in 50 years the costs are comparatively high, because this reflects society's general preferences. Similarly, with nuclear waste, it makes sense on this view that we choose a relatively cheap way of disposing of the waste, which also carries low risks. From the welfare economist's point of view, if we take seriously people's preferences and discount the future, then burying the waste deep underground looks like a good option. A secure underground repository would probably cost a good deal less and be more secure than keeping the waste in an easily monitorable location. Therefore we would have to pay less to sort out the nuclear waste problem, and if it was secured from outside interference and potential leakage into water tables and so on, we would face less risk.

This might not, from our point of view, look like a problematic conclusion – in fact it has obvious advantages... But a philosopher who disagrees with the welfare economist might draw attention to the inequalities they seem happy to accept. The utilitarian position from which the economist is arguing is supposed to treat everyone's preferences equally. But this has limitations: when uncertainty of consequences comes into the equation, then it appears better to go for maximum certain benefits over maximum uncertain ones. This effectively means that the preferences of future

generations count for less. If our moral responsibility, as utilitarianism suggests it is, is to maximise benefits, then we don't seem to have too much of a responsibility to future generations at all. Hopefully they'll also do well if we do well for ourselves, but we shouldn't worry too much. If we want to do something specifically for them, it's not a matter of responsibility but of whether we ourselves are particularly generous: so it's not a matter of moral obligatory, just a matter of whether we feel benevolent.

#### **D. A rights-based response**

An alternative view might be that what is important in deciding the question of responsibility is what individual people are entitled to, not what overall benefit might be produced by a policy. This means the *rights* of future people should be taken into account. If you think rights are an important concept, then it's probably because you think everyone has them, without exception. Equal rights extend to all people not only in space – that is, everyone alive now on the planet has them – but also in time.

On the equal rights view, then everyone who will ever live has the same rights as everyone else.<sup>2</sup> This means that we have no right to discount the future as the welfare economist wants to: we can't burden people who will be alive 50 to 100 years from now with massive decommissioning costs for our nuclear power stations, even if we can be reasonably sure that this is a good way to produce a maximum of maximally certain benefits. One reason for this, in the view of the rights advocate, is that people are entitled, above all, to consent to whether they have to bear costs that result from someone else's actions.

Now this is, in principle, fine if you're talking about consent from people who are alive now, before a nuclear plant is built. But if the largest part of the unpredictably large costs of having nuclear power will have to be paid by people who will not be alive for another 50 years or longer, then there is a problem. Future people cannot in principle consent to or withhold consent from present actions. If this is so, then it is arguably immoral to impose costs upon them for our benefit here in the present.

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<sup>2</sup> See Shrader-Frechette, 2005.

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But there are problems with the equal rights view too. Some philosophers have argued that it makes no sense to say that future people can have rights. This has to do with what it means to possess a right. If I build a nuclear waste depository in your neighbourhood, then you may well object, claiming that I have infringed your rights. Part of what it means to have rights is arguably to be able to claim that others have ignored them – so the fact that future people cannot consent is actually a reason *not* to be too concerned about them, at least if we think rights and not the greater good are the basis of morality. They can't claim their rights, therefore they have none.

The rights advocate might respond by arguing that we can have certain obligations to future people *in general*, which are independent of whether or not these people can claim their rights. For instance, suppose I'm having a picnic in Bute Park, accidentally break a bottle and leave the broken glass behind in the undergrowth rather than clear it away. Suppose a child at some future time steps on it and cuts her foot. I'd be judged to have acted wrongly; but arguably no-one has even to cut their foot for me to have arguably acted wrongly – because I know that leaving broken glass lying around exposes other people to definite risks.<sup>3</sup> If I have these general kinds of duties to the future, based on known risks, then the fact that the people who may be harmed by my actions may not even exist yet is immaterial. Just knowing about the actual risks they pose is enough.

### **E. The problem of knowledge**

But this brings us to a more serious problem with the equal rights view, on which I want to end. If there is a link between knowing about the definite risks of doing something and having to recognise the rights of others not to bear those risks, then what if we do not know about the risks of what we're doing? If our actions produce consequences (like high level nuclear waste) that may pose a hazard for at least several hundred years, then some of the potentially very serious risks we are taking with future people are unknowable. As I suggested earlier, if we bury the waste deep underground, then we know the casks are eventually going to fail – but we have no

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<sup>3</sup> Pletcher, 1981.

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way of knowing exactly what kind of risk this might pose, as we have no past experience of long-term burial to go on. Now, this has a counter-intuitive result, if we take rights seriously. We've seen that it's possible to argue that future generations have rights based on our general knowledge of what risks an action poses. But if we can't know very much about the risks, then on this argument we have less reason to be worried that we're doing anything wrong. This is because the less we can know about the risks which accompany an action, the less we can be held responsible for them. This is a basic principle of law, and any morality which takes rights seriously. But our problem here is how to think about our duties to future people, and particularly what to do about nuclear waste. And so the problem we face is that we're trying to decide what our responsibilities are in a situation in which *in principle* we don't know very much about the risks of our actions. Whether we want to think about responsibility in terms of acting to bring about the greater good, or acting so as to respect the rights of others, when it comes to future generations, we face a seemingly intractable problem: the fact that our knowledge about the consequences of what we're about to do doesn't reach very far.

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