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LARS LÖFQUIST

ETHICS BEYOND FINITUDE

RESPONSIBILITY TOWARDS FUTURE GENERATIONS
AND NUCLEAR WASTE MANAGEMENT



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Abstract

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This dissertation has three aims: 1. To evaluate several ethical theories about responsibility towards future generations. 2. To construct a theory about responsibility towards future generations. 3. To carry out an ethical evaluation of different nuclear waste management methods.

Five theories are evaluated with the help of evaluative criteria, primarily: A theory must provide future generations with some independent moral status. A theory should acknowledge moral pluralism. A theory should provide some normative claims about real-world problems.

Derek Parfit's theory provides future generations with full moral status. But it is incompatible with moral pluralism, and does not provide reasonable normative claims about real-world problems. Brian Barry's theory provides such claims and a useful idea about risk management, but it does not provide an argument why future generations ought to exist. Avner de-Shalit's theory explains why they ought to exist; however, his theory can not easily explain why we ought to care for other people than those in our own community. Emmanuel Agius' theory gives an ontological explanation for mankind's unity, but reduces conflicts of interests to a common good. Finally, Hans Jonas' theory shifts the focus from the situation of future generations to the preconditions of human life generally. However, his theory presupposes a specific ontology, which might be unable to motivate people to act.

The concluding chapters describe a narrative theory of responsibility. It claims that we should comprehend ourselves as parts of the common story of mankind and that we ought to provide future generations with equal opportunities. This implies that we should avoid transferring risks and focus on reducing the long-term risks associated with the nuclear waste.

Keywords: Future generations, Nuclear waste, Ethics, Applied ethics, Narrative theory, Self-transcendence, Moral status, Equal opportunities

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Contents

Acknowledgments.....	9
Introduction.....	11
Why Responsibility towards Future Generations?.....	11
Is Responsibility towards Future Generations Unnecessary?	13
Why Responsibility towards Future Generations still Seems to Matter	14
Aims	17
How to Understand Future Generations?	18
Research Material.....	21
Method	24
1) Analytic Questions	26
2) Evaluative Criteria.....	28
3) Nuclear Waste Management	30
Research Context.....	31
Previous Research	33
Nuclear Waste and Ethics	39
Outline.....	40
1. Well-being and Populations.....	44
Introduction	44
Background: Consequentialism and Utilitarianism	44
Parfit and The Project of Reasons and Persons	49
Parfit's Theory and Responsibility to Future Generations.....	53
Justification for Responsibility	53
Values	56
Population Principles	57
Practical Questions	61
Evaluation of Parfit's Theory	64
Consequentialism and Future Generations	64
Impersonal and Person-affecting Value.....	65
Responses to the Repugnant Conclusion.....	69

Parfit and Normative Claims	72
Parfit's Answers to Practical Questions.....	75
Parfit's Theory and Nuclear Waste	77
Conclusion.....	78
2. Posterity, Equality and Justice	80
Introduction	80
Background: Contract-theory and Justice.....	81
Barry's Critique of Different Theories of Justice and Their Approach to Responsibility towards Future Generations	87
Barry's Theory and Responsibility to Future Generations.....	90
Justification for Responsibility	90
Values	94
Equal Opportunities	97
Practical Questions	100
Evaluation of Barry's Theory	102
Fundamental Equality and Future Generations	102
Values and Contingent People.....	103
Equal Opportunities for Well-being	104
Equal Opportunities for Resources	107
Barry's Answers to Practical Questions	108
Barry's Theory and Nuclear Waste	110
Conclusion.....	111
3. The Transgenerational Community	114
Introduction	114
Background: Communitarianism.....	115
Intergenerational Justice and Community	117
de-Shalit's Theory and Responsibility to Future Generations....	123
Justification for Responsibility	123
Values	124
What We Owe Members and Strangers.....	128
Practical Questions	130
Evaluation of de-Shalit's Theory	131
The Limits of the Community and Future Generations	131
Why Act Humanely?	133
Deliberative Process and the Extension of the Community....	135
Resource Distribution and Community	137
Positive and Negative Obligations.....	138
de-Shalit's Answers to Practical Questions	140

de-Shalit's Theory and Nuclear Waste.....	141
Conclusion.....	142
4. The Common Good of Mankind.....	144
Introduction	144
Background: Whitehead's Metaphysics	145
Agius' Social Ethical Theory.....	148
Agius' Theory and Responsibility to Future Generations.....	152
Justification for Responsibility	152
Values	154
Responsibility and Collective Rights.....	157
Practical Questions	160
Evaluation of Agius' Theory.....	162
Process Philosophy and Future Generations.....	162
The Collective and the Individual.....	162
The Common Good of Mankind.....	164
Creative Freedom	166
Normative Claims and Collective Rights	167
Agius' Answers to Practical Questions	169
Agius' Theory and Nuclear Waste	170
Conclusion.....	171
5. The Idea of Mankind.....	173
Introduction	173
Background: Phenomenology.....	174
Jonas: A Metaphysical Response to Technology	175
Jonas' Theory and Responsibility to Future Generations.....	178
Justification for Responsibility	178
Values	180
The Imperative of Responsibility	183
Practical Questions	185
Evaluation of Jonas' Theory	188
The Idea of Mankind as the Object of Responsibility	188
The Essence of Mankind	190
The Heuristics of Fear and the Threat of Extinction	191
Normative Implications of the Imperative.....	193
Jonas' Answers to Practical Questions	194
Jonas' Theory and Nuclear Waste.....	195
Conclusion.....	196
6. A Common Narrative.....	198

Introduction	198
A Narrative Justification for Responsibility to Future	
Generations	203
Individual Narratives	203
Collective Narratives	206
The Story of Mankind.....	210
Conflicting Narratives and Other Problems.....	214
Value and Meaning.....	216
The Background for Normative Claims.....	222
Equal Opportunities for Resources	226
Practical Questions	231
Conclusion.....	235
7. Future Generations and Nuclear Waste Management.....	237
Introduction	237
Nuclear Waste and Its Management	238
Risks of High-level Waste	241
Methods for HLW Management.....	243
Rejected Methods.....	244
Ultimate Removal in Space	244
Deep Seabed Disposal	245
Realistic Methods.....	246
Surface Storage.....	246
Geological Disposal.....	247
Partitioning and Transmutation (P&T).....	249
HLW Management and Ethics	250
Risks and Equal Opportunities for Resources	254
Ranking of Moral Objectives.....	257
Evaluation of Surface Storage	260
Evaluation of Geological Disposal	261
Evaluation of Partitioning and Transmutation.....	263
Conclusion.....	264
Bibliography	267
Index	275

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Uppsala, March 2008

Lars Löfqvist

Introduction

Responsibility is, as so many other philosophical and theological concepts, an ambiguous concept. Because of this, I propose the following definition:

If A has moral responsibility towards B, this means that A owes B something, either because B has some morally relevant characteristics, or because B stands in a morally relevant relationship to A.¹

This definition of responsibility makes this concept similar to the concept of obligation. However, I find it useful to use the concept of responsibility because it can include some moral relations that are not easily expressed in terms of obligations. One example could be how a person reacts to a newborn child. Someone can deny that he or she has any obligation towards this child, but still feel that he or she owes the child something, just because of some characteristics of the child.

Moreover, the concept of responsibility is also often used in association with questions about guilt and sanctions. That comprehension of the concept is irrelevant for this dissertation. What is relevant is what should be done, and why someone should do it.

Why Responsibility towards Future Generations?

Only in the last century has humankind developed the capacity to destroy life on earth. Since then, humans have also become increasingly aware of the mounting environmental problems partly caused by increased technological and economic development. There

¹ The term *moral* or *moral relation* refers to a specific phenomenon, a system of relations that exists between humans, and which raises and highlights questions about what is good and evil, right and wrong, and what characterizes a good human life or a good society. This presupposes that there are other kinds of relations among humans, e.g. love and economic transactions.

are also signs that this process is accelerating and that the problems will be even more severe in the future.

There is a growing debate about the problems with development and there are attempts to find alternative paths towards progress. The concept of *sustainable development* is one attempt. This concept refers to an idea that tries to facilitate technical and economic development given the limits of our natural environment. This idea acknowledges that we can affect both the environment and future generations.² Obviously, if we can affect future generations, we might also act in ways that could cause negative effects.³ Generally, morality is focused on the future, e.g. how we should act, and it is therefore important to consider the moral implications of our capacity to affect future generations.

One central concern is whether our power to cause negative effects somehow obligates us to change our activities. I believe that most ordinary humans are disturbed by the idea of knowingly creating problems for other human beings. E.g., some of our acts could harm people living hundreds of years from now. Is that reason enough to act differently? Moreover, how should we act? Do we even know what problems our actions can generate? These questions accentuate questions about our responsibility towards future generations and about how that responsibility should affect our activities.

Future generations are all those generations that will probably succeed us. We will never meet them, and they will only know us by the world we leave behind. Some of the things we pass on are extremely dangerous, e.g. the huge and steadily increasing amount of high-level radioactive nuclear waste we produce.⁴ This waste might risk the health of hundreds of generations to come.⁵ Do we have responsibility towards these future people? Some are sceptical about it, and some even reject the need to think about this question. The

² *We (us, our)* refers to contemporary human beings.

³ Grenholm, Carl-Henric and Kamergrauzis, Normunds (eds.), *Sustainable Development and Global Ethics*. Uppsala Studies in Social Ethics 33. Uppsala University, Uppsala 2007, p. 12.

⁴ High-level nuclear waste is the most hazardous type of nuclear waste.

⁵ A *risk* is the product of the probability that something could cause some harm, or other burdens, (probability of exposure) and how much harm, or burdens, it could inflict (hazard of exposure). Being exposed to a risk means simply that there is a probability that one might be exposed to some kind of harm or burden.

rejection could be motivated by an acceptance of a very positive outlook on humanity's future.

Is Responsibility towards Future Generations Unnecessary?

There are some optimists that claim that there is no need for us to change or reflect on our activities, because there are some general trends in the history of mankind that will eventually lead to the greatest benefit for future generations.⁶ This optimism makes it unnecessary to talk about responsibility towards future generations; these generations are facing a bright future so why should we owe them anything? Generally, there are four arguments that support this optimism:

1) *Technological progress*. Human beings are extremely resourceful, and it is therefore reasonable to predict that they will solve most of the environmental problems with the help of technology.

2) *Substitution* (or compensation). Every natural resource can be replaced with either other natural resources or man-made resources. E.g., if we deplete the oil-supply, humans will nevertheless invent or develop new resources that are better, or at least as good as those that were depleted.

3) *Scarcity will change incentives*. This economic claim says that scarcity of resources will make it economically sound to invent new tools or change current behaviour, i.e. one type of behaviour will become more beneficial than other types of behaviour.

4) *Accumulation of wealth*. It is a basic fact that, historically, intergenerational transfers of capital resources (money, knowledge, factories, etc.) have left succeeding generations wealthier than previous ones. Because of this accumulation, future generations can

⁶ Even if the last two of these ideas are grounded in economic theory there are no obvious connections between the optimistic perspective and economics. Some of the more qualified optimists are: Kahn, Herman et al., *The Next 200 years: A Scenario for America and the World*. Sphere Books Ltd, 1978. Beckerman, Wilfred and Pasek, Joanna, *Justice, Posterity and the Environment*. Oxford University Press, Oxford, 2001. Lomborg, Bjørn, *The Skeptical Environmentalist: Measuring the Real State of the World*, Cambridge University Press, 2001.

cope with increased environmental costs and the need for substantial technical investment.

These four arguments imply that it is certain that future generations will be better off, or at least as well off, as we are.

Why Responsibility towards Future Generations still Seems to Matter

The most problematic arguments in support of the optimistic perspective are *technological progress* and *substitution*. Throughout history, humanity has always developed new tools and the increased industrialization has made it possible to produce, invent and use tools in an ever more efficient way. That is an indisputable fact of the present human condition. Still, historic trends might not continue into the future and there might be limits to what kind of tools humanity can invent, and the power of these tools. One can argue that a widespread breakdown of the earth's ecosystem can not be handled by any technology. Such a breakdown might be irreversible, and technology could only be used to adapt to the new circumstances, and not alter the overall process. Technology seems to have limitations. It can be used to minimize the effects that natural powers have on humanity, but it can not extend total control over those powers.

Concerning technological progress, it is important to note that it is impossible to guarantee any radical breakthrough in any research area. Even if increased spending on a prioritized area might increase the possibility of breakthrough, the occurrence of that breakthrough can not be predicted. Not even a total determinist can hope to predict when the next radical technological invention will occur, and based on that fact it would be foolish to make policy decisions motivated by the idea that some technological solution might magically appear and solve various problems.

Also, one might argue that some problems are not even of a technological kind, but primarily connected with lifestyles and values. Some of the environmental problems in today's industrialized countries are probably connected to a short-sighted hedonistic idea of the good life, and it might be more effective for society to change that idea than to hope for technology to solve the inherent problems of that idea.

Substitution implies that, if a natural resource can be cost-effectively replaced with a man-made resource that is similar, or better, in all relevant aspects, this resource can be effectively replaced with another. The question is, how often does this happen in practice?

Sometimes it is necessary to replace a natural resource with several natural or man-made resources. In that case, it is not correct to say that the resource is entirely substituted. It can be replaced with other resources, but there has been some change. If we take oil as an example, its substitute or substitutes must have the ability to replace the many uses of oil. There are no other natural resources with exactly the same qualities as oil, which implies that any substitute must involve some kind of production process, which might increase the cost of that substitution and make it relatively cost-ineffective. This is of course a very complicated issue; many variables shape the analysis, but this illustrates the problem with substitution.⁷ It is actually quite difficult to replace natural resources in a cost-effective way, so one should at least not a priori believe that this could be done.

Another problem with substitution is conceptual. There is a belief that the loss of one kind of resource can be replaced by a very different kind of resource. Insurances are a phenomenon that illustrates the point. We believe that a person can be to some degree compensated for an injury by a sum of money. There are some limitations to this thinking. To begin with, some injuries can not be healed and money can not do anything about it. This is partly connected to the great difficulty of establishing the economic value of things that are not easily integrated into any market. Techniques like ‘willingness to pay’⁸ might give some indications for how we should solve the problem in economic analysis, but that does not solve the conceptual problems. Instead, the whole idea of substitution might be problematic; it is not easy to see that one can at all compensate a loss of some value with some other value.⁹

⁷ Some of these variables are: the cost of oil extraction, market demand and consumer preferences.

⁸ *Willingness to pay* is a method to determine how much a person is ready to spend on services or goods. By using it, it is possible to determine how persons value different things. It can be used to establish costs of reduced physical capacity, and non-market values like that of preservations of species. In response to criticism of this method, proponents could argue that the problem with it is to understand its findings and implementing them, not the method itself.

⁹ A pragmatic argument could be used to defend the use of insurances and similar ideas. Humans are ready to accept compensation in the form of another kind of value.

Changed incentives are to a certain degree a sensible argument. If something costs more, and the cost is the only interesting variable, people often choose something cheaper, e.g. an increase in oil prices will make it more prudent to drive less and/or buy a smaller and more fuel-efficient car. But we must observe that it might take some time for the incentives to change, and that a negative trend could go on for quite long before steps are taken to change that trend. It is also possible that a negative trend becomes irreversible if it continues beyond a point of no return. In other words, when we start to change our activities it might be too late.

Concerning the *accumulation of wealth*, it is certainly true that investments and savings of previous generations have made many of us better off. The question is whether this historical trend will make future generations better off. The answer is related to the possibility of increasing costs. If some costs, like environmental costs, increase more than the wealth of future generations, they will not be better off. Or, expressed differently, increased wealth might be less important than an unspoiled environment. The benefits of the increase will be nullified by the increased cost or the destruction of essential life-preserving environments. There are only two solutions to this problem. There is either an increase in savings and investments, or a reduction of activities that increase environmental costs. Increased wealth does not automatically make future generations better off.

If one applies the optimistic perspective on problems like high-level nuclear waste management, it could legitimize a policy that many of us would call grossly negligent. In extreme cases, the perspective could recommend that we should not take care off the waste, because future generations will certainly find a better solution. Our only concern is to avoid any radioactive leaks during our lifetime. Extreme as this position might seem, there is some force behind it if one accepts the optimistic position. Nevertheless, if the counter-

Everyone that works accepts payment in money instead of in food. This is a legitimate comment, but it must be noted that acceptance is the key point. Future generations can not accept anything, so such ideas can not work in this case. There are no time-indifferent standards for comparing different things, which makes substitution quite problematic. E.g., standards for an efficient fuel could be its energy production, flammability, storage cost and direct environmental cost. If any product or resource is better than another (higher energy, lower flammability, lower costs) it is better. Even if we agreed on such a standard, it is impossible to know which criteria future generations would use for evaluating fuel efficiency.

arguments are conclusive enough to make us sceptical about the optimistic perspective, we must once again ask ourselves: what is the basis for responsibility to future generations, and how should we act towards these generations?

Aims

This dissertation is a study within the academic field of *ethics*. It is a theoretical attempt to understand questions concerning what good and evil, right and wrong are, and what characterizes a good human life or a good society, i.e. moral questions.¹⁰ Given the characteristics of ethics, and the questions raised in the previous section, this study has three aims:

1) To give a critical and constructive evaluation of several ethical theories that discuss responsibility to future generations.¹¹ By doing so, I hope to establish which theoretical positions are reasonable and which are unreasonable.

2) To construct a theory, or theoretical framework, about our responsibility towards future generations. Such a theory should ideally prescribe which actions are morally owed to future generations and provide a comprehensive argument in support of these actions.

3) To analyse the ethical implications of different methods of high-level nuclear waste management and to use the theory about responsibility towards future generations to evaluate these methods. This will test the normative relevance of the theory and could establish, or challenge, the ethical justification for these methods.

¹⁰ I presume that *ethics* is distinct from *morality*, *moralities* and *morals*, which are the ideals, norms and beliefs that people in the past, the present and the future have about good/evil, right/wrong, the good human life or the good society. Such ideals, norms and beliefs are acted on in everyday life and are of great practical importance. Both ethics and morality are related to the moral phenomenon, but in different ways. Ethics is the pursuit of a thorough understanding of this phenomenon, and morality is the representation of the phenomenon in everyday life. This study does not seek out to provide a new form of morality, instead its ambition is to understand and discuss issues that are of theoretical importance in the field of ethics; this is pursued independently of any implications for everyday life.

¹¹ An ethical theory is a more or less coherent system of ideas, claims and arguments about the moral phenomenon that attempts to provide a more thorough understanding of this phenomenon than what is usually attempted in everyday life.

It is noteworthy that the achievement of the first and second aim is not a necessary precondition for the accomplishment of the third aim. It would be possible to discuss the moral aspects of high-level nuclear waste without presupposing a substantial ethical theory. However, the conclusions drawn from such an analysis will lack theoretical depth, which must be provided by a more systematic ethical theory. It is therefore better to start in the sphere of normative ethics and only turn to the sphere of applied ethics when a theoretically sound position has been established.

On the other hand, I also believe that it is quite difficult to establish a sound position in ethics totally independent of the problems one wants to address. There should be a mutual interaction between the more theoretical aspect of ethics and the problems under investigation. The structure of this dissertation mirrors this understanding of the relation between ethics and ethical problems.

In order to accomplish the aims, I will ask and answer the following three questions:

- 1) What can be learned from how the different theories justify responsibility towards future generations?
- 2) What kind of values, claims and practical considerations should be included in a reasonable theory about responsibility towards future generations?
- 3) What insights should such a theory give us into the different methods used in managing high-level nuclear waste?

How to Understand Future Generations?

One helpful step towards establishing guidelines for what kind of ethical theory we need in order to determine our responsibility towards future generations is to take a look at the theoretical features of those future generations.

As I said before, one aspect of future generations is that they are always future. Because human society is made up of several overlapping generations, future generations are best defined as future relative to any contemporary humans. This means that for a person with young children the future generations start with his or her grandchildren. And for a person with grandchildren, the future generations start with his or her grandchildren's children. Future

generations are always the next unborn generation. As soon as a new generation is born it is no longer part of the future, it is one of us.

Another point is that future generations include many different generations. Theoretically, it is possible that the whole group of future generations includes members that will experience the extinction of the sun. Nevertheless, it is possible to make a distinction between *close* and *remote future generations*. Even if there is no distinct point where the close generations become remote generations, there still seems to be a difference between those who might live a 100 years from now and those that might live 3000 years from now. Whether this is of any moral importance is disputed.

Moreover, all future generations are affected by our acts. Their existence is not a logical necessity, but it is empirically very probable. As unlikely as it may seem, humanity could be wiped out, e.g. by some cosmic event or a plague. Even if such events are possible, it is very probable that there will be at least one future generation. Only a worldwide avoidance of having children would stop that from happening.

Another feature of future generations is that we have no specific knowledge about their society and what kinds of values that society will have. There are of course some general necessities of human life that must always be part of any conception of the good life. It is difficult to imagine any human society that does not value health, food, water, shelter and some kind of leisure. We might even contemplate whether such a society should be called human! However, if human life as we know it continues within a long enough time frame, it is possible that processes like evolution can change *homo sapiens sapiens* in such a degree that one could argue that a new species has been born. Such speculations should probably not significantly affect our ethical thinking, but might make us humble when we confront these difficult issues.

Because responsibility is normally directed to people who exist, this complicates how we ought to treat future generations as beneficiaries of our responsibility. Specifically, this means that future generations have an uncertain moral status in our ethical thinking. We can only relate to them through our conception of them. We must form conceptions about their lives, about whether they should exist, and about their moral status. A key to understanding responsibility towards future generations is to understand how different scholars

conceptualize future generations, and how the conceptual status of future generations is related to questions about their moral status.

The philosophical discussion about future generations is complicated by the lack of common terminology and several distinct questions are often compressed into one. A short terminological survey can make it easier to follow the debate about future generations.

All future generations are *possible* or *potential* because they do not exist, i.e. they are *not actual*. There is no consensus on exactly who these possible future persons and groups are. Some argue that potential persons are all those that will actually exist in the future. Others claim that possible must refer to all those that could exist. Obviously, this last group might be extremely large.¹²

Also, *possible* can be interpreted either in ontological or epistemological terms, i.e. future generations can be conceptualized as ontologically possible, and/or epistemologically possible. The first position implies that they could become actual, and the second position that we can envision that they could become actual.¹³

Moreover, future individuals and groups can also be considered to be *contingent* or *non-contingent*, depending on whether their existence is dependent on a specific act or not.¹⁴ Contingent future people are those individuals or groups whose existence, number and identity are affected by a specific act. Non-contingent people are those individuals and groups whose existence, number and identity are unaffected by

¹² E.g., Narveson, Jan, 'Future People and Us', in Sikora, R.I. and Barry, Brian (eds.), *Obligations to Future Generations*. White Horse Press, Cambridge, 1978, p. 43.

¹³ *Ontology* is an investigation aimed at answering some, or all, questions about being. The word ontology is often used to refer to the philosophical investigation of existence, or being. What then is the concept of being? There are at least four questions that can be asked in relation to this concept: 1) Which things are there? 2) What is it to be? 3) Is existence a property? 4) How is an understanding of being possible? These questions are related to each other. Craig, Edward, 'Ontology', in Craig, Edward (ed.), *Routledge Encyclopaedia of Philosophy*. Volume 7. Routledge, London, 1998. p. 117.

¹⁴ The terms contingent and non-contingent are provided by Heller. E.g., Heller, Jan Christian, *Human Genome Research and The Challenge of Contingent Future Persons: Toward an Impersonal Theocentric Approach to Value*. Creighton University Press, Omaha, Nebraska 1996, pp. 10-13. The distinction, but not the terminology, has also been highlighted by Schwartz and Parfit. See Schwartz, Thomas, 'Obligations to Posterity', in Sikora, R.I. and Barry, Brian (eds.), *Obligations to Future Generations*. White Horse Press, Cambridge, 1978, pp. 3-13. Parfit, Derek, *Reasons and Persons*, Clarendon Press, Oxford, 1984, pp. 351-379.

that specific act. This conception refers to the relative status of future generations.¹⁵

Finally, it is also possible to conceptualize future generations, either all future generations or a specific group, as providing a *precondition for meaning* or *value* in our lives. This conception focuses on the function that future generations have, regardless of their ontological or contingent status.

Research Material

Because of the characteristics of future generations, an important precondition in this study's selection-process is that the theories should have a wide approach to ethics. The need for a wide approach rules out any theoretical perspective that focuses exclusively on only one specific aspect of responsibility towards future generations. Ideally, the selected theories should answer several kinds of normative and practical question in relation to that responsibility.

Also, there is a danger of being excessively focused on a specific way of doing ethics or approaching ethical problems. It might be impossible to distance oneself totally from one's own research tradition; but it is certainly possible to try to understand another perspective and to approach a subject with that perspective. This legitimizes the use of several different kinds of ethical theories. By doing this, it might be possible to identify common problems, reoccurring ideas and more or less necessary conditions for any theory about responsibility towards future generations.

The material for this dissertation is different philosophical or theological texts that propose different theories about responsibility

¹⁵ It is noteworthy that David Heyd uses both the terms *potential* and *actual* when he refers to different kinds of future generations. He claims that the future population of Mexico can be seen as actual in relation to different economic and ecological policies in the United States. Heyd, David, *Genethics: Moral Issues in the Creation of People*. University of California Press, Berkeley, 1992, pp. 97-98. If we disregard the terminology and focus on Heyd's claim, it seems more appropriate to say that the future population of Mexico is non-contingent in relation to such policies. The policies will not affect the existence, number and identity of the Mexican population. The difference between possible and contingent is highlighted by Holtug in Holtug, Nils 'Person-affecting Moralities', in Ryberg, Jesper and Tännsjö, Torbjörn (eds.), *The Repugnant Conclusion: Essays in Population Ethics*. Kluwer Academic Publishers, London, 2004, p. 130.

towards future generations. The theories are selected with the help of four criteria:

1) The theory should provide a substantial perspective about responsibility towards future generations.

2) The theory should be conscious of and responsive to the conceptual and logical problems of future generations.¹⁶

3) The theory should make some claims about what we should do or not do to future generations.

4) The theory should have a unique perspective in relation to other theories about responsibility towards future generations.

The first criterion is arguably the most important one; it would be difficult to justify the use of a theoretical perspective that has nothing to say about responsibility to future generations. Even if it is possible to reconstruct the view of an ethical theory on responsibility to future generations, that is not an aim for this study. The theories selected for this dissertation are the following five:

I will start the analysis with the theory proposed by Derek Parfit. The main source of his thinking is *Reasons and Persons* (1984) where he claims that the consequentialist aim is to bring about the best possible world. Because of the huge amount of literature in the consequentialist tradition, it is difficult to choose one proponent over another. The benefit of choosing Parfit is that his importance to the field of responsibility towards future generations can not be in doubt; his work has initiated a significant debate.

Brian Barry is an influential political philosopher. Barry has worked on questions about responsibility towards future generations for many years. He refers explicitly to both Derek Parfit and Avner de-Shalit and both of these authors refer back to Barry. Barry supports a universalist theory of intergenerational justice.¹⁷ He claims that we owe future generations equal opportunities. Barry is very productive; his discussion about future generations is, however, concentrated in five articles: 'Justice between Generations' (1977). 'Rawls on Average and Total Utility: A Comment' (1977). 'Circumstances of

¹⁶ Some problems are: We have a limited understanding of their lives, needs and interests. They do not, and may not ever, exist.

¹⁷ Although the term universalism can refer to many different ideas, a minimal definition of *ethical universalism* is that everyone, without exception, ought to perform some act, or attain some disposition for acting, i.e. virtue. O'Neill, Onora, 'Universalism in Ethics', in Craig, Edward (ed.), *Routledge Encyclopaedia of Philosophy*. Volume 9. Routledge, London, 1998, p. 536.

Justice and Future Generations' (1978). 'Intergenerational Justice in Energy Policy' (1983). 'Sustainability and Intergenerational Justice' (1999).

Avner de-Shalit is a philosopher working at the Hebrew University in Jerusalem. In his important book *Why Posterity Matters. Environmental Policies and Future Generations* (1995) he makes a critical evaluation of utilitarian, contract and rights-based ethical theories about responsibility towards future generations. His own contribution is a communitarian theory that stresses the idea that a community stretches over several generations. Two of the reasons for including de-Shalit are his informed and sophisticated discussion of the major theories in ethics, and his demonstration of the specific benefits of his own substantial theory in relation to these theories.

Rev. Emmanuel Agius is a Catholic theologian based at the University of Malta. He is engaged in the Future Generations Program initiated by UNESCO, and he has edited or co-edited five anthologies discussing responsibility towards future generations from different perspectives. He proposes a theory based on the metaphysical theory of A.N. Whitehead.¹⁸ This theory is presented in his doctoral dissertation, *The Rights of Future Generations: In Search of an Intergenerational Ethical Theory* (1986). It involves the claim that because of the inter-relational character of human life, we are connected with all of humanity. This involves all past, all present and all future humans.

Hans Jonas (1903-1993) was a philosopher originally from Germany that later worked in Palestine and New York. He was early interested in environmental ethics and problems with technology. His seminal work, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age* (1984), emphasizes the need for

¹⁸ The concept of *metaphysics* can be characterized by its focus on two types of questions; the first type is aimed at the nature of reality, and contains specific questions like: is there any universal principle that can be applied to everything? That question is about the possibility for some general truth. The second type of questions tries to uncover what is ultimately real, which could be something that goes against our everyday experience. Both types of questions asked in metaphysics are related to being and *ontology*, which, however, is usually focused on things that do exist or should exist and not on the principles that govern everything. Famous metaphysical positions are materialism (reality is wholly made up of matter), idealism (reality is ultimately mental or spiritual) and dualism (reality is made up of both matter and consciousness). Craig, Edward, 'Metaphysics', in Craig, Edward (ed.), *Routledge Encyclopaedia of Philosophy*. Volume 6. Routledge, London, 1998, pp. 338f.

prudence when there might be unforeseeable effects of our actions. We should avoid risking the existence of mankind, because there is an ontological 'idea of man' that must be preserved. Jonas has been extremely influential for the discussion about responsibility in general, in particular for the discussion about risks that jeopardize human existence. His work is frequently quoted and commented, especially in theological discourses.¹⁹

It is certainly possible to extend the analysis by including more theories. One noticeable shortcoming is the absence of a feminist perspective. There is an absence of feminist philosophers who have focused on the question of future generations. Responsibility towards future generations could therefore be in need of an analysis from a feminist perspective.

Method

This is a study in ethics that includes considerations about how ethics should be understood, i.e. meta-ethics, normative ethics and applied ethics. There are no clear boundaries between these fields and it is therefore impossible to focus exclusively on one of them without presupposing claims in the other fields. One problem with this wide focus is that one might ignore many subtle issues included in each field. I can only hope that my discussion minimizes these omissions.

On the most basic level about how ethics and ethical claims should be understood, two recurrent themes will be the ontological and epistemological status of values. It is noteworthy that this study will not include any discussion about the semantic function of value claims, because my focus is on what we ought to do and not how ethical expressions should be understood.

Normative ethics is the systematic search to explain which actions, ideals or principles are right and which are wrong. In practice, the normative investigation might be limited to identification of the best arguments for an ethical position. Such investigations are quite complicated and the search for the right answer is probably a never-ending quest.

¹⁹ E.g., Schweiker, William, *Responsibility and Christian Ethics*. Cambridge University Press, Cambridge, 1995.

According to one interpretation, applied ethics is the application of normative ethical theories on real-life problems facing individuals and society, e.g. abortion or the justification of war. However, this perspective is too rigid. There should be a more mutual relationship between these two ethical fields in the sense that normative ethics can be better understood if it also gains insights from applied ethics, specifically the character of moral problems. One of the aims of this dissertation is to find the most ethically justified method of high-level nuclear waste management. If such a method could be identified, there are reasons for adopting it, at least from an ethical perspective. However, the character of nuclear waste can provide important insights into normative ethics as well.

There is always a danger of being too focused on either applied ethics or normative ethics and forget their interconnectedness. Both are investigations in ethics. If applied ethics should be able to make claims based on more thorough reasoning, it is necessary to try to relate it to normative ethics. But it is also imperative that normative ethics are also related to real-life problems. As long as moral relations are relations between humans, we must understand how these relations interact with the problems faced by humans. As such, I believe that normative ethics can be improved by applied ethics and vice versa.

Based on the interaction between normative and applied ethics, it is important that the analysis and evaluation of different theories be shaped with the goal of application in mind. I hope to manage that feat by shaping both the analytic questions and the evaluative criteria in a way that they extract and evaluate the normative content from the theories, which enable application on real-life problems. In this way, it is possible to avoid the risk of just making a deduction that is theoretically sound but ethically ambiguous or outright repulsive. Even if I hope that this dissertation takes this interaction into account, it is up to my readers to decide if it has been successful.

Accordingly, the method includes three different steps:

- 1) Describing the theories about responsibility towards future generations with the help of analytic questions.
- 2) Evaluating the theories about responsibility towards future generations with the help of evaluative criteria.
- 3) Describing and evaluating how the theories approach the question about high-level nuclear waste management.

Also, before the description of each scholar's theory about responsibility towards future generations, there will be a short presentation of both the research context of each scholar and his wider ethical perspective.

1) Analytic Questions

On the basis of how I previously characterized future generations, a reasonable theory about responsibility towards future generations must include four distinct, but closely interrelated, dimensions of ethical theory:

A) *Justification*: The focus of this dimension is on the argument why we should include futures generations in our moral considerations.²⁰

B) *Values*: This dimension includes claims about what is valuable in life and how value should be understood.

C) *Normative claims*: These ethical claims express what we should do towards future generations.

D) *Practical*: Answer questions, like: Who is responsible to whom? How long into the future should the moral concern be extended? How do we handle the unknown? These questions concern specific issues that are important for the applied part of the dissertation.

A necessary step in an ethical analysis is to make a careful description of the theories that shall be scrutinized. A useful tool to bring that about is to use a group of questions. These 'analytic' questions are used to identify certain aspects of different theories of responsibility towards future generations that are of interest for the particular aims of this dissertation.

However, there are no exact boundaries between different parts of a theory. It is usually an important criterion that a theory should be coherent, it is an integrated whole. It is therefore difficult, or perhaps even wrong, to abstract one part of a theory from the rest. The use of these questions should therefore be sensitive to this fact. Also, the

²⁰ It is a difficult question whether justification refers to a meta-ethical or normative part of ethical theory. One answer is that justification refers to the nature of ethical reasoning or ethical arguments. This is primarily a meta-ethical position but it seems to imply some ideas about normative ethics too. Possibly, one can claim that there should at least be a natural connection between statements about justification and normative claims.

questions themselves are interrelated; they bring out different aspects from the same theory.

There are nine analytical questions, which focus on different aspects of the four dimensions:

1) *What kind of argument supports responsibility to future generations?* This question aims at providing a general characterization of a theory about responsibility towards future generations. These theories come in various forms and some indications of the general framework of the theory are helpful in the analysis.

2) *Which aspects of the relationship between generations are morally relevant for the responsibility to future generations?* Accordingly, not everything in our relationship with future generations is morally relevant. This question focuses on what it is that makes the relationship between posterity and us a moral one.

3) *What values are promoted?* All ethical theories that claim that something should, or should not, be done, must say something about what is valuable in general or specifically for humans, i.e. make some value claims.

4) *What is the comprehension of values?* This question refers to meta-ethical issues about how values should be understood.

5) *What do we owe future generations?* It is essential that theories about responsibility towards future generations include claims about the normative content of this responsibility, in order for us to compare and weigh this responsibility against other kinds of responsibilities.

6) *What moral concepts should guide responsible action towards future generations?* There are various moral concepts that can be used to characterize responsibility towards future generations: It can be characterized as a question about principles, about rights, about distributive justice. Whatever the characterization, the key is to identify the normative content of what we should do for future generations.

7) *Who should be responsible, and to whom or what?* An ethical theory about responsibility to posterity must have some idea who should act according to the responsibility, e.g. individuals, groups, or institutions.

8) *What are the time-limits for responsibility?* This question is relevant because the concept of future generations can extend to

include all generations to the end of human life on earth. It is therefore reasonable to expect a theory to present a view on this subject.

9) *What is the correlation between responsibility and our limited knowledge about the future?* This question accentuates that time will eventually make all predictions come to shame. This fact could be used as an argument against responsibility toward posterity and it is therefore important to note how different theories relate to it especially in regard to risks, i.e. the probability that something harmful might occur.

A precondition for analysing different kinds of theories is that it is possible to apply the same method on different theories. This is arguably a very problematic idea. Most scholars have developed a special terminology, and an important part of the analysis is to identify the specific vocabulary of each theorist. One should let the material lead the way to a proper understanding of a particular concept and its use. This means that a principle of sympathy, or good will, must guide the interpretation. One should try to interpret the text in the most reasonable way and refrain from constructing an argument with the character of a man of straw.

This does not solve the problem with analysing different kinds of theories. However, it is possible to circumvent part of that problem by applying the same analytic model on all theories. Obviously, the model itself must be reasonable and adapted to its purpose. This study is aimed at making a well-grounded contribution to applied ethics, and the method is conceived with this aim in mind. All analytical questions are important if one wants to address real-life problems. A theory that has an ambition to say something about how our responsibility towards future generations should influence our activity should be able to answer all of the questions, irrespective of its theoretical tradition or conceptual apparatus.

2) Evaluative Criteria

Besides the descriptive aspect, the dissertation will also include an evaluation of each theory with the explicit aim of finding out what could be a reasonable theory about responsibility towards future generations. What characterizes a reasonable theory? There are many answers to this question, but I propose that a reasonable theory should satisfy four criteria. These criteria focus both on aspects which are of

particular interest given the aims of this dissertation, but also on more general questions about our world and what should characterize a good ethical theory generally.

1) *A theory should give future generations some independent moral status that can not be completely reduced to our own interests or beliefs.* The argument for this criterion is that it is the natural extension of the idea that we have responsibility to future generations. Alternatively, we could be justified to act short-sightedly and imprudently if we knew that future generations have no moral status. If we refuse to claim that such short-sightedness is justified, it seems that we need to provide future generations with some kind of independent moral status.

2) *A theory should acknowledge moral pluralism.* There are some social characteristics of human life that can not be, at least not now, changed or disregarded. The most important aspect of this complexity is that there are many partly incompatible ideas about the good life, there are many ideas about what is valuable or not, and there are many different ideas about the meaning of these values. This pluralism will prevail even if all marginalized and extremist ideas are rejected. I presume that it is better to accept this pluralism than to reject it.

3) *A theory should be theoretically coherent.* This is a traditional logical and philosophical ideal which implies that different parts of a theory should not only be compatible with each other, they should be an integrated whole. A coherent ethical theory provides a theoretical framework with a strong connection between arguments and where it is possible to follow the thoughts of its creator. This kind of theory will stand a better chance to capture, describe and explain the moral phenomenon than a theory that is incoherent.

4) *A theory should have some normative implications for real-life problems.* I.e., a theory should give some substantial recommendations about what we ought to do, or not to do, for future generations when we face problems that highlight such responsibility. Also, it is important that those recommendations refer to problems that we actually do or might face, and not to problems that are theoretically possible but presuppose a different kind of world.

These criteria are tools that shape the investigation of a theory. They provide a perspective from which a theory can be evaluated. Also, besides the use of criteria, the evaluation is partly relative. The different theories will be continuously compared with each other. This

makes it possible to identify theoretically problematic aspects that are not easily abstracted with formalized criteria.

Apart from these criteria, it is important to relate a theory to a specific problem. The fourth criterion gives some general insights into how a theory relates to real-life problems. However, there are many problems in real life, and it can therefore be beneficial to compare how different theories approach the same kind of problem. This can provide insights both concerning how reasonable the theories are and how we ought to handle a real-life problem.

3) Nuclear Waste Management

High-level nuclear waste²¹ management provides a real-life problem that has substantial implication for responsibility towards future generations. It is therefore beneficial to relate the theories to this problem.

The evaluation will include an effort to relate the different theories to the general characteristics of the nuclear waste, and determine whether the theory takes these characteristics into account or not. A theory is better if it acknowledges and provides a response to several of these characteristics rather than just to one.

The first characteristic is that *the waste is created* by the generations that use nuclear power. The waste is a by-product of nuclear technology, which makes it more morally important than if natural forces had produced it. A theory should therefore acknowledge the fact that we created the problem with high-level nuclear waste.

The second and most obvious characteristic is that *the waste is hazardous*. The exact amount of harm the waste can cause is dependent on several factors, it is however beyond doubt that the waste can be very dangerous for someone that is exposed to it. Any claims made by a theory about nuclear waste should therefore take its hazard into account.

The third characteristic is that *the waste is associated with long-lived risks* in the sense that it will be hazardous for thousands of years. Due to our limited knowledge about the remote future, high-level waste management includes the probability that future generations might be exposed to hazards. Also, risks might be unknown, i.e. we

²¹ I include the spent nuclear fuel from the nuclear power plants in the definition of high-level waste. For a more thorough discussion about this issue, see chapter 7.

just do not know if there is a risk or not. Or, risks might be indeterminate, i.e. they are known, but it is impossible to determine their probability or their effects. E.g., the risk might be dependent on the acts of future generations.

The first characteristic is less important for the overall evaluation. If we acknowledge that we created the waste, it seems difficult for a theory about responsibility towards future generations to avoid claiming that we are to some extent responsible for it. The evaluation will therefore focus on the second and third characteristics.

None of the theories for further investigation are specifically directed to the question of high-level waste management. Even if they acknowledge the nuclear waste problem, they do not attempt to provide a complete answer to how we ought to select a method for waste management. Based on this, it is reasonable that the evaluation of method can only be performed after the more general ethical claims about nuclear waste have been identified. It is therefore imperative to avoid making excessive and illegitimate demands on the theories. Instead, the goal in each chapter is to evaluate how the theories relate to the nuclear waste problem generally; the question of method will be investigated in the last chapter.

Research Context

This dissertation is written in a specific research context. Studies in ethics at the Faculty of Theology in Uppsala can be characterized by at least two distinct features.

First is the focus on both normative and applied ethics. Recent studies have focused on such different subjects as political philosophy²², self-realization²³, economic theory²⁴, Christian social

²² E.g., Gölstam, Algot, *Frihet, jämlikhet, demokrati. Etik och människosyn inom liberal och socialistisk tradition*. Uppsala Studies in Social Ethics 16. Uppsala University, Uppsala, 1995.

²³ Nilsson, Staffan, *Den potentiella människan. En undersökning av teorier om självförverkligande*. Uppsala Studies in Social Ethics 30. Uppsala University, Uppsala, 2005.

²⁴ Löfstedt, Malin, *Modell, människa eller människosyn? En analys av kritiska perspektiv på bilden av människan i neoklassisk ekonomisk teori*. Uppsala Studies in Social Ethics 31. Uppsala University, Uppsala, 2005; Jarl, Ann-Cathrin, *Women and Economic Justice: Ethics in Feminist Liberation Theology and Feminist Economics*. Uppsala Studies in Social Ethics 25. Uppsala University, Uppsala, 2000.

ethics²⁵, environmental ethics²⁶, care ethics²⁷ and feminist ethics²⁸. Ongoing research is also focused on sexual ethics, animal ethics, and different kinds of work ethics.

A second feature is the use of both philosophical ethical theory and diverse theological models. The discourse and research tries to combine the best from both worlds. More specifically, there is an openness to discuss metaphysical ideas and different views on life. This study continues the traditional Uppsala approach to ethics by combining applied ethics with a theoretical discussion that includes both theological and philosophical ethics. This wide perspective increases the possibility of making a contribution to the debate about responsibility towards future generations that acknowledges and builds on several kinds of theories.

Besides the context of research, it is noteworthy that there are other factors that influence this study. The text is highly influenced by the fact that I write from the perspective of a white middle class male, born and raised in a small and politically stable north European country. Any evaluation is undoubtedly influenced by this background and might be biased. Total objectivity is impossible, but one can at least try to take a less biased stand in order to reach conclusions that are not only based on personal preferences, but grounded in reasoning that everyone can at least to a high degree follow and possibly accept.

²⁵ Kamergrauzis, Normunds, *The Persistence of Christian Realism: A Study of the Social Ethics of Ronald H. Preston*. Uppsala Studies in Social Ethics 27. Uppsala University, Uppsala, 2001.

²⁶ Kvassman, Staffan, *Samtal med den värdefulla naturen. Ett studium av miljöetiken hos Knud Løgstrup, Holmes Rolston III och Hans Jonas*. Uppsala Studies in Social Ethics 22. Uppsala University, Uppsala, 1999; Kronlid, David, *Ecofeminism and Environmental Ethics: An Analysis of Ecofeminist Ethical Theory*. Uppsala Studies in Social Ethics 28. Uppsala University, Uppsala, 2003.

²⁷ Malmsten, Kersti, *Reflective Assent in Basic Care: A Study in Nursing Ethics*. Uppsala Studies in Social Ethics 24. Uppsala University, Uppsala, 1999.

²⁸ Bóasdóttir, Sólveig Anna, *Violence, Power, and Justice: A Feminist Contribution to Christian Sexual Ethics*. Uppsala Studies in Social Ethics 20. Uppsala University, Uppsala, 1998. Höglund, Anna T., *Krig och Kön. Feministisk etik och den moraliska bedömningen av militärt våld*. Uppsala Studies in Social Ethics 26. Uppsala University, Uppsala, 2001.

Previous Research

Responsibility towards future generations has been discussed in several traditions in ethical theory: primarily, consequentialism and contract-theory, but also rights-theory and communitarianism. Moreover, it has also been the object of theological investigation. Due to the size of the debate, I can only mention some of the most noteworthy contributors.

It is not a too controversial claim that most of the discussions about responsibility towards future generations have taken place in the *consequentialist* tradition. It seems rather obvious that some of our acts might harm future generations, and that this would be wrong if our general moral aim is to bring about the best consequences, e.g. those consequences that maximize well-being. Much of the discussion concerns how we can compare and evaluate different populations from a consequentialist perspective.

Thomas Schwartz argues that we can not have any obligations towards remote future generations, because different acts can cause different individual people to exist, and it is impossible to compare outcomes that include different people. Remote future generations can not complain about their situation in the sense that they want a better one. Another act would have caused different people to exist, and not the same people in a better situation. Wishing for a better situation implies wishing that somebody else should have lived a better life. The conclusion is that we can not owe remote future generations anything, because we can not improve the situation for those that will eventually exist. However, we can still have obligations to ourselves, if we believe that future generations should have a certain kind of life.²⁹

Jan Narveson focuses on whose well-being should be included into moral considerations. He noticed that we could either only include the well-being of existing people, or also include the well-being of those that might exist. If we should include the well-being of these possible people, this presupposes that we deny that our act of bringing them into existence is morally important. This means that our obligations are not towards future persons, but towards maximizing well-being generally, without any reference to whether people are better or worse

²⁹ Schwartz, Thomas, 'Obligations to Posterity', in Sikora, R.I. and Barry, Brian (eds.), *Obligations to Future Generations*. White Horse Press, Cambridge, 1978.

off, i.e. the obligations are impersonal. Also, Narveson notices that we can maximize well-being in two ways, either by bringing about people with high well-being, or by bringing about a larger number of people who have a low well-being. I.e., we could either maximize the average or the total amount of well-being. However, maximizing any of them leads to other problems.³⁰

Many philosophers have discussed similar issues as Schwartz and Narveson, and the most well-known is Derek Parfit. Parfit's contribution is a deep discussion of the many problems facing consequentialism. This includes finding a principle that maximizes well-being without leading to counter-intuitive conclusions. One of these conclusions is that maximizing total well-being could imply that a large miserable population is better than a smaller happier one.³¹

David Heyd is a philosopher that argues in line with Schwartz, he claims that we do not have any obligations to future generations generally, but only to those whose existence is independent of our acts. The size of this group can vary, depending on the act. Heyd also provides a detailed presentation of the problems facing both his and Parfit's theory.³²

Gustaf Arrhenius is a Swedish philosopher who has focused on the different ways of solving the problem of maximizing well-being of a population. Specifically, how we should find a population principle that avoids both the problems that face the maximizing of average well-being, and those that face the maximization of total well-being. His conclusion is negative, there is no principle that solves the problem of maximization without leading to counter-intuitive conclusions.³³

Another tradition in ethical theory in which the subject of responsibility towards future generations has been discussed in great length is *contract-theory*. A large part of the discussion has focused on how John Rawls' contract theory can be adopted to include future generations. One example is David Richards. He claims that the so-called original position should be conceived as a gathering of all past,

³⁰ E.g., Narveson, Jan, 'Future People and Us', in Sikora, R.I. and Barry, Brian (eds.), *Obligations to Future Generations*. White Horse Press, Cambridge, 1978.

³¹ Parfit, Derek, *Reasons and Persons*. Clarendon Press, Oxford, 1984.

³² Heyd, David, *Genethics: Moral Issues in the Creation of People*.

³³ Arrhenius, Gustaf, *Future Generations: A Challenge for Moral Theory*. Uppsala University Printers, Uppsala, 2000.

contemporary and future people. All of these generations should be able to influence the moral principles that should guide their society.³⁴

Another important contributor is Brian Barry. He is both a firm critic and proponent of contract-theory. E.g., he claims that it is difficult to extend the original position so that it includes future people. Such extensions lead to metaphysical peculiarities. On the other hand, he does argue that the fundamental equality between humans should be extended to include future generations.

David Gauthier is another contract-theoretical writer. His work focuses on rational choice as the foundation for morality. However, he does attempt to include future generations into moral considerations by focusing on the overlapping relations between generations. On the other hand, this reasoning can not easily show how it is in our self-interest to have obligations to remote future generations.³⁵

Another theoretical tradition is *rights-theory*. Several of the most famous proponents of rights have argued that the concept of rights can be extended to include future generations. The main problem concerns how we at present can assign rights to people that do not exist.

Joel Feinberg claims that future generations have rights in the sense that if they exist, which he presumes, they will have interests. Rights can be used to protect these future interests from being frustrated by our acts. He also notices that future generations can not have a right to exist, but only rights as long as they will exist.³⁶

There has also been strong criticism against the idea of assigning rights to future generations. Lukas H. Meyer provides one example. He claims that the assignment of rights presupposes a wide range of problematic claims and there are important considerations that can not be accounted for by such a theory, primarily why future generations should exist. It is unreasonable that someone has a right to exist. Interestingly, Meyer also claims that our obligations should be based

³⁴ Richards, David A.J., 'Contractarian Theory, Intergenerational Justice, and Energy Policy', in MacLean, Douglas and Brown, Peter G. (eds.), *Energy and the Future*. Rowman and Littleman, Totowa, NJ, 1983.

³⁵ Gauthier, David, *Morals by Agreement*. Clarendon Press, Oxford, 1986.

³⁶ Feinberg, Joel, 'The rights of Animals and Unborn Generations', in Partridge, Ernest (ed.), *Responsibilities to Future Generations*. Prometheus Books, New York, 1981.

on the continuation of common projects and that this implies that our society should be open towards the future.³⁷

Nevertheless, Annette Baier claims that it is conceptually possible to talk about the rights of future generations. A proxy can claim these rights in order to facilitate protection of future generations whatever their ontological status. Future generations have a status similar to each person's future self. She also argues that the reason why we ought to care for future generations is because we are part of a community, which stretches from the past and into the future.³⁸

Baier can therefore be placed among those authors that propose more *communitarian* approaches towards the problem of responsibility towards future generations.

Martin P. Golding provides one account that stresses that it is important that our obligations towards future generations are connected to whether we share some ideas about the good life with future generations or not. Golding claims that this shared idea of the good life is the reason why we have strong obligations to close future generations and weaker to the remote future. However, a shared idea of the good life is part of what makes a group a community. The remote generations are not part of our community and we can not know their ideas of the good life. We can not therefore have an obligation to promote their good life. At best, we must avoid making any plans for them.³⁹

Many of Golding's arguments are discussed at length by de-Shalit, who provides a comprehensive theory of intergenerational communities and which obligations are associated with these communities. Moreover, he provides an argument that we owe strong negative obligations to those that are non-members of our community.

Another philosopher that also stresses communitarian aspects of responsibility, but who also includes Kantian reasoning, is Bruce E. Auerbach. He stresses the connection between both the history and the future of the community, and that we should act in ways that future

³⁷ Meyer, Lukas H., 'More than They Have a Right to: Future people and Our Future-oriented Projects', in Fotion, Nick and Heller, Jan Christian (eds.), *Contingent Future Persons: On the Ethics of Who Will Live, or Not, in the Future*. Kluwer Academic Publishers, London, 1997.

³⁸ Baier, Annette, 'The Rights of Past and Future Persons', in Partridge, Ernest (ed.), *Responsibilities to Future Generations*. Prometheus Books, New York, 1981.

³⁹ Golding, Martin P., 'Obligations to Future Generations', in Partridge, Ernest (ed.), *Responsibilities to Future Generations*. Prometheus Books, New York, 1981.

generations are likely to accept.⁴⁰ Auerbach's work is important, but the actual justification for his ethical theory is similar to de-Shalit's theory. de-Shalit has developed a much more comprehensive justification for why we should take future generations into account when we act, which makes it more appropriate to focus on his theory.

Besides the philosophical traditions, several theologians have discussed responsibility towards future generations. Arguably, the most noteworthy one is Emmanuel Agius. His dissertation has provided a deep and constructive analysis of such responsibility, which is the reason why he is represented in this dissertation. Besides, Agius has edited several important anthologies on the subject. One anthology includes contributions from theologians in several different strains of Christianity and other religions.⁴¹

Another contributor with clear theological insights is Jan Christian Heller. He insists that the Christian tradition is above all focused on persons and their relation to God, and this makes it difficult to assign any moral status to future people whose existence is totally dependent on our acts. However, Heller solves this by retaining the focus on persons, including God, and combining this with the moral demand that we ought to adapt a more objective perspective when we consider how our acts affect people generally.⁴²

Heller combines normative ethics with applied ethics. Another philosopher who takes a similar approach is Edward A. Page. He focuses on the problem of climate change and that of intergenerational justice. Page argues for an egalitarian distributive theory that focuses on the opportunities of future generations for both resources and well-being. Also, he stresses the importance of relating ethical inquiry to hypothetical examples (problems that could happen) as opposed to imaginary examples (examples that could not occur in our actual world), a methodological perspective that I fully agree with.⁴³

⁴⁰ Auerbach, Bruce E., *Unto the Thousandth Generation: Conceptualizing Intergenerational Justice*. Peter Lang, Frankfurt, 1995.

⁴¹ Several articles in Agius, Emmanuel et al. (eds.), *Caring for Future Generations: Jewish, Christian and Islamic Perspectives*. Praeger Publishers, Westport, 1998.

⁴² Heller, Jan Christian, *Human Genome Research and The Challenge of Contingent Future Persons: Toward an Impersonal Theocentric Approach to Value*. Creighton University Press, Omaha, Nebraska 1996. Also, Fotion, Nick and Heller, Jan Christian (eds.), *Contingent Future Persons: On the Ethics of Who Will Live, or Not, in the Future*. Kluwer Academic Publishers, London, 1997.

⁴³ Page, Edward A., *Climate Change, Justice and Future Generations*. Edward Elgar Publishing Limited, Cheltenham UK, 2006.

Turning to previous research about *nuclear waste and ethics*, one of the earliest contributions is by Richard and Val Routley. They argue forcefully against nuclear power and nuclear waste. They use a contractarian framework to argue that the production of nuclear waste provides a moral situation similar to leaving a bomb on a full bus. Such actions are morally wrong because they transfer risks to people who have not benefited from the activities that generated the risks.⁴⁴

A more recent contributor to the nuclear waste debate is Kristin Shrader-Frechette. She provides a substantial discussion about the moral problems associated with geological burial of nuclear waste, especially the problems associated with risk evaluations. Her ethical position is partly based on Barry's theory, and similar to that of the Routleys. She claims that an egalitarian reasoning makes it morally wrong to transfer risks to future generations without their consent. This gives additional support to Barry's place in this dissertation. Parts of her in-depth analysis of geological burial of nuclear waste will be referred to in the last chapter.⁴⁵

In relation to previous research, the contribution of this dissertation is threefold:

First, the dissertation it is an attempt to formulate a broad theory of responsibility towards future generations, which includes several kinds of considerations. By discussing considerations about justification, value theory, normative claims and practical questions, one can hopefully attain a better comprehension of this kind of responsibility. This kind of approach is quite unusual, but not totally new, other attempts have been made by Agius, Auerbach, de-Shalit and Heyd.

Second, the dissertation is aimed at formulating a theory with the help of theoretical insights from several types of theories. A substantial part of the discussion is focused on more technical issues in consequentialism or contract-theory. Even if these discussions are important, it is useful to try to include other ethical perspectives and be more flexible when it comes to theoretical positions. The idea is to construct a theory but retain some flexibility for what kind of theory it can be. This means that even if this dissertation shares similarities

⁴⁴ Routley, Val and Routley, Richard, 'Nuclear Energy and Obligation to the Future'. *Inquiry*, 21, 1978.

⁴⁵ Shrader-Frechette, Kristin, *Burying Uncertainty: Risk and the Case Against Geological Disposal of Nuclear Waste*. University of California Press, Berkeley, 1993.

with Page's important work, it considers a wider spectrum of theories and tries to provide an in-depth analysis of all of them.

Third, this dissertation has the specific aim of combining normative ethics with applied ethics and to do justice to both of these fields. By presenting a thorough discussion of normative ethics and applying the conclusions to the question of nuclear waste management, it is possible to reach a deeper understanding of both fields. This makes this dissertation similar to both Page's and Heller's works. Page, on the other hand, focuses only on the questions of egalitarian distributive justice, and Heller works exclusively in a consequentialist framework. This dissertation discusses several kinds of ethical theories and does not presume that either an egalitarian distributive or a consequentialist framework is the most appropriate.

Nuclear Waste and Ethics

There are many practical problems that highlight the question of responsibility towards future generations; however, this dissertation focuses exclusively on the problem of high-level nuclear waste.

From the perspective of ethics, as an investigation concerning moral questions, the most important reason for this focus is that nuclear waste illustrates the asymmetry between those who benefit from nuclear power and those that suffer the risk of being harmed by the radioactive waste. We gain the benefit of relatively cheap energy and independence from oil resources. On the other hand, future generations gain no direct benefits, and any indirect benefits are contingent at best.⁴⁶ Accordingly, some reject nuclear energy because it has characteristics similar to a time bomb. We know that the waste risks the lives of future generations and that is reason enough for its rejection.⁴⁷ These moral aspects of the waste make it the appropriate

⁴⁶ Indirect benefits might be that the cheap energy will stimulate technical and economic development that could benefit future generations. This claim is not well supported and must be rejected. We saw earlier that the optimistic perspective has serious flaws. It is not certain that posterity will be in a better position than we are. Even if they have greater technological power, increased knowledge, and better production facilities, this might still be insufficient to respond to ecological breakdown and enormous environmental costs. A second point is that significant parts of the cheap energy are used in personal consumption that has little or no social benefit, i.e. conspicuous consumption.

⁴⁷ Routley, Val and Routley, Richard, 'Nuclear Energy and Obligation to the Future'.

test case for a reasonable theory about responsibility towards future generations.

From a more general perspective, a reason to investigate the problem with high-level waste is its public importance. All countries currently using nuclear power will face this problem sooner or later, even if they stop using nuclear power today. Sweden, e.g., has committed itself by the 1980 national referendum to decommission its nuclear power plants, which means that finding the right management method becomes more and more pressing as the phase-out approaches.

Concerning the legitimate use of an ethical evaluation of nuclear waste management, it is noteworthy that this is related to the general question about which kinds of criteria ought to be used in the evaluation of different methods. Naturally, economic and technical criteria are vital for the selection of any method, but there are also other issues. Some of the most important are democratic issues and security issues. However, there are also specific moral considerations.⁴⁸ Such issues are not technical in the sense that they are dependent on specific knowledge about nuclear technology. Instead, they are dependent on ideas, preferences and beliefs about what is good/bad, what is right/wrong and what the good life and the good society are.

If responsibility towards future generations, which clearly is one of the moral issues with nuclear waste, is an important criterion for method selection, it is legitimate to make an ethical investigation of different, and sometimes incompatible, ways of understanding that criterion. Such an ethical investigation might help to untangle some of the problems associated with the management problem.

Outline

Chapter 1 discusses Parfit and consequentialism. Parfit can provide a straightforward answer why it is wrong to bury nuclear waste in a way that harms future generations. However, this can only be achieved by accepting several strong preconditions. One is to accept a value theory that leads to the conclusion that it is better to maximize the amount of

⁴⁸ This is explicitly stated in the official governmental study: Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2004*. SOU 2004:67. Fritzes, Stockholm, 2004, pp. 18f.

people with low well-being than to achieve a high amount of individual well-being for each person. Also, it is doubtful if Parfit's theory is compatible with moral pluralism.

Also, the consequentialist framework can not provide normative claims that can provide some guideline for what to do with the nuclear waste. This presupposes information that can not be attained beforehand. This means that consequentialist normative claims can only be used to evaluate a situation afterwards. At best, it might be possible to combine a consequentialist theory with other kinds of normative claims. This makes it necessary to turn to another kind of theory.

Chapter 2 focuses on Brian Barry's theory of the fundamental equality between us and future generations. However, this theory does not provide a distinct answer to the question whether equality could also imply the equal opportunity to exist. Instead, Barry presumes that their existence is a precondition for what we ought to do for them.

A more promising aspect of Barry's theory is that we owe future generations equal opportunities. It is possible to interpret Barry as either a proponent of equal opportunities for resources only, or as a proponent of both equal opportunities for resources and the protection of vital interests. The second interpretation is not compatible with moral pluralism. However, Barry provides a promising way of handling the insecurity of the future. He claims that we should refrain from transferring risks to future generations. This gave an important insight into how we can handle the nuclear waste problem.

The conclusion is that Barry's justification for responsibility towards future generations does not provide a reason why we ought to care about their existence. This makes it necessary to continue the investigation. Moreover, it seems that part of the problems with both Parfit's and Barry's theories are that they focus on individuals. If responsibility is focused on individuals, it becomes complicated by the fact that we can affect who will be born in the future. The alternative is to shift the focus towards theories that treat future generations as a collective.

Chapter 3 concerns Avner de-Shalit's theory about the communitarian bond between generations. His theory provides a forceful argument for responsibility by claiming that close future generations and we are members of the same transgenerational community. On the other hand, de-Shalit can not explain why we

ought to care for those that are non-members. This makes the moral status of remote future generations totally dependent on our beliefs or interests. This is an unacceptable conclusion.

However, it is also noted that de-Shalit's idea of the community might be extended to include all humans. It seems important to consider mankind as a unified group in order to provide future generations with some independent moral status. The problem is to find a reasonable explanation for this unity. Also, de-Shalit's normative claims presuppose a specific theory about value, about benefits and harm. This is incompatible with moral pluralism.

Chapter 4 turns the focus to the Whiteheadian theory proposed by Emmanuel Agius. Agius claims that mankind is part of a system of relations that binds all of reality together. Mankind itself is inherently one due to the close relation between all humans. It is impossible to abstract one group of humans from another group, which makes it reasonable to talk about the common good of mankind.

Agius' theory is also incompatible with moral pluralism. The only way to claim that there is just one common good of mankind is to ignore or distort real conflicts between individuals and groups. However, it is still reasonable to try to attain a perspective that unifies mankind but is compatible with moral pluralism. Agius' normative claims are similar to Barry's in the sense that they focus on the resources that future generations need in order to live a good life. This provides an additional argument in support of the idea that we owe future generations equal opportunities for resources.

Chapter 5 turns to the theory of Hans Jonas. Jonas provides a metaphysical theory that grounds responsibility in the existence of objective values. Even if all organisms have such objective values, humans have special importance because they are the only beings that can take responsibility. It is therefore imperative to protect the existence of mankind. Jonas' theory stresses the need to feel responsible for future generations as a precondition for acting once the objective values have been understood and accepted. However, it seems that Jonas' own theory might be too abstract to actually motivate people to act.

Jonas' theory might be compatible with moral pluralism if it means that our responsibility should focus on preserving future generations' freedom to take responsibility. This makes it important to shift the focus from the actual life of future generations, to the preconditions

that they can live a good life. This opens up a promising way of combining normative claims with moral pluralism.

Chapter 6 is an attempt to provide a reasonable theory about responsibility towards future generations that is compatible with the insights of other theories. It proposes a narrative theory which stresses that we are all parts of the same human story. Even if there is no compelling reason to accept this perspective, it provides a different kind of meaning for our lives.

Also, given that we accept our part of The Story of Mankind, future generations are necessary for our own conception of meaning. The present will be meaningless without references to both the past and the future. This narrative theory captures the idea that mankind is unified, but retains the possibility for different interpretations of the story. This seems to be in line with moral pluralism. The basic normative claim of the narrative theory is that the story ought to be open and undetermined. It becomes necessary to provide the preconditions for many ideas of the good life. Equal opportunity for resources provides the best normative expression of this idea.

Chapter 7, the final chapter, discusses the problem of nuclear waste management in relation to different moral objectives. Equal opportunities for resources provide a ranking of these objectives. It implies that the most important objective is to reduce the risks we transfer onto future generations. This should guide the ethical evaluation of different methods. Moreover, the chapter stresses that whatever the ethical evaluation, the method selection will ultimately be a political issue. However, there are still specific ethical reasons to prefer that future generations should not be exposed to any risks they have not benefited from.

1. Well-being and Populations

Introduction

Many consequentialist philosophers have discussed what we ought to do for future generations but the arguably most important one is Derek Parfit (b: 1942). He is a Fellow of All Souls College, Oxford, and known for his insightful analysis of both the concept of personal identity and that of our responsibility towards future generations. It is difficult to discuss the former subject, without considering these philosophical problems that Parfit has discussed at length.

The primary sources in this chapter are Parfit's influential book *Reasons and Persons* (1984), and the articles 'Future Generations: Further Problems' (1982), 'Energy Policy and the Future: The Social Discount Rate', in *Energy and the Future* (1983), 'Overpopulation and the Quality of Life', in *Applied Ethics* (1986), and 'Against the Social Discount Rate', written together with Tyler Cowen, in *Justice Between Age Groups and Generations* (1992).

Reasons and Persons includes discussions of several issues that have indirect implications for the issue of responsibility for future generations, e.g. personal identity and impersonal reasons for acting, and it is therefore important to examine this work as a whole. However, it is in its fourth part that Parfit focuses exclusively on problems concerning future generations. Parfit does not primarily construct a normative theory about responsibility towards future generations. Instead, his discussion is negative; he shows some problems such a theory must provide solutions to.

Background: Consequentialism and Utilitarianism

The claim that Parfit writes in the consequentialist tradition is in need of some qualifications. The starting point is two questions: What is

consequentialism? And, what is Parfit's theory? The rest of this section will answer the first question and the next section will consider how Parfit's theory can be related to consequentialism generally.

One straightforward definition states that consequentialism has the following basic normative claim:

... all choices (of actions, rules, institutions, and so on) must be judged by their consequences, that is, by the results they generate.⁴⁹

As a minimal definition of consequentialism, this indicates the theory's most fundamental claim. Actions, rules and institutions should only be evaluated by their consequences. All other moral considerations are relevant only to the extent they affect these consequences. Consequentialism is also usually, but not necessarily, combined with the claim that the consequences should be evaluated from an impartial perspective. That is, an agent should evaluate consequences without any regards to his or her personal relations or obligations.⁵⁰

Any discussion of consequentialism would be incomplete without any reference to the most famous consequentialist theory, *utilitarianism*. Every utilitarian theory includes consequentialism, but it is possible to endorse consequentialism without accepting utilitarianism. One definition of utilitarianism is that it is a normative theory that combines *consequentialism* with *welfarism* and *sum-ranking*. A theory that lacks one of these specifications would not be called utilitarian.⁵¹

⁴⁹ Sen, Amartya, *Development as Freedom*, Oxford University Press, Oxford 1999, pp. 58f.

⁵⁰ Scheffler, Samuel (ed.), *Consequentialism and Its Critics*, Oxford readings in Philosophy, Oxford University Press, Oxford, 1988, p. 1.

⁵¹ This division of utilitarianism is based on Sen, Amartya, *Development as Freedom*, pp. 58f. A similar division is presented in Sen, Amartya and Williams, Bernard (eds.), *Utilitarianism and Beyond*, Cambridge University Press, Cambridge, 1982, pp. 3f. Also, Sumner, L. W., *Welfare, Happiness, and Ethics*, Clarendon Press, Oxford, 1996, p. 3. Sumner uses the term aggregation instead of sum-ranking. Whatever the term, the idea is the same. Individual values should be summed up to give a total value. Also, the combination of welfarism and sum-ranking is sometimes labeled as an example of an axiology, i.e. a theory about what has value and how different states of affairs can be compared with regard to their value. E.g., Carlson, Eric, *Some Basic Problems of Consequentialism*, Uppsala University, Uppsala, 1994, p. 25.

According to Amartya Sen, welfarism and sum-ranking can be defined as follows:

Welfarism: The judgment of the relative goodness of alternative states of affairs must be based exclusively on, and taken as an increasing function of, the respective collections of individual utilities in these states.

Sum-ranking: One collection of individual utilities is at least as good as another if and only if it has at least as large a sum total.⁵²

Welfarism states that the correct way of ranking alternative outcomes, i.e. the consequences of our acts, depends on how these acts improve life, i.e. the well-being of human and animal life. The point is that *only* well-being is relevant for the evaluation of the consequences of different acts. This implies that only well-being has *intrinsic value*, i.e. well-being is important, and worthy of pursuit without references to other things. Intrinsic value should be distinguished from *instrumental value*, i.e. things that are important in the pursuit of other values.

Well-being can usually be defined in three ways, in hedonistic terms, in terms of preference satisfaction, or as being in accordance with a certain ideal understanding of what makes a life good, i.e. perfectionism.

Hedonism claims that well-being should be understood as an increase of pleasure and a decrease of pain. This theory is supported by the empirical claim that humans and animals seek pleasure and try to avoid pain. Pleasure is the only thing that is sought for its own sake.

Preferentialism, or desire-theory, states that well-being consists in satisfaction of preferences or interests. This theory places extra weight on the autonomy of people to choose what they believe to be valuable. A problem facing preferentialism is that some people have preferences that are harmful to others. A solution is to include a limitation to which preferences should be included in utilitarian considerations. One example is to limit the relevant preferences to those that someone would have after reflecting about a situation and having total knowledge of all relevant aspects of it.⁵³

⁵² Sen, Amartya, 'Utilitarianism and Welfarism'. *The Journal of Philosophy*, Nr 9, September 1979, p. 468.

⁵³ This is the position of Hare, Richard M., *Moral Thinking: Its Levels, Method and Point*. Clarendon Press, Oxford, 1981, pp. 140-146.

Well-being can also be defined by referring to *perfectionist* theories (or objective list theories). Perfectionist theories claim that what is good for a person is not totally dependent on his or her own interests or experiences; some things have special value independent of pleasure or interests. Knowledge, love, friendship, freedom and beauty are phenomena which most of us tend to value, even if they sometimes bring us much pain and all of these things are necessary components of a good life. This kind of theory provides a much broader perspective on well-being than the two other kinds of theories. However, perfectionism faces the objection that it seems strange that some things are valuable without any references to people's own interests.

The third part of utilitarianism is sum-ranking, which states that the well-being of different individuals can be combined into a total value by a process of aggregation. This makes it possible to describe the impact of an act on the state of the world and compare it with all other acts. Acts can be ranked according to their capacity to increase general well-being so that a single act (or several acts with the same total) will signify the maximum increase of well-being.⁵⁴

Summarizing the discussion so far, one notices that the two characteristics of utilitarianism are that the moral aim is to maximize well-being and that this should be done in an impartial way. The only thing that matters about an individual is his or her well-being and this well-being is then abstracted and aggregated.

Moreover, besides the more specific aspects of consequentialism, an important question is whether consequentialism should be viewed as an action-guiding theory or as a criterion of right. Both theories are normative in the sense that they determine the right action. However, the difference lies in how this can be determined. If consequentialism concerns actions, it would be extremely demanding. It implies that everyone should always act in a way that brings about the best outcome. Also, it is extremely difficult for individuals to coordinate their actions in a way that brings about the best outcome. A solution to these problems is to consider consequentialism as a criterion for right

⁵⁴ Sum-ranking does not necessarily have to be included in utilitarianism. Sen, Amartya and Williams, Bernard (eds.), *Utilitarianism and Beyond*, mention a utilitarian theory that ranks alternatives according to Rawls' difference principle. Footnote p. 4.

action, a criterion that is valid independently of the problems of actually following it.

Another way of making consequentialism less demanding is to make the distinction between direct consequentialism, or *act consequentialism* and indirect consequentialism, or *rule consequentialism*. The first theory states that every action should be preceded by a calculation about which action brings about the best outcome. The second theory states that individuals should follow guidelines or act on motives that in themselves are justified for their general tendency to bring about the best outcomes.⁵⁵

A possible reconciliation of act consequentialism and rule consequentialism is offered by Hare's two-level theory. It implies that there are two levels of moral thinking. First, the intuitive level on which moral principles are subjected to influences from childhood and tradition, i.e. the so-called *common sense morality*. We use the intuitive level in our daily life, and it is adequate in most situations. Second, there is also the critical level, on which moral thinking is based on a consequentialist reflection (primarily guided by the universality of moral prescriptions). With this scrutiny, it is possible to formulate principles that should be adhered to on the intuitive level, because of their general tendency to produce well-being.⁵⁶

A more specific argument against consequentialism, in its utilitarian form, is that it does not place sufficient importance on the separateness between people. E.g., utilitarianism evaluates outcomes by impartially aggregating the positive and negative effects on people's well-being into a total value. One effect of this is that a decrease in one person's well-being can be compensated by an increase in another person's well-being. The goal of utilitarianism is to maximize the total amount of well-being, independently of whose well-being it is. Robert Nozick gives one argument against this view:

⁵⁵ I find this distinction valuable because it makes it possible to talk about other things than rules that might bring about the best outcomes, like dispositions and motives. See Brink, David O., 'Some Forms and Limits of Consequentialism', in Coop, David (ed.), *The Oxford Handbook of Ethical Theory*, Oxford University Press, Oxford, 2006, pp. 383f. for a more substantial discussion of this distinction.

⁵⁶ Hare, Richard M., *Moral Thinking: Its Levels, Method and Point*. pp. 39-43. See also; Hare, Richard M. 'Ethical Theory and Utilitarianism', in Sen, Amartya and Williams, Bernard (eds.), *Utilitarianism and Beyond*, Cambridge University Press, Cambridge, 1982, pp. 23-38. I use the term consequentialism whereas Hare uses utilitarianism because it is possible to use the two-level distinction without accepting all the claims of utilitarianism.

...there is no social entity with a good that undergoes some sacrifice for its own good. There are only individual people, different individual people, with their own individual lives. Using one of these people for the benefit of others, uses him and benefits the others. Nothing more.⁵⁷

Nozick points out that utilitarian reasoning seems to presuppose that well-being can be separated from individuals. He believes that there are no grounds for assigning well-being in such a way because there are only individuals whose lives can be better or worse. There exists no 'social' good by itself. However, this is only an argument against those who believe that separateness of individuals is important and that is something, as we shall see, which Parfit denies.

Parfit and The Project of Reasons and Persons

Parfit's general project is to show how impartial reasons for acting, understood as giving no special weight to our own personal interests or relationships, should be of greater moral importance than other reasons. He proposes a consequentialist ethical theory, and a reductionistic theory about personal identity, both of which support the claim that impartial reasons for acting should be more important. The main focus of this section is to characterize his ethical theory, but it is also important to consider his theory about personal identity because this theory gives additional support to his ethical theory.

According to Parfit, the main normative claim of consequentialism is: 'There is one ultimate moral claim: that outcomes be as good as possible.'⁵⁸ This claim is complemented with different statements concerning acts (we should all do what makes the outcome best and we act wrongly if we aim at acts that make an outcome worse) and risks (aim at the outcomes with the highest expected good). He also claims that consequentialism covers everything that could make outcomes better or worse. This includes acts and outcomes but also desires, dispositions, beliefs, emotions, the colour of our eyes, the climate and everything else. E.g., if we can change our motives for acting and such a change will make the outcome better, we are morally obligated to do so. This also explains why it is possible for consequentialism to justify the conclusion that we should cease to be

⁵⁷ Nozick, Robert, *Anarchy, State and Utopia*. Basic Books, New York, 1974, pp. 32f.

⁵⁸ Parfit, Derek, *Reasons and Persons*. Clarendon Press, Oxford, 1984, p. 24.

consequentialists if this would lead to the best outcomes. A consequentialist can justify the belief in some common sense morality, a morality that most of us finds reasonable, perhaps mostly because of tradition, and live according to, because it will lead to the best outcome.⁵⁹

Parfit states that his claims cover different versions of consequentialism, including utilitarianism. Normatively, his theory is consequentialist in the sense that it claims that morality should be impartial and aimed at bringing about the best future scenario. Moreover, most of Parfit's discussion about future generations focuses on formulating a normative principle that makes it possible to compare different future scenarios with the aim of deciding which is best.

An application of consequentialism needs an idea of what makes something better or worse. Utilitarianism supplies one such idea. Parfit states that utilitarianism combines consequentialism with the following claim: '...the best outcome is the one that gives to people the greatest net sum of benefits minus burdens...'⁶⁰ This understanding of utilitarianism is similar to the definition given earlier. The only difference is that sum-ranking is presupposed and that welfarism is described as benefits. Parfit also notes that consequentialism could be pluralistic in the sense that it can include many theories about what is better or worse. One example is to combine a utilitarian principle with an egalitarian principle. This makes it possible to maintain that one situation can be better than another because it includes a more equal distribution of benefits than other situations.⁶¹

Parfit does not explicitly accept a utilitarian ethical theory. Instead, he makes an indirect argument for it by showing how some arguments against it do not create unsolvable problems. However, it is noteworthy that he focuses on principles of beneficence, i.e. principles regarding the well-being of people and this presupposes that he adheres to welfarism. Also, he does not propose a specific definition of well-being, he discusses well-being generally. Furthermore, this welfarist framework is complemented by egalitarian considerations. Parfit acknowledges that concerns about just distributions can

⁵⁹ Op. cit., pp. 24ff.

⁶⁰ Op. cit., p. 26.

⁶¹ Op. cit., p. 26.

influence the comparisons of outcomes, at least in the sense that a more equal distribution of welfare is better than an unequal one.⁶² Possibly, his theory is semi-utilitarian; it includes consequentialism, sum-ranking and welfarism, without making a commitment to a specific theory about well-being, and additionally, the theory is also sensitive to the distribution of welfare, i.e. equality.

A significant part of Parfit's discussion focuses on evaluating and comparing consequentialism and common sense morality and he does this by making a distinction between individual and collective versions of moral theories. The individual level focuses on how each person should act, and the collective level on coordination problems, i.e. on how each person should act if everyone acts in the same way as he or she does. This means that an ethical theory might be impossible to follow on an individual level but might be very useful if everyone followed it. E.g., it might be impossible if everyone followed consequentialism on an individual level. That would imply that everyone must coordinate his or her actions with what other persons do so that the actions would lead to the best outcome. But on the collective level, it might be possible for everyone to follow rules that will give the best outcomes in the long run; this represents a collective form of consequentialism. This distinction is similar to the distinction between direct consequentialism and indirect consequentialism.⁶³

Parfit claims that it is a powerful argument against an ethical theory if it fails on a collective level. If a theory is unsuccessful on an individual level this has few implications. On the other hand, a theory that fails on a collective level would imply that the general adherence to this theory makes the whole situation worse.⁶⁴ He noticed that consequentialism is indirectly collectively self-defeating, because if

⁶² Op. cit., pp. 339-345. Generally, in regard to distribution, there are four main types of egalitarian theories. Parfit focuses on equality of welfare and represents one of these theories. A second type of theory focuses on equality of resources. However, some philosophers reject a narrow focus on equal distribution on the grounds that it is reasonable to hold people responsible for their actions. It is therefore more appropriate to talk about equal opportunities for welfare and equal opportunities for resources. The next chapter will discuss Brian Barry, who focuses on both equal opportunities for resources (or product capacity) and welfare. Arneson, Richard, 'Equality and Equal Opportunity for Welfare'. *Philosophical Studies* 56, 1989, pp. 77-93.

⁶³ Parfit, Derek, *Reasons and Persons*, pp. 30-31. This similarity is noted by Heller, Jan Christian, *Human Genome Research and the Challenge of Contingent Future Persons: Towards an Impersonal Theocentric Approach to Value*, Creighton University Press, Omaha, Nebraska, 1996, p. 110.

⁶⁴ Parfit, Derek, *Reasons and Persons*, p. X.

everyone tries to follow that theory it would lead to a situation where everyone is worse off than if they had followed another ethical theory.⁶⁵ Parfit also claims that common sense morality is directly self-defeating, which is a fatal problem.

As we saw before, Nozick argues that utilitarians do not place sufficient importance on the separateness of persons. Parfit's response to this charge centres on proposing a reductionist theory about personal identity. In accordance with this theory, utilitarians do not claim that there exists some 'social super organism' that can be benefited or harmed, instead, they do accept a specific theory about personal identity. This explains why utilitarians do not place any moral importance on the separateness of persons.⁶⁶

Parfit's reductionist theory about personal identity claims that a person's identity is nothing more than a psychological connection and/or psychological continuity between different experiences with the right kind of cause, the so-called relation R. A unified consciousness is no more than a certain connection between different psychological states. A radical change in this connection can therefore change the identity of a consciousness to such a degree that it can result in another consciousness. One example is to compare the identity of a specific entity (body and consciousness) in his or her teens and the identity of the same entity (body and consciousness) in his or her eighties. Parfit claims that it might be impossible to determine in what degree these two entities are the same person. It might be impossible to determine if a certain body and consciousness share the same identity as another body and consciousness, i.e. identity is a question of degree and not a question of all or nothing. This also implies that difference between distinct temporal parts of our own personal life can be greater separate than the difference between our own lives and the lives of other peoples, i.e. people are not separate entities.⁶⁷

The reductionistic theory is developed in comparison with the so-called self-interest theory of rationality. The self-interest theory states that we should aim at outcomes that will make our own lives go as well as possible. This implies neutrality towards different temporal stages in one's own life but also a partiality compared with the lives of

⁶⁵ Op. cit., pp. 26-28.

⁶⁶ Op. cit., pp. 331f.

⁶⁷ Op. cit., pp. 215-217.

other people. It is only one's own life that is important. Self-interest theory claims that different temporal stages of a person's life have a certain connection, a connection that is radically different from the connection between different persons. Parfit argues that it is not reasonable to accept this asymmetry and we should instead care less about our own personal future and care more about future outcomes generally, which includes both us and other people. This reductionistic theory makes the utilitarian claim (that we should bring about the outcome that is best from an impersonal perspective) more reasonable.⁶⁸

Moreover, the reductionistic theory of personal identity gives less weight to other considerations, like equality. Parfit claims that equality is tied to separateness of persons in the sense that equality is most important when we consider people as distinct from each other. The reductionistic view denies separateness of persons, and gives more importance to experiences at a particular time and not to the totality of experiences during the course of a specific life. Equality must therefore be aimed at giving each person either good experiences, or minimizing the bad experiences at any given time. The latter position makes equality similar to negative utilitarianism, i.e. the moral aim is to reduce suffering. This makes equality less important than if we would accept another kind of identity theory than the reductionistic one. Parfit's own conclusion is that his investigation has made utilitarianism more reasonable but that this does not compel one to accept that theory.⁶⁹

Parfit's Theory and Responsibility to Future Generations

Justification for Responsibility

Parfit's main argument is that neither remoteness in time, nor remoteness in space is of any special moral importance.⁷⁰

⁶⁸ Op. cit., p. 346.

⁶⁹ Op. cit., pp. 340-347.

⁷⁰ Op. cit., pp. 356f.

Suppose that I leave some broken glass in the undergrowth of a wood. A hundred years later this glass wounds a child. My act harms this child. If I had safely buried the glass, this child would have walked through the wood unharmed.

Does it make a moral difference that the child whom I harm does not now exist?⁷¹

Parfit's answer is no. The fact that we can act in ways that can affect the *well-being of future generations* provides us with a moral obligation to include future generations into our moral considerations.

Moreover, because consequentialism claims that the moral aim is to make the outcome as good as possible, it is necessary to explain how we can make future generations better or worse off. These comparisons are necessary in the process of identifying the best outcome.

Parfit observes that there are problems with the seemingly straightforward consequentialist support for responsibility towards future generations. The main problem is that there are some cases where we can not say that we made a person's life worse even though we directly affected the well-being of that person. The reason is that we can not only affect the well-being of future people but also their number and their identity.

Our identity is an outcome of specific acts. Parfit claims that if we did not get conceived the time we did we would not have existed, somebody else would. The point is that a different combination of sperm and egg would lead to a person that would have a different genetic makeup. Is this important? We can conclude that if we were born and lived a life full of misery we can not say that our life was worse than it could have been, this life is the only one we can have. A different timing would cause another person to exist.⁷² This *non-identity problem* emphasizes that the evaluation of acts that cause some people to exist can not be made by any reference to the harm or benefits of these people.

The problem of non-identity is similar on a social level. If we would choose a policy of environmental depletion instead of environmental conservation it would eventually affect all people that are born. This would mean that everyone that will exist will have an identity that is causally dependent on a certain policy. Another policy

⁷¹ Op. cit., pp. 356f.

⁷² Op. cit., pp. 351-355.

would have brought about other persons. In short: If we choose depletion instead of conservation, the people that will eventually exist can not say that they are worse off than they could have been. Another policy would have brought about different people.⁷³ As Parfit expresses it:

When we are choosing between two social or economic policies, of the kind that I described, it is not true that, in the further future, the same people will exist whatever we choose. It is therefore not true that a choice like Depletion will be against the interests of future people.⁷⁴

These problems, in both individual and social choices, are tied to the fact that there are three kinds of choices: Same people choices, same number choices, and finally, different number choices. *Same people choices* involve the ordinary situation when we consider how we can benefit or harm one or several people. The last two choices are different in that they involve bringing about other people and affecting their identity and number. Both types of choice face the non-identity problem. The second type of choices, *same number choices*, involves situations where we consider two different outcomes that both involve the same number of people but where the identity of people in each outcome is different. This situation can be solved by comparing the well-being of people in each outcome, independent of their identity, and identify the best outcome by, e.g., referring to a utilitarian principle.⁷⁵

The choice between conservation and depletion could be thought of as a case of a same number choice. However, it is more probable that this choice will also affect the number of people born and it would then be an example of the third kind of choices, *different number choices*. The problem with this type of choices is that it makes it necessary to compare outcomes that are different in two ways; they involve both different people and a different number of people.⁷⁶

The problem is to formulate a way of comparing these kinds of outcomes that avoid contra-intuitive implications. This involves formulating a reasonable principle of beneficence, i.e. a principle about how we are to benefit other people and protect them from

⁷³ Op. cit., pp. 361-363.

⁷⁴ Op. cit., p. 363.

⁷⁵ Op. cit., pp. 359f.

⁷⁶ Op. cit., pp. 355f.

harm.⁷⁷ Ideally, such a principle should cover all three kinds of choices. Parfit wants to find such a principle, theory X. Before turning to the possibility of formulating such a principle, it is imperative to consider Parfit's solution to the non-identity problem which includes a specific comprehension of value.

Values

It is reasonable to interpret Parfit as a proponent of several values. He accepts that both *well-being* and *equality*, as in equal distributions, are worthy of pursuit. E.g.:

Certain distributions are, we claim, morally preferable. We ought to give some priority to helping those who are worst off, through no fault of theirs. And we should try to aim for equality.⁷⁸

However, due to his acceptance of a reductionist theory of personal identity, Parfit comes to the conclusion that equality is less important than well-being, because distributions can not cover whole lives when whole lives are unimportant. What matters are our experiences, not the connection between them.

Nevertheless, the distribution of well-being is of moral importance. This should be understood in a specific sense, and not as implying that equality has some intrinsic value, i.e. is important in itself. Instead, equality should refer to the distribution of experiences at any given time, and aim to reduce bad experiences. The reductionist theory of personal identity makes equality similar to negative utilitarianism in the sense that it aims at reducing suffering.⁷⁹ One can therefore conclude that the only thing that Parfit might claim to have intrinsic value is well-being.

Turning to Parfit's comprehension of value generally, he claims that there are two ways of understanding beneficence and how people's well-being is related to the world. Well-being can either be understood as *person-affecting* or as *impersonal*. The idea behind understanding well-being as person-affecting is that if something should be considered better or worse, it must be better or worse for

⁷⁷ Op. cit., p. 371.

⁷⁸ Op. cit., p. 339.

⁷⁹ Op. cit., pp. 344f. Parfit also describes different ideas of equality in the article 'Equality and Priority'. *Ratio* 10, Nr. 3, Dec. 1997.

someone, i.e. a person's situation must become better or worse. 'We appeal to people's interests — to what is good or bad for those people whom our acts affect.'⁸⁰ If well-being is understood in these terms, it is impossible to explain why a policy of depletion is worse than a policy of conservation. Parfit's conclusion is that we must move away from conceiving well-being in person-affecting terms if we want to avoid the non-identity problem.⁸¹

The alternative understanding of well-being is to claim that something could be good or bad quite independently of whether the affected person's situation becomes better or worse. The term impersonal covers all principles that are not person-affecting.⁸² If one conceives beneficence, and well-being, as separate from people's interests, it becomes possible to avoid the non-identity problem. The key question is then not whether a person is benefited or not, but how good the outcome is for those who exist, whoever they may be.

Summing up, Parfit claims that the only way to include future generations, i.e. those generations whose existence is dependent (contingent) on our choice, directly into our moral considerations is to accept an impersonal theory of value. A person-affecting theory can not explain why we would make future people worse off if we choose a policy of depletion instead of conservation. The only way to justify conservation would be to argue that we do in fact value such a policy. This last position is actually proposed by some philosophers and I will return to a comparison between these positions in the evaluation.

Population Principles

Arguably, Parfit does not make normative claims about our responsibility towards future generations in the sense that he describes how we should act in relation to them. Instead, he discusses and compares different populations in order to determine the best one.⁸³ The conclusions of such investigations are not normative claims. Even if an outcome is better, this does not imply that we should bring it about. However, it can still be normative in the sense of claiming that one scenario is better than another. Moreover, it is possible that there

⁸⁰ Parfit, Derek, *Reasons and Persons*, p. 370.

⁸¹ Op. cit., p. 378.

⁸² Op. cit., p. 386.

⁸³ Op. cit., p. 381.

is, or should be, a connection between the outcomes and normative claims, which makes it reasonable to discuss Parfit's population principles.

Parfit stresses the fact that our choices can affect both the identity and the number of people that will actually live, which raises the question about how many people there should be, on earth or beyond. He actually states that an ethical theory can not be complete without answering this question.⁸⁴ This is the reason why most of his discussion is about overpopulation, the optimal size of a population and the general well-being of that population. Basically, the question is about the relation between the number, i.e. quantity, of lives and the quality of each individual life in a given population.

Furthermore, Parfit attempts to answer the question of population optimum by formulating a principle of beneficence that covers the three kinds of choices. He starts by noticing that any reasonable theory must be impersonal, not person-affecting, because it would otherwise be open to the non-identity problem. It is impossible to claim that an act benefits a person in a distant future, but it is possible to claim that the distant future could be better or worse in some sense. This claim presupposes that something can be better or worse independently of people's interests.

Parfit starts his extensive and technical search for a reasonable principle of beneficence by considering two types of utilitarian principles, *the total impersonal principle* and *the average impersonal principle*. The first principle states that the best outcome is the one that maximizes the total well-being (or whatever makes life worth living). There are two ways to maximize total well-being. Either by bringing about more people with lives worth living or by increasing the average well-being of those alive. As long as the goal is total maximization, it is unimportant how well each individual is doing. Parfit rejects the total impersonal principle because it is applied in situations where our actions affect both the identity and size of the future population, different number choices; it leads to the so-called *repugnant conclusion*:

The Repugnant Conclusion: For any possible population of at least ten billion people, all with a very high quality of life, there must be some much larger imaginable population whose existence, if other things

⁸⁴ Op. cit., p. 381.

are equal, would be better, even though its members have lives that are barely worth living.⁸⁵

This conclusion states that it is better if there is an enormous population (Z) in which everyone has lives that do not involve much well-being, than a much smaller population (A) where everyone has much better lives with high well-being. Parfit wants to find a way of stopping this maximizing process because he finds this repugnant conclusion difficult to accept.⁸⁶

One attempt to avoid the repugnant conclusion is to consider different versions of the average impersonal principle. This principle claims that the best outcome is the one that includes people with the highest possible average well-being. This principle implies that only quality has value and no amount of quantity can substitute a reduction in quality. It makes the dubious claim that it is wrong to bring about future people whose well-being, or whatever makes life worth living, is lower than that of living people, but still very high. One reason why Parfit rejects this principle is because its claim is too extreme. Some qualitative reductions of well-being should be acceptable if there is a large increase in the quantity of well-being, as long as this involves an addition of people whose well-being is above the level where life ceases to be worth living.⁸⁷

The total impersonal principle claims that only quantity has value and the average impersonal principle that only quality has value. The total impersonal principle implies that every decrease in quality can be compensated by a sufficient increase in quantity. According to Parfit, one solution is to introduce a limit on the value of quantity. The limit claims that an increase in quantity can not possibly outweigh any increase or decrease in quality. This would make it possible to stop the maximizing process.⁸⁸

However, this solution does not work. It might be reasonable to define a limit beyond which more well-being ceases to have value, i.e. any further increase of well-being becomes valueless if it reaches beyond a certain limit. However, it would be unreasonable to

⁸⁵ Op. cit., p. 388.

⁸⁶ Op. cit., p. 388.

⁸⁷ Op. cit., p. 405 and pp. 420-422.

⁸⁸ Op. cit., pp. 401-405.

introduce a similar limitation on suffering, i.e. any increased quantity of suffering should always be important.⁸⁹

Together with the average impersonal principle, a limitation placed on the quantity of suffering would imply that the suffering of a few people is always more important than the suffering of a much larger group, as long as the few suffer just a little longer. Moreover, if the quantity of well-being is important up to a certain point, and the quantity of suffering always has importance, there is an asymmetry between the importance of the quantity of well-being and the quantity of suffering. This leads to another problem, the so-called *absurd conclusion*.

The asymmetry between well-being and suffering implies that two populations which include the same amount of suffering and the same amount of well-being but have different temporal extensions must be evaluated in different ways. The first population might have a long temporal extension, it is spread over several centuries. The second population might have a short temporal extension, it exist in just one century, but a large spatial extension. A limitation placed on the quantity of well-being would imply that the first population is very good and that the second population is very bad.⁹⁰ However, time itself can not be morally important, and Parfit concludes that both the quantity of well-being and the quantity of suffering must always be morally important.

Moreover, there are two solutions to the absurd conclusion. The first is to claim that quantity has no value if it consists of adding lives that have a level of well-being that is below a certain level, this is called the *valueless level*. The second solution, *the lexical view*, claims that no numbers of lives which are below a certain level of well-being, mediocre lives, have any importance. The value of lives that are above a certain level of well-being, blissful lives, can not be compared with lives that are below this level. There is a sharp discontinuity between different types of lives. This makes it impossible for a larger quantity of lives with small well-being to be better than a smaller number of lives with high well-being.

Both of these solutions imply that we must accept the claim that a population with a few suffering individuals and an enormous amount of people with a high well-being, which is still below the valueless

⁸⁹ Op. cit., p. 406.

⁹⁰ Op. cit., p. 411.

level or where lives are blissful, is worse than no future population at all. Parfit also argues that both solutions lead to a weaker form of the repugnant conclusion. For every population, there can be another, and better, population which is much larger, and includes many more lives with a well-being that is just above the valueless level or the mediocre level.⁹¹ None of the solutions are therefore reasonable, but their implications are less repugnant than the repugnant conclusion.

Parfit's own solution to the repugnant conclusion takes the form of a type of *perfectionism*. There is a qualitative difference between a world that has an enormous population where everyone's life has very little well-being, and a world with much fewer people with a much higher well-being and which includes a large amount of the best things in life, e.g. best creative activity, best aesthetic experiences, best relationships between people. The reason why we consider the conclusion so repugnant is because it implies that the best things in life are either sparsely spread, or lost. This theory explains why the move from the small population to the larger should be rejected. Change that includes the loss of the best things in life should be avoided. Such loss can not be compensated for by any additional quantity of a lesser kind of well-being.

Perfectionism faces at least two objections. The first is that it seems to disvalue the importance of reducing suffering in the world. The second is that the best things in life can not be totally independent from the less good things in life. There is a continuum between the best and the worst. This makes it arbitrary to reject every reduction of the best things in life if the reduction involves a huge increase in the quantity of well-being.⁹²

Practical Questions

It is noteworthy that Parfit does not provide a specific answer in response to the seventh analytic question: Who should be responsible towards future generations? However, the question can be answered by turning to his general theory and his remarks concerning other issues. The first step is to turn to his consequentialism. According to this theory, the only thing that is relevant is to determine what brings

⁹¹ Op. cit., pp. 412-417.

⁹² Parfit, Derek, 'Overpopulation and the Quality of Life', in Singer, Peter (ed.), *Applied Ethics*, Oxford University Press, Oxford, 1986, pp. 145-164.

about the best consequences. Responsibility can be placed on at least three different levels, individual, group and institutional.

On the individual level every person that is capable of moral agency that might affect the life situation of future generation is directly or indirectly responsible for the situation of future generations. Parfit seems to support the idea that responsibility could be placed on the individual level. He claims that as long as people's actions make some small effect, this makes them responsible for what they do and can be a reason for changing such activities if the total cumulative effect is negative.⁹³

The group level places responsibility on specific groups. Examples of such groups could be car drivers or managers. Parfit would probably support the placing of responsibility on this level too if it is possible to identify one or several groups that have a larger effect on the situation for future generations.

Responsibility placed on the institutional level focuses on the general rules of the political and legislative system. Such rules make collective and coordinated action easier as long as most individuals follow and honour the rules. Individual responsibility towards future generations is restricted to following the institutional rules. Parts of Parfit's discussion support placing responsibility on this level too, especially his discussion about the importance of collective action. It is often more effective for individuals to follow general rules than it is to make their own deliberation about what to do. It seems that, for Parfit, the important issue in determining the right level for responsibility is necessarily connected with which level brings about the best outcome, which could be an empirical question that can not be determined a priori.

Parfit answers the eighth question, the time-limits of responsibility, by rejecting the use of a social discount rate on the interests of future generations. Discounting is an idea that claims that every future value should be reduced with an interest rate to make it comparable with present values. This presupposes that any present value can be invested and will therefore be more valuable in the future. According to Parfit, discounting can be used to compare economic values but it can not be applied to considerations about well-being. It is unreasonable to make future well-being less important just because it is future, because time can not reduce the importance of well-being.

⁹³ Parfit, Derek, *Reasons and Persons*, pp. 73-86.

Time itself can not be a reason for caring less about future generations.⁹⁴

Moreover, Parfit also considers the following moral arguments that are used to support the claim that one should discount the benefits and costs of future generations.

1) *Democracy*. People, generally, tend to care less about the future. This argument for discounting is rejected because what people care about can be wrong and should therefore be of no special moral importance.

2) *Insignificant risk*. Some risks have a very small chance of occurring and their effects should therefore be discounted. Parfit asserts that it is acceptable to discount the probability that some event occurs in the remote future if those predictions are likely to be wrong. However, this is because of the difficulty of making exact predictions and not of the well-being of future generations.

3) *Future generations will be better off*. Future generations will be better off and it is therefore unnecessary that a poorer group, we, give them resources. This argument does not support discounting the well-being of future generations; it just states that they will be better off, which has nothing to do with time.

4) *Excessive sacrifice*. Without discounting, we will be obligated to make excessive sacrifice. This argument supports the claim that one should not overburden any generation. On the other hand, it gives no support to the claim that future well-being is less important, it just claims that we should not demand excessive sacrifices of ourselves.

5) *Special relations*. We have a special relationship with those generations that are close to us, children and grandchildren, and we should therefore give them more weight by discounting the interests of future generations. The same argument supports giving more weight to the well-being of fellow countrymen than people in other countries. Discounting is then used to take kinship into account. Even if this reasoning might be valid in some situations, Parfit rejects its application in situations that involve great harm. Kinship is not relevant in such situations.⁹⁵

⁹⁴ Op. cit., p. 357.

⁹⁵ Cowen, Tyler and Parfit, Derek, 'Against the Social Discount Rate', in Laslett, Peter and Fishkin, James S. (eds.), *Justice Between Age Groups and Generations*, Yale University Press, New Haven, 1992, pp. 145-150. Also in Parfit, Derek, 'Energy Policy and the Future: The Social Discount Rate', in MacLean, Douglas and Brown, Peter G. (eds.), *Energy and the Future*, Rowman and Littlefield, Totowa, New Jersey,

The ninth analytic question is: What is the connection between responsibility and the limitations of knowledge? This question is about how we ought to act in response to risks. Parfit's discussion about how consequentialism includes the claim that from a subjective perspective the right action is the one that will bring about the best expected outcome when the choice is made. The best outcome is determined by adding together the good effects, and the probability they that will occur, and subtracting the bad effects, and the probability that they will occur.⁹⁶ This provides an answer to risks where their probability is known, but a more pressing problem is to identify the right act in response to situations including risks whose probability is practically indeterminate, but whose occurrence would have a profound negative effect on future people. As far as I can see Parfit does not provide an answer to such situations.

Evaluation of Parfit's Theory

Consequentialism and Future Generations

Parfit's theory makes a straightforward case why we should not act in ways that harm future generations. The fact that future generations are only possible has no moral significance; it is therefore reasonable to give them full moral status. This means that future generations have the same status as we, i.e. actual people. Future generations should not be mistreated just because they are future, and their moral status is not dependent on our interests or beliefs. It seems that Parfit's theory is fully compatible with the first evaluative criterion.

However, there are several problems with Parfit's theory. Future generations' full moral status can only be maintained by making several other claims, claims that are not beyond doubt. One example would be why we ought to accept consequentialism as the starting point for the discussion. Just because one rejects common sense morality, one is not obligated to turn to consequentialism. On the other hand, it seems that Parfit does not attempt to provide an

1983. These five arguments are non-economic. Cowen and Parfit also mention several economic arguments, which have no bearing on this discussion.

⁹⁶ Parfit, Derek, *Reasons and Persons*, p. 25.

argument in support of consequentialism. It is rather a precondition or framework for his discussion.

Impersonal and Person-affecting Value

Parfit's theory presupposes an impersonal value theory. This theory is an attempt to solve the non-identity problem. How then can the impersonal value theory be evaluated? Due to the fact that Parfit claims that the impersonal theory is better than a person-affecting one, it is reasonable to compare these two theories. Arguably, the most important proponent of a person-affecting theory is David Heyd.

Heyd stresses that the conceptual distinction between impersonal and person-affecting values is similar to, but distinct from, the distinction between value realism and value constructivism. Realism refers to the idea that there is a world totally independent of human consciousness and comprehension. Accordingly, value realism implies that values could exist independently of humans. Impersonal values imply that something can be valuable without any reference to persons. This, however, is still compatible with the claim that values are social constructions.

Another, related, conceptual distinction is that of subjectivism, i.e. values are derived from subjects, and objectivism, i.e. values are separate from specific subjects. Here, Heyd notes that there is no direct link between the impersonal value and objectivism, and between person-affecting and subjectivism. One can claim that values must be related to people, without presupposing that they are subjective.⁹⁷

According to Heyd, the question about impersonal or person-affecting value concerns the connection between the world and value:

There are two mutually exclusive and exhaustive alternatives of viewing this connection. According to the first [impersonal], value is attached to the *world*, that is to say it characterizes states of affairs in the widest global meaning of the term. According to the second [person-affecting], value is attached only to human beings..., that is, through the way it *affects* (human) subjects.⁹⁸

⁹⁷ Heyd, David, *Genethics: Moral Issues in the Creation of People*. University of California Press, Berkeley, pp. 82-90.

⁹⁸ Op. cit., p. 80.

Thus, Heyd proposes a person-affecting theory. Accordingly, an outcome can only be good, bad, and better or worse if someone is affected by that outcome. As was noted by Parfit, this theory faces the non-identity problem. Heyd, on the other hand, claims that this is acceptable because his theory can still include some future generations directly into moral considerations.

It is noteworthy that Heyd's theory uses a special terminology in regard to different kinds of future people. First, he claims that actual people are those whose existence will not be affected by an act. This is a group of people that consist of those that exist and those that will exist. Second, potential people are those whose existence is affected by an act.⁹⁹

In order to avoid a terminological confusion, I find it more useful to use the distinction between contingent and non-contingent people instead. The primary reason is that it seems counter-intuitive to talk about actual future people. Future people are all somehow potential or possible. Thus, Heyd's theory implies that morality should focus only on non-contingent people, as opposed to focusing on both contingent and non-contingent people. Another way of saying this is that those whose existence is totally dependent on our act, i.e. contingent people, have absolutely no moral status.¹⁰⁰

Moreover, Heyd's response to Parfit's choice between conservation and depletion involves a decision about who is non-contingent and has moral status, and who is contingent and has no moral status. The question boils down to a choice: a decision-maker needs to make a choice about the status of people.¹⁰¹ Heyd notes that even if contingent people can not be directly involved in moral considerations, they can be indirectly included, because non-contingent people have preferences regarding the well-being of contingent people. We, e.g., usually care about our children's general health and life situation.¹⁰² However, Heyd seems to claim that these are just empirical claims about human nature.

Heyd's theory has one main drawback. It makes the categorization of contingent and non-contingent people totally dependent on a decision maker. It is difficult to identify just who should make such a

⁹⁹ Op. cit., pp. 97f.

¹⁰⁰ Op. cit., p. 99.

¹⁰¹ Op. cit., p. 98.

¹⁰² Op. cit., pp. 13-15 and pp. 193-203.

choice, and the choice itself makes a huge impact on how reasonable the decision is. There is therefore a huge incentive for a decision maker to choose in a way that benefits his or her own interests. There are no criteria that can rule out that a decision maker categorizes all future people as contingent, and ignores them in making a policy choice. The only remaining way of including future generations into moral considerations is indirect. This will make the moral status of future generations totally dependent on our interests and beliefs.¹⁰³ Heyd's theory is incompatible with the idea that future generations should have some independent moral status.

Heyd's theory also makes mankind's continued existence totally contingent on whether we believe that such existence is a good thing. He tries to reduce the implications of this conclusion by developing a more inclusive perspective on personal identity that makes it important for individuals that their projects continue beyond their death. This extension of personal identity is fruitful and will be discussed in the chapter on de-Shalit.

An impersonal value theory, on the other hand, solves the non-identity problem and includes future generations directly into the moral sphere; they have the same moral status as we have. Also, it can also provide a strong reason for the continuation of mankind, because such continuation maximizes impersonal value.

However, one must seriously question an impersonal value theory. That the world can be better or worse without referring to the situation of people is not easily comprehensible. Does it make sense for something to be good totally independent of human interests? A person with a misanthropic trait could claim that it is better if there are no humans at all, and justify that with some kind of intuitionism. Those of us who feel otherwise can not reject that position by referring to the triumphs of the human project.

The strangeness of impersonal value is associated with how this value is specifically characterized. E.g., Parfit claims that well-being has impersonal value. But one can claim that there are other impersonal values. One example of a reasonable impersonal value, besides well-being, is the value of a continued human existence on

¹⁰³ It is noteworthy that Heyd claims that the question about responsibility towards future generations tests the limits of ethical theory. His own answer is that contingent people would cross that limit and that they can not be incorporated into ethical theory.

earth.¹⁰⁴ This seems to imply that the key to making sense of impersonal value is to determine which values are in fact impersonal. A pluralistic account is more reasonable than a monistic one, at least a monism that focuses only on well-being.

However, it is also possible that both Parfit and Heyd focus on the wrong questions. The non-identity problem presupposes that the dichotomy between contingent and non-contingent future people is of moral importance. E.g., if one denies that that the non-identity problem is of any moral importance, the question of how value is related to the world becomes less important. One can claim that personal identity is morally irrelevant when we consider how we ought to act towards future generations. Instead, we should focus on the situation that a person finds him or herself in, quite independently of his or her identity. The importance question is whether that person can live according to his or her idea of the good life.

One way of expressing this idea is provided by Ariansen. He claims that obligations should not be attached directly to future or present people but to different placeholders who are part of a network of relations. Some individual will eventually fill a specific place, and it is imperative that he or she can live a certain kind of life. This idea makes it possible to assign obligations to people whose identity is unknown.¹⁰⁵

As a value theoretical position, this implies that the question of value can not be abstracted from questions about relations. Value is partly determined by being part of a network of relations. Both the impersonal and the person-affecting value theory claim that value is either impersonal or person-affecting, but this might be an unnecessary dichotomy. Values are found in human societies and those are inherently relational, it is therefore a small step to claim that value is also relational in the sense that it can not be properly understood without some reference to the network of relations, i.e. a society or a community.

However, there are two problems with this position. The first is that it gives no answer to the question about population size. One can still ask: what is the appropriate number of placeholders? The answer to

¹⁰⁴ Suggested by Wolf, Clark in 'O Repugnance, where Is Thy Sting?', in Ryberg, Jesper and Tännsjö, Torbjörn (eds.), *The Repugnant Conclusion: Essays in Population Ethics*, Kluwer Academic Publishers, London, 2004, pp. 78f.

¹⁰⁵ Ariansen, Per, 'Beyond Parfit's Paradox', in Agius, Emmanuel et al. (eds.), *Future Generations and International Law*. Earthscan Publishers, London 1998, pp. 13-17.

that question is to a large degree dependent on what kind of ethical theory one accepts. If one rejects consequentialism, the question becomes less pressing. There is no need to determine the optimum number of placeholders. There can be many populations that are optimal.

The second problem is that it seems strange to assign obligations to a place in a network of relations instead of towards a person. One answer is that we have little knowledge about future generations generally, and no knowledge about future individuals. The only thing we do know is that they will possibly be a large group of individuals, whose exact identity is unknown. This problem seems unavoidable, and an ethical theory that demands more information demands the impossible.

I conclude that it is possible and reasonable to deny that the identity of future generations is of moral importance. What is important is that a person could become part of a network of moral relations and that he or she is owed certain obligations just because he or she is such a placeholder.

Responses to the Repugnant Conclusion

Given that one accepts an impersonal value theory, a theory that one can indeed doubt, and if we accept the claim that the repugnant conclusion is an important theoretical problem and that any proponent of some principle of beneficence must respond to it, there are at least four responses to this problem:

The first response is to accept the repugnant conclusion. The reason why we find this conclusion repugnant is that we believe that our own lives are significantly different compared to the lives in the Z population. Our lives seem to include high levels of well-being compared to the lives of people in Z. But how reasonable is this belief? Some philosophers, like Torbjörn Tännsjö, claim that our belief is mistaken, and that our ordinary lives are much closer to the lives of people in Z.¹⁰⁶

The implication of this response is that our own lives are barely worth living. I find this claim unreasonable. First, our well-being is

¹⁰⁶ See Tännsjö, Torbjörn, 'Why We Ought to Accept the Repugnant Conclusion', in Ryberg, Jesper and Tännsjö, Torbjörn (eds.), *The Repugnant Conclusion: Essays in Population Ethics*, Kluwer Academic Publishers, London, 2004, pp. 219-238.

not static, it can change throughout our lives. Few would therefore agree that this means that their lives are just barely worth living generally. Of course, there are those lives that might be close to being not worth living; however those are often easily identified, e.g. those that suffer because of famines and/or wars. They are quite distinct from regular life in the developed world. Most of us living in the developed world could probably reduce our well-being significantly without getting close to a point where we would consider suicide a good idea.

The second response is to keep searching for a reasonable formulation of theory X. As we saw, Parfit himself offers a possible solution to the repugnant conclusion by proposing a perfectionist theory. It states that some values can not be reduced or substituted with other values. Any reduction of these values is a change to the worse. This theory suffers from the strange implication that there can be radical differences between values that seem very similar and Parfit himself is sceptical about how reasonable this is.

A third response is to reject that some evaluative comparisons are impossible because some relations are not transitive. The reason why it is possible to claim that the huge population Z is better than the small population A is because there are also populations between these extremes which affect the evaluation of the extremes. E.g., Parfit claims that there is some population B which includes a bigger population than A but includes just a small reduction of each individual's well-being, i.e. its total well-being is higher than the well-being of A. However, Z is better than B because Z includes a much higher total amount of well-being. This means that B is better than A, and Z is better than B. This reasoning seems to make it necessary to conclude that Z is better than A, and thus supports the repugnant conclusion. By rejecting that the relation 'B is better than A' is a transitive relation, it is possible to claim that B is better than A, and at the same time claim that A is better than Z. The drawback with this response is that transitivity is often a quite reasonable idea and it seems unreasonable to reject that it is valid for at least some comparisons.¹⁰⁷

¹⁰⁷ See Rachels, Stuart, 'Repugnance or Intransitivity: A Repugnant but Forced Choice', in Ryberg, Jesper and Tännsjö, Torbjörn (eds.), *The Repugnant Conclusion: Essays in Population Ethics*, Kluwer Academic Publishers, London, 2004, pp. 163-186. See also Persson, Ingemar, 'The Root of the Repugnant Conclusion and Its Rebuttal', in Ryberg, Jesper and Tännsjö, Torbjörn (eds.), *The Repugnant Conclusion:*

The fourth, and most radical, response to the repugnant conclusion is provided by moral pluralism. This dissertation claims that a reasonable theory about responsibility towards future generations must acknowledge moral pluralism. This is not compatible with welfarism, the idea that only welfare has moral importance.

Moral pluralism implies that one can claim that there are other intrinsic values besides well-being, e.g. equality and autonomy. But more importantly, it also implies that one can not decide the relative importance of different values once and for all. Many values are important, although to different degrees to different people. If one identifies a need to complement well-being with other values, this can influence the weight and scope of a principle of beneficence.¹⁰⁸

What implications does the rejection of welfarism have for the repugnant conclusion? Will this conclusion just disappear? I do not believe that this would be the case. It is hard to reject the claim that well-being should have some value. However, the benefit of rejecting an exclusive focus on well-being is that it makes it easier to place limitations on the maximization process that leads to the repugnant conclusion.

As an example, one could claim that humans should exist without saying anything about their number or well-being, because mankind's existence has an impersonal value. It is also possible to claim that human existence includes some specific features, like the autonomy to lead a life in accordance with one's values, and if those features are lacking, it is no longer human life in its fullest sense. I.e., the Z population should be avoided because it de-humanizes the members of that population. Also, if we set the level for a 'full' human existence high enough, there could still be a Z population. I.e., a population whose lives are just above the level where human life is 'full'. That population would then be acceptable. Notice that this is based on non-welfarist values, which means that no amount of positive or negative welfare can substitute these values because the categories are totally different. This ideal is similar to Parfit's position, but he does not

Essays in Population Ethics, Kluwer Academic Publishers, London, 2004, pp. 187-199.

¹⁰⁸ It is noteworthy that the rejection of welfarism is also a rejection of utilitarianism generally, but does not necessarily include a rejection of all kinds of consequentialism. E.g., one can claim that only outcomes have importance but they should be evaluated in relation to a specific moral ideal, like the will of God, which has nothing to do with well-being.

seem to introduce explicit non-welfarist values, his focus is still human well-being.

The basic idea is that it is possible to make claims about existence without making claims about well-being. The specific character of the total utilitarian principle of beneficence combined with an impersonal value theory, i.e. Parfit's total impersonal principle, is that it is neutral in regard to the difference between bringing about new people and the well-being of these people; both of these variables are important. However, by circumventing beneficence with independent considerations about existence, the number and welfare of future people can only be determined after considerations about existence.

The conclusion is that the repugnant conclusion is inherently tied to the principle of beneficence and if we introduce a limitation on this principle, by referring to other values than well-being, it is possible to reduce the importance of the repugnant conclusion. Moral pluralism implies that there are other values besides well-being and that these can be of equal or more weight than well-being.

Parfit and Normative Claims

Arguably, there is a connection between values and normative claims in the sense that if we endorse a certain value, we would probably be ready to accept a normative claim that this value ought to be brought about. If this is reasonable, one can also claim that if a comparison of different outcomes leads to the conclusion that one is better than another, this could be one moral reason to try to bring about this outcome. This kind of connection is not necessary. It is possible to argue that comparisons of outcomes are a separate part of morality, distinct from the part of morality that focuses on acts or what we should do generally, i.e. normative claims.¹⁰⁹

Such a position is reasonable but also problematic. The fourth criterion for a reasonable theory about responsibility towards future generations states that such a theory should have some normative implications for real-life problems. It is therefore necessary to try to reconstruct Parfit's consequentialism as a normative theory.

Parfit's discussion about the principle of beneficence could be reformulated as a search not only for a reasonable way of comparing outcomes, but as a search for a reasonable formulation of beneficence

¹⁰⁹ Parfit, Derek, *Reasons and Persons*, p. 430.

as a normative principle. Moreover, it has also been noted that Parfit gives some weight to equality. Based on this, the normative claim should be formulated so as to give weight to both well-being and equality. How then can a consequentialist claim that includes both the aim of maximizing well-being and the aim of an equal distribution be characterized? Two candidates are either an act consequentialist claim or a rule consequentialist claim.

An *act consequentialist* claim about responsibility towards future generations implies that

we should act in a way that maximizes the total sum of well-being (benefits minus burdens) and distribute it as equally as possible between generations.

This claim makes it our obligation not only to increase well-being but also to distribute it in a more equal way. We are acting wrongly if we reduce well-being for future generations, or if we focus on only one group of future generations, e.g. future generations that are descendants to inhabitants of rich countries. One argument against this position is that it is extremely difficult to know which acts would actually maximize well-being and equality. We often lack sufficient information about the effects our acts will have, e.g. how many people might be affected and to what extent. It is therefore better to follow general guidelines that are aimed at realizing this goal.

Accordingly, a *rule consequentialist* claim about responsibility towards future generations implies that

we should follow rules that maximize the total sum of well-being (benefits minus burdens) and distribute it as equally as possible between generations.

The rule consequentialist claim makes it reasonable to avoid many kinds of acts that could lead to future suffering. It becomes less morally justified to bury toxic material because we know that such burial could leak and affect future generations. On the other hand, the claim still makes it morally obligated to increase the population in order to maximize well-being. It can recommend that we should increase both well-being and equality by bringing about a huge population which consists of people with very low individual well-

being; we are obligated to do this. There are at least three responses to this problem.

First, we could propose an internal constraint to the maximization of well-being by accepting a perfectionist theory of well-being, like Parfit's. That would make it illegitimate to increase well-being if it affects the qualitative aspects of well-being. No amount of a lesser kind of well-being can cancel out a decrease of the superior kind.

Second, an external argument is provided by the fourth evaluative criterion: normative claims should be applied to real-life problems. This means that normative theories should be affected by those restrictions that our actual world provides. This affects the normative relevance of the repugnant conclusion.

From an empirical perspective, there is a higher and a lower limit for the human population at any given time. The human species itself sets limits because too few people will make procreation impossible or lead to genetic degeneration. The human habitat sets limitations because too many people will eventually lead to famine and ecological disasters. Parfit's theory would place the optimum somewhere in-between these extremes. Exactly where these extremes are might not be possible to determine or can probably only be determined afterwards, when it is too late. In either case, this means that even if the goal is to make the world as good as possible it might be impossible to determine where the optimum should be placed given the need to avoid the two extremes.

One can conclude that the optimum human population must lie within a certain range that is sufficiently far away from the extremes, but that it is impossible to say exactly where this optimum lies. As long as the main focus is human life in this world, this makes the discussions about the optimum population less relevant for the question about responsibility towards future generations. Parfit himself might support this conclusion. He claims that we should imagine away the limits of nature and natural resources and use the repugnant conclusion to test our normative principles.¹¹⁰ This is indeed a reasonable goal, but the fourth evaluative criterion implies that normative claims should be related to our actual world in order for them to be applied to real-life-problems. Our world is a world of finite resources and this is important for normative claims.

¹¹⁰ Op. cit., pp. 389f.

A third response is that both the act consequentialist and rule consequentialist normative theories are unreasonable because of a practical problem. It is impossible to determine what will actually happen. As such, it is impossible to determine which acts or rules maximize well-being and equality. As was noted earlier, this kind of critique can be rejected by claiming that consequentialism is a criterion for right action, not a theory for acting. This is not an acceptable argument given the aims of this dissertation. A theory must provide some guidelines for what we should do for future generations.

One solution to this problem is to combine a consequentialist justification with non-consequentialist normative claims. Parfit could probably accept this. Consequentialism as a theory of justification could be associated with almost any kind of normative claims given that they maximize well-being or equality, or any other value.

Parfit's Answers to Practical Questions

Concerning the seventh question, it was noted that Parfit does not take a specific stance on the question about on which level responsibility should be placed. However, due to his emphasis that an ethical theory should not be collectively self-defeating, i.e. that it must be possible for everyone to follow it, it seems that he gives most support for the institutional level. The chief benefit with that level is that it focuses on coordination between individuals. Coordination is more easily achieved if everyone follows, and accepts, a shared set of rules. This provides a strong argument in support of placing responsibility on an institutional level, at least from a practical perspective.

Also, in respond to the eighth question, it was noted that Parfit provides a very strong case against discounting. Interestingly, the rejection of discounting will increase the demands that future generations can make on us, and those demands will be especially heavy if one accepts a consequentialist ethical theory. If the ultimate aim for morality is to bring about the best outcome, and we know that any amount of resources saved will make future people better off, the conclusion is that we should reduce our living expenses and save as much resources as possible. If this is correlated to human well-being, in the sense that more resources will increase the possibilities of high well-being, consequentialism seems to obligate these kinds of massive savings.

The savings conclusion is similar to the repugnant conclusion with only one difference. The generation that knows it will be the last one is justified in consuming all accumulated resources to maximize their well-being. Is it reasonable to assume that this is the best outcome? If we use Parfit's terms and claim that every generation besides the last will have a life that is barely worth living, and the last generation will have a life with a level of well-being much beyond anything any human has ever had before, it could be the best outcome. The outcome can be justified both with the total impersonal principle, and the average impersonal principle.

Also, this outcome would be impossible to reject from an egalitarian perspective of fair distribution between generations. There is no point in making a more average distribution between all previous generations and the last generation. The last generation has the special knowledge that it is the last and this makes following redistributions unnecessary. An argument for a more egalitarian distribution would be that individual people's lives matter in other ways than their experience of well-being. E.g., we might claim that people's lives should include an equal share of the world's resources. However, Parfit rejects such considerations by adhering to a reductionist theory of personal identity. Equality should only be focused on present experiences. If equality is less important, and the aim is to bring about the best outcome, the savings conclusion seems justified.

Thus, it is certainly possible for a consequentialist to reject discounting. However, given the overall aim to maximize well-being, the rejection leads to another argument against this theory. It implies that we should accumulate massive savings. It is not obvious how Parfit would respond to this problem. Possibly, he might claim that this is a bad conclusion, but it is still better than the repugnant one. Of course, our intuitions might differ on this issue.

The ninth analytic question concerns how we ought to handle our limited knowledge about the future, especially our limited knowledge about the occurrence of negative events, risks. Even though he provides a formal way of handling risks, Parfit does not provide an answer to the question about how one should approach situations in which the risks are indeterminate, i.e. we know that there are risks, but not their probability or their hazard. If we want some indications towards how we ought to handle these problems, we must turn to another theory.

Parfit's Theory and Nuclear Waste

Given the fact that Parfit conceives well-being in an impersonal way makes it irrelevant whether the waste might hurt someone right now, or if it might hurt someone thousands of years from now. Well-being is always important, and we act morally wrong if our waste management causes a decrease in the well-being of future generations.

Concerning the problem with risks, Parfit claims that consequentialism implies that one should aim to bring about the outcomes with the highest expected good, i.e. well-being. This is determined by adding together the good effects, and the probability they that will occur, and subtracting the bad effects, and the probability that they will occur.

The problem with nuclear waste is that we just do not know what will happen under extended periods of time. The probabilities are indeterminate, either because of our total inability to know them, e.g. the actions of future generations, or because they are very difficult to determine, since they refer to empirical knowledge about materials, geological processes, the harmful effects of small doses of radiation, etc. As long as our empirical knowledge is gained by an inductive method, there is just no possible way of making exact predictions about the future effects of waste management.

Because of this, the guideline that we should maximize expected well-being seems quite empty of normative content. We do not really know what will maximize well-being because so much can happen. Whether we acted right or wrong might be impossible to judge beforehand. We might need to wait until we know what happened. This, of course, makes this theory quite redundant if the goal is to gain some idea about how we ought to handle nuclear waste, given the fact that we do not know the future.

Instead, it seems that we must live with insecurity and still try to manage the waste in an ethically defensible way. The conclusion is that we must turn to another kind of normative theory that is less dependent on what will actually happen in the future and can give us guidance now.

Conclusion

The strongest part of Parfit's theory is that it bestows future generations with full moral status, i.e. there is no moral difference between us and future generations. This moral status presupposes other considerations, that are more dubious. To start with, Parfit does not provide a reason why we ought to accept a consequentialist theory to begin with. This might not be a serious problem because it is more of a condition than a claim.

Moreover, Parfit's value theoretical discussion is related to the non-identity problem. He adheres to an impersonal value theory because it solves this problem. However, it is possible to reject this problem by claiming that people's identities are irrelevant for questions about responsibility towards future generations. In addition, his theory stresses both the value of well-being and equality. This makes his theory partially compatible with pluralism. On the other hand, if we acknowledge further values, his theory is incompatible with pluralism.

Parfit's theory does imply explicit normative claims, and a reconstruction of his normative position might still lead to the repugnant conclusion. However, there are ways to avoid those problems, e.g. by stressing empirical limitations, or by just proposing non-consequentialist normative claims. Parfit might agree with that conclusion.

In regard to practical questions, one strong part of Parfit's theory is that it provides a substantial argument against discounting the future effects of our actions. Time itself is not morally relevant. His theory could still imply that we are morally obligated to massive savings, a conclusion that seems almost as repugnant as the repugnant conclusion.

Moreover, Parfit's theory can certainly explain why it is wrong to manage the waste in ways that reduce the well-being of future generations. Nevertheless, the theory says little about how we should handle risks. If we want some forward-looking guidance, we need to turn to another kind of normative claims.

We are left with two options, either to construct some kind of consequentialist theory that makes non-consequentialist normative claims, or turn to another kind of ethical theory. Whatever the strategy, it is necessary to consider another kind of theory. Given the framework of analytical philosophy, the most obvious alternative to a consequentialist theory is an egalitarian one. The next chapter will

therefore consider how an egalitarian theory might approach the question of responsibility towards future generations.

2. Posterity, Equality and Justice

Introduction

Brian Barry (b. 1936) is a well-known British moral and political philosopher educated at the University of Oxford. He is especially famous for his critique, defence and development of the specific liberal conception of justice put forward by John Rawls. He is a vigorous defender of an egalitarian distribution of resources and rights between people independently on cultural barriers.

The primary sources for Barry's writings on future generations are the articles 'Rawls on Average and Total Utility: A Comment' (1977), 'Justice Between Generations', in *Law, Morality and Society: Essays in Honour of H. L. A. Hart* (1977), 'Circumstances of Justice and Future Generations', in *Obligations to Future Generations* (1978), 'Intergenerational Justice in Energy Policy', in *Energy and the Future* (1983), and 'Sustainability and Intergenerational Justice', in *Fairness and Futurity* (1999).

These specific texts are complemented by some of Barry's other texts, which can provide important insights where the articles can not. The primary source for his general thinking is his study *A Treatise on Social Justice*, that includes *volume 1: Theories of Justice* (1989) and *volume 2: Justice as Impartiality* (1995). The first volume is a deep analysis of different ideas about justice. Barry's conclusion is that the most reasonable idea of justice is based on impartiality. The specific nature of this idea is systematically put forward in the second volume of the treatise. A final relevant text is *Why Social Justice Matters* (2005), which deals with the problems associated with inequality.

Because Barry's views on future generations are expressed in a number of different writings, this chapter must have a more reconstructive character than the other chapters. This becomes even more problematic because the writings span over more than 20 years.

It is therefore not surprising that there have been considerable developments in his work. Although this is a significant problem, I believe that it is possible and important to try to reconstruct Barry's views and learn something from them.

Background: Contract-theory and Justice

Contract-theory (contractualism/contractarianism) is one of the main theoretical traditions in analytical philosophy. It has lately been proposed by, among others, such distinguished philosophers as John Rawls, Thomas Scanlon and David Gauthier. However, contract-theory comes in several versions and it is therefore important to note the differences between these types. Barry has made an excellent contribution by providing an in-depth analysis of contract theories, and it is therefore reasonable to turn to his work. It should be noted that Barry talks about contract-theory as a foundation for justice, in the same way as Rawls, but other contract-theorists, like Scanlon and Gauthier, use the contractual framework as a way of understanding the nature of morality. This difference is of less importance for the following discussion.

Barry's focus is social justice, which he defines as distributive justice. Social justice concerns the distribution of society's benefits and burdens.¹¹¹ Accordingly:

The subject of justice is the distribution of rights and privileges, powers and opportunities, and the command over material resources. Taking the term 'resources' in a suitable broad sense, we can put this succinctly by saying that justice is concerned with the distribution of scarce resources—resources about whose distribution a potential for conflict of interests arises.¹¹²

Barry's project is an attempt to defend ethical universalism in the form of a theory of justice that is valid for any society. A universalistic theory is defensible because the beliefs of most societies are heterogeneous and there is no total mutual incomprehension between the beliefs of different societies. This makes it necessary, and possible, to formulate arguments that can be acceptable to people with

¹¹¹ Barry, Brian, *A Treatise on Social Justice Vol I. Theories of Justice*. University of California Press, Berkeley, 1989, p. 355.

¹¹² Op. cit., p. 292.

other beliefs.¹¹³ Barry claims that moral pluralism is a fact of human life. There is no realistic possibility that we will establish a society where everyone would pursue the same conception of good.¹¹⁴ That is the reason why we need a freestanding notion of justice.

The first step in Barry's project is to reject a theory he calls '*justice as mutual advantage*'.¹¹⁵ This theory, which is proposed by Hobbes and developed by Gauthier, starts off with noting the benefits of a moral framework instead of a war of everyone against everyone. Everyone wants to pursue their idea of the good life and is ready to limit this pursuit somewhat in order to avoid not reaching it at all. Rules of justice are established by bargaining between different parties. The rules reflect people's different powers in the sense that the strong can influence the bargaining more than the weak.

Barry rejects mutual advantage because it can not show why people should follow rules when they can get away with breaking them. Their basic motivation is self-interest and it could be in their interest to break the rules.¹¹⁶ Also, mutual advantage places people with limited bargaining power, like children, handicapped and minorities, at a disadvantage. We expect a reasonable theory of justice to protect these groups.¹¹⁷ A third argument against justice as mutual advantage is that the result of any bargaining, the rules for regulating society's institutions, is at best a temporary settlement. Parties will always have a reason to break the current settlement if it satisfies their self-interest. Moreover, they will always try to renegotiate a better settlement.¹¹⁸

Barry also discusses a form of mutual advantage that he calls '*justice as reciprocity*'. This theory postulates that people are motivated by self-interest but also by a sense of fair play. This makes them inclined to follow rules of justice even when they could benefit from breaking them. This theory is rejected because it only changes the motive for following rules and retains mutual advantage as the

¹¹³ Barry, Brian, *A Treatise on Social Justice Vol II. Justice as Impartiality*. Clarendon Press, Oxford, 1995, pp. 5-7.

¹¹⁴ Op. cit., pp. 25-26 and p. 160.

¹¹⁵ Hobbes is the most famous proponent of this idea of justice, but its roots go back to Plato's *The Republic*.

¹¹⁶ Barry, Brian, *A Treatise on Social Justice Vol II. Justice as Impartiality*, pp. 33ff.

¹¹⁷ Op. cit., pp. 45f.

¹¹⁸ Op. cit., p. 39.

criterion for justice. Groups with weak bargaining power are still in a precarious situation.¹¹⁹

Turning to Barry's own proposal, which he calls '*justice as impartiality*', he points out that every society must have some rules of justice to avoid civil war. What is needed is a theory that can regulate actions between people with different ideas of good. This theory limits to some extent the legitimate pursuit of every idea of good but enables different pursuits.¹²⁰

This also includes a rejection of consequentialism. It is impossible to maximize good because there are no independent criteria that determine what is good. It is therefore necessary to find ways of living together in spite of this disagreement. Instead, it is more reasonable to say that we have an obligation to refrain from causing harm because there is much more agreement about what constitutes harm.¹²¹

The concept of impartiality is illustrated in the decisions of a good judge. The judge does not reach his conclusions by placing any particular weight on anyone's interests. His conclusions should be in accordance with the law and a partial judge might fail to reach those conclusions.¹²² Likewise, impartiality can be characterized as a perspective people should employ in dealing with conflicting claims, a will to refrain from partial considerations.¹²³ However, it is important to note the distinction between being impartial (and fair) and being moral. A bureaucrat could be perfectly impartial, and be just in a procedural sense, in applying rules concerning shipments to death-camps. Barry claims that impartiality is a limited moral concept that primarily sets limits to actions without stating what should actually be aimed at. It is only possible to determine what impartiality implies when the goals are already determined.¹²⁴

There are two central ideas that make up the foundation of justice as impartiality. The first idea is the assumption that people want to reach agreement with other people. This is the motivation for acting justly that, according to Barry, is the central part of every theory of

¹¹⁹ Op. cit., pp. 48ff.

¹²⁰ Op. cit., p. 77.

¹²¹ Op. cit., pp. 25f.

¹²² Op. cit., p. 13.

¹²³ Barry, Brian, *A Treatise on Social Justice Vol I. Theories of Justice*, p. 290.

¹²⁴ Barry, Brian, *A Treatise on Social Justice Vol II. Justice as Impartiality*, p. 19.

justice because of the practical nature of justice.¹²⁵ The second idea specifies the characteristics of this agreement.

Turning to the first central idea, Barry states: ‘...my argument presupposes the existence of a certain desire: the desire to live in a society whose members all freely accept its rules of justice and its major institutions.’¹²⁶ This is basically the recognition of a moral motive for actions. People want to come to a reasonable agreement with others that do not share their idea of good and this must include an attempt to justify actions to other parties and the will to freely limit the pursuit of the good life if that is demanded by impartiality. A just person is therefore someone that defends his or her actions in an impartial way and freely conducts oneself in accordance with what can be defended in that way.¹²⁷ Barry’s claim is simply that there are other reasons for acting than those based on what is in our own interests.

Also, those who have an attitude that includes a desire to justify their actions must also accept another idea. Barry believes that we should be moderately *sceptical* or hesitant about every idea of good. We should not believe that any idea of good is so well founded that it should be imposed on those that reject it. There is ample evidence that rational persuasion can not solve all disagreement. And, the only other option seems to be massive compulsion, which should be avoided.¹²⁸

The second central idea of justice as impartiality focuses on what a reasonable agreement between proponents of different ideas of good would entail. This is important, because it is reasonable agreement made under certain equalizing conditions, which specifies what justice is. ‘The basic idea here is that just rules are those that can be freely endorsed by people on a footing of equality.’¹²⁹ This equal footing is a necessary condition for establishing what justice is. The necessary premise is the acceptance of a fundamental equality between people that makes partial arguments, like those based on race, sex or luck in the natural lottery, morally irrelevant and claims that just rules must be acceptable to all.¹³⁰

¹²⁵ Barry, Brian, *A Treatise on Social Justice Vol I. Theories of Justice*, p. 359.

¹²⁶ Barry, Brian, *A Treatise on Social Justice Vol II. Justice as Impartiality*, p. 164.

¹²⁷ Barry, Brian, *A Treatise on Social Justice Vol I. Theories of Justice*, p. 363.

¹²⁸ Barry, Brian, *A Treatise on Social Justice Vol II. Justice as Impartiality*, pp. 168-173.

¹²⁹ Op. cit., p. 52.

¹³⁰ Op. cit., p. 8.

Barry turns first to a method developed by Rawls as a way to formulate a specific expression of his basic egalitarian idea. Barry considers Rawls' theory as 'the most influential, and the most fully developed variant of justice as impartiality'.¹³¹ Rawls' method is centred on the notion of an *original position* in which persons decide which rules should guide the general structure of society. The deciding parties are bound to follow the newly established rules, hence the term contract. By changing the exact characterization of the original position, above all by specifying what knowledge people have, one can justify different rules. Rawls himself argues that the parties should be deprived of any knowledge of their personal goals and situation; they should be behind a *veil of ignorance*. Another important specification is that the parties should be motivated only by self-interest and that they disregard the interests of others.

Eventually, Barry rejects Rawls' version of the original position. People in the original position who lack personal information can not come to an agreement with each other because they have no idea of what their goals are. Instead, they are reduced to trying to act prudently under conditions of extreme uncertainty, and to maximize the possibilities of reaching their own goals whatever those might be. What is needed is a way of defining just rules based on the egalitarian idea that just rules must be acceptable to those who fare worst under them. Barry wants just rules to be based on more than just a choice under extreme uncertainty; he wants the rules to directly reflect the motive to justify one's claims to other people, i.e. by making a case with impartial arguments.¹³²

Barry's specific conception of impartiality leads him to endorse a form of theory developed by Thomas Scanlon. Scanlon's theory departs from the theory of Rawls in two important aspects. Parties in the original position are aware of their identities (and interests) and they are not motivated only by self-interest. They also want to

¹³¹ Op. cit., p. 8.

¹³² Barry, Brian, *A Treatise on Social Justice Vol II. Justice as Impartiality*, pp. 57ff. Moreover, Barry argues that Rawls' theory of justice is made up of two conflicting parts. One part is Humean and based on mutual advantage. The other part is Kantian and based on justice as universal hypothetical assent. Barry, Brian, 'Circumstances of Justice and Future Generations', in Sikora, R.I. and Barry, Brian (eds.), *Obligations to Future Generations*. Temple University Press, Philadelphia, 1978, pp. 229ff. Barry rejects the Humean part and tries to develop the Kantian.

establish principles that can be reasonably accepted by everyone.¹³³ It is therefore imperative that anyone should be able to launch arguments against any proposed rule without being rejected a priori. This involves giving everyone the power to veto a proposed rule hence equalizing power in the decision-process.¹³⁴ Barry pre-empts the critique that ‘...the Scanlonian construction is little more than a device for talking about what is fair, on a certain fundamentally egalitarian conception of fairness’¹³⁵ by claiming that Scanlon’s theory is useful to express the basic commitment to equality and reasonable agreement.¹³⁶

It is also noteworthy that there are two levels of impartiality. The first level, or first order, impartiality means that persons should act impartially towards different interests. A person might try to satisfy all interests without placing any specific weight on any of them, including their own. Impartiality as a kind of action-guiding principle should be rejected because it would be extremely harsh on the participants. There are strong incentives to become a free-rider, and it would also demand an impossible amount of cooperation between people.¹³⁷ Barry himself focuses on the second level, or second order, impartiality. This implies that a person believes that institutions, like the state and justice system, should follow principles that are impartial concerning substantial conceptions of the good life and acceptable to all. Second order impartiality leaves room for partial actions, and the pursuit of personal goods in those spheres of life that are not covered by institutional rules.¹³⁸

¹³³ Scanlon claims that: ‘An act is wrong if its performance under the circumstances would be disallowed by any system of rules for the general regulation of behaviour which no one could reasonably reject as a basis for informed, unforced general agreement.’ Scanlon, Thomas M., ‘Contractualism and Utilitarianism’, in Sen, Amartya and Williams, Bernard, *Utilitarianism and Beyond*, Cambridge University Press, Cambridge, 1982, p. 110.

¹³⁴ Barry, Brian, *A Treatise on Social Justice Vol II. Justice as Impartiality*, pp. 67ff.

¹³⁵ Op. cit., p. 113.

¹³⁶ Op. cit., p. 8 and p. 113.

¹³⁷ E.g., Op. cit., pp. 205-207.

¹³⁸ Op. cit., p. 11 and pp. 192-195.

Barry's Critique of Different Theories of Justice and Their Approach to Responsibility towards Future Generations

Barry claims that the main reason why we care about (remote) future generations in the first place is because justice demands it and not because of any natural sentiment for them. If such natural sentiment were missing, it would still be possible to make a case for caring about future generations, because the demands of justice are independent of partial sentiments.¹³⁹

Moreover, a natural sentiment like 'humanity', i.e. a concern for the welfare of others, makes moral demands different from those justice makes: 'Humanity requires that we respond to others' needs whereas justice requires that we give them their due.'¹⁴⁰ When something is owed because it is a matter of justice, it is not necessary to point towards any specific feelings to justify why one should have access to a specific good. Justice could, e.g., demand that rich people give more to poor even if that would reduce their welfare and is against their 'natural' sentiment. Justice could also demand that we who are alive at this moment in time should refrain from actions that could harm posterity, even if this makes our lives worse off.¹⁴¹

Barry rejects several theories of justice by showing their inadequacy to deal with future generations. First, he rejects mutual advantage because it makes justice an extension of self-interest. Due to future generations' obvious lack of self-interest, this theory can not include future generations.¹⁴²

Secondly, Barry rejects the communitarian theory of justice, that justice is situated in a social sphere characterized by reciprocity, a moral community. He does not consider justice to be contingent on the moral community; it would be strange to refrain from certain actions only because of the lack of moral interaction.¹⁴³ Moreover, one reason

¹³⁹ Barry, Brian, *A Treatise on Social Justice Vol I. Theories of Justice*, p. 192.

¹⁴⁰ Barry, Brian, 'Circumstances of Justice and Future Generations', p. 205.

¹⁴¹ Op. cit., pp. 205f.

¹⁴² Attempts to extend justice as mutual advantage to cover future generations are analysed and rejected by Arrhenius in Arrhenius, Gustaf, 'Mutual Advantage Contractualism and Future Generations'. *Theoria*, Vol. 65, part 1, 1999. The basic problem is that there are no good selfish reasons for us to save for future generations.

¹⁴³ Barry, Brian, 'Justice Between Generations', in Hacker, P.M.S. and Raz, J. (eds.), *Law, Morality, and Society: Essays in Honour of H. L. A. Hart*, Clarendon Press, Oxford, 1977, pp. 270f. Barry also mentions Golding's view that obligations rest on a sense of a moral community. He rejects that position as morally offensive on the account that whether we have obligations to future generations can not be connected

for Barry's universalism is the need to justify why people in rich countries should reduce their own consumption in order to benefit future people that will live in other communities. This is a direct argument against de-Shalit's theory. I will return to the tension between these two theories in this chapter and the next.¹⁴⁴

Thirdly, Barry rejects the libertarian tradition following from Locke and Nozick. This tradition rests on the notion that individuals have natural rights to themselves and the products of their labour. No question of justice can arise as long as there is no illegitimate transaction of property. Future generations have no rights to our property and can therefore not argue that they are treated unjustly.¹⁴⁵

Finally, Barry also considers Rawls' theory. Barry himself uses a similar theory when he discusses justice between contemporaries. However, when he turns to responsibility towards future generations, he notices that there are several problems with Rawls' theory.

The starting point is that Rawls claims that people in the original position have a natural interest in future generations. Even if people in this position know they are contemporaries, they share some concern for the next generations, e.g. their children and grandchildren.

Barry identifies two arguments against this so-called motivational assumption. First, the assumption does not justify direct concern for remote generations. I.e., the generations that we have no attachment to, except for our possibility to affect them with our actions. Even if there was an overlapping chain of relations, which would indirectly link us to those generations, some problems must be corrected now and will only affect remote generations. The reason why those problems should be corrected must involve a direct argument from our concern for remote generations and therefore be independent of our own sentiments.¹⁴⁶

The other argument is that the motivational assumption has an ad hoc character, and is only used to motivate concern for posterity. Why should one introduce such a concern when all other social concerns

to an idea that they share our view of life. Generally, Barry rejects the position that 'The limits of caring are the limits of justice.', in Barry, Brian, 'Circumstances of Justice and Future Generations', pp. 227f. (quote from p. 228).

¹⁴⁴ Barry, Brian, 'Sustainability and Intergenerational Justice', in Dobson, Andrew (ed.), *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice*. Oxford University Press, Oxford, 1999, p. 99.

¹⁴⁵ Barry, Brian, 'Justice between Generations', pp. 272f.

¹⁴⁶ Barry, Brian, *A Treatise on Social Justice Vol I. Theories of Justice*, pp. 192ff.

are hidden behind the veil of ignorance? Why not also introduce a concern for some of our contemporaries and reject self-interest as the sole motivation for the parties?¹⁴⁷

There is another possibility put forward by David Richards. He rejects the claim that people in the original position must be contemporaries. Instead, we should imagine that there is a meeting between all generations that have lived, live, and will live. The key point is that everyone should be ignorant of his or her temporal location.¹⁴⁸

Barry points out that the number of generations that will eventually live on earth is dependent on our actions, i.e. they are contingent. This means that if all future people should be included in the original position, this must include both those that will live and those that could possibly live. This implies that future generations might be asked to determine rules that might lead to their own non-existence. This is indeed a strange situation.¹⁴⁹

Richard's theory also raises the question whether potential people are somehow benefited by coming to exist, i.e. that they have an interest to exist. A good starting point is to consider what value should be placed on existence and non-existence. If we, e.g., place a positive value on existence it would certainly affect the decisions in the original position. It would make any potential person biased towards choosing principles that will increase the possibility that he or she will exist. It would be in the interests of potential future generations to support a massive increase in the population.

Also, if existence could have a negative value, and non-existence can have a lower negative value, or a positive value, one could conclude that there should be no mankind at all. Because, as long as one is prepared to say that some lives are worse than non-existing, one could say that the non-existence of mankind is better than its existence.¹⁵⁰ Possible people in the original position could choose a

¹⁴⁷ Barry, Brian, 'Justice between Generations', p. 279. Barry, Brian, *A Treatise on Social Justice Vol I. Theories of Justice*, pp. 190ff.

¹⁴⁸ Richards, David A.J., *A Theory of Reason for Action*. Clarendon Press, Oxford, 1971, p. 81 and p. 134. Also, Richards, David A.J., 'Contractarian Theory, Intergenerational Justice, and Energy Policy', in MacLean, Douglas and Brown, Peter G. (eds.), *Energy and the Future*. Rowman and Littleman, Totowa, New Jersey, 1983, pp. 138ff.

¹⁴⁹ Barry, Brian, 'Justice between Generations', p. 281.

¹⁵⁰ Op. cit., p. 283.

principle that guarantees a lower negative rather than risk an even higher negative value.

Barry himself is deeply sceptical towards the idea that potential people are benefited by existence:

I do not see how coming into existence can itself be regarded a good from the point of view of the potential person, since potential persons do not have a point of view. And yet I must admit to feeling uneasy with the alternative conclusion that we should take into account only the conscious states of those who get born.¹⁵¹

Moreover, he sees the issue of potential people as a severe challenge to a contractarian theory:

If a contractarian approach to population entails dealing with potential people [...] and if dealing with potential people entails that we have to assign a value to non-existence [...] the conclusion I wish to suggest is that there is something wrong with the contractarian approach.¹⁵²

Apparently, Barry claims that dealing with potential people and the assignment of value (negative or positive) to non-existence is so problematic that it places doubt on the ability of contractarian theories to handle future generations. This is a rather surprising conclusion, given the fact of his own adherence to Scanlon's theory.

Barry's Theory and Responsibility to Future Generations

Justification for Responsibility

Given Barry's acceptance of Scanlon's contract-theory, it seems surprising that he claims that contractarian theory can not be redefined to include future generations. However, he still claims that we have such responsibility and justifies this by referring to a specific interpretation of equality.

¹⁵¹ Op. cit., p. 282.

¹⁵² Barry, Brian, 'Rawls on Average and Total Utility: A Comment'. *Philosophical Studies* 31, 1977, p. 322.

Barry argues that as long as we can establish how justice can work between us, it is possible to make some headway by an analogical argument. His basic method is to start off from the basis of intragenerational justice, and see how it can be applied to intergenerational justice. In short, intragenerational justice can by analogy give insights into how intergenerational justice should be conceived.¹⁵³

The main premise of Barry's analogical argument is the egalitarian ideal of *fundamental equality*. The ideal is that people should be treated in a similar way except when there are some morally relevant grounds for treating them differently. He specifies morally relevant grounds as: '...they are grounds which we ought reasonably to expect the person affected to accept freely.'¹⁵⁴ The idea is that temporal or spatial locations are not morally relevant grounds for unequal treatment.

I believe that the core idea of universalism - that place and time do not provide a morally relevant basis on which to differentiate the weight to be given to the interests of different people - has an immense rational appeal.¹⁵⁵

Be that as it may, the question that comes to mind is: why should fundamental equality have this special weight? Barry's first answer is that there is really no good justification for it; it has the status of an axiom in his argument. It seems that the underlying idea is that one can not convince people to act on moral reasons if they are not inclined to do that and equality (of some kind) is presupposed in morality. This would be in line with Barry's earlier writings. Another argument for fundamental equality is that it is extremely difficult to find any good basis for rejecting it.¹⁵⁶

¹⁵³ Barry, Brian 'Sustainability and Intergenerational Justice', p. 93. Bruce Auerbach makes the exact opposite argument. Because of the great problems of intergenerational justice it is more reasonable that any theory that can solve those problems can solve intragenerational justice. Auerbach, Bruce, *Unto the Thousandth Generation: Conceptualizing Intergenerational Justice*, p. 217.

¹⁵⁴ Barry, Brian, 'Sustainability and Intergenerational Justice', p. 97. In the light of justice as impartiality, this means that everyone has the power to veto a proposed distributive rule. It is therefore necessary to argue in an impartial way to get a general agreement.

¹⁵⁵ Op. cit., p. 100.

¹⁵⁶ Op. cit., p. 97.

Barry abstracts four principles from the premise of fundamental equality: equal rights, responsibility, vital interests and mutual advantage.

With the principle of *equal rights*, Barry means that political and civil rights should be distributed on an equal basis and that an unequal distribution must be accepted by those who get less of these rights. *Responsibility* means that people's voluntary actions can lead to legitimate unequal outcomes. It also means that unequal outcomes not brought about because of voluntary actions should be compensated.

The principle of *vital interests* claims that there are some objective aspects of human life, like housing and food, which should be satisfied for every person and have priority over other interests.¹⁵⁷ *Mutual advantage*¹⁵⁸ is a secondary principle and it states that if everyone gains from a departure from a state of affairs produced by the first three principles, such departure is acceptable but justice does not require it.¹⁵⁹

Barry extends the four principles of fundamental equality and concludes that they can be applied to intergenerational justice with some qualifications. The principle of equal rights is not directly applicable, because the present generation can affect the probability that future generations will enjoy equal rights. That probability will probably diminish if future generations end up in a serious environmental situation.¹⁶⁰

Regarding responsibility, it is certainly true that future generations can not be responsible for the world they inherit. It is therefore unjust if they end up in a situation where they are worse off than we are. The benchmark for such evaluation should be the present situation, which means that we must compare future scenarios with our own to judge them better or worse.

One thing future generations can be responsible for is how many they are at any given moment, which has implications for our responsibility concerning population size. We can not be held responsible for how large the (remote) future population will be. But

¹⁵⁷ This idea of vital interests seems to be similar to Rawls' idea of primary goods: Things that everybody wants whatever their other goals in life may be.

¹⁵⁸ This last principle is another idea of mutual advantage than the one previously mentioned.

¹⁵⁹ Barry, Brian, 'Sustainability and Intergenerational Justice', pp. 97f.

¹⁶⁰ The negative consequences of ecological breakdowns on social justice are discussed in Barry, Brian, *Why Social Justice Matters*, pp. 261ff.

only for the resources we pass on. However, we can be responsible for the near future generations, and this implies that everything must be done to limit population growth.¹⁶¹

Concerning the principle of vital interests, Barry states that temporal or spatial location should not affect the weight of vital interests. This is obviously an explicit rejection of a social discount rate that would make remote interests less powerful compared to close ones. Finally, the application of the principle of mutual advantage towards future generations is rejected. Legitimate departure from equal distribution presupposes knowledge about the preferences of all the involved parties and the preferences of future generations are unknown.¹⁶²

Barry also states that the principle of responsibility and the principle of vital human interests are equally important. It is not possible to decide any ranking a priori without any more specific information. It would be problematic to prioritize vital interest because it implies the conclusion that we should bring about an enormous population where everyone has a very low welfare. The repugnant conclusion must be avoided and one way of doing that is to balance vital interests with responsibility.¹⁶³

Lastly, it is noteworthy that Barry also claims that we should see ourselves as custodians of the planet. ‘...those alive at any time are custodians rather than owners of the planet, and ought to pass it on in at least no worse shape than they found it.’¹⁶⁴ This idea is mentioned again where he says: ‘As temporary custodians of the planet, those who are alive at any given time can do a better or worse job of handing it on to their successors’¹⁶⁵ Either this is a claim about how we should conceive ourselves in relation to the future, or it is a claim that we can not argue that we have a greater right to any resources than any other generation. Possibly, one could also interpret this as a beginning for another way of justifying why we have responsibility towards future generations. However, because it is only mentioned in passing, there is actually no way of knowing what it entails.

¹⁶¹ Barry, Brian, ‘Sustainability and Intergenerational Justice’, pp. 107ff.

¹⁶² Op. cit., pp. 98f.

¹⁶³ Op. cit., p. 112.

¹⁶⁴ Barry, Brian, ‘Justice between Generations’, p. 282.

¹⁶⁵ Barry, Brian, ‘Sustainability and Intergenerational Justice’, p. 93.

Values

According to Barry, *fundamental equality* is the starting point for distributive justice and a different treatment must always be morally justified. Fundamental equality has the status of an axiom, which many of us seem to accept.

One interpretation of this claim is that equality has intrinsic value, that it is valuable independently of all other considerations. This interpretation might imply that everyone should have a similar amount, even if an unequal distribution would be better for everyone, including those that are worst off. This is a very unreasonable idea and there are no grounds for believing that Barry would accept it.

Instead, it is more reasonable to interpret Barry as maintaining that an equal distribution is the baseline for any distribution. We must start with a situation in which everyone should have an equal share, except when there are legitimate claims for a larger share. Such legitimate claims could then change the initial equal distribution. Thus, equality does not have intrinsic value. Instead, Barry's egalitarian theory regards equality as a starting point, from which we can determine just distributions, which may or may not be equal and which are characterized by being freely acceptable by those who are affected.¹⁶⁶

In addition, the idea that people should freely accept distributions implies that the *autonomy* of people to live their own lives is important. Arguably, this is part of Barry's comprehension of fundamental equality, and it would explain why he places such importance on equal opportunities in the first place.¹⁶⁷ On the other hand, it is difficult to establish if autonomy is justified by the fact that our world includes many conceptions of the good life and that it is impossible to determine the best one. Or, whether this implies that autonomy has some kind of intrinsic value. Both interpretations are possible.

Besides, Barry does not argue that it is only equality that is important for distributive justice. It is also important to consider people's *vital interests*, which are also derived from fundamental equality. However, it seems difficult to regard such interests as being derived only from considerations about equality. The term 'interests' is closely related to the term preferences, i.e. what people prefer,

¹⁶⁶ Op. cit., pp. 96f. Also, Barry, Brian, *A Treatise on Social Justice Vol II. Justice as Impartiality*, pp. 7f.

¹⁶⁷ Barry, Brian, 'Sustainability and Intergenerational Justice', pp. 103f.

which could indicate that Barry accepts some kind of preference theory of well-being.

It is therefore more reasonable to interpret vital interests to imply that Barry claims that well-being has value. This means that equality, i.e. distributions should be freely acceptable by those that are affected, and well-being, i.e. vital interests, are important and should be pursued or protected. However, Barry does not specify their exact weight in relation to each other. He does notice that to prioritize well-being gives unreasonable results, which suggest that it has lesser value than equality.¹⁶⁸

Besides this, it is also important to determine how Barry's theory relates to Parfit's distinction between person-affecting and impersonal value. In order to do this, one must understand how Barry conceptualizes future generations, and which terminology he use. One claim that illustrates this is the following:

I have come to believe that the value of continued human existence has to be a premise of other arguments that invoke the interests of actual (present or future) human beings. It can not be derived from any such argument, and I do not think that anything is gained by invoking the supposed interests of potential persons in becoming actual.¹⁶⁹

Arguably, the most interesting part of this quote is that the existence of future generations is a precondition rather than a claim. That would be problematic because it leaves us without any idea why future generations ought to exist in the first place. Moreover, Barry's claim that there are future actual people could indicate that he believes that it is likely that there will be future people, or that he accepts the idea that there are future people that are non-contingent, i.e. they will exist independently of our actions.

Another interesting feature of this quote is that it includes a specific rejection of any moral importance of the interests of potential people. As we saw in the previous chapter, Heyd makes a similar claim, when he states that potential people have no moral status. Given the fact that Heyd accepts a person-affecting theory, this could imply that Barry supports a similar theory. There are also several other reasons that support a person-affecting interpretation of Barry's theory.

¹⁶⁸ Op. cit., p. 112.

¹⁶⁹ Barry, Brian, 'Circumstances of Justice and Future Generations', p. 204.

The first reason is that we should note that contract-theory is usually connected with a person-affecting value theory. Scanlon, e.g., claims that the value of human life is that we ought to respect it. Specifically, the value refers to the respect of the person whose life it is, and not the value of human life generally.¹⁷⁰ Given this, it is difficult for contract-theory to provide an argument that could explain why mankind should exist, without referring only to our interests or beliefs.

The second reason is that it is utterly strange that one could add more value to the world by creating more people, at least according to Barry. He can not see the value of extra people. The world would not be better with 7 billion people instead of 4 billion.

The third reason is that Barry claims, in one of his more recent articles, that environmental philosophers make a mistake if they ascribe intrinsic value to nature. This attempt is mistaken because the value of nature must be centred on human attitudes. It would be abuse of language to say that something is better or worse without regarding the human perception of it.¹⁷¹

Then again, Barry seems to take at least some potential persons into account. E.g., he claims that it is better if humanity extends a long time into the future than a short time. When it comes to the question whether humanity should continue 500,000 years into the future rather than 500 years, the idea that more people might exist has moral importance.¹⁷² There is no reason to suppose that people will live 500,000 years from now and that their existence is not dependent on our actions. If their existence is dependent on our actions, then they are contingent. This is totally incompatible with the idea that contingent people have no moral status.

Moreover, Barry claims that the negative aspects of an early destruction of mankind is not dependent on the frustration of any interest of people not being born, but on the claim that we would abuse our position as custodians of the planet. It would be wrong in the sense of its 'cosmic impertinence'.¹⁷³ It is possible to interpret this as a claim about a state of the world that is inherently bad, which points toward an impersonal view.

¹⁷⁰ Scanlon, Thomas M., *What We Owe to Each Other*. The Belknap Press of Harvard University Press, London, 1998, pp. 103-107.

¹⁷¹ Barry, Brian, 'Sustainability and Intergenerational Justice', pp. 113-115.

¹⁷² Barry, Brian, 'Justice between Generations', p. 282.

¹⁷³ Op. cit., p. 284.

Based on this discussion, it seems that Barry's theory could either be impersonal or person-affecting, there are arguments that support both interpretations.

Equal Opportunities

Barry's general proposal is that justice demands that we owe future generations equal opportunities.¹⁷⁴ Generally, the concept of equal opportunities implies that everyone should be able to gain some kind of benefit, e.g. a job, resources, well-being, etc., as long as he or she makes a big enough personal effort.

Barry's actual comprehension of this concept has changed throughout the years. His general idea is that we should provide future generations with a spectrum of options, which they can use to strive towards whatever they want to strive towards. He says:

What justice requires, I suggest, is that the overall range of opportunities open to successor generations should not be narrowed. If some openings are closed off by depletion or other irreversible damage to the environment, others should be created (if necessary at the cost of some sacrifice) to make up.¹⁷⁵

This claim focuses specifically on resources. Our obligation is to avoid making people in the future worse off in regard to these resources.

It is noteworthy that, in his earlier writings, Barry rejects the connection between equal opportunities and the welfare people might extract from these opportunities. His argument is that we lack knowledge about what future people will enjoy. Our only option is therefore to provide them with *resources*. This does not require any specific information about future generations' ideas about the good life. Thus, we do not need to know anything at all about them except that we should not limit their chances of living a good life, whatever that may be.

¹⁷⁴ Suggested in Barry, Brian, 'Circumstances of Justice and Future Generations', Barry, Brian, 'Intergenerational Justice in Energy Policy' in MacLean, Douglas and Brown, Peter G. (eds.), *Energy and the Future*. Rowman and Littleman, Totowa, New Jersey, 1983. Barry, Brian, 'Sustainability and Intergenerational Justice'.

¹⁷⁵ Barry, Brian, 'Circumstances of Justice and Future Generations', p. 243.

Besides, Barry makes an even stronger claim. Not only do we lack information about people's ideas about the good life, this information is irrelevant for justice, because justice should not be focused on well-being at all. Justice amounts to give future generations a fair part of society's resources, quite independently of the well-being they get from it.¹⁷⁶ This idea is somewhat problematic due to the fact that many of us can not make as good a use of resources as others. Some people will have very low well-being even if they get much larger amounts of resources. Some of us believe that justice should take this into account.

In his later writings, Barry makes a qualification of the concept of equal opportunities. Owing future generations equal opportunities is still aimed at sustaining a range of possible ideas of the good life.¹⁷⁷ However, these ideas will always include some common features because there are objective requirements to live a good life, i.e. to be healthy, raise families, work at a full capacity, and take part in the social life, i.e., what Barry calls *vital interests*.¹⁷⁸ These requirements include, but are not restricted to: adequate nutrition, clean drinking-water, clothing and housing, health care and education.¹⁷⁹ Equal opportunities should therefore be associated with not only resource distribution, but also with the satisfaction of vital interests.

The idea of vital interests could be interpreted as referring to some kind of resources. E.g., one might say that nutrition, water, clothing, housing, health care, and education are resources. However, they are more than just resources. Barry claims that

Justice requires that a higher priority should be given to ensure that all human beings have the means to satisfy these vital interest than to satisfying other desires.¹⁸⁰

This implies that vital interests are some kind of desires that demand certain resources in order to be satisfied. It also indicates that Barry might promote some kind of preference theory of well-being.

Whatever the interpretation of vital interests, equal opportunity implies that everyone ought to be able to lead a good life. This is a life

¹⁷⁶ Barry, Brian, 'Intergenerational Justice in Energy Policy', pp. 19ff.

¹⁷⁷ Barry, Brian, 'Sustainability and Intergenerational Justice', pp. 104f.

¹⁷⁸ Op. cit., p. 97 and p. 99.

¹⁷⁹ Op. cit., p. 105.

¹⁸⁰ Op. cit., p. 97.

where one's own choice is the main determinant of how one lives, and the precondition for this is satisfaction of vital interests. This is a significant change in the concept of equal opportunity. From being a concept that above all implies an equal access to resources, equal opportunities have evolved to include specifications of the preconditions for living a good enough life. I.e., there is a level of satisfaction of vital interests that must be reached before we can talk about equal opportunities in a full sense.¹⁸¹

One important character of equal opportunities is that it can justify preservation of non-renewable resources across generations. If we use any amount of a non-renewable resource there will be less left for others to use. Also, if one resource is consumed, but there are other comparative resources that are more expensive the situation will be similar, future persons will be in a worse situation compared to us.

Nevertheless, Barry argues that consumption of non-renewable resources could be legitimized if future generations are compensated by technology and capital. This is possible because a resource in itself is not valuable. It is only valuable on account of what it can do. The key is to maintain *productive opportunity* across generations, which refers to what a resource can give and not the resource in itself.¹⁸²

Finally, Barry also argues for a connection between equal opportunities and *sustainability*. He claims that sustainability is a necessary condition for justice between generations. Future people are not responsible for the world they inherit, and should therefore not be worse off than we are (according to the principle of responsibility). He maintains that the best way to understand sustainability is to see it as a distribution of equal opportunities across generations. We are therefore obligated by the demands of justice to provide future generations with the same opportunities we have. The present should be a benchmark for evaluating what we should do because whatever the situation was in the past, we can not do anything to change it.

Barry's definition of sustainability is: '... there is some X whose value should be maintained, in as far as it lies within our power to do so, into the indefinite future.'¹⁸³ Barry rejects preferences as a reasonable candidate for X because of the possibility of adaptive

¹⁸¹ Barry develops this wide definition of equal opportunities, and its political implications in *Why Social Justice Matters*. Polity Press, Cambridge, 2005.

¹⁸² Barry, Brian, 'Intergenerational Justice in Energy Policy', pp. 17ff.

¹⁸³ Barry, Brian, 'Sustainability and Intergenerational Justice', p. 101.

preferences. People come to prefer what is and not what could be. Another possible candidate for X is what people conceive as the good life. The obvious problem is that we have no idea about future generations' ideas of the good life. The solution is that we should make it possible for them to decide what their good life consists of. He suggests that X should be understood as equal opportunities and that this should be maintained across the generations. This is a fusion of Barry's general idea about equal opportunities with the idea that mankind's existence should be safeguarded. As was noted earlier, the actual argument for this existence is still lacking.

Practical Questions

Concerning the seventh analytic question, it seems that Barry is not primarily interested in the actions of individuals, and he explicitly rejects the idea that his theory of impartiality is an action-guiding theory. It is a theory that concerns the operation and structure of just institutions. However, it is important to keep in mind that Barry's reason for discussing institutions is that they are the means for reaching just outcomes, i.e. just distribution. The goal should be situations characterized by a specific kind of equality, where unequal distribution can only be acceptable if everyone accepts it. This means that institutions can be used to change an outcome that is brought about by individual acts. Of course, individual acts can also bring about more or less just outcomes.¹⁸⁴

Moreover, as a response to the eighth question, Barry does not place a specific time limit on our obligations towards future generations. In accordance with his adherence to fundamental equality, it is not possible to justify any deviation from equality based on the temporal location of beneficiaries. Justice demands that all future generations have the same equality of opportunities. This is clearly the background when he describes sustainability as the idea that we should maintain equal opportunities for future generations into the indefinite future, to the extent it is in our power to do so.

The argument why we should extend our obligations indefinitely rests on the precondition that 'the continuation of human life into the future is something to be sought (or at least not sabotaged) even if it

¹⁸⁴ Barry, Brian, *Why Social Justice Matters*, pp. 17f.

does not make for the maximum total happiness.’¹⁸⁵ Fundamental equality, combined with the claim that humanity should continue into the distant future, implies that sustainability is a necessary part of intergenerational justice. The conclusion is therefore that if it is possible for us to affect the opportunities of distant future generations, we are obligated to refrain from limiting those opportunities.

Regarding the ninth analytic question, about our limited knowledge of the future, Barry argues that our limited knowledge is often a decisive reason for not acting in a certain way. He argues explicitly against optimistic risk management. We should, in the absence of better information, refrain from acting in ways that could bring about disastrous consequences.

The first argument for this is that it would be foolish for an individual to engage in activities that have small benefits now, but where there is a small risk of enormous harm later. The weight of this argument is increased when it involves harms that could affect other humans and future generations. Especially, Barry says that it is worse to harm a large specific group of people at the same time than to hurt a random amount of individuals. The former is worse because it will include the destruction of culture, and that will also harm all succeeding generations.

The second argument is that risks might be acceptable if those who face the risk either freely accept it, i.e. they *consented* to the risk, or *benefited* from the activity that generates the risk in the first place. However, there is often an asymmetry between the distributions of risks and benefits. Some get benefits whereas others have to cope with risks. Barry claims that such asymmetry is illegitimate. This problem is especially pressing between future generations and us. We obtain benefits from many activities and pass on risks that might lead to great harm for future generations. Naturally, future generations can not consent to those risks.¹⁸⁶

Moreover, in the light of the previous claims it comes as no surprise that Barry is a proponent of a *precautionary principle*, at least in regard to global warming. Thus, when there is a threat to the future life on the planet, we should act on the assumption that the most

¹⁸⁵ Barry, Brian, ‘Justice between Generations’, p. 284. Exactly why the continuation of mankind should be sought (or not sabotaged) is never really explicit. I will return to that question in the evaluation.

¹⁸⁶ Barry, Brian, ‘Intergenerational Justice in Energy Policy’, pp. 27-29.

negative measurements and predictions are correct. To exemplify; if we believe that it might rain, we take the umbrella, regardless of the probability involved.¹⁸⁷ Of course, as we have seen, Barry does not provide a reason why such threats should be avoided. He presumes that future generations should exist.

Evaluation of Barry's Theory

Fundamental Equality and Future Generations

Barry's idea is based on the claim that we and future generations share the same fundamental equality. We owe them a similar treatment, as long as there are no compelling grounds for treating them differently. Fundamental equality is an axiom, which implies that we owe future generations equal respect when it comes to equal opportunities.

Barry's claim captures a strong reason why we ought to act in a certain way towards future generations. However, as was noted with Parfit, even if the idea seems intuitively reasonable it has more problematic implications. One is the moral status of future generations. The question is whether Barry can avoid the problems associated with future generations being possible or potential?

It was noted that Barry claims that we act unjustly if we treat people differently on account of their temporal location. The problematic point is that our choices will bring about different people in the future. One can then ask whether it is justified to treat these contingent people in a different way, e.g. by providing them with no moral status. Of course, the reason for the lack of moral status will not be their temporal location, but the fact that they are contingent.

Given this background, one can ask whether we should treat these contingent people in the same way we treat ourselves. If so, does this imply that we should bring them into existence? Barry denies this because this could imply that we should try to bring about as many people as possible, i.e. the repugnant conclusion. It seems that the problem facing fundamental equality is similar to the problems that face contract-theory. Why should contingent people be ignored? The

¹⁸⁷ Barry, Brian, *Why Social Justice Matters*, pp. 257-260.

answer to this problem lies in how Barry conceives the relation between people and values.

Values and Contingent People

The question of the fundamental equality of possible people is closely related to the question of value. This is because, given a certain kind of value theory, impersonal value, it can be reasonable to claim that equal treatment could include bringing people to exist. This can also lead to the repugnant conclusion. It was noted earlier that Barry makes claims that are compatible with both an impersonal theory and a person-affecting theory. What is the most reasonable position?

It was noted that Barry rejects the idea that adding extra people would in some sense increase the value in the world. However, he does believe that it is more valuable if mankind extends a long time into the future rather than a short time.

This position is problematic, at least if we compare it with the following scenario. There are two situations. In the first situation, there are a few generations where each generation includes many people. In the second situation, mankind goes on long into the remote future, but each generation includes just a few people. In the first situation the temporal expansion is short but the spatial expansion large, this is reversed in the other situation. But if one rejects the idea that temporal location is of any moral importance, it is impossible to say that situation two is better than situation one.

If we contemplate why we should choose a smaller and more temporally extended future population instead of a larger population with a shorter extension, it seems that the argument that we should choose a smaller population already presupposes that we should accept the existence of future generations. Even if many of us would accept this idea, one can still wonder what kind argument can show why it is better that mankind exists a longer time than a shorter time. We can at least wonder how Barry justifies this claim.

It was noted that Barry rejected the claim that the interests of future generations are harmed if they do not get born. Fundamental equality does not seem to demand that we should bring contingent people into existence, and this means that equality can not be the basis for the claim that mankind should continue to exist. Barry has over the years hinted that that we would abuse our place if we did something that

risked the continuation of mankind. He calls it a 'cosmic impertinence' and he seems to support the idea that this must be based on other considerations than our interests.

One interpretation of this claim is that Barry supports an impersonal value theory. This can explain why it would be wrong to destroy mankind without referring either to our interests or to those of future generations. On the other hand, what would prevent us from reaching the repugnant conclusion if we start to treat contingent future generations equally by bringing them into existence? My interpretation of Barry's theory is that he wants to claim that mankind should exist, but he does not want to accept the drawbacks of an impersonal value theory. However, this seems to be an impossible mission. Are there any interpretations that might make his claims feasible?

It seems that the most straightforward interpretation is to follow Barry himself and claim that the continuation of mankind is a precondition, a premise, for other claims about future generations. It is therefore not a normative claim, but more similar to the axiom of fundamental equality. We either accept it or not. Those of us who want a more developed argument have to turn elsewhere to find the justification for mankind's continued existence.

My conclusion is simply that it is difficult to interpret Barry's value theoretical position. Some claims seem to be compatible with an impersonal value theory and some with a person-affecting one. Arguably, the most coherent one is the person-affecting position because it is most fitting with his general framework. However, a person-affecting position can not explain why contingent future people should exist, and it can not give them any moral status. Given the fact that the first evaluative criterion claims that future generations, including both contingent and non-contingent people, should have a moral status that is independent of our beliefs and interests, we must reject the person-affecting position.

Equal Opportunities for Well-being

Barry's overarching idea with using the terminology of equal opportunities is that we should make it possible for future generations to live in accordance with their own idea of the good life. This also presupposes that future generations are competent enough to

determine how they want to lead their lives. This justifies the claim that we owe them an equal treatment, specifically, that distributions should be equal, as long as there are no good reasons for them to be unequal.

Barry extends the concept of equal opportunities to include more than just equal resources. Equal opportunities should also include equal concern for vital interests. This extension is problematic, because it seems that vital interests can not be determined without some idea about the good life.

This discussion is closely related to Rawls' idea of primary good. Rawls claims that we can all agree that some things are good.¹⁸⁸ By introducing the concept of vital interests, Barry seems to follow that reasoning. However, communitarians have criticized Rawls' idea about primary goods; they claim that it presupposes a specific comprehension of the good life. Barry faces the same critique, and this implies that he can not in the case of intergenerational justice reach his own overall goal of providing a theory of justice that is neutral to different ideas of good. How can he respond to this critique?

A first response is that there really is some common good for all humans. This good can either take the form of some kind of perfectionist idea, like the capabilities approach of Martha Nussbaum and Amartya Sen¹⁸⁹, or the form of an empirical claim about human life. Every human society up to this point seems to accept that some things are necessary in order for humans to live according to their specific comprehension of the good life.

A second response is to claim that it is dangerous to make justice too dependent on one specific idea of the good life, because justice should provide the possibilities for many different comprehensions of the good life. This is important because we do not know the ideas of future generations, and it is therefore unjust for us to decide for them. Or, put differently, equal opportunity for welfare presupposes a significant, but not a total, separation between the demands of justice and any specific idea of the good life. This would make it impossible to claim total neutrality towards different ideas about the good life. Instead, the goal must be to claim that one comprehension of justice is

¹⁸⁸ E.g., Rawls, John, *A Theory of Justice*. Oxford University Press, Oxford, 1973 (1971), p. 62.

¹⁸⁹ Nussbaum, Martha C., *Women and Human Development: The Capabilities Approach*. Cambridge University Press, Cambridge, 2000. Sen, Amartya, *Development as Freedom*, Oxford University Press, Oxford, 1999.

more neutral than other comprehensions. I.e., neutrality is not a question of all or nothing but a question of more or less. This conclusion might be acceptable to Barry.

Nevertheless, both of these responses are incompatible with moral pluralism. There is no logical or empirical necessity that future generations will share our idea of the good life. Neither are there any good reasons to presume that our formulation of a common good would be acceptable. This is an argument both against the idea that there is some minimal common good, e.g. vital interests, and the idea that future generations might accept a more substantial idea of the good life, i.e. some communitarian idea of the good life.

Moral pluralism also accentuates another kind of problem. The concept of equal opportunities is normatively empty if it is not combined with some substantial normative claim. E.g., de-Shalit claims the preservation of a good environment is justified because we actually value it and want future generations to experience it.¹⁹⁰ Barry, if he refrains from including the environment in the vital interests, could respond by claiming that we should leave future generations the option to value the environment even if we ourselves do not value it.

Of course, de-Shalit could respond by claiming that such reasoning implies that nuclear weapons should be maintained because we would otherwise limit the range of options for future generations. This is a strong argument but a possible reply is that it is very difficult to conceive that nuclear weapons in themselves have value. Or that any group would see these weapons as an integrated part of their own idea of the good life. Moreover, even if they did have such an idea of the good life, nuclear weapons would not be compatible with Barry's general theory of justice, because no group can justify their possession of those weapons to any other group.

Another argument against this communitarian critique is that even if we must choose what we ought to preserve, that choice must be aimed at preserving a wide range of things that could be considered valuable. The goal is to give future generations the option to lead their lives according to their own idea of good. It is therefore important to also preserve some things that might not be considered valuable by

¹⁹⁰ de-Shalit, Avner, *Why Posterity Matters: Environmental Policies and Future Generations*. Routledge, London, 1995, pp. 124ff.

many of us.¹⁹¹ Also, it might be quite difficult to determine what a given community actually values. The possibility of reaching a total consensus is certainly slim. That would probably lead to the majority deciding what should be preserved. As long as we are unwilling to accept that situation we should also preserve things that only few of us enjoy.

The conclusion is that Barry could respond to the communitarian critique because his theory of justice does presuppose several specific normative ideas. Primarily fundamental equality, in the sense that everyone ought to be able to accept those acts or rules that affect their lives, but also the idea of vital interest. This makes Barry's theory as open to criticism as the communitarian ones. Both theories are incompatible with moral pluralism.

Equal Opportunities for Resources

Besides Barry's support of an impartial theory of justice, he also provides a pragmatic argument in support of several ideas about the good life. He claims that no group will ever be powerful enough to completely dominate all others, and it is therefore necessary to find a way of living together peacefully, at least if we want avoid a war without end.

It is therefore important that we develop an attitude that makes it sensible to avoid this kind of conflict. This is the reason why Barry stresses the importance of being sceptical towards all ideas of the good life. This idea can also be supported by the fact that human life is filled with folly. All of us are equally destined to be wrong about some things, moral or non-moral. We should therefore be humble enough to accept the possibility that we might be mistaken in our pursuit of the good life.

Moreover, scepticism can be deeper in the sense that one can doubt that one has found *the* idea of the good life for everyone. One might also claim that it is impossible to determine the content of the good life once and for all. Every one of us is therefore mistaken, at least in the sense that we can not claim that our idea of the good life is the best one. Moreover, this makes it more important to continue the search for the good life, than to establish just one supreme idea.

¹⁹¹ I say 'many' because it is difficult to imagine anything in the world that not even one single person values. People do have many strange preferences!

One conclusion from this discussion is that the concept of equal opportunities should be freestanding from every idea of the good life, including the idea of vital interests. Moral pluralism provides a forceful argument against the belief that one specific idea is correct. Instead, what is needed is a way of providing a situation in which several ideas about the good life are possible. This must include a concept of equal opportunities that avoids making any specific claims about well-being. Barry himself provides such an idea in his earlier writings when he focused on equal opportunities for resources.

Barry does not claim that resources should be equally distributed between generations. Instead, he claims that future should have the same productive opportunity as we have. The reason for this is that we can not claim that we are entitled to an extra share of resources. Instead, we are only entitled to an equal share of non-renewable resources, or the product opportunity that can be extracted from these resources.

It is important to note that the justification for equal distribution of productive opportunity does not rest on any harm that future generations could gain from resource depletion, but on the difficulty of justifying a move away from the initial equal distribution. This makes it possible to at least partly ignore the question of well-being and focus on legitimate transfers of resources.

However, the shift towards resources is somewhat problematic. It implies that we must ignore people's different capacity to abstract well-being from the different resources. On the other hand, equal opportunities for resources seem to be the only way to avoid making unjustified claims about future generations' ideas about well-being.

Barry's Answers to Practical Questions

Barry's answer to the seventh question, about who is responsible, is promising, because it stresses the importance of establishing the right kind of institutions. On the other hand, it might also face the problem of concentration of power.

The sheer volume of our environmental impact and resource consumption makes it necessary to establish very powerful and far-reaching institutions. To make it possible for future generations to reach the minimum just level of satisfaction of vital interests would therefore involve a radical redistribution in form of much increased

taxation and/or higher prizes. Even if we reject the idea that we should provide for the vital interests of future generations and focus on only providing them with equal opportunities, it will certainly be necessary to implement a radical change in how resources are used.

The problem is that there is an obvious risk associated with strong institutions. Such institutions can become oppressive. This should make us somewhat sceptical to establish such institutions. Instead, it implies that we must also depend on the actions of individuals and groups. Of course, this presumes that it is possible to motivate both individuals and groups to act in a responsible way. It is not obvious how Barry's theory can explain how this can be done. He could respond that the attitude of wanting to justify one's actions to others is motivation enough. On the other hand, even if this makes sense when we consider intragenerational justice, it is more dubious when we consider our actions towards future generations. That I want to justify my conduct to people that I can meet is sensible. It is less reasonable that I also want to justify my acting towards those that live a hundred years from now.

In regard to the eighth question, it is noticeable that the support for equal opportunities for all future generations could involve quite a huge demand on all of us. Giving all future generations the opportunity of living a good life will demand sacrifices, because of its enormous scope. Of course, Barry would claim that this is a justified demand, and we might all agree. However, given the fact that people might not see the obvious reason to make sacrifices to remote future generations, this can explain why the motivational question is so important. Also, it supports a search for some kinds of argument that can make it less unrealistic to believe that most people might develop an attitude to act responsibly.

Concerning the ninth analytic question, it was noted that Barry uses an analogy between taking risks in an individual's life and actions that involve risks to future generations in order to determine acceptable risks. It is foolish for a person to risk great harms for a small benefit. And the same argument applies to questions involving many people and long time frames.

However, there is an important difference. In the first case the agent risks his own life, but in the second case the agent risks other lives. The first case would be a question of prudence that even the most selfish person could accept. But the second case can not be a

question of prudence as a rational enterprise. It must be a moral question. This presupposes the existence of a moral motive for acting. One can then ask if taking risks is irrational, immoral or both?

There is at least one way that risking harm to future generations could be called 'irrational' instead of immoral. First, many people have preferences about other people's welfare. If one wants future generations to live good lives, it would be irrational to act in a way that risks it. Of course, this idea must be rejected if it makes the moral status of future generations totally dependent on our interests or beliefs.

As an alternative, the most reasonable interpretation of Barry's theory is that it implies that the asymmetry between benefits and burdens is itself immoral. Many of us can agree that it seems immoral that some get all the benefits, if others get all the burdens. Also, the same seems to hold when we compare situations where some party gets all benefits, while another party only faces risks. Possibly, one can claim that a smaller risk is less problematic than a larger. But this is related to the actual hazard that might occur. It is not obvious that a small probability of massive harm is better than a larger probability of smaller harms. Also, it seems that Barry's reasoning is independent of the probability that a hazard actually occurs. One interpretation is that the idea is that the risk itself, whether it is large or small, is the problem. This makes it possible to handle risks that are indeterminate. At least in the sense that it is immoral to subject people to known risks in the absence of any benefits or consent.

Barry's Theory and Nuclear Waste

According to Barry, we should make it possible for future generations to live in accordance with their ideas of the good life. Based on that, it is difficult to believe that any conception of the good life would be compatible with the harm caused by nuclear waste. It is therefore wrong for us to act in ways that cause future generations to be exposed to the hazards of nuclear waste.

Concerning the problem of risks, it is noteworthy that Barry's idea of risk distribution has clear implications for questions about risks where the exact effects are indeterminate. It can be understood as claiming that it is morally wrong to transfer risks to parties that have

not benefited from the activities that generated the risks, or consented to being exposed to such risks. Barry claims that it is a problem to make asymmetrical distributions of benefits and burdens:

... with some examples such as nuclear power plants, the benefits and risks are asymmetrically distributed across time: the benefits disproportionately occur while the plant is producing electricity, and the risks continue in some form for thousands of years, until the radioactivity of the waste decays to a safe level.¹⁹²

Based on this, it is morally wrong to transfer the risks associated with nuclear waste onto future generations. An obvious problem is that it is impossible to avoid any transfer of risks because the waste is hazardous for such long periods of time. How should we act? If we can not avoid transferring any risks, we must find a management method that makes the most legitimate transfers. One interpretation of Barry is that any transfer of risks to future generations is wrong, and we are morally obligated to minimize such transfers generally.

Conclusion

The idea that we should treat future generations equally seems to be reasonable. At least, if we follow Barry and accept that people are fundamentally equal. If moral status is dependent on equality, it seems that future generations should have full moral status.

However, Barry's theory seems compatible with both the idea that future contingent generations should exist, i.e. an impersonal value theory, and that their existence is not morally required, i.e. a person-affecting theory. Moreover, Barry also states that the existence of future generations is a precondition, and not a normative claim. Thus, Barry's theory is unable to provide some kind of reason for why the existence of future generations is important. It is necessary to turn to another theory in order to attain an answer to that question.

Moreover, Barry formulates a useful normative idea. He claims that we should provide future generations with equal opportunities. This can be interpreted in two different ways. It could imply that we should provide them with resources, but also, that we should provide them

¹⁹² Barry, Brian, 'Intergenerational Justice in Energy Policy', p. 29.

with the possibility to lead their lives according to their own ideas of the good life. This idea is compatible with moral pluralism as long as it does not imply more substantial claims about the good life.

In response to the practical questions, Barry does not provide a realistic idea about moral motivation, which can explain why we should care about remote future generations. On the other hand, Barry's idea about risk distribution seems more promising. It claims that it is morally wrong to transfer a risk to someone that has not consented or benefited from the activity that generated the risk in the first place.

Barry provides an answer both to the question why it is wrong to expose future generations to the hazards of nuclear waste and to the question how we ought to handle risks. His theory implies that it is wrong to manage the nuclear waste in a way that transfers risks to future generations.

Combined with the conclusion from the last chapter, it seems that it might be possible to combine Barry's normative claims with a justification based on a pluralist consequentialist theory. However, this is not the case, because the theories are based on partially incompatible ideas.

The only reason why a pluralist consequentialist theory could accept Barry's normative claims is if they actually maximized well-being, equality or whatever is valuable, which is not obvious. Barry focuses on the preconditions for future generations' lives. This presumes that it is important that future generations lead their own lives, independently of any maximization of values generally. The idea is simply that maximization is not the overarching moral aim.

This implies that, if Barry's claims are reasonable, we must seek to provide it with a different kind of justification. What would that justification look like? An answer can be found by noticing that both Parfit and Barry focus on individuals. E.g., because future individuals have full moral status, Parfit has come to the conclusion that we should maximize well-being by bringing about more individuals with a high enough well-being. Barry, on the other hand, seems to be unable to explain why future individuals ought to exist, without claiming that equality demands it. However, if equality demands existence, we could as well conclude that we ought to maximize the amount of future individuals because each individual has an equal demand.

These problems are associated with the fact that we do not know which individuals will exist in the future, but we can still affect their number, existence and identity. If it is problematic to provide future individuals with moral status, one might avoid this problem by providing future generations with a collective moral status. The focus is not future individuals, but the future group. One philosophical tradition that primarily focuses on groups is the communitarian one. It is therefore relevant to turn our attention to a philosopher who provides such a theory.

3. The Transgenerational Community

Introduction

Avner de-Shalit (b. 1957) is an Israeli scholar, who works at the Hebrew University of Jerusalem. He has also pursued research at Oxford University. His primary work is in political philosophy, environmental ethics and politics.

The primary sources for this chapter are de-Shalit's book *Why Posterity Matters, Environmental Policies and Future Generations* (1995), and the articles 'Environmental Policies and Justice between Generations: On the Need for a Comprehensive Theory of Justice between Generations' (1992), 'Community and the Rights of Future Generations: a Reply to Robert Elliot' (1992), and 'Down to Earth Environmentalism: Sustainability and Future Persons', in *Contingent Future Persons. On the Ethics of Who Will Live, or Not, in the Future* (1997). These sources refer explicitly to the problems with responsibility towards future generations.

Also, it is beneficial to have a source that represents a broader side of de-Shalit's philosophical thinking. His book *The Environment, between Theory and Practice* (2000) provides that point of view.

The reason why de-Shalit sets out to construct a theory about responsibility towards future generations in *Why Posterity Matters, Environmental Policies and Future Generations* is that there is, according to him, a widely shared belief that we have certain obligations to future generations.¹⁹³ However, we also share the belief that we have obligations to present generations; the consequence is that obligations towards these two groups can conflict. To solve this conflict we need a theory of distributive justice, a theory that specifies

¹⁹³ de-Shalit, Avner, *Why Posterity Matters: Environmental Policies and Future Generations*, p. 11.

the distribution of resources and burdens in relation to the needs of different groups.

Background: Communitarianism

Communitarianism began as a reaction to liberal political theories, primarily represented by John Rawls and his book *A Theory of Justice* (1971).¹⁹⁴ Rawls' contribution was to formulate normative principles that all individuals, in a theoretic decision-making position, could accept as the governing principles for political institutions.

A central theme is that society is made up of individuals that have different and even competing ideas about the good life. This has a profound impact on the society's distributive arrangements. As was discussed in the previous chapter, Rawls claims that distribution should focus on primary goods. These are goods that every person needs or wants, independently of his or her other preferences, e.g. all other things being equal, we all want more freedom, opportunities, self-respect, wealth and income, rather than less. This is what Rawls calls his thin theory of good. This theory must be differentiated from more substantial theories of the good life, i.e. full theories.¹⁹⁵

Society should, according to Rawls, focus on other issues than what is a good life, because there are many substantial theories about what the good life consists off. The goal for justice is to make it possible for everyone to lead their life according to their own idea of the good life. Hence, society should focus on setting certain limits to all individuals' pursuit of good.¹⁹⁶ It is therefore imperative that society is governed by a conception of justice that is independent of substantial ideas about the good life and that everyone can agree upon. This explains why Rawls turned to the idea of the original position.

Several prominent philosophers reacted against Rawls' theory, in particular Charles Taylor, Michael Walzer, Alasdair MacIntyre and Michael Sandel. These philosophers, all in the Anglo-American academia, have been called communitarians.¹⁹⁷ Their theories differ

¹⁹⁴ Avineri, Shlomo and de-Shalit, Avner (eds.), *Communitarianism and Individualism*. Oxford University Press, Oxford, 1992, p. 1.

¹⁹⁵ Rawls, John, *A Theory of Justice*. Oxford University Press, Oxford, 1973 (1971), pp. 395-399.

¹⁹⁶ Op. cit., pp. 3-5.

¹⁹⁷ Sandel, Michael J., *Liberalism and the Limits of Justice*. Second Edition. Cambridge University Press, Cambridge, 1998, p. ix.

significantly, but there are some common traits in them. Generally, communitarians deny the sharp distinction that Rawls makes between what is right, i.e. just, and what is good. They also deny that it is possible to have a conception of justice that does not presuppose a particular conception of the good life. Justice must be related to what is good. Communitarians are also sceptical about the idea that an individual can choose which rules should govern society without any specific knowledge of their own lives or culture. Humans are social animals and it is unreasonable to extract an individual from his or her context and still derive any reasonable conception of what is good or just.¹⁹⁸ Communitarians share two general ideas:

First, the different individuals in a community do not see themselves just as members of a certain social group. Instead, each individual's self-understanding includes the relation to the community as an integrated part of his or her own personal identity. Hence, the individual is partly defined by the community. The community does not only describe what the members have, in terms of relationships and institutions, but what the members are.¹⁹⁹

Second, the community is the source of values, i.e. ideas about what is important, including what is good. It is impossible to define what the good life is without relating this to the values of a specific community. Those values that are widely shared in a particular community provide the moral force behind all kinds of moral concepts including justice. I.e., the values of the community will determine what is just and unjust.²⁰⁰

This means that communitarians are sceptical towards, or deny, ethical universalism. They do not believe that there are moral principles or claims that are valid for everybody and in every time. Instead, they usually propose *ethical contextualism*, i.e. that the comprehension and implications of morality must be related to some kind of context. There exist no context-transcending perspective.

¹⁹⁸ Op. cit., pp. 186f.

¹⁹⁹ E.g., op. cit., pp. 150f. Sandel calls this perspective on the community 'constitutive'.

²⁰⁰ E.g., Walzer, Michael, *Spheres of Justice: A Defence of Pluralism and Equality*. Basil Blackwell Ltd, Oxford, 1983. Some examples are: 'All the goods with which distributive justice is concerned are social goods. They are not and they can not be idiosyncratically valued' p. 7, and 'All distributions are just or unjust relative to the social meanings of the goods at stake', p. 9. But also 'A given society is just if its substantive life is lived in a certain way - that is, in a way faithful to the shared understanding of the members', p. 313.

Intergenerational Justice and Community

de-Shalit claims there are some features in the relationship between different generations that are not relevant in the relationship between ourselves. We have, e.g., limited knowledge of the size and preferences of future generations. Also, funds and technology can only be transferred in one direction. This means that a theory about justice between generations must have other features than a theory that deals with justice between contemporaries. The first kind of theory is about intergenerational distributive justice and the second kind about intragenerational distributive justice.²⁰¹

The environmental problems provide the background for discussions about intergenerational distributive justice. The discussions about such problems are often concerned with both the welfare and the rights of people or of all living beings, like trees and animals. de-Shalit argues that theories that assign rights to animals and trees might not be intuitively acceptable for most people. It is easier to accept the legitimacy of environmental issues if these are put forward as issues of the distribution of resources and burdens between generations.²⁰² de-Shalit's aim is therefore '...to find the philosophical justification of environmental, or 'green' policies.'²⁰³ Specifically, he seeks out '...to justify or to discover the moral grounds for an intuition most of us share about our obligations to future generations and about intergenerational justice.'²⁰⁴

de-Shalit's investigation includes a thorough discussion of contract theories, utilitarian and rights theories. de-Shalit rejects all of these theories because they are insufficient to handle the special aspects of obligations to future generations. Instead, he proposes a communitarian theory that extends human communities into the future.²⁰⁵ Accordingly, it is in the redefined self-interest of the present members to consider the needs of future members.

²⁰¹ de-Shalit, Avner, *Why Posterity Matters: Environmental Policies and Future Generations*, pp. 2ff.

²⁰² Op. cit., pp. 7f. Also, de-Shalit, Avner, 'Environmental Policies and Justice between Generations: On the Need for a Comprehensive Theory of Justice between Generations'. *European Journal of Political Research*, Vol. 21, 1992, p. 312.

²⁰³ de-Shalit, Avner, *Why Posterity Matters: Environmental Policies and Future Generations*, p. 10.

²⁰⁴ Op. cit., p. 11.

²⁰⁵ Op. cit., pp. 12f.

de-Shalit's explicit aim is to find a philosophical justification for our obligations to future generations, his proposal is:

I am claiming here that the constitutive community extends over several generations and into the future, and that just as many people think of the past as part of what constitutes their 'selves', they do and should regard the *future* as part of their 'selves'. These are the relations that form the transgenerational community, which is the source of our obligations to future generations.²⁰⁶

Given this precondition, what are the conditions for a given collection of people to be called a community? de-Shalit argues that a community is formed by a group that satisfies at least two conditions; cultural interaction and moral similarity.

Cultural interaction means that a member of a community has a special insight into his or her social context. He or she has developed an explicit understanding of concepts, symbols, political activities, humour, etc. that are present in his or her context. Conversely, these social entities are difficult for outsiders to understand.²⁰⁷ The only valid process of cultural interaction is the one that extends across generational borders. We interact with the cultural expressions of past generations. Future generations will interact with our cultural manifestations. We will also interact with future generations in the sense that their ideas and creative expressions, such as art and science, will be studied and reflected on by future generations and they might apply these ideas in new ways. Hence, future generations will interact with our ideas. This represents an interaction in steps, one generation sends ideas and the following generation answers them, but also sends its own message into the future.²⁰⁸

Cultural interaction can develop into a *moral similarity*. This similarity is the second condition for the existence of a community. It means that the members of a community have a similar way of looking at social life; also, they share specific values and goals. This similarity of ideas and values constitutes a common ground from which it is possible to build a political debate. In the ideal community

²⁰⁶ Op. cit., pp. 15f.

²⁰⁷ Op. cit., pp. 22f.

²⁰⁸ Op. cit., pp. 43ff. Also, de-Shalit, Avner, 'Community and the Rights of Future Generations: A Reply to Robert Elliot'. *Journal of Applied Philosophy*, Vol. 9, No 1, 1992, pp. 113f.

the moral similarity is extensive, but in reality there are different levels of similarity that can change from time to time.

Moral similarity arises from a series of steps that involve questioning and criticism. It begins with a historical community; a group of people that sees the community as constitutive of their identity in the sense that they were brought up in it. The second step introduces a critical stance in the sense that the members start to question the necessity and membership of their group. Some members might decide to leave and others to stay. Hence membership becomes based on rationality because the members make a voluntary and informed decision to stay.²⁰⁹ The questioning in this stage primarily concerns the values, ideas and norms of the community, and the way these values represent the good life and fit together with different moral intuitions. New ways of thinking or new knowledge are analyzed, and can be incorporated into the community. When this process becomes more differentiated, members must decide if they want to belong or not.²¹⁰

As a side note, it seems that moral similarity also places a limitation on the values an individual can have generally. Even if he or she is part of several communities at the same time, he or she can not accept just any combination of values. At least, it is extremely difficult to accept fascism in one community and democracy in another.

A transgenerational community follows a similar development as a community formed by contemporaries. It begins with a historical unreflective community. By a process of critical self-evaluation, such a community moves towards a more stable time, at least for one or two generations. During this time, there is a continual debate about the community's values even at this stage. The new children who are born into the community will probably first endorse their parent's values, but they will soon enter the debate. These children see their own identity as derived from the discussion between themselves and their parents. The process of questioning is once again practiced but this will probably not lead to a significant change in the first generation. The immediately following generations will experience a moderate change but later generations could experience radical change. Such

²⁰⁹ de-Shalit, Avner, *Why Posterity Matters: Environmental Policies and Future Generations*, p. 34.

²¹⁰ Op. cit., pp. 28f.

change can be brought about by changes in the community's context and/or the impact of new ideas.²¹¹

The *critical and questioning process* can not stop more than temporarily. If and when the debate ceases or fails, the transgenerational community is no longer constitutive, i.e. the members do not consider membership to be an inherent feature of their own identity. When a new generation is born it will reflect on its historical community's values and be involved in a cultural interaction with the past, but it will do this in light of new environmental facts. If the community's context displays new technological, cultural and economic achievements, this will influence the new generation and its agenda in the political debate.

According to de-Shalit, this critical and questioning process is a normative requirement. It is only through this process that the identities of rational individuals can be constituted from the values of their community.²¹² However, the process will eventually lead to changes of the community's beliefs. This is necessary because no rational individual can possibly define himself or herself in terms of potentially false values and opinions.²¹³ Also, because we want our own values to be good, we should encourage this kind of critical reflection, i.e. our own values are better if they can withstand criticism and new circumstances. That future generations will reflect on our values can also make us more selective in our own discussion about which values we ought to promote.²¹⁴

Moral similarity is the more significant condition for the forming of a community. The absence of moral similarity will cause the members to question if they are in fact members of the same community as their ancestors. Also, in the absence of moral similarity, members will not acknowledge their obligations to the community. The most stable and substantial transgenerational community is a community with more, rather than less, moral similarity. However, such similarity does not have to be total. Members can be part of a community although they share a low moral similarity as long as they hold the belief that they can persuade their fellow members in an open discussion about the community's values. This discussion must include a background

²¹¹ Op. cit., pp. 46f.

²¹² Op. cit., p. 30.

²¹³ Op. cit., pp. 29f.

²¹⁴ Op. cit., p. 48.

agreement about the moral tradition of the community, and a will to reach an agreement, not in the sense of a minimal consensus but in the sense of openness to persuasion.²¹⁵

A drastic change in what the members considers to be reasonable values will make them alienated to the community's original values. Members will come to question if they are part of the same transgenerational community. As a result of this questioning, some members might choose to leave it. One historical example is the pilgrims who left England for America.²¹⁶ Eventually, the community's members will decide that the old values are irrelevant or undesirable. They will discard the old values and the moral similarity will cease to exist. When a substantial debate between the advocates of old values and those proposing competing values is no longer a genuine possibility, it is no longer possible to speak of a transgenerational community.²¹⁷

A conclusion is therefore that moral similarity extends into the future, but will eventually disappear, because of changes in the community's context. This is a matter of empirical fact. The argument in support of a continual debate about the community's values is that we want this to happen because we want future members of the community to endorse our values not because they are traditional, but because they are good.

Motivationally, the reason why we should care about posterity is that posterity is a part of the same transgenerational community as we are. This is not based on sentiments, but on the fact that members share the self-understanding that the community constitutes their identity. The members understand that the moral values, which are derived from the community, are internal to who they are. The future community is therefore as important as the present in regard to the members' identities.²¹⁸

Interestingly, de-Shalit also discusses and rejects another argument for caring about future generations that is based on fraternity. According to this, people care for their children; those children will care for their children. This chain implies that we should care about our children's children and so on. The argument for the rejection of

²¹⁵ Op. cit., pp. 59f.

²¹⁶ Op. cit., p. 47.

²¹⁷ Op. cit., p. 49.

²¹⁸ Op. cit., pp. 31ff.

this idea is that there is no automatic reason that one should care about someone that one's loved one's care about. Sentiments, like love and care, are directed towards specific persons and are not transitive. Also, the concept of love would lose its meaning if it were directed to a large social context. It is unreasonable to think that our obligations to unspecified and unknown people several generations from now could be based solely on such specific sentiments.

The community's extension over generations is connected to the psychological and moral importance of *self-transcendence*. As opposed to Parfit, de-Shalit argues for a theory of personal identity that accentuates the unity or continuity of the self over time.²¹⁹ According to de-Shalit, it is unreasonable to talk about a self without referring to goals and intentions; they are integrated parts of a person. What makes a person the same through the passing of time is that he or she can be seen as a continuum of different selves. Obviously, people care about their present intentions and their future fulfilment.

Moreover, the present self is related to the past and future selves through the intentions and ideas of these and coming selves. This relationship between the present and the future is the reason for caring about the future. The future represents the implementation of present intentions. This implies that a part of one's present self, i.e. one's intentions for the future, can survive the death of one's body.²²⁰ Like books and diaries published after the author's death. Part of a person's self still exists because of the ideas and thoughts fixated in these mediums. The death of our body is not the point where our future selves cease to exist. Continuity can still exist if the future after our demise reflects our intentions. de-Shalit sees the transgenerational community, based on cultural interaction and moral similarity, as an institutional and moral reflection of the psychological concept of self-transcendence.²²¹

²¹⁹ Op. cit., p. 35.

²²⁰ Op. cit., pp. 34ff.

²²¹ It seems that de-Shalit's theory about identity is pretty much the opposite of Parfit's. Parfit reduces the identity to be above all concerned with the present; de-Shalit extends the identity towards the future. On the other hand, they seem to talk about different things, de-Shalit focuses on the psychological aspect of identity and Parfit on the ontological.

de-Shalit's Theory and Responsibility to Future Generations

Justification for Responsibility

de-Shalit provides two justifications for our responsibility towards future generations. The first, and most important, justification is that we are obligated to act justly towards all members of our *community*, independently of their temporal status because they share moral similarity and a debate about values. This is the case because obligations are derived from the relationships of the community.

de-Shalit also provides a second justification for responsibility that is independent of communitarian relations. There is an obligation towards non-members that entail that we should refrain from causing harm to other human beings.²²² It claims that it is immoral to ignore the suffering of others whatever their spatial and temporal location may be. This obligation is called *humanity* and concerns the well-being of other people.²²³ Humanity seems to imply that well-being has value, and that this value is in some sense independent of communities.

Justice and humanity are based on different moral requirements. The first is concerned with ownership and control of resources and humanity with people's well-being. Justice raises basic obligations like how should water be controlled in England or what obligations do the better-off Englishmen have towards those Englishmen that have the least advantage. These considerations could, e.g., lead to redistributions of the control over resources. Another feature of justice is that it applies continuously, all the time.

Humanity, on the other hand, requires us to avoid the infliction of suffering on other people and to relieve it if it occurs. Humanity can often be more pressing than justice; an example could be to relieve a famine in Somalia. However, the obligations to the people of Somalia are for certain purposes and they come to an end when the distress is relieved.²²⁴

²²² E.g., op. cit., p. 129.

²²³ Op. cit., p. 64.

²²⁴ Op. cit., p. 64.

The key difference between these two kinds of justification is the control over distributional assets. The community is the context of continuous control over resources. We can share control over resources with our immediate descendants, but not with remote future generations. E.g., de-Shalit claims that it is unreasonable to share control over resources with people living two thousand years from now.²²⁵ However, near future generations are fully members of the community. This implies that we should take their welfare and wider interests into account when we make important decisions. Future generations are stakeholders in the community, similar to members that are worse off. This means that every essential and non-essential type of goods that we consider to be important for a good life should also be distributed to near future generations.²²⁶

Also, it should be noted that de-Shalit sees the need for international intergenerational justice. This need is based on the fact that communities are also related to each other. If one community takes the step to secure resources or welfare of their future members, another community could take actions that undermine those steps.²²⁷ Clearly there is a great need for some kind of international collaboration concerning obligations towards future generations. This places some doubt on how well fitted a communitarian theory actually is to justify our obligations towards future generations.

Values

According to de-Shalit's theory, there seem to be many values. E.g., both well-being and equality could be valuable, depending on the community. Some communities might place more importance on equality, while other communities place more importance on well-being. The important thing is not what kinds of values actually are endorsed, but that they are shared, i.e. there is a moral similarity.

The focus on moral similarity implies that a communitarian theory does not pretend to be neutral between different ideas of the good life, but provides a specific idea. The reason why we ought to act in a

²²⁵ Op. cit., pp. 64f.

²²⁶ Op. cit., p. 13 and pp. 54f.

²²⁷ Op. cit., pp. 135-137.

certain way is simply that it is motivated by the values of the community.²²⁸

On the other hand, de-Shalit also presumes that the community ought to be characterized by a free and critical debate about values.²²⁹ This implies that equality, in the sense that everyone should be able to both participate in debates and to reject values, has general importance. A community that fails to facilitate a free debate makes it hard for rational persons to accept its values. Or, as de-Shalit puts it:

... I insist on the opportunity, given to every member at any time, to reflect on the community's values, and to try either to alter them or to leave the community and join another if not satisfied. This, as I show below, is a condition essential to the success of a transgenerational community.²³⁰

It seems that *equality*, as equal opportunity for participation in the moral debate, and to be free to reflect upon and to reject values, is a precondition for a transgenerational community. This implies that a moral debate becomes a necessary component of every type of transgenerational community. Apparently, de-Shalit is promoting a strong universalist egalitarian ideal, which seems quite surprising given his communitarian theory.

Concerning his general comprehension of value, de-Shalit claims that values are derived from communities, i.e. communities are the sources of values.²³¹ It seems obvious that de-Shalit is a defender of some kind of ethical contextualism. However, it is still important to identify what kind of contextualism de-Shalit proposes. This is especially pressing because the demand to act humanely seems to be a moral demand that is owed towards all people; the scope of this demand is universal. This could imply some kind of universalism, which is usually incompatible with communitarianism.

²²⁸ This is noted by de-Shalit when he compares his own theory to different contractarian theories. Op. cit., pp. 124-127 and pp. 129f.

²²⁹ de-Shalit, Avner, 'Down to Earth Environmentalism: Sustainability and Future Persons', in Fotion, Nick and Heller, Jan Christian (eds.), *Contingent Future Persons: On the Ethics of Who Will Live, or Not, in the Future*. Kluwer Academic Publishers, London, 1997, p. 132.

²³⁰ de-Shalit, Avner, *Why Posterity Matters: Environmental Policies and Future Generations*, p. 17.

²³¹ Op. cit., p. 33.

The actual status of humanity seems to be uncertain because de-Shalit argues that humanity is not derived from any communitarian relationship. Humanity is concerned with people's well-being, generally.²³² Does this imply that humanity has both universal scope, and should be accepted by every community? Specifically: How does de-Shalit relate the value of non-members' well-being to the community as a source of value?

The first consideration is the normative character of the well-being of non-members. Should humanity be interpreted as motivated by the community's actual endorsement of the value of non-members' well-being? If the well-being of non-members is valuable independently of, or even opposed to values of a community, there must be another kind of source for this value, e.g. another community, a common feature of mankind (e.g. reason or human dignity), or this value is simply part of reality, i.e. some kind of value realism.

It seems that the last two positions are incompatible with the idea that the community is the source of value. However, does this imply that humanity should be interpreted as accepted by all communities? That is empirically questionable. Or should it be interpreted as a normative claim that every community ought to adopt? If every community should adopt it, this presupposes that different communities can communicate in a meaningful way, so that this importance of well-being can be spread to new communities.

This raises a second kind of consideration: How does de-Shalit's theory determine the epistemological character of non-members' well-being?

Generally, as an epistemological claim, it makes sense to claim that it is difficult to understand what is valuable except by relating oneself to the values of a community. However, does this mean that all values must be understood in relation to a community, i.e. *epistemological contextualism*, which would imply that well-being can not be understood without the reference to a specific idea of well-being, or can well-being, or some features of it, be understood by all humans, i.e. is there some *epistemological universalism* in regard to well-being? de-Shalit does not provide an answer to that question.

Besides these normative and epistemological questions about value, there is also the question of how value is related to persons, especially the fact that future generations are possible.

²³² Op. cit., p. 63.

It is noteworthy that de-Shalit does not make any explicit claims about how value is related to persons. However, he argues that one of the benefits of his theory is that it avoids ontological questions about potential versus actual people.²³³ Also, he claims that he does not intend to take part in the discussion about the value of human existence, which implies that he does not want to commit to one value theory or another.²³⁴

However, even if de-Shalit avoids making claims about how value relates to persons, it is still possible to consider what his implicit position might be in relation to Parfit's distinction between impersonal or person-affecting value theories. Parfit defends the first type, and Heyd argues for the second type. Interestingly, de-Shalit discusses Heyd's theory when he develops his psychological theory about self-transcendence.

Given the fact that de-Shalit always accentuates that values are related to communities, one interpretation is that de-Shalit presupposes a person-affecting value theory. E.g., he states that 'The communitarian theory of intergenerational justice locates the source of our obligations to future generations in ourselves ...'.²³⁵ If this is interpreted as a value claim, it implies that there are no values except for those of the community. That would be an implicit rejection of the idea that there are values that are independent of people's situation, i.e. an impersonal value theory. On the other hand, this claim might as well be interpreted as a rejection of the idea that there are values totally independent of humans, i.e. value realism.

However, one can also interpret de-Shalit differently. Parfit accentuates that the only way to avoid the non-identify problem is to claim that value is impersonal. de-Shalit argues forcefully in support of the claim that we should avoid causing harm to remote future generations. This claim presupposes that it is meaningful to talk about harming these generations. Arguably, this could mean that an impersonal value theory is necessary and that well-being should be conceived in impersonal terms.

Which one of these two interpretations is correct? Given his general approach to ethics, it is more reasonable to interpret de-Shalit as a supporter of a person-affecting value theory. He makes no claims

²³³ Op. cit., p. 127.

²³⁴ Op. cit., pp. 39f.

²³⁵ Op. cit., p. 123.

that might imply that value can be understood without a reference to a specific community. E.g., well-being must be understood in relation to the specific community because the community is the source of values.

Possibly, de-Shalit's theory might also be compatible with the third kind of value theory, both future people and their relation to value must be understood by referring to a network of relations. Given that de-Shalit places such importance on communitarian relations such an interpretation might be reasonable. Even if de-Shalit's theory is compatible with this position, it might be enough to conclude that his theory is incompatible with an impersonal value theory.

What We Owe Members and Strangers

de-Shalit is not interested in making a systematic account of what we owe future generations. Instead, his interest is the justification for our obligations. That said, he still accounts for some of the contents of these obligations.

Future generations make two types of moral demands on us. One type is based on justice and membership in a transgenerational community. The other one is based on humanity towards strangers and the moral demand to refrain from causing suffering. The first type involves strong positive and negative obligations to close future generations, and the second type involves negative obligations to remote future generations.

de-Shalit claims that we have strong positive and negative obligations towards the current members of our community as well as future members of it, i.e. close future generations. The positive obligations imply that we should not only refrain from some actions, but also supply resources that we consider to be part of the good life. Moreover, we should even make certain non-essential goods available for close future generations.²³⁶

We should also consider close future generations when we are deciding environmental policies, in order not to overburden them. This implies that the wider interests of close future generations should be included in the political decision-making. These interests should be weighed against our interests and can not simply be dismissed. We can even be obligated to pay regular taxes that will improve the life of

²³⁶ Op. cit., p. 13.

close future generations. Another example is to accumulate enough research to send a human into space within the next three to seven generations.²³⁷ Strong obligations involve placing certain burdens on us and transferring benefits to close future generations.

de-Shalit claims that as far as distribution policies go, governments should treat the obligations to close future generations in a similar fashion as obligations to us. Obviously, there might be some situations where our obligations to contemporary members clash with obligations to future members of our community. There are no clear-cut solutions to this kind of dilemma. Instead, de-Shalit suggests that this kind of situation must be relieved in a similar fashion as dilemmas between contemporaries, through a democratic political process.²³⁸

The strong obligations are limited to the transgenerational community. We reach the end of this community and to the strong obligations that we owe it when the community reaches a stage where the members' relations to each other are characterized by little moral similarity. But until then, obligations to contemporaries and close future generation will have similar weight, in considerations about welfare, preservation of rare species, beautiful landscapes, depletion of natural resources, etc.²³⁹

Obligations toward remote future generations focus on negative aspects. As such, these obligations include the demand to refrain from causing harm and to avoid potential harm, but also to relieve harm when such occurs. Accordingly, this negative obligation implies that we should refrain from depleting natural resources, and destroying aesthetic monuments. It also includes the demand that we may be temporarily taxed to reduce certain toxic levels and forced to end policies that have great foreseeable risks to remote future generations. This might include giving up nuclear energy (even if the cost will be considerable). Strong as these negative obligations are towards remote future generations, they have limitations. E.g., it is not reasonable to expect current humans to pay regular taxes to improve the welfare of these generations, at least not if this lowers our support for the worst-off among both our contemporaries and close generations.²⁴⁰

²³⁷ Op. cit., p.55.

²³⁸ Op. cit., pp. 58f.

²³⁹ Op. cit., pp. 58f.

²⁴⁰ Op. cit., p. 13 and pp. 54f.

Practical Questions

de-Shalit's response to the seventh question, who is responsible and to whom or what this responsibility is owed, is inherently tied to his communitarianism. Obviously, the most important part of responsibility towards future generations is the responsibility of contemporary members towards future members of the same community. The most important argument for this is that the future community is an integrated part of our identity.

Another argument is empirical if people are given a choice to distribute resources between two equally well off communities, they are most likely to prioritize the community that has values similar to their own. However, it is not reasonable to disregard people's suffering only on the basis that they do not share a common set of values. The severe need of another community can be a decisive factor in many situations, independently of any actual moral similarity to that community.²⁴¹

What are the time-limits for responsibility? According to de-Shalit, our obligations are partly determined by the degree to which future generations are members of our community. He claims that future generations will sooner or later cease to be part of our community and this limits our positive obligations towards them. The problem is that we can not claim to know the exact time when this break occurs. This means that it is impossible to determine if our transgenerational community stretches 4 or 50 generations into the future.²⁴²

On the other hand, de-Shalit makes some claims that could be interpreted as supporting some more specific limits to the different kinds of obligations:

In general, we have very well-founded and definite obligations to immediate future generations, e.g. those up to eight or ten generations from now.²⁴³

This claim seems unreasonable simply on the grounds that there is no reason to suppose that a community will stretch eight to ten generations into the future, such a limitation is arbitrary.

²⁴¹ Op. cit., pp. 52f.

²⁴² Op. cit., p. 52.

²⁴³ Op. cit., p. 11.

A more reasonable interpretation of de-Shalit's theory is that the only way to establish the limits of the community is in retrospect. The only individuals who can decide whether future humans are part of the same community as present humans are future humans. However, de-Shalit claims that it is reasonable that our positive obligations fade away in the remote future, i.e. they become less and less pressing.²⁴⁴

It should be noted that it is only our positive obligations that fade away; our negative obligations are not related to temporal remoteness. de-Shalit claims that there can be no time limit on the negative obligation to refrain from causing harm. As long as our activities can cause harm to future generations, there are relevant moral reasons against that behaviour.²⁴⁵ We should also consider how our past and present policies hurt future generations. If we come to the conclusion that these too can cause substantial suffering it will become a moral reason for abandoning these policies.²⁴⁶

Finally, it seems that de-Shalit does not answer the ninth analytic question, which concerns the connection between responsibility and the limitations of knowledge. He considers questions where something will occur, and not questions about when things could occur, i.e. risks.

Evaluation of de-Shalit's Theory

The Limits of the Community and Future Generations

de-Shalit provides a forceful argument for why we ought to care for the future members of our community. The motivation for caring about close future generations is that they are part of our identities. And because the community is the source of obligations, an individual that denies the demands of his or her community will in some sense deny part of his or her own self. Barry, on the other hand, claims that the problem with de-Shalit's communitarian perspective is that it provides no reasons for acting in a way that is opposed to one's own

²⁴⁴ Op. cit., p. 54.

²⁴⁵ Op. cit., p. 64.

²⁴⁶ Op. cit., p. 13 and p. 54.

personal beliefs.²⁴⁷ It seems that morality becomes inflated to self-interest, because one considers the future generations to be part of one's own self.

The problem concerning what we ought to do to non-members, both remote future generations and the future generations of other communities, seems to highlight some limitations of de-Shalit's theory.

de-Shalit claims that the reason why we ought to care about non-members is not connected to any communitarian relationships, but to their well-being. But how should this well-being be interpreted? It seems that it is a normative ideal, we should care about the well-being of future generations. This means that the protection of remote future generations is dependent on our moral preferences. There is no other ground on which to base their moral status except for communitarian relations, and they are not included in such relations. This position is not compatible with the first evaluative criterion. This criterion claims that future generations' moral status should not be totally dependent on our preferences or beliefs. de-Shalit's position must either be rejected or reinterpreted.

However, even if de-Shalit's theoretical position seems to make it impossible for him to give remote future generations some independent status, there might be other considerations that give them such status. One example would be if human interests or beliefs have a certain character that always assigns moral status to remote future generations. Of course, this would imply making some general claims about what preferences communities in fact include, specifically if this means that humans generally prefer to act humanely towards strangers.

This strategy is necessary in order to provide remote generations with some moral status that justifies the obligations to them. de-Shalit's theory would be incoherent without such an argument because he stresses that we really have obligations to remote future generations. It is imperative to try to understand this argument.

²⁴⁷ Barry, Brian, 'Sustainability and Intergenerational Justice', in Andrew Dobson (ed.), *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice*. Oxford University Press, Oxford, 1999.

Why Act Humanely?

The problem facing de-Shalit's theory is the inclusion of an obligation to act humanely to non-members and how this obligation relates to the actual values of the community. Specifically, this is a question that accentuates the third evaluative criterion of moral pluralism. How can de-Shalit argue for an obligation to act humanely in the face of pluralism?

The first question is normative: Should every community include the obligation to act humanely and what can be done to establish this obligation? It is possible to interpret de-Shalit as a proponent of certain values. As such he makes a normative claim; a community should include values that make it obligatory to act humanely towards non-members. The problem is that there are no grounds for criticizing a community that does not include such obligations. As long as there is an internal debate about values, some values, like the well-being of future generations, might be rejected. If some communities deny that we have an obligation to act humanely to remote future generations, there is not much more to do than to keep trying to change these values. Possibly, this is a reason why de-Shalit wrote his book.

de-Shalit refers repeatedly to Michael Walzer so it can be useful to see if he provides an answer to this problem. According to Walzer, strangers are sometimes entitled to our hospitality, assistance and good will. This can be formulated as a principle of mutual aid. Walzer does not specify any grounds for this principle, but he illustrates its practical implications. The conditions for a party to be morally obligated to aid another party are: (1) one party is in urgent need, and (2) the risks and cost to the first party is relatively low.²⁴⁸ In relation to future generations the first condition is easily met. Current humans are causing irreversible damage to ecosystems and consume resources. The other condition is problematic because it sets limitations on how much aid we owe future generations. How much is relatively low costs, and how is it possible to get a community to accept costs that they conceive as too high? The communitarian response to this question must once again be that one must try to establish new values in the community.

Another, but similar, problem concerns the epistemological problem: Should the obligation to act humanely be interpreted as

²⁴⁸ Walzer, Michael, *Spheres of Justice: A Defence of Pluralism and Equality*, pp. 32f.

deriving from every community's moral tradition, or can this obligation be comprehended without any reference to a community? Or, to put it differently, how is it that a member of a community knows that he or she should act humanely towards non-members?

There are at least three answers in response to the last question: (1) Humanity is actually endorsed in a community. (2) Humanity is endorsed in another community and a member wants to establish this value in his or her own community. (3) The value of humanity can be known without reference to communities, e.g. through reflection.

The first answer implies *normative moral relativism*, i.e. that an act or a disposition might be right in one context, but wrong in another. According to this, it is impossible to decide if the morality of any one of these communities is the most well-founded or right one.²⁴⁹ Given the fact that all communities do not accept the value of humanity, members of a community that do not endorse the value of acting humanely have no obligation to act humanely. Similarly, members in a community that accept that value have an obligation to act accordingly. The obligation to act humanely becomes totally dependent on the community's actual values.

de-Shalit accentuates that there is a moral demand to act humanely, but the only argument he can provide to those who disagree is to turn to the second answer, i.e. that there are communities who actually value the well-being of non-members. This fact can bring about change in a community in the sense that some of its member's start to feel that one ought to act humanely.

This reasoning faces some problems if it is applied to the sphere of international relations. One example is a scenario where one community accepts a certain value but another community rejects it, but the actions of both communities are necessary to reach a certain goal. One way of trying to reconcile the position of the two communities would be to find a common ground. As we saw, Barry argues that impartiality is one method of finding a common ground for

²⁴⁹ There are several other kinds of relativism. *Descriptive relativism* claims that there are in fact different values and norms in different times and in different societies. *Epistemological relativism* implies that different communities can have different ideas about the justification of moral claims. *Metaphysical relativism* states that different groups can have fundamentally different conceptions of reality, they inhabit different moral worlds. E.g., Wong, David B., 'Moral Relativism', in Craig, Edward (ed.), *Routledge Encyclopaedia of Philosophy*. Volume 6. Routledge, London, 1998, pp. 539-542.

living together in spite of incompatible values. Possibly, this is a more appropriate way of handling international relations than trying to change each other's values. International cooperation is imperative because problems like climate change do affect both the future people of our own community and future people in other communities.

Finally, regarding the third answer, there are no grounds to interpret de-Shalit as a proponent of the idea that we should accept humanity because of some context-transcending reason. It presupposes some kind of impartial or universalist conception of morality that is not compatible with communitarianism. Values can only be interpreted by referring to a specific community. If the solutions to some problems presuppose a common ground, either epistemological or normative, and de-Shalit's theory fails to provide such grounds, this is a forceful argument against his theory.

A conclusion is that a theory about responsibility towards future generations must include an attempt to provide some common ground between communities because it is a precondition for defining a response to global problems. Some of the most pressing problems facing mankind are global and they need a global response. The fourth evaluative criterion stresses the importance of real-life problems, which makes it impossible to ignore global problems. However, if global problems need a common ground between communities, that common ground must also be compatible with pluralism. de-Shalit's theory fails to provide such a common ground. A reasonable theory about responsibility towards future generations must be based on another kind of ethical theory. However, that said, there are also promising ideas in de-Shalit's theory.

One solution to the problems of de-Shalit's theory is to extend and redefine the concept of community so that it can include all humans. This presupposes that we can conceive ourselves to be part of a community of mankind, which is a radically different kind of community. E.g., it must include many different values and ideas about the good life.

Deliberative Process and the Extension of the Community

de-Shalit claims that moral similarity is the single most important criterion for being part of the same community. Being part of the same community is the crucial criterion for receiving the benefit of strong

positive obligations. What does this mean for individuals that do not share the community's values and have an ambition to change those values? According to de-Shalit, these people can be considered part of the community with low moral similarity, as long as they think that they might change the values in it and they share the moral tradition of the community as a background agreement. Does this imply that one could be considered part of the community even if one does not endorse the values in it? It seems to be the case that

...a transgenerational community does not have to reach the stage of an absolute moral similarity as long as there is (a) an active debate on the idea of the good, (b) some common agreement (mainly on account of a common moral tradition) as a background, and (c) a will to reach agreement, not in the sense of attaining minimal consensus but in the sense of an openness to persuasion.²⁵⁰

This raises three problems. The first is that this seems to contradict the rejection of the tradition as a basis for the community. The members have to be rational, and tradition as such can not provide a reason for someone to continue to be part of a community. However, de-Shalit does not reject tradition right out of hand. A reasonable interpretation suggests that a tradition is a necessary background for every discussion, even if it is finally rejected.

Secondly, this could be interpreted as rejecting moral similarity as the basis for membership in the community. The important thing is that there is a debate, which all members of the community can attend, and that there is some possibility to persuade others to accept one's own values. Should sharing the same debate then be the criterion? Such a reading is supported by the importance that de-Shalit places on debate.²⁵¹

Thirdly, how should agreement about the common debate be understood? There has probably never existed a community with absolute moral similarity so such an agreement would be quite useless. However, the implication of statement (b) is that no total

²⁵⁰ de-Shalit, *Why Posterity Matters: Environmental Policies and Future Generations*, pp. 59f.

²⁵¹ de-Shalit, Avner, 'Down to Earth Environmentalism: Sustainability and Future Persons', p. 132. This is also illustrated in *The Environment: between Theory and Practice*, where he claims that the primary value of deliberate democracy is its deliberation. de-Shalit, Avner, *The Environment: between Theory and Practice*. Oxford University Press, Oxford, 2000, pp. 154ff.

moral similarity has to exist, it is enough that members share some general ideas. Depending on how you define general this could mean that the only similarity that exists is that members are all humans. In this wide sense it is possible to think that during the whole moral history of the human race there has always been some common moral agreement.

The conclusion drawn from this discussion is that it is difficult to see exactly what status de-Shalit gives moral similarity. On the one hand, moral similarity can be considered the most important criterion for a group of people to be called a community. And some of de-Shalit's other statements suggest that it is not a necessary condition, as long as there is a constructive debate about the community's values, and the participants are open for persuasion and willing to persuade others. This means that the focus can be shifted from the actual shared values to the process of establishing those values. This is fruitful because it makes it possible to lower the boundaries between different communities. Two communities can be involved in a continual discussion with each other, and this could be ground enough for claiming that they are part of some shared community. This can provide an argument for a much more inclusive ethical theory, a theory that could include all of mankind. Of course, it is difficult to claim that this would be a communitarian theory; it is more appropriate to claim that communitarian reasoning inspires it.

Resource Distribution and Community

According to de-Shalit, justice is concerned with ownership and humanity with the avoidance of causing harm. We can only share control of resources with members of the transgenerational community, which is the context for justice.²⁵²

de-Shalit's theory has a difficulty with handling global problems, like the differences between rich and poor countries and the global environmental problems. Obviously, these problems transcend different contexts. It seems that de-Shalit can only approach global problems by referring to humanity. Humanity is different from justice and could be sometimes more pressing but it does not cover questions

²⁵² de-Shalit, Avner, *Why Posterity Matters: Environmental Policies and Future Generations*, p. 64. This position is also stated in a footnote: 'a community is an institution that entails obligations of justice', op. cit., p. 140.

about distributions. But why should we accept a theory about justice that does not provide a way of handling issues that might imply international redistribution? It seems that de-Shalit places an unnecessary limitation on justice.

As a contrast to de-Shalit, it is noteworthy that Barry claims that justice could include distributive schemes that are insensitive to contexts. The important issue is not whether the community is the focus for justice, instead, the question is about how to legitimize holdings. It is a trivial fact that communities might have illegitimate control of resources. A community could simply invade another community's territory and take hold of some resources. In response to such a situation, it seems quite reasonable to claim that it raises a question of distribution which is insensitive to the limits of the community. If some holdings are illegitimate, it seems that other communities or individuals have just claims to either get some benefits from these resources, or to share control over them.

Another example that illustrates the problem of limiting justice to communities would be a scenario where country A constructs a hazardous facility close to the border of country B. One can argue that country A should avoid harming citizens of country B and that this is based on humanity. However, one can also argue that it is inherently wrong to distribute risks and benefits in an asymmetrical way. The fact that one group gets all the benefits and the other group gets only drawbacks is enough to consider this to be a question of just distribution.

The conclusion is that it is simply not reasonable that all considerations of justice, distributions of benefits and resources, should be limited to the community. Questions about resources, benefits and burdens and legitimate holdings go beyond communities. If this is the case, it seems premature to confine obligations based on justice only to close future generations. We might as well argue that justice demands that we distribute resources to remote future generations.

Positive and Negative Obligations

de-Shalit stresses that we have strong positive and negative obligations towards our fellow community members and strong negative obligations to non-members. However, there are two

problems facing this distinction. First, it might be impossible to uphold the distinction between positive and negative obligations. Secondly, as long as both negative and positive obligations are based on values there is a risk that remote future generations will reject our values. This means that it is difficult to determine what will or will not actually hurt them.

It is difficult to define suffering independently of well-being. How should suffering be defined? Should a definition be focused on physical or psychological aspects of harm? If we take the first option, that we should refrain from causing physical suffering, then we have to change several aspects of our behaviour. The lifestyle of western countries consumes enormous resources, and sometimes de-Shalit states that consumption of some resources represents harm.²⁵³ It can also be argued that damage to the high ozone layer causes an increase of cancer. This will result in future humans suffering of cancer as a direct result of our policies. Clearly this represents a reason for us to change that type of behaviour. But if such behaviour is tied to our lifestyle, should that lifestyle change too? If suffering is defined in the psychological sense it could demand even more from us. If future generations have a considerable lower well-being than we have, but also detailed records of our lifestyle it is not impossible that they would experience life as undeserved poverty. This experience could be strong enough to cause psychological suffering. Do we have an obligation to spare future generations from such suffering?

If we, as seen above, are morally obligated to change our lifestyle, are we ready to accept this moral responsibility? Should the account of what people are prepared to do have some importance? Temporary taxing for the relief of some specific environmental problem can be accepted, but regular taxes to increase the welfare of future people is unreasonable if it lessens our support for the worst off among our contemporaries and close future generations.²⁵⁴ How about a regular taxation to relieve remote future generations of enormous environmental costs? Concerning this problem, humanity is silent.

If both harm and suffering presuppose a specific comprehension of well-being, it is difficult to comprehend how this position is compatible with moral pluralism. There is no reason to suppose that remote future generations accept our ideas about well-being.

²⁵³ Op. cit., p. 13.

²⁵⁴ Op. cit., p. 55.

Accordingly, if de-Shalit's theory implies that our positive and negative obligations are dependent on a specific comprehension of well-being, his theory fails to take moral pluralism into account.

de-Shalit's Answers to Practical Questions

As a statement of how people actually act, I find it reasonable to agree with de-Shalit. People have a tendency to care more for those that are similar to them. However, this is not a satisfying normative statement. That we usually care for our community is not a sufficient reason to care only for that community. Instead, it seems more reasonable that we might in some cases be obligated to act against the values of our own community because there are other more pressing considerations. Arguably, it is difficult to give a specific answer to when we should care about the community and when we should care about other things, e.g. humanity, the environment. de-Shalit could agree with this conclusion. He does claim that the needs of some communities might be more important than whether they share our values or not. This suggests that it is difficult to determine a priority arrangement that is insensitive to the actual situation. What is needed is sensitivity and wisdom in every case.

Concerning the time-limit for responsibility, the eighth question, it is important that de-Shalit does not make any special claims about the reach of the transgenerational community. It is possible that the community can extend several hundred years into the future. It could also reach only a few generations from now. Although he refrains from claiming this I suspect that he thinks that the transgenerational community has a longer reach into the future than the fraternity model of community. According to that model, love for one's children leads to love for their children and so on. This could probably motivate care for a few generations, but the sentiment will eventually disappear. He rejects that model because of its limited reach but I do not see any grounds for claiming that the transgenerational community must reach further. Values and societies can change fast. There is even a strong sense that in our post-modern world change is coming faster than before.²⁵⁵

²⁵⁵ There is a tendency to view the industrialised western world as the norm for the entire world. It could be the case that there are more communities that experience a slower degree of change. Change still occurs though.

It is possible for the transgenerational community to reach far into the future, but it is not possible to determine a specific date. Eventually a change in the community's values will end the moral similarity with the contemporary community. The rational discussion within the community makes this inevitable. That change also represents the change of our moral responsibility toward future generations.²⁵⁶ By choosing to refrain from mentioning any specific time limit for this process, the theory avoids being arbitrary. There is no possible way of knowing or establishing any particular point in time when obligations change from strong to weak. By making the judgment of moral similarity a matter for the future generations themselves de-Shalit leaves the future the way it should be, open.

The fact that de-Shalit says nothing about problems with our limited knowledge about the future and risks make it necessary to move directly to the question of nuclear waste management.

de-Shalit's Theory and Nuclear Waste

de-Shalit argues that we have strong positive and negative obligations towards close future generations, i.e. those that are the future members of our community. Also, we owe strong negative obligations to remote generations. This means that we owe both close and remote generations an obligation to refrain from actions that might harm them. It is then pretty straightforward that we should avoid acting in ways that might harm future generations. As long as the nuclear waste is hazardous, we act wrongly if we expose them to that hazard. Moreover, de-Shalit makes the following claim in regard to exposing remote generations to nuclear waste:

... many of our environmental policies, such as storing radioactive waste, are likely to harm remote future generations. This is morally wrong, and we should find a way to store nuclear waste securely or, if as many scientists argue this is impossible in the present state of our knowledge, we should either put aside huge sums of money to help future generations in the search for better and safer means of storage ... or, even better, we should abolish nuclear power entirely.²⁵⁷

²⁵⁶ Op. cit., pp. 52ff.

²⁵⁷ Op. cit., p. 63.

However, as has been noted, even if we agree with de-Shalit that such action is wrong, this does not solve the problem with risks.

If we transfer risks onto future generations, the question is what level of risk we are morally entitled to transfer. It is more difficult to determine de-Shalit's answer to that question. E.g., it seems that it might be acceptable to transfer some risks onto close generations. These generations might have benefited from the activities that generated the risks. They might even consent to risks if they share our idea of the good life, and the risks are associated with activities that are integrated with that idea. Of course, it is more difficult to believe that this would be the case with remote generations. They have not benefited and we have no good reasons to suppose that they might consent to anything.

Based on this, it is rather clear that Barry's theory about responsibility towards future generations gives better insights than does de-Shalit's theory. Barry's claims about risks can be interpreted as implying that all transfers are illegitimate.

Conclusion

de-Shalit's theory has several attractive features. One is that our identities are dependent on future generations. We strive towards self-transcendence by affecting the world beyond our death. This explains why we should care about future members of our community. The problem is how this is compatible with issues that require global responses or stresses our responsibility to non-members. Possibly, one can expand the concept of the community to include them, but de-Shalit does not provide such an expansion.

de-Shalit's theory is flexible in regard to values. A given community could include many. On the other hand, the community should also include a debate about values, which presumes an egalitarian idea. Each member should be able to critically discuss and reject the values of the community.

In regard to normative claims, de-Shalit argues that we have both negative and positive obligations to future generations. This position presumes that there is a way to formulate an idea about well-being and harm, and that future generations accept this idea in relation to moral pluralism. There is no reason to suppose that this is the case.

A noteworthy aspect of de-Shalit's answers to the practical questions is that he claims that responsibility is diminished by time. Our positive obligations become only negative. This idea has some benefits, but it faces the problem of establishing a point in time where our positive obligations fade away. Any point seems arbitrary.

Also, de-Shalit maintains that we should not store nuclear waste in a way that harms future generations. However, in contrast to Barry, he does not provide any specific idea about how we ought to handle risks with nuclear waste. This is a clear limitation of his theory compared with the theory of Barry.

Summing up, it is reasonable that humans must conceive their own lives in relation to a group. This makes it possible to provide future members of that group with moral status. However, what is needed is a way to avoid the limited communitarian focus and extend the community to include all of mankind. Is this possible? One attempt to do this is provided by Emmanuel Agius. He provides a theory that integrates all human communities, but also reality in general, into an ontological whole. Morally important for our responsibility towards future generations are ontological relations that are insensitive to communitarian boundaries.

4. The Common Good of Mankind

Introduction

Rev. Emmanuel Agius is a theologian based on Malta. He is educated in philosophy and theology, and gained his doctoral degree at the Catholic University of Leuven (Belgium) on the subject of the rights of future generations. His post-doctoral work includes research in bioethics at the University of Tübingen, Germany, Georgetown University, Washington D.C. and the University of Notre Dame, Indiana. Moreover, Agius is also engaged in the Future Generations Program initiated by UNESCO. This program intends to heighten the awareness of our responsibility towards future generations, and the establishment of a guardian for these generations. Agius is currently professor in moral theology and moral philosophy at the Faculty of Theology, University of Malta.

This chapter's first primary source is Agius' doctoral dissertation, *The Rights of Future Generations: In search of an Intergenerational Ethical Theory* (1986). The second primary source is five articles that specifically discuss issues about future generations. They are: 'Towards a Relational Theory of Intergenerational Ethics', in *Our Responsibilities Towards Future Generations* (1990). 'Patenting Life: Our Responsibilities Towards Present and Future Generations', in *What Future for Future Generations* (1994). 'Obligations of Justice Towards Future Generations: A Revolution in Social and Legal Thought', in *Future Generations and International Law* (1998). 'The Earth Belongs to All Generations: Moral Challenges of Sustainable Development', in *Caring for Future Generations: Jewish, Christian and Islamic Perspectives* (1998). 'What Future for Future Generations? A Whiteheadian Intergenerational Ethical Perspective', in *Framing a Vision of the World* (1999).

Finally, a third primary source is Agius' book *Problems in Applied Ethics* (1994), which includes a chapter about the problems connected with our ethical responsibility for future generations.

An accurate understanding of Agius' theory must be preceded by a short introduction to Alfred North Whitehead's (1861-1947) philosophy, because Agius develops Whitehead's metaphysics into a social ethical theory about responsibility towards future generations.

Background: Whitehead's Metaphysics

It is difficult to provide a short account of such a complicated and encompassing metaphysical theory as the one put forward by Whitehead; this short introduction can only scratch the surface of his work. However, some basic ideas and concepts can be characterized. Also, due to the theory's complicated character it is reasonable to use a secondary source as a complement to Whitehead's own account. I will therefore use the account of Whitehead's metaphysics provided by Sten M. Philipson.

Methodologically, Whitehead claims that our experience of reality is that everything is interconnected. Reality is an integrated whole, essentially interrelated, dynamic and organic. The fact that humans experience the world as a coherent totality is the fundamental basis for the claim that reality is basically interrelated. This totality is also the reason for believing that it is possible to find a rational order in the world. Whitehead attempts to develop a coherent theory that can explain all different phenomena of this total experience.²⁵⁸

The experience of reality's totality is different from sense perception, which is still important. Instead, it is rather an integrated view of ourselves conceived as related to our own past and future, to others, and to the whole of reality. This fundamental experience is an intuitive awareness of the interrelatedness of reality, which Whitehead calls *prehension*, or 'feelings'.²⁵⁹

Whitehead's metaphysical theory explains *reality as a process*, characterized by change, becoming, growth and decay. There are no eternal substances, or any other static structure in reality, but only a

²⁵⁸ Philipson, Sten M., *A Metaphysics for Theology: A Study of some Problems in the Later Philosophy of Alfred North Whitehead and Its Applications on Issues in Contemporary Theology*. Almqvist and Wiksell International, Stockholm, 1982, p. 31.

²⁵⁹ Op. cit., p. 34 and p. 49.

continuous flow of change. There are exceptions from this general character of reality, unchanging things, like some concepts and scientific models. But these are abstractions from the real.

The process of reality has two dimensions. The first is *transition*, in which the things that make up reality relate to each other. Things decay or perish, which leads to their objectification. They become a necessary feature of the world, something that all other things must take into account. The other dimension is *concrecence*, i.e. where things move from being potential towards becoming concrete. This is a subjective aim, inherent in all things that make up reality.²⁶⁰

Reality is made up of *actual entities*, or actual occasions. E.g., God is an actual entity and so is also the most insignificant stuff in space. Actual entities are events or drops of existence that perish immediately on coming into being. There is nothing apart from or beyond actual entities, they are reality. An actual entity is characterized by being prehended by both itself and other actual entities. Moreover, Whitehead claims that it is impossible to understand actual entities in isolation, because every actual entity is inherently connected with all other entities. Relations are an integrated part of the essence of an actual entity.²⁶¹

An actual entity must always conform to the past, which is called efficient causation. Yet, there is always a degree of freedom, or self-causation, in which an actual entity can choose how it should strive towards the future. Whitehead rejects all forms of determinism by claiming that all actual entities have a fundamental capacity to choose their own future. A future that is represented in the present by potentialities, or as Whitehead's calls them, *eternal objects*.

Even if there are many potentialities, an actual entity can not become whatever it wants; there is a limited spectrum of goals to choose from. An actual entity can apprehend its potentialities, it can identify what it can become. Concrecence is the aspect of the process in which an actual entity grasps its possibilities. This act of choosing which potential to strive towards is called final causation. Whitehead claims that all actual entities, even those without consciousness, become actual by selecting among different potentialities. However,

²⁶⁰ Op. cit., pp. 43-45.

²⁶¹ Op. cit., pp. 48f.

this process is primarily a habit on the more unconscious levels of reality, not an informed choice.²⁶²

Actual entities are often organized into two different kinds of *societies*, i.e. groups. The first kind is inorganic societies, like stones. The second kind is organic societies, like trees or humans. This second kind of society has more freedom. Organic cells are less determined by its past than e.g. stones. This means that they have a greater freedom to choose their potentialities, to experience more. But it is still important to note that all societies of actual entities are similar. There is a strong continuity from the inorganic to the organic.

The difference between organic and inorganic societies accentuates the question about *value*. All actual entities have *intrinsic value*, i.e. importance for their own sake. Nevertheless, value is connected with the ability for prehension. Those actual entities that have a wider range of potentialities have a higher value than those with fewer potentialities. Also, the experience of value is also associated with prehension, we know value intuitively, and this experience is itself valuable.²⁶³

Finally, Whitehead manages to incorporate God in his system, primarily by radically redefining God's power and knowledge. God's most important function is to embody all potentialities. Actual entities have a specific number of potentialities for their becoming, which are known by God. God tries to influence the entities so that they might reach their potential. God lures or hints these potentialities, however, the ultimate choice is left with the entities themselves. God's ultimate goal is to maximize potentialities which will also maximize the amount of value, or value-experience, in the world.²⁶⁴

²⁶² Op. cit., pp. 45-47.

²⁶³ Op. cit., pp. 50-52.

²⁶⁴ Op. cit., pp. 59ff. There is an important theological school based on Whitehead's philosophy, and on the writing of Charles Hartshorne (1897-2000). This school has had a profound impact on American theology. Some of its most famous proponents are John B Cobb jr. and David Ray Griffin. Cobb and Griffin use Whitehead's metaphysical scheme to redefine and develop specific parts of the Christian faith, especially the character of God but also how God relates to the creation. See, e.g., Cobb, John B. and Griffin, David Ray, *Process Theology: An Introductory Exposition*. Christian Journals Limited, Belfast, 1977.

Agius' Social Ethical Theory

Agius claims that Whitehead's metaphysical theory has plain ethical implications. The metaphysics, which Whitehead called 'the generality of outlook', is necessarily tied to human actions, which is called 'the morality of outlook'. The specific understanding of reality is connected with a specific ethical theory.²⁶⁵

Turning to the relevance of process philosophy for the question of responsibility towards future generations, the starting point for Agius is that the world today is characterized by change and interconnectedness. People experience radical technical and social changes and have come to understand that their actions will affect both strangers in other countries and posterity. Any reasonable theory about future generations should take this experience into account.²⁶⁶

Agius analyses several different ethical theories. He rejects, in a similar manner as de-Shalit does, utilitarian and deontological theories, because these theories can not coherently take into account all the different aspects of responsibility towards future generations. Agius also rejects some rights theories primarily because of their failure to take into account the development of collective and individual rights by the United Nations Organization. Agius believes that it is important to include that discussion in the more philosophical analysis of the rights of future generations.²⁶⁷

Agius claims that the main reason for using Whitehead's process philosophy is that a reasonable theory about responsibility towards future generations must include a sound metaphysical foundation that explains the relationship between us and posterity. Whitehead's theory claims that reality is interrelated and constantly changing. These interrelations imply that we are ontologically connected to posterity.²⁶⁸

²⁶⁵ Agius, Emmanuel, *The Rights of Future Generations: In Search of an Intergenerational Ethical Theory*. Catholic University of Leuven, Leuven 1986, pp. 298f.

²⁶⁶ Op. cit., pp. 181f.

²⁶⁷ Op. cit., p. 171.

²⁶⁸ Op. cit., p. 177. Also in Agius, Emmanuel, 'Towards a Relational Theory of Intergenerational Ethics', in Agius, Emmanuel et al., *Our Responsibilities Towards Future Generations*. A Programme of UNESCO and The International Environment Institute. UNESCO and Foundation for International Studies at the University of Malta, Malta, 1990, pp. 80f., and Agius, 'What Future for Future Generations? A Whiteheadian Intergenerational Ethical Perspective', in Cloots, André et al. (eds.), *Framing a Vision of the World*. Essays in Philosophy, Science and Religion 14. Leuven University Press, Louven, 1999, pp. 252f.

Whitehead's theory can also handle the fact that many of today's most serious problems (environmental destruction, resource depletion) have a global, structural and systematic character. Agius believes that the broad perspective of process philosophy is therefore more suitable to today's larger ethical issues. Basically, process philosophy provides a more adequate framework to explain our experiences of reality than other ethical theories do and this makes it better adapted to answer the question about responsibility towards future generations.

Agius uses Whitehead's theory to reconstruct a social ethical theory. Due to the fact that Whitehead did not write about ethics in any systematic way, Agius believes that it is important to see what can be learned from process philosophy, and how this theory can be applied in the field of ethics.²⁶⁹

As was noted above, Whitehead's starting point is the human experience, but his focus is the totality of reality, his metaphysics is holistic and tries to explain the whole of reality.²⁷⁰ Obviously, such a perspective can have many implications for ethics, but the key ethical issue is that humans are relational by nature. Humans are essentially interrelated to the rest of reality, which means that 'Process philosophy is a rigorous denial of extreme individualism.'²⁷¹ By rejecting individualism, or *atomism*, process philosophy provides a radically different comprehension of personal identity.

According to Agius, Whitehead's theory implies that the individual self is not a being that acts, but an act of being. Such acts can only be performed in relation to others. As Agius puts it: '... the relational dimension of the act of being is not accidental to the being in question, but is a constitutive element of the act of being itself.'²⁷² A person's self is made up of actions that are inherently social and relational: 'The self is an activity, a process, which is constituted and enriched by relations.'²⁷³

From this perspective, it is not surprising that atomism, which sees every person as ontologically separate from others, must be rejected. Agius stresses this point when he claims: 'The person is constituted by

²⁶⁹ Agius, Emmanuel, *The Rights of Future Generations: In Search of an Intergenerational Ethical Theory*, pp. 178f.

²⁷⁰ Op. cit., pp. 181-183.

²⁷¹ Op. cit., p. 224.

²⁷² Op. cit., p. 225.

²⁷³ Op. cit., p. 225.

his relations and has no other existence than as a creative synthesis of these relations. Relatedness is the very existence of the self.²⁷⁴

However, one important question is how this comprehension of the self is at all compatible with the idea that humans have specific identities. If everything is changing, how can a person conceive himself as a unity over time? Agius' response is that even if the self is constituted of acts and relations and therefore dynamic, there must be a completeness that fits both historical occasions and the present. This could either be understood as if there is a core of the self that is present in every relationship, or that there is a certain structure that fits both history and the present. In the light of the dynamic character of Whitehead's metaphysics the latter seems the most reasonable interpretation.

Moreover, Agius uses Whitehead's metaphysical theory to redefine our understanding of mankind, nature and God. Agius claims that there are several reasons why such redefinition is necessary.

In relation to mankind, Agius states that we have a growing experience that we are not only related to our contemporaries but also to our posterity. Relationships are both intragenerational and intergenerational in the sense that they extend into both space and time. This insight is also linked to the fact that we have an enormous capacity to affect the lives of posterity.²⁷⁵ The idea behind this unity of mankind is that the connection between all actual entities is mirrored in the connection between different parts of society. The same kind of relatedness and process that guides the microscopic level will also guide the macro level.²⁷⁶

In regard to the natural environment, Agius claims that it is no longer possible to view nature as a mere object. Science has revealed that nature is not static or dead, but in a process of becoming. Nature is perceived as a web of interrelationships. This means that what occurs in one part of nature might affect other parts. Moreover, it is apparent that most resources are finite.²⁷⁷

Another reason why mankind can not be separated from nature is that nature, as well as humans, is made up of actual entities. These entities are grouped together into societies that are organized after a

²⁷⁴ Op. cit., p. 227.

²⁷⁵ Op. cit., p. 221.

²⁷⁶ Op. cit., p. 267.

²⁷⁷ Op. cit., pp. 221f.

common feeling. Trees, rocks, animals and humans are constituted in the same way in the sense that they are individual enduring objects. Also, there is no straightforward difference between non-living and living enduring objects; they are all part of an interconnected reality. It is therefore impossible to abstract any part from the totality. To say that nature is valueless would imply that humans too are without value. But the most important point is that all actual entities are the subject of experience, which is the source of value. The conclusion is that everything that exists has value. Agius also believes that the destruction of nature restricts its diversity and complexity, which will reduce the amount of value in the world.²⁷⁸ Also, both the richness of experience of human beings, and their bodies are dependent on the quality of the environment. Nature provides both inputs for experiences, and absolute necessities for physical survival.²⁷⁹

Finally, Agius also argues that it is necessary to redefine God, especially in response to questions like: How does God act in history? How is God connected to the future of mankind? Can God alone guarantee the survival of the human species?²⁸⁰ One of Whitehead's insights was that God can not be totally different from the overall metaphysical system, but must share the fundamental insights of the system. This involves the claim that God shares a similar characterization with that of actual entities.²⁸¹ Of special importance is how God relates to potentiality in the world, and God's persuasive agency in the world.

Concerning potentiality, Agius states that the potentiality (the eternal objects) must be situated somewhere, because they have a continuous importance and relevance in the world. Accordingly, the eternal objects are part of God's non-temporal nature. This means that God has knowledge of all the possibilities for the world, and works towards their realization.²⁸² The eternal objects are graded in God's nature in accordance with their relevance to each other, and to their capacity for creative advance of the world. This order provides an initial aim for each actual entity. It is here God's acting begins. God

²⁷⁸ Op. cit., pp. 253f.

²⁷⁹ Op. cit., p. 257.

²⁸⁰ Op. cit., p. 221.

²⁸¹ Op. cit., p. 281. Agius mentions that there are different views on how God should be characterized. Hartshorne, e.g., sees God as a society of actual entities similar to a human person.

²⁸² Op. cit., p. 283.

provides an impulse for the best kind of acting, but every actual entity must choose to follow that aim. God's aim with the creation is to increase the value of the world's events. This means that both the depth, and the intensity of valuable experiences in the present and the future should be maximized.²⁸³ By providing every actual entity with an aim, God tries to lure the world, and humanity, into reaching the optimum future, the best possibilities.²⁸⁴

Agius' Theory and Responsibility to Future Generations

Justification for Responsibility

As we saw, Agius claims that it is necessary to redefine how we conceive human society. Individuals can not be separated from society, and different societies can not be separated from each other. There is a global community and an intergenerational *community of mankind*, i.e. neither space nor time constitutes morally relevant borders for this community. This community shares a *common good*. The idea behind this redefinition is to integrate future generations into our conception of society, which explains why we have certain responsibilities towards them.

As opposed to de-Shalit, who focuses on how a community shares a specific debate, moral similarity and cultural interaction, Agius grounds the transgenerational community on the ontological relations between humans. This relation will of course also include both the cultural and biological heritage, in the sense that all humans build their societies partly on past societies, and that humans are genetically linked. Specifically, Agius claims that we should consider mankind to be one ontological unity that includes all past, present and future generations.²⁸⁵

The background for this idea is that process philosophy defines a person as a network of relationships that constitutes his or her very being. We can not abstract a human from his or her society, which

²⁸³ Op. cit., pp. 284f.

²⁸⁴ Op. cit., pp. 287ff.

²⁸⁵ Op. cit., p. 294.

means that humans are inherently social and it is wrong to accept an atomistic perspective.²⁸⁶

Moreover, according to the metaphysics of process philosophy, actual entities can be organized in ‘societies’. A ‘society’ is a collection of actual entities that have a common feature, which Agius calls a *common form*. This is mirrored on the level of human society. If we take a nation as an example, it is characterized by a common culture and language that distinguishes it from other nations and this conditions all the members of this community. Another aspect is that this common form arises by each member’s prehension of other members. Culture is transmitted to every member through social interaction, i.e. socialization. A third aspect of ‘society’ is that the members’ identity is shaped, or conditioned, by their membership. This reproduces the common form. This general characterization of society is used by Agius in a number of different ways. He concludes that there is an interdependent relationship between the community and the individual; they are necessary for each other.²⁸⁷

The idea of an intragenerational and intergenerational community of mankind is supported by the claim that every society is related to all other societies because of the relational network between them.²⁸⁸ Moreover, each society is constituted by its history and its future. It is impossible to abstract one society’s history from the history of other societies because their history is interrelated. In a similar manner, it is impossible to abstract one society’s future from the future of all other societies. Agius claims that the best way of viewing them is to see them as an integrated whole, a global and intergenerational community of mankind.²⁸⁹

Another important claim is that the common good can not be reduced to the good of a specific society or even the global community. It is impossible to abstract any specific idea of good and make it general. The ultimate community for humans is mankind, and it is on this level that the common good must be found.²⁹⁰ This idea presupposes that it is possible to move from the description that reality

²⁸⁶ Op. cit., p. 260.

²⁸⁷ Op. cit., pp. 261-263.

²⁸⁸ Op. cit., pp. 276-278.

²⁸⁹ Op. cit., pp. 278-280.

²⁹⁰ Agius, Emmanuel, ‘What Future for Future Generations? A Whiteheadian Intergenerational Ethical Perspective’, pp. 260f.

is characterized by interrelatedness, to the normative conclusion that we all ought to bring about better experiences for everyone.

Agius claims that the common good has to include a certain amount of resources, because richness of experiences is contingent on certain material conditions. The accumulation of social wealth (like practical knowledge, science, culture and technology) increases the reservoir of the common good. Moreover, it is possible to enlarge the common good with things that until recently were not considered to be part of the common good, like nature and natural resources.²⁹¹ The argument in support of this inclusion is that nature can enhance the richness of experience.

Values

Agius' discussion about responsibility towards future generations presupposes that it is possible to move from the description of the ontological unity of reality, to a normative conclusion. Accordingly, instead of just stressing the importance of some values, e.g. well-being and equality, process philosophy provides a unique understanding of reality which explains the step from 'is' to 'ought'. It is therefore necessary to start with his comprehension of value before we can consider what values he in fact promotes.

Agius claims that the ultimate source of value is the experience:

... all organisms have some degree of intrinsic value and this intrinsic value is located in experience. To be an occasion of experience is to have value. But experience varies in richness and intensity, and accordingly, there is more value in those experiences that are richer, more harmonious, and more intense.²⁹²

Apparently, all actual entities are valuable because they have experiences. But those experiences that the most valuable experiences are those that are richer more harmonious and intense.

Moreover, actual entities share some degree of freedom, but the range of possible experiences directly corresponds with the degree of freedom and potentiality to bring about more value. Those actual

²⁹¹ Agius, Emmanuel, *The Rights of Future Generations: In Search of an Intergenerational Ethical Theory*, pp. 328f.

²⁹² Op. cit., p. 207.

entities that have a lesser degree of freedom are more dependent on the past and are therefore less valuable.

Higher amount of freedom makes it possible to achieve more value and attain grater experiences. Because of their consciousness, humans are also the kind of entity that has the greatest freedom to create new and novel value. It is therefore sensible that humans have a special status compared to other actual entities.²⁹³ One can also conclude that humans are the species that are capable of experiencing the *richest, most harmonious, most intense and widest range* of experiences.

The question of value also accentuates the important aspect of the relationship between the individual and the society. Process philosophy claims that every individual's dignity should be defended because the total value of the society is dependent on the value experience of every individual. Value is located in individuals and not society as such. However, even if one assigns rights to individuals, the rights of the individual can not be absolute; there are needs for mutual adaptations between individuals.²⁹⁴

Given this background, it is easier to understand why Agius claims that the best, or most beautiful, society is the one where the parts work together towards a common end. A society is characterized by beauty if its different parts show mutual adaptation and become integrated in a harmonious whole.²⁹⁵ What represents this harmonious whole? The answer is the common end of mankind, which is the enrichment of experiences of every member of the species.²⁹⁶ Agius writes:

...the common good is that order in the community of mankind by virtue of which, every present and future member of the human species can enjoy the possibility of achieving richness of experience.²⁹⁷

The idea is that the range of possible experiences is included in the common good. We should act in ways to expand these experiences. We ought to establish an environment that makes it possible for all humans to live a life filled with 'a harmonious and rich experience'²⁹⁸.

²⁹³ Op. cit., pp. 239-243.

²⁹⁴ Op. cit., pp. 264f.

²⁹⁵ Op. cit., pp. 263f.

²⁹⁶ Op. cit., p. 327.

²⁹⁷ Op. cit., p. 327.

²⁹⁸ Op. cit., p. 327.

It is also noteworthy that Agius appears to accept the idea that civilization is actually becoming more and more harmonious, i.e. mankind is actually making progress towards the goal of reaching rich experiences. Progress could at least be made if people start to pursue the common good instead of their private ones.²⁹⁹

Based on all this, it is possible to claim that Agius' theory is both *perfectionistic* and *universalistic*. It is perfectionistic because it provides one specific ideal for what constitutes a good world and a good life. Agius accentuates that a good society should include a harmony between individuals and groups, but also a harmony between mankind and nature. Both culture and nature shape people's experiences.³⁰⁰ The theory is also universalistic, in the sense that every human being ought to accept this ideal. Every person will achieve his or her highest experiences by striving to maximize the experiences of the whole of mankind. There can be no conflicts of interests; the common good *is* the individual good.³⁰¹

Finally, it is important to consider how Agius comprehends the relation between persons and values. The answer is that future generations are real in the sense that the future is already an immanent part of the present. The present holds all the possibilities of the future, possibilities that the future must conform to. Future generations are objectively real even though they are not yet actual.³⁰² He claims that: '... though future generations do not yet exist, they are still real in so far as they will come to exist in the future.'³⁰³

Even if there is a theoretical possibility that we could stop to procreate, Agius considers that to be a highly unlikely scenario that should not affect our responsibility. Instead, future generations have a status of being 'epistemologically possible', they are likely to exist in the future. And moreover, the identity of future generations is irrelevant. Our responsibility is towards the people that might be affected by a policy, not to some specific people.³⁰⁴ This is basically Ariansen's position, which was mentioned in chapter one.

Also, Agius follows Annette Baier and claims that future generations have a status similar to the future states of each person's

²⁹⁹ Op. cit., pp. 304f.

³⁰⁰ Op. cit., pp. 257-264.

³⁰¹ Op. cit., pp. 314-316.

³⁰² Op. cit., pp. 238f. and p. 341.

³⁰³ Op. cit., p. 341.

³⁰⁴ Op. cit., pp. 129-136. Agius refers to an idea put forward by Trudy Govier.

self. There is no guarantee that there will be a future self but that does not stop us from caring about it.³⁰⁵

Responsibility and Collective Rights

Agius claims that each person's responsibility has two dimensions. The first dimension implies the idea that everyone should aim at perfection in every occasion of experience, i.e. we are responsible to our own becoming. This means that every person should strive towards new ideas and values by employing the capacity for creative freedom. Each person ought to aim for more and better experiences. A person must therefore include other perspectives in order to enrich his or her own experiences. Each of us must consciously strive to avoid stagnation, either in the form of suffering, or in the form of loss of experiences. A person, who intentionally aims to reduce his or her experiences, trivializes life and acts irresponsibly.³⁰⁶

The second dimension states that each individual should also increase the intensity and harmony for the rest of reality. Everyone ought to reach the highest form of moral beauty in every occasion of experience, because it will contribute to the moral beauty of the universe. Each person is part of a creative process aimed at reaching a maximal beauty and harmony for the world.³⁰⁷

The profound relatedness of reality gives the second dimension extensive implications. The creative process is not bound to specific generations but includes all generations. The argument for this is that even though everyone has individual aims, these aims take on an objective character when we act and start to influence other people. A specific act can not be abstracted from reality, because each act affects the whole network of relations. Or, put differently, the future of one human can not be separated from the future of mankind. The conclusion is that each person has a responsibility to aim towards

³⁰⁵ Agius, Emmanuel, 'What Future for Future Generations? A Whiteheadian Intergenerational Ethical Perspective', pp. 250f. This is an argument put forward by Baier in Baier, Annette, 'The Rights of Past and Future Persons'.

³⁰⁶ Agius, Emmanuel, *The Rights of Future Generations: In Search of an Intergenerational Ethical Theory*, pp. 306-308. Agius, Emmanuel, 'What Future for Future Generations? A Whiteheadian Intergenerational Ethical Perspective', p. 258.

³⁰⁷ Agius, Emmanuel, *The Rights of Future Generations: In Search of an Intergenerational Ethical Theory*, p. 309. Agius, Emmanuel, 'What Future for Future Generations? A Whiteheadian Intergenerational Ethical Perspective', p. 257.

what is good in the long run for all members of the human species, including himself or herself.³⁰⁸

Formulated as an obligation for a given society, the second dimension of responsibility implies that

Every society, since it is related internationally and transgenerationally, should direct its efforts to the well-being of all civilizations and to humanity as a whole.³⁰⁹

Also, in the same way as a person can not be separated from mankind, mankind can not be separated from nature. Our actions can harm and destroy nature as well as future generations, and it is therefore reasonable for us to have a responsibility not only to future generations, but also to nature generally. According to process philosophy, it is not permissible to act in such a way that threatens the total integrity of nature. It is the sheer scale of human destruction of nature, and whole species, that is the problem, not individual destruction, like the killing of an individual animal.³¹⁰

Given this background, that every person has an obligation to strive towards the highest experiences for mankind, what ought we to do for future generations?

According to Agius, the key concept is social justice. The reason for this is that the subject of social justice is: ‘...duties of individuals towards the community to which they belong and vice-versa.’³¹¹ Process philosophy claims that the human community is a community that transcends both space and time; all humans are part of the same community. Clearly, this redefinition of the community changes the scope of social justice. Based on this, Agius proposes that the most promising way of expressing this moral relationship between individuals and the community of mankind is by a new system of duties and rights.³¹²

Consequently, we have certain obligations towards future generation because they have rights. It is noteworthy that these two concepts do not presuppose each other. In the previous three chapters,

³⁰⁸ Agius, Emmanuel, *The Rights of Future Generations: In Search of an Intergenerational Ethical Theory*, pp. 310-316.

³⁰⁹ Op. cit., p. 279.

³¹⁰ Op. cit., pp. 316f.

³¹¹ Op. cit., p. 329.

³¹² Op. cit., p. 334.

all philosophers claimed that we owe future generations something, without using the concept of rights.

Agius does not consider it to be a necessary condition that a rights holder ought to be able to claim his or her rights. A person does not need to claim his or her rights directly, instead, some other party might claim the rights on behalf of that person.³¹³ Social justice demands that we appoint some kind of guardian for future generations. This guardian should have the mandate to protect the interests of these generations.³¹⁴

Concerning the rights of future generations, it is interesting that Agius sees no real opposition between our and posterity's interests. Instead, all humans, present and future, are part of a collective entity that is the subject of rights, mankind. Mankind is inherently one, and no generation has a stronger claim than any other. Agius states that

...the rights of future generations are, quite literally, our rights, as soon as we perceive ourselves as members of the human species. Both the present and future generations have the same rights, since all existing and potential human persons are members of one collectivity whose rights are common to all generations.³¹⁵

This claim implies that we will change our comprehension of rights when we come to consider ourselves as part of mankind. We will come to understand that every human has the same rights.

What rights does mankind have? Agius claims that mankind has two collective rights:

- a. Just as the first of the rights of every man is the right to life, so the first of the collective rights of the human species is that of survival.
- b. The second is that the "collective heritage" of the human species should not be appropriated by any part of mankind, but managed on behalf of the species as a whole.³¹⁶

³¹³ Agius, Emmanuel, 'What Future for Future Generations? A Whiteheadian Intergenerational Ethical Perspective', p. 251.

³¹⁴ Agius, Emmanuel, 'Obligations of Justice Towards Future Generations: A Revolution in Social and Legal Thought', in Agius, Emmanuel et al. (eds.), *Future Generations and International Law*. Earthscan Publishers, London, 1998, pp. 11f.

³¹⁵ Agius, Emmanuel, *The Rights of Future Generations: In Search of an Intergenerational Ethical Theory*, p. 341.

³¹⁶ Op. cit., p. 342.

The first right implies that no generation has the right to exterminate the human species. Moreover, this right implies that there must exist an extensive system of international legal instruments to regulate such actions that can become a threat to humanity's existence. The diversity and unity of mankind must be preserved and nuclear war is absolutely prohibited. There must also be some international cooperation to regulate the storage and disposal of nuclear waste in order to prevent genetic damages.

The second right implies that all human generations, future and contemporary, have a right to enjoy a richness of experience. This is realized by the implementation of the common heritage idea. The common heritage includes living resources, like the sea, and the vast cultural heritage, particularly science and technology.³¹⁷

Practical Questions

Agius' response to the seventh analytic question, who should be responsible towards future generations, is that

Every member, society and generation has an obligation to promote the creative advance of mankind.³¹⁸

This is a normative claim with two sides. The first is that everybody has a personal obligation to promote the advance of mankind. We should all aim for something better for our species, towards a greater common good.

...mankind demands from all its members the responsibility to enhance, promote and enrich the cumulative advance of the common good of the human species.³¹⁹

Again, this claim has significant personal implications. No one seems to be left out of the collective goal. Every human capable of moral action is included in the sphere of responsible agents.

However, even if all of us share the same responsibility, there are some people that are disadvantaged; mostly people in poor countries and future generations. These two groups can not take responsibility

³¹⁷ Op. cit., p. 343.

³¹⁸ Op. cit., p. 340.

³¹⁹ Op. cit., p. 340.

to the same degree because the first group lacks resources to do more than to just survive, and the second can not change the world it inherits. Agius claims that the interests of these two groups coincide, they are both sensitive to the activities of those who live in the richer countries. It is therefore imperative that we in rich countries help both these groups by making larger contributions to the common good, e.g. by increasing both investments and savings. Investments and savings will increase the resources available for future generations, but it will also benefit the poor. Instead of consuming resources in poor countries, rich countries will invest in these countries in order to gain the largest returns.³²⁰

The eighth question concerns the time-limits of responsibility. Agius' response is that there can be no specific time-limit after which we have no moral ground for caring about future generations. This is a natural conclusion of Whiteheadian metaphysics. If everything is related to everything, the past, present and future can not be fully defined distinct from each other; there seem to be no reasons why our concern for future generations should stop after a specific period of time.³²¹ We have a responsibility towards every generation that will come after us. The existence of the species, and those structures which are necessary to uphold its continuation, should be maintained for as long as possible.

The ninth question concerns our limited knowledge about the future. Agius does discuss the limitations of human knowledge about the future and says that responsibility requires foresight. The future is not a blank page and 'Before taking any decision whatsoever, we are therefore obligated to consider all possible consequences on the future which might follow from it.'³²² This foresight is important because our increased power has a greater tendency to cause both more benefits and more harms. To be responsible implies that we should only proceed with social policies when we have considered all possible consequences. This also implies that we should try to reach a deep understanding of our present condition so that we can learn how it affects the future.³²³

³²⁰ Agius, Emmanuel, 'What future for Future Generations? A Whiteheadian Intergenerational Ethical Perspective', pp. 251f.

³²¹ Op. cit., p. 259.

³²² Agius, Emmanuel, *The Rights of Future Generations: In Search of an Intergenerational Ethical Theory*, p. 323.

³²³ Op. cit., pp. 323f.

Evaluation of Agius' Theory

Process Philosophy and Future Generations

Whitehead's idea that every individual, every plant and animal is inherently connected to each other seems to be reasonable, at least as a descriptive claim. It makes it easy to understand the connection between generations, they are ontologically tied to each other.

The problem is that the step from Whitehead's metaphysical theory to a social ethical theory is much grater than Agius seems to acknowledge. How should the ontological relatedness give us insights into how we are to act towards future generations? According to Agius, these insights make it possible to identify a common good for mankind as a species. This means that our own private and collective goods are somewhat misguided. Instead, we should accept that we are related to the whole of reality, and we should all pursue the common good.

One obvious motivational benefit of accepting Agius' theory is that it trivializes the question: Why should I do anything for future generations? If everything is related to everything else, the reason why we should care about future generations is similar to why we should care about ourselves. And it is superfluous to stress that we should care about ourselves because most people seem to do this anyway.

The Collective and the Individual

What then is the moral status of future generations? Agius claims that our own interests and beliefs must be adjusted to acknowledge the interrelatedness of reality. However, this relatedness implies that we can not abstract ourselves from future generations and they can not be abstracted from us. One conclusion is that the moral status of future generations must be the same as our own. Their status must also be independent from our own interests and beliefs because those are misguided.

Agius' theory seems to imply that both our moral status and that of future generations is dependent on how we all affect the total amount of beauty of in the world. As long as we, or future generations, add our experiences to the world, we are very valuable, but if we do not, our value decreases. Does this imply that someone who consciously

strives towards more trivial experiences has another and lesser moral status? One interpretation is that the moral status of some individual or group is contingent on the actual contribution they make to the beauty of the world. This claim might be of little practical importance, because we could still believe that some moral status is enough to be protected from the actions of other people.

However, the idea that the value of an individual is in some sense dependent on his or her ability to contribute to some common project is controversial. Individuals are usually considered valuable independently of their contributions. Of course, there is no need to claim that future generations consist of individuals, we might as well consider them to be a faceless collective. But we can not be treated in the same way because we are obviously individuals. This would imply that if Agius wants to include both us and future generations in the same ethical theory, he must acknowledge that it is possible to assign moral status both to individuals and to collectives.

However, Agius also claims that the individual is the source of intrinsic value, which could be one reason for moral status. It would then be strange for Agius to claim that a group can have the same value as an individual. It seems that the idea of moral status of individuals is incompatible with the characterization of future generations as a collective, which might seem incoherent.

An answer is to claim that moral status is tied to a position in a network of relations. We occupy identified positions in this network, which makes it reasonable to consider us as individuals. Future generations, in the form of future individuals are unknown. However, we can still talk about them as having moral status because they could occupy a position in the network. This seems to be the idea presupposed in Agius' value theory, which Ariansen also develops. On the other hand, it might be possible to adopt this comprehension of relations without accepting Whitehead's metaphysics.

Whatever our moral status and our place in the network of relations, we must still consider what the aim for this network is. Agius provides us with an answer, to maximize the beauty in the world, the common good. Arguably, if we all come to accept that we are mistaken in our personal strivings and that we should instead strive towards the common good for mankind, many problems would disappear. At least in the sense that future generations' good is our good, and our good is theirs. We are just different generations that

should want the same thing. Of course, that we want the same thing is empirically false. We do not, and we have no grounds whatsoever to assume that it could happen peacefully.

The common good of mankind can still be reasonable as a normative claim. However, even as a normative claim it is utterly unrealistic.

The Common Good of Mankind

Agius's idea of the common good is incompatible with moral pluralism. According to the second evaluative criterion, the world is characterized by moral pluralism. Of course, this is a descriptive claim and it is possible to deny its normative relevance. I believe that it has normative relevance because it should make us sceptical about the idea that there is some common good for mankind. And if there is a common good, it must be compatible with many interpretations. It is just too optimistic to believe that we can ever accept just one idea of the common good without massive bloodshed, where one group establishes its interpretation with the use of violence. As long as we want to avoid that, we must acknowledge pluralism also in the normative sense.

Although Agius's theory is based on the idea that the world is constantly changing, it is less compatible with moral pluralism that one could hope for. Values can of course change. But that change is evaluated in relation to one given standard, which is the common good. Interestingly, the idea of the common good is not only that it is common for all mankind, but also that there exist no other good. We are all mistaken in our private or collective endeavours and must instead always pursue the good of all mankind. This is a very strong claim, which seems difficult to sustain given moral pluralism.

Even if one really believes that there is a common good, it is difficult to ignore the pressing fact that people seem rather unwilling to agree about what this good actually consists of and how we ought to achieve it. The implication is that there seems to be no difference between fighting a fascist regime or blowing up innocent children. The key issue is whether the acts will increase or decrease the common good. However, it seems that the common good has a tendency to distort real conflicts between individuals and groups, and means and ends.

Accordingly, we could all accept that future generations are real, but we can disagree about what ought to be done. If the only criterion for the right choice is that we should choose to bring about the order that makes it possible for present and future humans to achieve richness of experience, it is difficult to see what we should in fact choose, and even more difficult to claim that someone uses the wrong means towards it. If Whitehead's metaphysical theory has these implications when it is reinterpreted as a social ethical theory, there are strong reasons to reject his metaphysics.

However, there is also the question of the gap between Whitehead's metaphysics and Agius' social ethical theory. Obviously, an ethical theory needs some criterion to determine what is right and wrong. But it is difficult to determine which criterion is the right one. To say that some things increase experiences more than other things imply a substantial normative claim. E.g., the claim that 'nature increases the possibility for experience' is a normative claim that indicates that something is good. But this claim might be incompatible with the claim that 'man should improve nature when there is a greater possibility that this will increase mankind's experiences of it'. Which claim is the right one? It is necessary to have an independent criterion.

The point is, even if we agree that everything is interrelated with everything else, this does not give any specific social ethical insights without some more specific normative claims about what is more important. This implies that Whitehead's metaphysics must include some other kind of normative theory that specifies both which values and which principles should guide our actions towards future generations. Moreover, it is also possible to derive other principles or rights from the same metaphysics. This means that Agius faces the problem of conflicting ideas of the common good that might be based on the same theory.

Another limitation concerns the teleological characteristics of Agius' theory. According to his theory, reality is characterized as interrelated and as a process with a clear goal: The maximization of value, or specifically, of experiences. But this goal is very general. One can as well claim that, even if that is the ultimate goal, it can only be attained through a combination of lesser goals. Who should then determine these goals? Possibly, there could be many ideas about that too.

A conclusion from this discussion is that the common good, as Agius sees it, is just too incompatible with the criterion of moral pluralism. It must therefore be rejected. The idea of a common good might still be reasonable, but it must be flexible enough to be compatible with different interpretations in order to be compatible with moral pluralism.

Creative Freedom

One of the more promising aspects of Agius' theory concerns the characteristics of humans. Even if our experiences are the same kind of experiences as that of all other actual entities, there is a huge difference in degree. This has a profound effect on what humans can accomplish.

Because humans are conscious beings they are not as bound by the past as other entities. Obviously, humans too, are bound by the past; there are no totally free subjects. The difference is that humans can transcend themselves from the past to a much higher degree than other entities.³²⁴ Consciousness gives humans a creative freedom to do things that can not be predetermined or foreknown, even by God. Agius states that 'Creative freedom is the hope for the future, which remains an open horizon...'³²⁵

Creative freedom is a fruitful idea because it can explain why many of us feel that the repugnant conclusion is repugnant. This is because it recommends a policy that destroys the openness of the future. And it makes it morally obligatory for us to claim that a reduction of individual welfare is something good. From Agius' perspective, such deterioration must be unacceptable. This argument is similar to Parfit's perfectionism. The difference between them is that Agius provides a whole metaphysical theory in order to support his argument.

Also, creative freedom fits surprisingly well with de-Shalit's theory about the characteristics of the democratic process. According to de-Shalit, a community is partly characterized by an ongoing debate about which values the community should endorse. de-Shalit makes it a normative demand that there should be such a debate. Possibly, one can claim that creative freedom and openness to the future is the

³²⁴ Op. cit., pp. 243-246.

³²⁵ Op. cit., p. 245.

precondition for this debate. And the reason why this openness is so important is that humans live in a world of change and a static comprehension of the good life, or of value, is incompatible with such a world.

It is not necessary to accept Whitehead's metaphysics in order to note that the world is changing; it is enough to claim that there are processes in the natural world that affect mankind. As long as these processes continue to make some kind of impact on humans, it is necessary for mankind to be open for change in values, epistemology, culture, religion or any other human phenomena, artefact or activity.

Normative Claims and Collective Rights

A beneficial aspect of Agius' normative claims is that they focus on resources instead of on welfare. As we have seen, it is problematic to associate normative claims to some idea about well-being, because future generations will probably not share that idea. Taking moral pluralism seriously implies that future generations might accept both other values and ideas about the good life.

Instead, it is more beneficial to protect the preconditions for many different ideas of the good life, i.e. resources. There are obvious connections between Agius' idea about collective rights to a common heritage and Barry's idea about equal opportunity for resources.

A more difficult aspect is the idea of collective rights generally. Rights are usually used in the protection of individuals from different intrusions from other people. Rights protect individuals from being considered to be, and used as, instruments for reaching other goals. There are some problems connected with the extension of this subject to cover groups generally and mankind specifically.

Is it possible to reconcile the rights of an individual with the rights of a collective without facing problems concerning priorities? Obviously, it is not difficult to find examples of individuals that have beliefs and ideas that are incompatible with those of other individuals and groups. How should we regard the beliefs of these individuals when they are acting in a way that is incompatible with their rights as parts of humanity?

This seems to imply that I can be the subject of rights, but also act against my own rights. However, this is a strange notion, we do not usually claim that an agent can act against his or her own rights. An

agent can usually waive a specific right, like the right to vote, in a particular election. But is it reasonable to say that one can waive the rights of humanity? That would be incompatible with Agius' theory, because those rights are the most important part of our moral relationship with future generations. This means that contemporary individuals have rights that they can not waive, and that these individuals can have beliefs that are incompatible with these rights.

Concerning these problems, Agius would respond by saying that the idea of the rights of mankind is that any part of mankind can make claims against another part. It is not reasonable to say that we can make claims against ourselves, but it is reasonable to say that future generations can claim things of us. Even if all of humanity is the subject of rights, it is when one part of humanity is in a position to harm another part, that the rights are relevant.

However, there are some other problems with the idea of collective rights, the first is the question about who should define them. Agius seems to argue for some kind of common good, but why should anyone accept his idea of the good human life? The problem is that his theory is too tied to a specific metaphysics. Many could probably accept that the rights of mankind are good ideas, but few might accept their metaphysical basis.

Another question is whether the normative claims of the collective rights could be expressed in another way that preserves these claims. It seems that one could accept Agius' claims but reject the use of the rights language. The reason for this is that rights are so embedded in a certain individualistic conception of morality and it is therefore better to express the same ideas without using the term rights. Barry's idea that we owe future generations equal opportunities for resources seems to capture the normative content of the collective rights without using the rights language. Both Agius and Barry claim that mankind ought to exist in the future. Both also claim that there are some things in life that all humans should get the chance to experience.

I conclude that the use of rights language has no inherent benefits and can be avoided when we speak about what we owe future generations. The normative content of responsibility towards future generations can as easily be expressed in forms of equal opportunities.

Agius' Answers to Practical Questions

As a response to the seventh question, the character of the common good makes everyone responsible to promote it. Agius also stresses that our rich contemporaries have a special responsibility to do this. However, even if I agree with this claim, I am not convinced that the interests of the future generations in rich countries actually coincide with the interests of poor contemporaries.

Agius' argument is that the rich would benefit most from their investments if they invested in poor countries. This claim might be empirically true, but it misses the question of power. Why should those in the rich countries invest in poor countries if they know that this will also make their own descendants end up in a relatively weaker position? This seems to presume that the rich have already come to accept that there is a common good for everyone, and that we should all promote it. On the other hand, the rich might benefit the poor for instrumental reasons, in the sense that it might be a necessary evil in order to safeguard the well-being of their own descendants. However, this is a contingent fact. If the rich come to the conclusion that they can safeguard the well-being of their descendants without helping the poor they might as well do that.

The point is that the interests of some future generations might not coincide with those of poor contemporaries. Instead, it seems that the rich countries must come to a conclusion about whose interests they ought to prioritize, their own future generations (at least the close ones), or all future generations (even the remote ones) and the poor living today. We must acknowledge that we in the rich countries face a real choice about whose interests are most important. Of course, if we all accept Agius' idea of the common good the answer is simple. The rich countries' responsibility is to contribute more, both to the present poor and to all future generations.

Agius' answer to the eighth question is more reasonable. It seems difficult to claim that responsibility covers only a specific period of time due to the arbitrariness of placing a specific time limitation on it.

Concerning the ninth question, Agius makes an important point. We should not act before knowing. Of course, there are many things we do not know about the future, which can not be known at all, the actions of future generations might be the most important. Another point is that our actions might cause effects that are impossible to

determine or imagine. This is a problem of unknown or indeterminate risks. How do we handle these?

One way is to follow Barry's theory and claim that we should refrain from distributing known risks in an asymmetrical way. This makes it irrelevant to determine the size of the risk. A second response is to act, but try to integrate different protective measures that could reduce or mitigate harmful effects. The problem with this second response is that the safety margins might be faulty or too limited. However, due to the fact that Agius does not give a specific answer to which response is appropriate, it seems that his theory could be compatible with both of these responses.

Agius' Theory and Nuclear Waste

Turning first to the hazard of nuclear waste, Agius would make the following explanation why we should avoid exposing future generations to this hazard: We are responsible for the well-being of every future generation because we are part of the same network of relations. We are obligated to try to bring about a higher degree of enriched experiences for future generations and it is difficult to see how this is compatible with nuclear waste hazards. As long as we know that we might create hazards for future generations by using nuclear power, we are acting irresponsibly.

Turning to the subject of risks and nuclear waste, Agius makes it abundantly clear that we should consider all possible future effects of our actions. We know that the waste is hazardous and we know that it is hazardous for a very long time. On the other hand, we also know that we can not totally avoid doing something with the waste. The issue is to find a morally acceptable way of handling risks. And there seem to be only two alternatives, either to try to avoid transferring any risks or to develop protective measures that might mitigate possible leakage of the waste.

However, Agius does not make any specific claims about the legitimate and illegitimate transfers of risks. It seems that Barry still provides the best answer to such questions. It is just wrong to transfer risks onto people that have not benefited from the activities that generated risks and have not consented to the exposure of risks.

Conclusion

Agius' justification for our responsibility towards future generations is based on a radical metaphysical theory. He stresses that we are connected to future generations through the relational character of reality. However, because of his metaphysical framework, there are some strange moral implications of his theory.

Concerning values, it seems that Agius' theory is totally incompatible with moral pluralism. He provides a vision of the common good that distorts real differences between humans. Nevertheless, a more promising idea is that responsibility could be aimed at safeguarding a process of creative freedom, which could provide some flexibility for what is valuable.

In addition, when he discusses normative claims, Agius focuses primarily on resources. This avoids the problem with changing conceptions of well-being, and it is also compatible with the idea that we owe future generations equal opportunities for resources. On the other hand, there seems to be no inherent benefit with the use of rights language to express this normative claim.

Regarding practical questions, it seems that Agius' theory disregards real conflicts of interests between rich future generations and poor contemporaries. Another drawback is that he does not provide an answer to how we ought to handle risks.

Agius does provide an argument for why it would be wrong if future generations were hurt by nuclear waste. However, he does not provide an answer to how we ought to consider the long-time risks of nuclear waste. This makes his theory less relevant to this problem than Barry's theory.

A useful character of Agius' theory is that he manages to integrate mankind into a coherent whole. Not only is mankind itself one community, mankind is also part of all of reality. The problem facing this idea is that it goes too far. The common good becomes too encompassing. It is also opposed to moral pluralism, which seems to be an important feature of the world.

Nevertheless, it would be beneficial to retain the inherent unity of mankind because this could provide future generations with a collective moral status just because they are part of mankind. This idea must also be compatible with moral pluralism, a seemingly difficult achievement! On the other hand, such a perspective would

provide a reasonable justification for responsibility towards future generations.

Hans Jonas proposes a theory that might provide such a perspective. He too claims that both future generations and we are part of an ontological whole, the idea of mankind. However, he does not provide any strong conception of the common good, which could imply that his theory is compatible with moral pluralism.

5. The Idea of Mankind

Introduction

As a person, Hans Jonas (1903-1993) lived a life of changing horizons. He was born in Germany and educated by Husserl, Heidegger and Bultman. He went into exile some years before WWII. Travelling to England and Palestine, he later served as a soldier in the British army. After the war he served in the new Israeli army, but he left Israel to work as a philosophy professor in Canada, USA and Germany. As a philosopher he was among the first who questioned how our technology is used and to what ends it strives.

The primary source to Jonas thinking about responsibility to future generations is his seminal work: *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*. Although it was originally published in German in 1979, it was translated into English by Jonas himself (and David Herr) and published in 1984. This book was a considerable success in Germany, but it has made a more limited impact in countries like Britain and USA. One explanation for this is that these two countries are dominated by the analytical philosophical tradition, while Jonas writes in a phenomenological tradition.

Other primary sources are *The Phenomenon of Life: Toward a Philosophical Biology* (1966), *Philosophical Essays: From Ancient Creed to Technological Man* (1974), and *Technik, Medizin und Ethik: Zur Praxis des Princips Verantwortung* (1985). The last work includes reflections on the practical implications of *The Imperative of Responsibility*. All these books give important insights into Jonas' general theoretical reasoning.

An important secondary source is *Mortality and Morality: A Search for the Good after Auschwitz* (1996) edited by Lawrence Vogel. This is an anthology that was published posthumously and includes articles

in English, that were previously only available in German; these articles extend the ideas from *The Phenomenon of Life* and *The Imperative of Responsibility*.

Background: Phenomenology

Phenomenology is a reoccurring subject throughout Jonas' writing, e.g., in *The Phenomenon of Life*, he asserts:

Although my tools are, for the most part, critical analysis and phenomenological description, I have not shied away, toward the end, from metaphysical speculation where conjecture on ultimate and undemonstrable (but by no means, therefore, meaningless) matters seemed called for.³²⁶

An analysis of Jonas' thinking must therefore include a short introduction to this phenomenological description. This turns the focus on phenomenology generally. Although *phenomenology* is not a unified tradition, one can at least give some general description of its method.³²⁷

The *phenomenological method* involves two steps. The first step is to make a *reduction*. The world is placed between brackets, which mean that one must for the moment disregard whether there is a world outside the consciousness. This move makes it possible to analyse how we experience the world, or how the world is represented in our consciousness. The focus is the *phenomena*, the world as we experience it. The aim is to gain a deeper knowledge of our experience of the world without presupposing its existence.³²⁸

The second step is to make a *description* of the phenomena without any philosophical presuppositions. This makes it possible to attain the true character of experience and avoid some of the problems that philosophy has confronted. These problems are primarily caused by influences from scientific realism. Instead, there are no reasons to accept (or take for granted) a realistic account of the world, which makes humans into interpreters of different sensations that are then

³²⁶ Jonas, Hans, *The Phenomenon of Life: Toward a Philosophical Biology*. Dell Publishing Co, New York, 1966, p. x.

³²⁷ Howarth, Jane, 'Phenomenology, Epistemic Issues in', in Craig, Edward (ed.), *Routledge Encyclopaedia of Philosophy*. Volume 7. Routledge, London, 1998, p. 346.

³²⁸ Op. cit., pp. 343f.

put together in our mind. As an alternative, phenomenology claims that when we see e.g., a table, we do not see several parts that are interpreted by the mind as a table; we see the table as a whole.

Consequently, a phenomenological description of an object is aimed at grasping the whole of the object. There are many aspects implicit in the object. In the case of the table, we have ideas about how it would feel to touch it, to walk around it and its usefulness, etc. All these aspects are implicit in seeing a table and we would be surprised if they were absent. The idea is that theory is secondary to experience, and that scientific theory is different from the actual experience of the world.³²⁹

Moreover, Jonas is not bound to the phenomenological method. He goes beyond it when he formulates an integrated metaphysical theory, which focuses on being, or the organism. This theory is also developed into a response to the problems with technology.

Jonas: A Metaphysical Response to Technology

Jonas is one of the most important critics of mankind's increased entanglement with technology. The problem is that technology has become the ultimate extension of human power over nature. It is much more than a mere tool for humans; it has developed into a force with its own momentum. The collective character of technology and its great importance in human life make it almost impossible to control. Or as Jonas claims: 'Our power has become our master instead of our servant. We must now gain control over it.'³³⁰

This situation is entirely new. Historically, technology used to be a way for humans to overcome different problems with mankind's position in nature. Nature was something that surrounded the small pockets of humanly controlled territory. Nature was not mankind's responsibility; it was large enough to look after itself.³³¹

Today the situation between nature and technology is radically different. Nature is not in charge any more. Mankind, with the help of technology, has totally subdued nature under its power. This raises

³²⁹ Op. cit., pp. 344f.

³³⁰ Jonas, Hans, *Mortality and Morality: A Search for the Good after Auschwitz*. Vogel, Lawrence (ed.). Northwestern University Press, Evanston, Illinois, 1996. p. 109.

³³¹ Jonas, Hans, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*. The University of Chicago Press, Chicago, 1984, pp. 2ff.

questions about humanity's relations to nature, but also about the ethical status of technology. With the increased power and reach of technology it has become apparent that technology is not ethically neutral. Technology has become so important that it has been perceived as the principal form of human development, reaching towards higher and higher goals; it's the new calling for mankind.³³² Even mankind itself has become an object for technology. Questions like the expansion of our lifespan, behavioural control and genetic manipulation signify an unknown territory, and carry profound ethical implications.³³³

Jonas stresses that the core of the problem with technology is the vast excess of our power over our knowledge. Our capacity to predict future effects of our actions has not followed the increased effects of these actions. This information shortage increases the probability that our current activities might cause negative effects for future generations.³³⁴ We need a new kind of ethical theory as a response to this lack of knowledge, a way of thinking that can help us out of this precarious situation, and which can guide our actions in spite of the problems with our enormous power and limited foresight.³³⁵

Technology is such a powerful force that it can only be confronted with norms based on extremely strong foundations, norms that are unquestionable. However, our situation lacks those foundations. Traditionally, religion has provided absolute moral foundations, but these foundations have been destroyed by the ethical nihilism of modern science, i.e. that there are no moral limits to human activities. Jonas does not believe that the answer to technology lies in a revitalization of religion. Instead, the answer must lie in a special kind of ethics.³³⁶ This is the reason why Jonas seeks the response to the threat of technology in an ethical theory based on metaphysical considerations. It is therefore useful to consider how Jonas approaches metaphysical questions generally, before turning to the specific contents of his theory.

A central character of Jonas' metaphysical theory is that it should incorporate the whole human experience, that we are both bodies and minds, without making reductions. This theory should explain both

³³² Op. cit., pp. 9f.

³³³ Op. cit., pp. 17-21.

³³⁴ Op. cit., pp.7f.

³³⁵ Op. cit., p. 22.

³³⁶ Op. cit., pp. 22f.

the threat of technology and provide a response to it. This position is an attempt to avoid the limits of *dualism, materialism* and *idealism*.

Dualism has separated body and mind into totally different substances. The body is in the world and is governed by its natural laws. The mind, on the other hand, is not part of the world and not subjected to natural laws. Dualism can not easily explain the relationship between the body and the mind. How can mindless matter develop a mind? The only empirical evidence we have is that matter can exist without a mind, but there are no instances of a mind situated outside matter.³³⁷ It is therefore difficult to accept that there is a mind (or soul) separated from matter.

Materialism and idealism take radically different and equally extreme positions. They claim either that there is only matter, or that there is only consciousness. Both positions fail, because they can not give a reasonable explanation of each other. Neither can they claim refuge by stating that they complement each other. Jonas says:

Yet precisely our living body constitutes that very self-transcendence in either direction and thereby makes the methodological *epochē* founder on its rock. It must be described as extended and inert, but equally as feeling and willing—and neither of the two descriptions can be carried to its end without trespass into the sphere of the other and without prejudging it.³³⁸

Thus, the living body is the home of experience and the living aspect of the body functions as the criterion of a reasonable metaphysical position; ‘Life means material life, i.e., living body, i.e. organic being.’³³⁹ Materialism is unreasonable because it can not explain life. On the other hand, idealism can not take full account of the body, in the sense that it is finite.³⁴⁰

³³⁷ Op. cit., p. 67.

³³⁸ Jonas, Hans, *The Phenomenon of Life: Toward a Philosophical Biology*, p. 18. *Epochē* refers to the first step in the phenomenological method, where the world is placed between brackets. Husserl calls this standpoint ‘transcendental’. He claims that it is a position outside the world, from where we can contemplate the structures of our own consciousness. The primary structure is the *neomata*, i.e. the structure that makes up the directness of the consciousness. Existential phenomenologists, e.g. Heidegger, would say that the reduction is only partial, not every assumption can be put aside at the same time. Howarth, Jane, ‘Phenomenology, Epistemic Issues in’, pp. 343f.

³³⁹ Jonas, Hans, *The Phenomenon of Life: Toward a Philosophical Biology*, p. 25.

³⁴⁰ Op. cit., pp. 17ff.

Jonas' phenomenological description of human beings attempts to overcome the limitations of these three metaphysical positions. Inspired by the natural sciences, primarily biology, he tries to provide a unifying metaphysical theory. This theory is centred in a description of life as both bodily and conscious. He claims that the mind can not only be a by-product of matter, there must be a closer connection that is more appropriate to the testimonial of life itself.³⁴¹

Another reason for Jonas' investigation of the metaphysical is that he believes that it is possible to derive *ought* from *is*. Jonas claims that even the denial of any possibility to derive *ought* from *is*, is itself a metaphysical position. Although that position often claims to be without any metaphysical considerations whatsoever. E.g., a materialist makes an ontological claim: matter is all that is in the world. However, it is impossible to be certain that the world consists only of matter without accepting a restricted epistemological position about what can be known.

Epistemological reductions are impossible without an idea of what *is*, i.e. some metaphysical position. Thus, a materialist position is metaphysical. It might not claim more than what is necessary, but nevertheless, it does make metaphysical claims. Jonas concludes that it is not necessary to reject the possibility of deriving *ought* from *is*. However, if one attempts to derive *ought* from *is*, one has to face metaphysical considerations right on. One can not hide behind some minimum of assumptions.³⁴²

Jonas' Theory and Responsibility to Future Generations

Justification for Responsibility

As a starting point, Jonas claims that the question about responsibility towards future generations, in relation to the threat of technology, is

³⁴¹ Op. cit., pp. 1f.

³⁴² Jonas, Hans, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*, pp. 43ff.

about which ideas, insights or value-knowledge should represent the future in the present.³⁴³

Jonas believes that it is important to start with the question of mankind's existence. The reason for this is that the non-existing, i.e. possible people, can not make any claims on us. They may have claims on us when they exist, but not before. How then can we be responsible towards future generations?

The answer is that responsibility is grounded in a theory about existence. This responsibility must be different from our more ordinary conceptions of it, as some kind of reciprocity. What is needed is a type of *nonreciprocal responsibility* or duty, something that is not grounded on any idea of compensation or other selfish motives.³⁴⁴

The archetype for all responsibility, even the one based on reciprocal relations, is how we relate to our children. Nature has implanted a capacity in us to recognize a duty to act selflessly towards our children. Children are the paradigmatic case of 'objects' claiming responsibility from us. Children awaken our feeling of responsibility but it is their characteristics, the 'ought' of their being, which is the primary trigger for the responsibility.³⁴⁵

Accordingly, there are two parts of responsibility, one is based on the actual characteristics of the objects of responsibility, like children, and the other is our human character. This other part of responsibility is subjective.

A theory of responsibility, as any other ethical theory, must deal both with the rational ground of obligation, that is, the validating principle behind the claim to a binding "ought," and with the psychological ground of its moving the will, that is, of an agent's letting it determine his course of action. This is to say that ethics has an objective side and a subjective side, the one having to do with reason, the other with emotion.³⁴⁶

This subjective part of responsibility motivates an agent to act in accordance with the responsibility. The feeling or responsibility generates a willingness of the subject to act in a way that sustains the

³⁴³ Op. cit., p. 22.

³⁴⁴ Op. cit., pp. 38f.

³⁴⁵ Op. cit., p. 39 and pp. 130-135.

³⁴⁶ Op. cit., p. 85.

object's claim to existence. The ethical capacity to feel responsibility is part of what makes us human.³⁴⁷

However, even if there are parallels between the responsibility towards children and responsibility towards future generations, the case for responsibility towards future generations is different. There is a general duty to procreate, which is a duty towards 'being'. This means that existence, or being, makes a moral demand upon us.

Obviously, this is an idea that is in need of some more substance. Jonas' general idea is that there are objects that make us responsible, because of their inherent features. When it comes to the existence of mankind, it is not the future generations that make us responsible. Future generations can not make us directly responsible because they do not exist, instead:

... we are, strictly speaking, not responsible to the future human individuals but to the *idea* of Man, which is such that it demands the presence of its embodiment in the world.³⁴⁸

Our responsibility is directed towards *the idea of mankind*, which is an ontological idea, an idea about what should exist, that produces an imperative for the continued existence of mankind.

It is important to find an ontological foundation for mankind's existence because ethics as a field of action is insufficient to provide a sufficient argument for the existence of humans. It can only describe what actions ought to be performed given that future generations exist.³⁴⁹ What is needed is a metaphysical theory that can bridge the crucial step from *is* to *ought*. Jonas attempts to provide such a theory by suggesting a specific theory of value.

Values

Jonas claims that the idea of mankind obligates us to preserve its existence. This presupposes that it is possible to derive that mankind ought to exist from the fact that mankind does exist. Moreover, due to the fact that an extinction of mankind would leave none left to suffer its demise, Jonas must also explain why the existence of mankind is

³⁴⁷ Op. cit., p. 90.

³⁴⁸ Op. cit., p. 43.

³⁴⁹ Op. cit., pp. 43f.

better than its non-existence. The nature of these questions explains Jonas' turn to metaphysics.³⁵⁰

Jonas' idea is that there are two kinds of values. First, there are '*objective*' values, i.e. those that are good-in-themselves. Second, there are also *subjective values*, i.e. the values of people, values of or for someone.³⁵¹ Jonas claims:

Only from the objectivity of value could an objective "ought-to-be" in itself be derived, and hence for us a binding obligation to the guarding of being, that is, a responsibility toward it.³⁵²

The idea is to ground objective value, or the good-in-itself, in being. This objective value will then provide an immanent demand on our actions; it becomes the object of responsibility.³⁵³

However, what does the good-in-itself consist of, or what is it in being that makes us responsible? Primarily, objective values are things that urge the existence of its subject. I.e., if something is objectively valuable, this implies that something should exist or continue to exist. But Jonas takes a step further; he claims that the existence of value, or the capacity for value, is itself valuable.

Jonas develops this idea by establishing a close connection between goal-striving, purpose, and value. Goals are an essential part of conscious life, or for subjects. Moreover, Jonas also maintains that purpose exists on an unconscious level of reality, it is a part of nature. Specifically, the ultimate goal of nature is the survival of life itself.³⁵⁴ All organisms share this drive to continue their existence.

According to Jonas, intuition helps us grasp the fundamental importance of purpose. The principal reason for accepting any value is that goal striving, purpose, is better than the absence of purpose. Accordingly, it is the capacity to strive for goals (whether conscious or not) that is the good-in-itself.

We can regard the mere *capacity* to *have* any purposes at all as a good-in-itself, of which we grasp with intuitive certainty that it is infinitely superior to any purposelessness of being.³⁵⁵

³⁵⁰ Op. cit., pp. 44-48.

³⁵¹ Op. cit., pp. 48-50 also p. 77 and pp. 83f.

³⁵² Op. cit., p. 50.

³⁵³ Op. cit., p. 85.

³⁵⁴ Op. cit., pp. 72-75.

³⁵⁵ Op. cit., p. 80.

This is an intuitively based ontological axiom. This can explain why it is better that something exists than that it does not exist. Purpose is being's claim that continuing existence is better than non-being. It is life's (being's) emphatic opposition against death (non-being).³⁵⁶

However, even if all organisms have purpose, hence objective value, mankind still has a special status. Mankind can choose how to act, to be moral:

Every living thing is its own end which needs no further justification. In this, man has nothing over other living beings – except that *he* alone *can* have responsibility *also* for them, that is, for guarding their self-purpose.³⁵⁷

Hence, the fact that only humans can take responsibility makes other humans the primary aim for this capacity; responsibility is primarily responsibility to other humans. This should not be understood as a devaluation of nature, because there is no inherent opposition between nature and mankind. What is good for mankind includes the existence of nature, partly because nature is a necessary condition for human life.³⁵⁸

Finally, it is also important to consider Jonas' position in relation to Parfit's distinction between impersonal and person-affecting values. This is relatively simple, because Jonas' reason for turning to metaphysics in the first place is motivated by his attempt to come to terms with the objective value of existence generally and the value of mankind's existence specifically.

Jonas claims that the value of mankind's presence in the world can not be determined by any reference to the net happiness over unhappiness.³⁵⁹ The evaluation of the objective value of mankind's presence in the world is independent of the actual lives or interests of humans. This is the explicit endorsement of a position that makes value independent of people's situation, which implies that the value of mankind is impersonal.³⁶⁰

³⁵⁶ Op. cit., pp. 80-82.

³⁵⁷ Op. cit., p. 98.

³⁵⁸ Op. cit., pp. 136f.

³⁵⁹ Op. cit., p. 11.

³⁶⁰ This is also noted by Heyd. Heyd, David, *Genethics: Moral Issues in the Creation of People*, pp. 263-264.

The Imperative of Responsibility

Jonas claims that our responsibility towards future generations entails the following normative claim: ‘Act so that the effects of your action are compatible with the permanence of genuine human life.’³⁶¹

Specifically, this claim includes two obligations:

[Responsibility] charges us, in the first place, with ensuring that there *be* a future mankind – even if no descendents [sic] of ours are among them – and second, with a duty toward their *condition*, the quality of their life.³⁶²

The first obligation refers to the ontological imperative that future generations should exist. Mankind’s existence is the precondition for all other obligations; it is therefore quite reasonable that mankind’s presence is the first obligation: ‘the possibility of there being responsibility in the world, which is bound to the existence of men, is of all objects of responsibility the first.’³⁶³ This ontological basis makes the actual harms and happiness, which humans bring to the world irrelevant. Even if mankind’s existence brings about more pain, our species is obligated to continue its existence.

Moreover, the duty to secure the future existence of mankind includes a duty to procreate. However, Jonas does not believe that there is a duty for everyone to procreate, but that it is a general duty for mankind to procreate.³⁶⁴

The second obligation concerns the quality of future generations’ lives. According to Jonas, there are some types of lives that can not be considered fully human or compatible with mankind’s essence.

A starting point is to note that Jonas argues for the importance of nature. Human power has come to threaten not only mankind itself but all of nature. Although nature has value in itself, because it contains goals, it is also of great value to mankind. Mankind can not be fully human without nature. The mistreatment of nature becomes a threat to mankind’s own essence. We are part of nature, and we have responsibility to all of nature’s beings.³⁶⁵

³⁶¹ Jonas, Hans, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*, p. 11 and p. 99.

³⁶² Op. cit., p. 40.

³⁶³ Op. cit., p. 99.

³⁶⁴ Op. cit., p. 40.

³⁶⁵ Op. cit., pp. 136-141.

According to Jonas, the basic threat to both nature and mankind is the western idea of progress.³⁶⁶ He forcefully rejects the idea that mankind will eventually, some time in the future, become something more than it is now; ideas that say: there is a more 'real' mankind in the future, which is better than both the present and the previous generations. Such utopian ideas distort the fact that the 'real' humans have always been here.³⁶⁷ Also, utopian ideas presuppose a material abundance that is utterly unrealistic. It is impossible to provide the satisfaction of every human need without either drastically reducing the human population or seriously threatening nature itself.³⁶⁸

However, even if Jonas rejects the idea of progress or that there is some final good for mankind, he can still identify situations where humans can not be real, or scenarios where we can make humans less human. Jonas does not claim that there is a specific good that humans can fail to attain. Instead, he claims that the moral aim is to preserve the precondition for mankind's ability to assume responsibility. This implies that we ought to preserve the possibilities of *free choice and spontaneity* for future generations.³⁶⁹ Freedom is the necessary condition for responsibility, it makes it possible for humans to care for each other and for other beings. This capacity to take responsibility is the primary reason why humans have a special place in the world. Also, a temporary loss of freedom might be tolerable, but the permanent loss is never acceptable.³⁷⁰

Responsibility demands a significant change in our lifestyle. It is not possible to increase the global average quality of life (seen as a materialistic and economic increase) without burdening the environment. There are limits to nature's capacity to accept increased pollution and exploitation, etc.³⁷¹ The limitations of nature make it impossible to continue the growth of human prosperity. On the other hand, it is still possible to change the overall distribution of prosperity. Instead of striving towards utopia, we must come to the realistic

³⁶⁶ Op. cit., pp. 160-169.

³⁶⁷ Op. cit., pp. 200f.

³⁶⁸ Op. cit., pp. 186-192.

³⁶⁹ Op. cit., p. 118 and p. 133.

³⁷⁰ Jonas, Hans, *Mortality and Morality: A Search for the Good after Auschwitz*, pp. 104-112.

³⁷¹ Jonas, Hans, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*, pp. 188ff.

conclusion that those that are privileged must provide more for those that are not; some equalization of prosperity is necessary.³⁷²

Generally, the limits of nature lead to a call for modesty. We must reject some lifestyles because they are not compatible with the natural limits and will therefore risk the future existence of mankind. This goal can only be reached if we encourage the development of a feeling (or a concern) for the whole of mankind, including future generations. Only such concern can motivate us to take these actions, which are becoming increasingly important if we are to secure the future existence of mankind.³⁷³

Finally, Jonas acknowledges that the present often has a more binding urgency than the future, which can make our obligations to future generations less pressing:

Naturally the needs of the moment will always have priority, except under the most pitiless regimes which for the sake of the final goal are willing to sacrifice whole segments of their own populations.³⁷⁴

Future generations can not force us to sacrifice our lives because of some greater good for future mankind. That is the concrete limit on our responsibility towards future generations.

Practical Questions

Who is responsible, and to whom or what? The answer to the last part of the question is simply that we are responsible to the idea of mankind. However, one can still ask who should take this responsibility?

One answer is that this question is a subject for political philosophy; Jonas' own focus is the theoretical background for such representation, whatever its manifestation.³⁷⁵ That withstanding, there are ideas in his theory that point towards another answer to the question.

³⁷² Op. cit., pp. 160f.

³⁷³ Jonas, Hans, *Technik, Medizin und Ethik: Zur Praxis des Prinzips Verantwortung*. Suhrkamp, Frankfurt am Main, 1985, pp. 71f.

³⁷⁴ Jonas, Hans, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*, p. 122.

³⁷⁵ Op. cit., p. 22.

Of special interest is the fact that Jonas notices different kinds of responsibility. They range from the archetype of the parents' responsibility towards their own child, to the statesman's self-chosen responsibility. A person can freely ascend to power and therefore gain corresponding responsibility. He or she takes it upon himself or herself to care for the common good of many people.³⁷⁶ Obviously, politicians or statesmen have more power than the common citizen, which implies that they have more responsibility than the ordinary citizen.

Also, if we relate the above to the importance of a subjective feeling for the responsibility towards future generations we reach the following conclusion: Such a feeling is important for moral education generally, but of special importance for statesmen. It seems crucial that statesmen develop this feeling because their decisions have enormous consequences.³⁷⁷

On the other hand, one can also make the interpretation that, if there is an idea of mankind, we should all of us be ready to act in a way to protect it, if the combination of all our activities could threaten the future existence or essence of mankind. If that is the case, it seems vital that everybody should be motivated to make sacrifices for the future.³⁷⁸ This would lead to the conclusion that there is no specific level of responsibility. Individuals, groups and institutions are all responsible.

Concerning the eighth analytical question, the time-limits of responsibility, Jonas proposes the idea that the statesman's responsibility is dependent on our power to affect future generations. Our actions, in the form of global technology, threaten both the existence and essence of future generations. The reach of a statesman's responsibility is therefore dependent on the reach of technology. Jonas says:

Our sense of responsibility must be commensurate with the magnitude of our power and therefore involves, *like it*, the entire future of humanity on this earth.³⁷⁹

³⁷⁶ Op. cit., pp. 96f.

³⁷⁷ Op. cit., pp. 117ff.

³⁷⁸ Op. cit., p. 99.

³⁷⁹ Jonas, Hans, *Mortality and Morality: A Search for the Good after Auschwitz*, p. 99.

This is an explicit rejection of any attempt to discount the effects we can have on posterity. We, or our statesmen, have responsibility for as long as our actions can have effects on other humans. Time does not limit the reach of the responsibility.

The response that Jonas provides to the ninth analytic question, the limitation of our knowledge about the future and the problem of risks, is that we are obligated to refrain from acting in ways that could jeopardize the existence or essence of mankind.³⁸⁰ Or put differently, we should never wager the idea of man, even when such a wager could bring about enormous benefits.

Jonas' idea is that we should develop a so-called *heuristics of fear*, the capacity to be moved by the mere possibility that future humans could come to harm by our acts.³⁸¹ We must motivate ourselves to feel for the future generations, and this is linked to our capacity for fantasy and empathy. The focus must be to imagine the world we leave behind and how our actions influence future generations, especially the risk of catastrophe. Our fear of catastrophe must be the guiding principle; because it is with fear of negative consequences we notice what is valuable. E.g., would we ever notice or value our health without contrasting it with sickness? Heuristics of fear implies the focus on potentially negative consequences of our actions. Finally, it includes the moral character to be moved by these negative projections.

Such an attitude must be cultivated; we must educate our soul to a willingness to *let* itself be affected by the mere thought of possible fortunes and calamities of future generations, so that the projections of futurology will not remain mere food for idle curiosity or equally idle pessimism.³⁸²

Apparently, when we consider how we are to act, we should try to imagine all future scenarios that are dependent on those actions. Some of the scenarios will be positive and have a capacity for great benefits, but there will also be scenarios where the benefit is replaced by direct harm or the risk of harm. If there is a risk that our actions could jeopardize the future existence of mankind, we should treat that

³⁸⁰ Jonas, Hans, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*, p. 37.

³⁸¹ Op. cit., pp. 26ff.

³⁸² Op. cit., p. 28. Futurology is defined as the scientifically informed projection of what our present acts can causally lead to. E.g., Jonas, Hans, *Mortality and Morality: A Search for the Good after Auschwitz*, p. 99.

hypothetical knowledge as a sure fact. Jonas stresses that the mere possibility that mankind's future existence could be threatened should have a categorical impact on our actions; we should never risk mankind's existence. This is not a question of weighing benefits against harms. Instead, great harms (those that risk human existence and the possibility for a fully human life) are always more important. Jonas proposes that we should treat all risks that threaten that existence as certain knowledge. Some wagers are unacceptable and must be rejected out of hand.³⁸³

One interpretation is that Jonas' support of the heuristics of fear implies that he adheres to *the precautionary principle*. At least, he seems to adhere to this principle in regard to those actions that might affect mankind's existence. He claims that it is morally acceptable for one individual to act irresponsibly when he or she is the only person whose life is threatened by an act. On the other hand, it is morally impermissible to take huge chances to achieve some greater good if this threatens the lives of other people. Such acting can only be justified in order to avoid a great evil. There is a strong asymmetry between hoping for good and trying to avoid evil.³⁸⁴

Moreover, if there is a slight possibility that either the existence, or the essence, of the whole future of mankind could be at risk, such actions can never be justifiable. This claim is supported by the overarching imperative for mankind to exist.

Evaluation of Jonas' Theory

The Idea of Mankind as the Object of Responsibility

An obvious benefit with Jonas' theory is that it focuses on securing the possibility of human life in the future. Jonas claims that we must have an explanation why mankind's existence is a good thing before we can decide what we actually owe future generations. The idea of mankind says that humans shall exist, and that they shall live a fully human life.

³⁸³ Jonas, Hans, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*, pp. 37f.

³⁸⁴ Op. cit., pp. 35f.

However, Jonas' theory does have a somewhat strange implication. It seems that future generations have only indirect moral status. We have no direct obligations towards future generations, instead our obligations are directed towards the idea of mankind, and how this idea should be actual in the world. Of course, Jonas does presuppose that future generations are part of the idea of man, which means that any obligation towards that idea will indirectly be an obligation towards future generations. This perspective is compatible with the first evaluative criterion. Jonas' theory does not claim that the moral status of future generations can be reduced to only our own beliefs and interests. It is irrelevant that future generations are not conceptualized apart from mankind generally.

On the other hand, it still seems difficult to understand that our relation and responsibility towards future generations is directed to an ontological idea instead of these generations. Arguably, the reason why some of our acts are problematic is that they either directly harm or might harm future people, that are totally innocent and have not gained anything from the activities that generated these risks. It makes sense to claim that our responsibility should be directed to them.

Jonas is obviously right in stressing that our responsibility towards future generations is directed towards a group that does not exist. Given this fact, such responsibility must always be based on some kind of conceptualization of these future generations. However, there is quite a large leap from conceptualization to the acceptance of an ontological idea. As has been showed in earlier chapters, it is perfectly reasonable to talk about moral relations to posterity without making ontological claims. Moral relations come in different forms, e.g., the ability to promote someone's well-being, that one can distribute resources in different ways, or that we can be part of the same community. None of these relations are ontological, but many of us would still claim that they are important.

A tentative conclusion is that the idea of mankind provides future generations with a moral status, but that it does so in an unnecessary abstract way. The fact that future generations are possible does not imply that either metaphysics or ontology is necessary.

The Essence of Mankind

The idea of mankind includes two different kinds of considerations, first that mankind should exist, and second, that mankind should exist in a certain way. This existence should be compatible with the essence of mankind. This essence implies that mankind should exist in relation to nature, and that its freedom to take responsibility should be maintained.

Jonas delivers a convincing critique of utopian ideas. It is indeed strange to believe that the genuine human is yet to come and that there are some conditions that will facilitate its appearance. It is practically impossible to secure a radically new context for humans if that would include that everybody has all his or her material needs satisfied. Non-human nature can not withstand further development, so it is most likely that it is impossible to increase the industrial output to a level that brings about such material conditions. Also, the reduction of population would imply a radical strategy, which would probably reduce the general well-being. Besides, it is difficult to understand what people would do if all of their material needs were to be satisfied.

According to Jonas, the real human has always been here. This imposes limits on our actions towards nature and the use of technology directed at mankind itself. The idea seems to express a special insight into what it is to be human or dehumanized. However, claims about the essence of mankind are claims about what ought not to be. This is a normative idea.

This raises the problem of combining the essence of man with the fact that there is moral pluralism. Whether Jonas' idea of mankind is compatible with moral pluralism or not depends on its flexibility; exactly how sharp are the limits for what is fully human?

If the idea of mankind is *static*, it means that mankind has an essence that stays the same forever. Correspondingly, if this idea were considered *dynamic*, this would mean that mankind has an essence that can and/or will change. Arguably, the first position is more problematic. It seems a bit presumptuous to claim that one has captured the essence of mankind. The fact is that there are many conflicting ideas about what mankind is, and what kind of world must support our species.

A static conception of mankind's essence faces a certain kind of problem. One example would be that future generations could come to

the conclusion that the wild untouched and unchanged nature is unnecessary. It is quite possible that people would continue to cherish plants and animals, but subject them to control and modifications related to the wishes of mankind. We might consider this future scenario repulsive, but would it threaten mankind's essence? Probably not. A change of nature does not automatically threaten the possibility for future generations to take responsibility. The reason why an untouched nature ought to be preserved must be based on some other considerations. Possibly by stressing that there should be many ideas of the good life in the future. This would of course be a move away from the idea of a static essence.

Based on this, it seems that a dynamic idea of mankind's essence is more reasonable. One interpretation of Jonas' theory is that the essence of mankind is just the precondition for many different interpretations of mankind's essence. The reason why both unchanged nature and freedom should be preserved is that they are preconditions for human life generally. However, there might still be a wide range of scenarios that are acceptable as long as they do not undermine the existence of mankind. This dynamic comprehension of mankind is compatible with moral pluralism.

Finally, by stressing the importance of freedom, it seems that Jonas shares an idea with both de-Shalit and Agius. de-Shalit stressed the democratic debate and the freedom for each individual to reject or accept the values of the community. Agius, on the other hand, claims that mankind is characterized by having creative freedom, not entirely bound by the past. Jonas' idea is similar. He claims that it is imperative that mankind's freedom to take responsibility is preserved. This gives the important insights, that a key aspect in all three theories is freedom and that it is wrong to determine the future for future generations.

The Heuristics of Fear and the Threat of Extinction

Moral pluralism could imply that there can be disagreement about which scenarios would undermine mankind's existence and which would not. However, Jonas' theory demands that we should try to teach ourselves to care for future generations so that we can be motivated by the sheer possibility that they could be harmed by our actions. One can seriously question the possibility that all of us would

develop the same feeling of responsibility, a feeling that enables us to define the same scenarios as threats to mankind's existence, and motivates us all to make similar sacrifices.

Jonas is aware of the utopian aspects of his demand. It is certainly difficult to believe that we could all act in a similar fashion, when people in general have had a great difficulty with keeping themselves from killing each other. But still, it is necessary, from Jonas' point of view, that there should be something that binds us together with future generations. This is why the subjective part of the responsibility is necessary for motivating us to act in a way that does not harm future generations. Our feeling that we are responsible must be extended as far as the effects of our actions, i.e. to the end of human life on earth.

This raises a motivational problem: Can we teach ourselves to be motivated by an ontological idea? Of course, Jonas wants us to educate ourselves to become motivated. But is this a realistic ideal? We must contemplate the possibility for us to reach this ideal. If it is not possible for us to be motivated, why should we bother?

The first problem is that it might be difficult to be motivated by an abstract idea of mankind. Or, it might be the case that Jonas' analysis is correct, but his theoretical proposal too abstract. It presupposes that we to some degree accept his general theory of being. This includes his impersonal value theory, which makes values immanent in all of nature. It is certainly not necessary to accept that theory! Impersonal values have the counter-intuitive effect that something can be good independently of people's actual condition. This is a strange idea. Instead, it might be easier to provide a ground for motivation by developing a theory that focuses on the unity of mankind, without accepting a specific metaphysical theory.

A second problem is that the motivation to act is probably related to the conditions that we find ourselves in. Jonas notices that a threat can often illustrate what is important. I agree with this, but it seems reasonable that a threat can also make it easier to get people to do something. Jonas wants us to act before we reach a point of no return, a situation where we can not protect the idea of mankind. I believe that it is quite difficult to expect any action before people either actually face a threat or come to believe that there is one. In the absence of a clear and present danger that mankind might become extinct, it seems that Jonas demands the impossible. On the other hand, as long as people actually consider there to be a clear and

presents danger, this might provide the opportunity both to unite different groups and to motivate them to act in a similar manner.

A conclusion is that people's motivation might be dependent on some empirical conditions. Moreover, one can seriously doubt whether such conditions are enough to make people turn to an idea based on speculative metaphysics. Another, similar, but more concrete moral idea might be more fitting.

Normative Implications of the Imperative

It is certainly possible to use Jonas' theory to answer some pressing real-life problems that raise the questions about our responsibility to future generations. The theory's wide focus makes it possible to handle problems with a similar scope, e.g. global problems like climate change. It is possible that the emission of greenhouse gases could lead to an increased average temperature on earth, and that this could threaten the relative equilibrium of the earth's ecosystems and cause them to brake down. Mankind is, at least for now, dependent on these ecosystems, so continuous greenhouse gas emissions will therefore threaten mankind's survival. From Jonas' point of view this is unacceptable, and we should therefore reduce the emissions of greenhouse gases.

On the other hand, there are other real-life problems that seem more difficult to handle with Jonas' theory. Some real-life problems are pressing and affect future generations, but do not jeopardize the existence of mankind or the opportunities for future generations to be fully human. E.g., Jonas' theory is too general to answer why it would be wrong to construct a time bomb, bury it in the ground, and let it explode a hundred years from now.

Jonas could claim that such action would shorten the human lifespan and reduce freedom, which is a necessary precondition for the unique human capacity to take responsibility. However, that can not be considered to be a conclusive argument, because the freedom to take responsibility is not totally blocked. Instead, it is just the responsibility of some people that is blocked, i.e. those people that are directly affected by the bomb.

Possibly, one can argue that even if this bomb affected all future generations and each and every future person, this might not have any importance. One can stress that the average human lifespan has

changed significantly throughout human existence, which is a reason for not connecting the capacity to take responsibility to a certain lifespan. Or, simply, the freedom associated with the capacity to take responsibility would not be affected by a reduction of average lifespan. Also, as long as the loss of freedom is not permanent, such a loss can be accepted if the alternatives are worse.

The conclusion is that even if Jonas' theory can provide normative claims that explain why some of our activities are wrong, it can not cover all kinds of real-life problems. Problems that do not threaten either the existence or the essence of mankind generally, seem to be beyond his theory.

Of course, this is a limitation that Jonas himself could have accepted. He did not attempt to provide an answer to every conceivable problem, only the one he believed to be most pressing, i.e. technology.

Jonas' Answers to Practical Questions

In regard to the seventh analytic question, it seems that even though Jonas places special responsibility on the statesman, his view is compatible with the idea that there are several levels of responsibility. This would be in line with the discussion in the previous chapters.

Jonas' answer to the eighth question is that responsibility can not be reduced by time. It must correlate with our general capacity to affect future generations and continue as far into the future as that capacity will. This too is compatible with the discussion so far.

However, concerning the ninth analytic question, about our lack of knowledge about the future, Jonas provides a novel answer in the form of the heuristics of fear. The mere thought that future generations might be seriously hurt by our action should be enough for us to refrain from that action. This seems to be an extremely stern version of the precautionary principle. Is it reasonable?

The heuristics of fear seems quite reasonable in response to some activities that might threaten the existence or essence of mankind. E.g., if someone launches the idea that we ought to try to genetically alter humans in order to make them less aggressive, we might emphasize possible side-effects, like loss of ambition or competitive spirit. It is not unreasonable that such loss would be devastating for mankind and that we should never risk this alteration.

However, as a general principle, it is difficult to determine the implications of the heuristics of fear. E.g., would it imply that we should not develop fusion power? There is a possibility that the use of fusion power could lead to an increased use of nuclear energy generally. Nuclear energy is combined with the risk of nuclear weapons. Does this imply that we should refrain from developing nuclear fusion?

The problem is that society is too complex and too integrated. A problem might be insignificant when it occurs occasionally, but devastating if it occurs often. This means that the one and the same phenomenon can be either a real threat or insignificant. E.g., a few cars are not a huge problem, but a billion cars are. It is difficult to determine what we ought to do given the heuristics of fear. Should we allow a few cars? Should we allow a billion cars, but compensate by restricting other activities? The heuristics of fear give us little insight into what we ought to do when we face this kind of problem.

Jonas' Theory and Nuclear Waste

The hazards of nuclear waste seem to accentuate the theoretical limits of Jonas' theory. First, the waste will not jeopardize the future existence of human beings as such. Second, any leakage will not make it impossible for future generations to be fully human, at least not in the sense that they can not be responsible. Only a few people, globally speaking, will be affected if the waste contaminates nature and comes into contact with human beings. People in close proximity to the contamination might die swiftly because of huge irradiation doses, but most victims will be affected in a less drastic way. Of course, they might die of cancer at an early age, but does that imply that they are less human? Is it less human to live fifty years instead of eighty? It seems that this is a question that Jonas' theory does not answer.

In addition, Jonas says little about specific risks. The only risks that he discusses explicitly are those that might affect the existence of mankind or the essence of mankind. His response to such risks is to adopt an uncompromising version of the precautionary principle. However, as long as the nuclear waste does not risk mankind's future existence, or provide a significant threat to its essence, Jonas has not much to say about it.

Conclusion

Jonas' justification for responsibility towards future generations makes it imperative that future generations exist because they are part of an ontological idea that demands responsibility. However, Jonas also stresses that there is a subjective component of responsibility, that people actually feel responsible and are prepared to act. It is not evident that people would ever act to protect an ontological idea.

In regard to value, one of Jonas' most important ideas is that humanity should exist because of ontological considerations. This idea provides an answer for those of us that doubt mankind's presence in the world. On the other hand, as long as this presupposes an impersonal value theory, it still seems strange that something can be valuable without any reference to its actual capacity to bring about benefits and harms.

Jonas' normative claims answer problems which are threats to all of mankind, like the collapse of the earth's ecosystem. We should never act in a way that might cause such effects and threaten mankind's existence. On the other hand, there are many problems that do not threaten human existence, but are nevertheless important. E.g., how to avoid harming future generations. Jonas' theory does not provide any specific ideas about how to avoid these problems.

One of his more beneficial ideas is that he maintains that responsibility should focus on safeguarding the preconditions for responsibility in the future, that we must retain the freedom of future generations to take responsibility. This idea provides a clear limitation on which acts are permissible and which are not, but might still be compatible with pluralism.

Moreover, another important insight from Jonas' theory is that we should educate ourselves to feel a concern for future generations, and therefore become ready to act in a way that secures their existence. There is a need for a unifying feeling, or concern for the whole of humanity, including future generations. Even if such a feeling would be very hard to bring about, it is still an admirable aim.

A drawback of Jonas' theory is that one can seriously doubt whether people can become motivated to act in accordance with metaphysical speculations, like the idea of mankind. Something more concrete is necessary. One strategy is to attempt to extend some of the communitarian reasoning to include mankind as a whole, without turning to either metaphysical or ontological considerations.

de-Shalit's theory provides a distinct motivational benefit in comparison to both Agius' and Jonas' theories. This extension should also follow Jonas in focusing on the preconditions for values instead of specific values. This could provide normative implications that are compatible with moral pluralism. This is attempted in the next chapter.

6. A Common Narrative

Introduction

It should be quite clear by now, that responsibility towards future generations is not entirely about acts and principles. It is inherently tied to questions about value, e.g. what is valuable for individuals and/or groups? Who defines what is valuable? Moreover, responsibility towards future generations is also linked to more general ethical questions: what is the nature of human life? How are individuals related to society? How should we understand our place in history? It is now time to find a theoretical formulation that captures these insights and provides a perspective that helps us to understand and decipher the ethical implications of nuclear waste management.

Responsibility towards the future generally, and future generations specifically, seems to start with the question about how an individual or a group should relate to history and the fact that they are part of a chain of generations that stretches back into the past and into the future. This is inherently linked to the fact that individuals are finite and part of history only for a short time. Be that as it may, individuals can to a certain extent transcend this finitude through a process of *self-transcendence*. This is commonly done by acting in a way that has effects beyond death, like building or destroying something. Another way is to cause effects that are delayed but surface after some time, like hiding a treasure. Generally, only a few people can act in a way that makes any noticeable impact beyond a couple of generations. However, there are other aspects of self-transcendence that raise the question about how it is related to responsibility towards future generations.

One philosopher, who has stressed such a connection, is Ernest Partridge. He claims that we can and should care about the fate of remote future generations because a life that consciously strives

beyond itself is better than a life that only focuses on itself. Such striving gives a sense of meaning, i.e. of making sense of life beyond oneself and involves experiences that are valuable to everyone, even to a hedonistic egoist. A total lack of self-transcendence is alienating, and impoverishes life.³⁸⁵ Still, even if we accept the importance of such self-transcendence it is necessary to understand what it means and if there are different ways of achieving it.

David Heyd, whose theory was discussed in the first chapter, has continued to develop Partridge's discussion of self-transcendence. Heyd claims that there are at least three ways of reaching self-transcendence. The first is by procreation. By creating new people we can extend our impact on the world beyond death. The second way is by focusing on common enterprises. Such enterprises have many forms but they could be nations, institutions and communities. Both the first and the second ways of achieving self-transcendence are tied to human endeavours.³⁸⁶ They focus on how to extend the self beyond death by supporting communal endeavours or creating the precondition for such endeavours. Heyd's idea is quite reasonable since people can obviously both procreate and commit to common causes. There could be many reasons for such actions and the intention to achieve self-transcendence could be one.

The third possibility to achieve self-transcendence is radically different and implies a focus on the value of human life itself. Heyd calls this the acceptance of an extra-human point of view. The value of humanity is based on something else than human beliefs or judgments, which makes value impersonal, at least from the human perspective. Heyd rejects this third alternative, because he claims that such an extra-human perspective is meaningless because it can not be established apart from our human perspective. The existence of humanity is beyond value judgment because value is person-affecting and inherently tied to human judgments.³⁸⁷

This value theoretical claim can of course be rejected, which is done explicitly by Parfit and Jonas who both accept an impersonal theory of value. However, the claim accentuates an important feature of human existence: we can not abstract ourselves from our

³⁸⁵ Partridge, Ernest, 'Why Care About the Future?', in Partridge, Ernest (ed.), *Responsibilities to Future Generations*, Prometheus Books, New York, 1981, pp. 203-220.

³⁸⁶ Heyd, David, *Genethics: Moral Issues in the Creation of People*, pp. 210-223.

³⁸⁷ Op. cit., pp. 223-228.

perspective. On the other hand, one could argue that few people would claim that it is possible to adopt an extra-human point of view. Instead, they claim that human life can be valuable in some sense that is independent of humans and their perspective. Religions and different views of life provide alternative ways of expressing such ideas, and it seems unfounded to reject all such perspectives.

Turning to the normative character of self-transcendence, it is obviously possible to reject it as an ideal. There are many other activities that give meaning to life, it is therefore possible to reject self-transcendence and still live a reasonably good life. Arguably, a rejection of self-transcendence seems to presuppose a narrow hedonist or preference theory about value. If values are the carriers of meaning, in the sense that meaning is usually grasped by identifying what is important in life, i.e. what is valuable, it is reasonable to give the experience of joy or satisfaction some meaning. However, the meaning obtained by a conscious striving towards self-transcendence can not be reduced to the joy or satisfaction experienced by the individual, even though such experiences could be an important part of it. There are several kinds of meaning and some kinds, e.g. *self-transcending meaning*, are impossible to grasp if we focus exclusively on individual experiences.

A narrow focus on experiences might reduce meaning to isolated incidents of experiences. In regard to this, Parfit argues that this might be the only reasonable understanding of personal identity. Even if this is true, this leaves the question of meaning surprisingly empty. Parfit's theory provides an extremely limited account of meaning that seems to follow from his reductionist theory about personal identity.

Moreover, one can reject the claim that an ontological or metaphysical position, or the denial of one, provides insights into what is meaningful and valuable in life. As was noted in the analysis of both Agius and Jonas, we can accept their ontological account, but still disagree about what ought to be done. The question about meaning is similar, we might agree that there is no metaphysical self, but still claim that meaning is more than a loose connection between isolated experiences.

Furthermore, self-transcendence implies a rejection of so-called atomism, i.e. that individuals are the basic parts of society and that individuals can be understood in isolation from society. Both Partridge and Heyd reject atomism, they claim that we can not understand

individuals, or what is meaningful for individuals, without referring to the context in which they live, act and experience.³⁸⁸ Self-transcending meaning is dependent on the contexts in which we find ourselves.

de-Shalit provides one account of how the meaning gained from self-transcendence can be understood. He too stresses that individuals must be understood in relation to their context. However, his theory has one limitation. Communitarian theory can explain why individuals should care about their future community, they are the source of value and meaning, but such a theory can not explain why individuals should care about people in other communities. A reasonable theoretical goal is therefore to combine the insights from communitarianism with an ethical theory that makes it reasonable to extend our moral concern also to those future generations that will not share our ideas about the good life. This must include an attempt to show why self-transcending meaning implies responsibility towards remote future generations, but does not imply that we can reduce the independent moral status of those generations.

My basic answer to these questions is that self-transcendence implies the adoption of a narrative comprehension of individuals, society and history. This narrative comprehension makes future generations a necessary background for a certain kind of meaning, which makes life intelligible. Such meaning can only be obtained as long as there will be future generations. We ought to protect the precondition for finding meaning in our own life, which will include the protection of future generations' capacity to find meaning. The precondition is that the future is essentially open, that the story is open-ended.³⁸⁹

³⁸⁸ Partridge's argument is based on George Herbert Mead's theory of selfhood. Partridge claims that a characteristic of human selfhood is that the self is developed and expressed in a social setting. Partridge, Ernest 'Why Care About the Future?', p. 206.

³⁸⁹ This is inspired by Meyer's idea that it is beneficial for our well-being to live in a society that is open to the future. Meyer's argument is that we derive much well-being from taking part in intergenerational projects and such projects must be open-ended. Meyer, Lukas H, 'More than They Have a Right to: Future People and our Future-oriented Projects', in Fotion, Nick and Heller, Jan Christian (eds.), *Contingent Future Persons: On the Ethics of Who Will Live, or Not, in the Future*. Kluwer Academic Publishers, London, 1997, pp. 141-150. My proposal is similar but focuses instead on the idea of a common narrative. Arguably, most projects have a narrative form. Moreover, I find it reasonable to talk about other considerations than just well-being. The narrative provides more than just well-being, it provides meaning.

The starting point for this narrative theory is the common human experience of temporality, i.e. the experience of the passing of time. Is there a common feature of this temporality? One answer is to claim that human temporality has an inherent narrative character. That is, humans experience and comprehend temporality in a narrative form. The narrative comprehension is tied to a specific idea about selfhood, which sees the self as a story.

Interestingly, Heyd uses both the words biographical and narrative to describe personal identity and how such a comprehension of identity transcends an atomistic view of persons. Heyd claims that a biographical understanding of a person's life ties the value of present activity to past and future activities. Moreover, he extends the concept to collective stories, cultures, and claims that taking part in a transgenerational story is an essential part of our own story.³⁹⁰ That said, it is important to note that Heyd does not consider the possibility of different stories or conflicts between them. A narrative theory must therefore also provide an solution to such conflicts.

The following investigation draws insights from two philosophers who have showed the relevance and benefits of using the narrative in order to comprehend humans, their relationship to each other, and to the rest of reality.

The first is Alasdair MacIntyre and his influential work *After Virtue: A Study in Moral Theory* (1985). MacIntyre is one of the most famous so-called communitarians, even if he does not use the label himself, which shows the close connections between narrative theory and de-Shalit's theory. de-Shalit discusses MacIntyre's narrative view on identity, but he develops a communitarian theory of transgenerational justice instead of a specific narrative theory.³⁹¹ The connection between narrative theory and communitarianism is therefore close, but they do not coincide. One can accept a narrative theory without accepting the contextualism of communitarianism.

The second is David Carr, a philosopher who has written extensively about philosophy of history. The primary source for his theory is *Time, Narrative and History* (1986) in which he proposes the idea of a collective narrative as an explanation of how human groups experience temporality.

³⁹⁰ Heyd, David, *Genethics: Moral Issues in the Creation of People*, pp. 214-222.

³⁹¹ de-Shalit, Avner, *Why Posterity Matters: Environmental Policies and Future Generations*, p. 36 and pp. 44f.

A Narrative Justification for Responsibility to Future Generations

The narrative theory claims that our responsibility towards future generations is justified because we and future generations should be understood as participants in the same narrative, The Story of Mankind. The function of this narrative is to provide meaning to our and to future generations' actions, identities and relationships. An essential feature of this narrative is that it can not be reduced to the story of one specific generation. The narrative is necessarily transgenerational and independent of each specific generation.

The above claim presupposes that it is possible and reasonable to talk about a narrative that includes both different individuals and different groups, and can be extended to include many generations. This makes it necessary to make a deeper investigation of narrative theory. This investigation will make use of both MacIntyre and Carr as discussion-partners.

Individual Narratives

As a starting-point, it is noteworthy that a narrative refers to an account of different events or experiences, either true or fictitious. A narrative is *functional* in the sense that it makes these events and experiences meaningful by placing them in a context. E.g., MacIntyre claims that we need to have a narrative history if we are to comprehend an agent's actions and beliefs.³⁹² It is impossible to view his/her acts or actions in isolation. We need to have knowledge about what precedes that action and the actor's goals. Or more specifically: 'Narrative history of a certain kind turns out to be the basic and essential genre for the characterization of human action.'³⁹³

Moreover, the narrative is not only functional; it is also *foundational* in the sense that the *narrative form or structure* shapes our experiences. Or as MacIntyre puts it:

It is because we all live out narratives in our lives and because we understand our own lives in terms of narratives that we live out that the form of narrative is appropriate for understanding the actions of

³⁹² MacIntyre, Alasdair, *After Virtue: A Study in Moral Theory*. Second Edition. Duckworth, London, 1985, pp. 204-225.

³⁹³ Op. cit., p. 208.

others. Stories are lived before they are told – except in the case of fiction.³⁹⁴

This explains why MacIntyre accentuates that the key to understand humans is not found in the question of *authorship* because ‘... we are never more (and sometimes less) than co-authors of our own narratives.’³⁹⁵ Instead, we can only learn what is meaningful, and more importantly, what is morally right and wrong, by regarding the stories that are already there.

Turning to Carr, he too stresses that the narrative is foundational for human experience. He claims that individual and social experiences of reality, specifically the experience of being part of history, have a basic narrative structure. This narrative structure is prior to and independent of any specific historical narrative, i.e. text about history.³⁹⁶ This means that the past is not recreated by applying a narrative on a mass of diverging facts: the basic experience of the past, the present and the future is narrative. People organize their experiences of reality in stories; everyday life has a narrative structure. These stories are the principal foundation for the meaning and the comprehension of the world.³⁹⁷

In spite of being a foundation for meaning, Carr incorporates certain flexibility into how an individual can relate to the narratives he or she find themselves in. People can change their perspective or occupy different roles in, and in relation to, a given story. The most important role in regard to our own life is the role of a *storyteller*. As storytellers we both describe an event, or an act, and determine how the story develops. ‘... we are constantly striving, with more or less success, to occupy the story-teller’s position with respect to our own actions.’³⁹⁸ A person can also describe his or her own actions from the perspective of a storyteller by describing that act in hindsight. This person can also see himself or herself as a protagonist in a story told by somebody else. Finally he or she can also be part of an audience that observes an event. However, according to Carr:

³⁹⁴ Op. cit., p. 212.

³⁹⁵ Op. cit., p. 213.

³⁹⁶ Carr, David, *Time, Narrative and History*, Indiana University Press, Indianapolis, 1986, pp. 2ff.

³⁹⁷ Op. cit., pp. 45-72.

³⁹⁸ Op. cit., p. 61.

... narrative structure refers not only to such a play of points of view but also to the organizational features of the events themselves in such terms as beginning-middle-end, suspension-resolution, departure-return, repletion, and the like. We maintain that all these structures and organizational features pertain to everyday experience and action whether or not the narrative structure or the act of narrative structuring takes explicit verbalization.³⁹⁹

Narration is not connected with the telling of a story, or with the different roles and points of view that a person can adopt in a story, it is rather an inherent feature of experience itself. We are, according to Carr, fighting to retain the *coherence* of our life and to avoid such events or acts that are incomprehensible in relation to our story so far. Life should not be comprehended as a group of sequences that have little or no connection with each other. Such a comprehension of life is foreign to everyday experience.⁴⁰⁰

Carr and MacIntyre provide an interesting account of meaning and how it is connected to the narrative. There are reasons to support the idea that the narrative provides the foundation for meaning. This does not rule out that there can be other kinds of meaning that are valuable, albeit to a lesser degree. It still makes sense that an isolated experience of joy might have some meaning and value. A more moderate claim is that the narrative is foundational for self-transcending meaning. The striving for self-transcendence includes the striving towards a narrative comprehension of experiences.

The striving for self-transcendent meaning has implications for how we ought to comprehend the concept of *personal identity*. Identity becomes a question of authorship and the narrative coherence of a person's story. Such coherence can only be obtained if an agent has some degree of freedom. However, there is a tension between how we can occupy the role of a storyteller and that of being the author. Authorship might not be about writing our own story but about choosing which story we partake in. As Carr points out, an individual's responsibility lies in picking the story that makes his or her life coherent, even if he or she is not the author of it.⁴⁰¹ This stresses that being part of a narrative is not neutral, it implies ethical

³⁹⁹ Op. cit., p. 62.

⁴⁰⁰ Op. cit., pp. 89ff.

⁴⁰¹ Op. cit., pp. 93f.

demands. Whatever story we choose, we might be held responsible for how it turns out.

Moreover, coherence of a person's story can not only be achieved by choosing a story; it presupposes that the story has a *telos*, a goal. E.g., MacIntyre claims that a general feature of a narrative quest, i.e. a person's striving towards narrative unity of his or her life, is that it is teleological. Future goals influence a person's present activities. This *telos* does not determine our lives but it does place certain limits on the ways in which our lives can continue and still be comprehensible.⁴⁰² Moreover, Carr notices that a life can include several parallel strivings, e.g. we can simultaneously raise a family and pursue a career and neither of these strivings is the overall *telos*.⁴⁰³ This means that individual narratives have a teleological character but do not presuppose just one *telos*. The narrative includes a search for one or more goals, a search that might be in vain, but is nevertheless essential for an individual's personal identity.

Collective Narratives

Individuals are necessarily related to other individuals and it is therefore necessary to consider the relationship between the individual narratives and the shared collective narratives.

In regard to individual narratives, it is noteworthy that Carr claims that each narrative is a combination of several perspectives: *the character*, *the storyteller* and *the audience*. The last perspective is necessarily inter-subjective in the sense that the storyteller must interact or relate the story to the audience. This audience can criticize, disagree or give their support to any given story, and their reaction will influence the narrator. Also, telling a story is important for the storyteller's own comprehension or experience of an event. Numerous persons have the experience that the telling of a story can give new insights and even revise the original memories of an event.⁴⁰⁴

Moreover, Carr also stress that human life is built on the work of previous generations.⁴⁰⁵ Science, as an example, includes many

⁴⁰² MacIntyre, Alasdair, *After Virtue: A Study in Moral Theory*, pp. 215f.

⁴⁰³ Carr, David, *Time, Narrative and History*, pp. 79f.

⁴⁰⁴ Op. cit., pp. 111f.

⁴⁰⁵ In a trivial sense, every generation builds on its inheritance from the previous ones, but this is especially the case with knowledge, technology and capital. Noted, e.g. by Barry, Brian, 'International Justice in Energy Policy', p. 23.

generations of researchers that relate themselves towards the same story of scientific research. This relationship holds independently of whether the new generations totally reject the previous generations' work, or they continue to expand that work. This implies that there is an ongoing project where different generations interact by a pattern of overlapping narratives. This overlapping of narratives constitutes a background for our individual acts and experiences, a background that makes those individual acts and experiences comprehensible.⁴⁰⁶

...for the individual, his or her own narrative, whether of work or other particular projects of life, exists within a larger temporal context which is itself narrative in character and which involves other people in a predecessor-successor relation.⁴⁰⁷

This means that besides our individual narratives we are also related to other more collective narratives, e.g. a community, a culture or a tradition, that are transgenerational and at least partly independent of our own story. This raises one important question: How does a collective narrative come about? Obviously, traditions do not spring out of nothing, there must be some conditions that need to be satisfied in order for them to develop.

According to Carr, the starting point for a collective narrative is that some individuals share a *common experience*. The most common example is the reaction towards a common problem or foe. The common opposition to a foe, e.g., shapes both the experience of each individual, but also the experience of being part of a group that shares a common experience. As many political leaders have noted, nothing makes people come together as a conceived threat to all of them. From an individual experience, 'I', the critical step is to see something as a common experience, 'we'. Moreover, a group can act in the sense that it is a gathering of individuals that are committed to a participatory common project, e.g. building a barn. Individuals can perform *common actions*.⁴⁰⁸

A common experience and a common action are two central characteristics of a *community*. However, it must be noted that there are communities that share an experience but can not perform collective actions. This makes the shared experience, identified by the

⁴⁰⁶ Carr, David, *Time, Narrative and History*, pp. 113f.

⁴⁰⁷ Op. cit., p. 114.

⁴⁰⁸ Op. cit., pp. 132-134.

members of the group, a necessary but not a sufficient condition for group action. Also, a common experience can as easily give rise to conflict as it can to unity. A great threat to a nation can as easily unite the nation as it can lead to a civil war.⁴⁰⁹

For Carr, the crucial step in the formation of a community is that people actually consider themselves parts of a group, ‘we’, including the sharing of a common project that gives meaning to the individuals.⁴¹⁰ This reasoning parallels MacIntyre’s discussion about the role of the telos in an individual’s story. The telos for any narrative must include an idea of the good life.⁴¹¹ The same reasoning can be applied on a collective level, a group’s common project will include an idea of the good life for the members of that group. A common project can only be comprehensible and meaningful if it is compatible with, or could be compatible with, the group’s conception of the good life, or at least the search for such a conception, i.e. that the project fits into the narrative.

External threats or opposition to other communities can often make an important contribution to a community’s narrative. Conflicts with other communities can make a community more self-conscious in the sense that its narrative includes the opposition to another party. Carr suggests that it might be possible to try to provide a common narrative for humanity, and that this was Hegel’s project. The failure of that project suggests that individuals have a great difficulty with identifying themselves as a part of humanity.⁴¹² Be that as it may, there is ample evidence that communities can actively seek to establish a common narrative. The most important example is the European Union in which traditional enemies (France, Germany and the United Kingdom) accept a common narrative, but also try to establish their own narratives as the most fitting for the future of the whole community. External threats can have a similar function, and new threats can unite communities that have been enemies in the past.

As is claimed by Carr, the precondition for talking about a common narrative is the existence of a shared experience and a *mutual recognition* of this shared experience. The question is: Is there any mutually recognizable and accepted common experience which all

⁴⁰⁹ Op. cit., pp. 135f.

⁴¹⁰ Op. cit., pp. 146-152.

⁴¹¹ MacIntyre, Alasdair, *After Virtue: A Study in Moral Theory*, p. 219.

⁴¹² Carr, David, *Time, Narrative and History*, pp. 159f.

humans share and which can lay the foundation for a community involving all of mankind?

Concerning shared experiences, we must start with considering how collective narratives function as a background for our specific acts. MacIntyre claims that in the process of becoming part of a society an individual must set his or her story against many other background stories. This is the only way of learning how to be a part of a given society.⁴¹³ This means that if we are to gain knowledge about a person and the meaning of his or her acts, we must consider that person's context. This will also include the consideration of the context's norms of appropriate behaviour, i.e. ethical principles and values.

On the other hand, one can accept the significance of the context while claiming that it is sometimes necessary to go beyond this context. E.g., the moral norms of a given group might promote activities that are harmful for some members of this group. A purely contextual perspective involves the risk that we can not go beyond the norms of a given context and find a critical point of view, a point of view that is often imperative if we are to change. To gain a critical point of view we could try to use another context or maybe develop a context-transcending perspective. The second option can be supported by one of Carr's insights; communities are often defined in opposition to other communities or to a problem or threat to the community.

If *common problems* can become mediators for a trans-contextual experience we must ask if there is a common problem faced by all of mankind?

Climate change can be considered to be such a problem. Global warming will affect everyone to some degree and its impact will be felt into the future. The most important effect of global warming is to what extent it causes suffering and harm. Suffering is an experience that everyone has had and that is easily shared with people from other cultures. Moreover, as far as global warming goes, it is difficult to explain away the importance of that suffering by referring to the responsibility of some specific group. Nobody deserves suffering caused by this phenomenon.

Of course, it is possible to argue that people do not suffer from global warming, or that we are not sure that some environmental effects are caused by global warming. Of these two arguments, the

⁴¹³ MacIntyre, Alasdair, *After Virtue: A Study in Moral Theory*, p. 216.

first seems most important; there is of course a correlation between how much we experience suffering because of some problem and how serious we consider that problem. This can support the dire conclusion that the biggest chance of gaining a mutual recognition of the experience of global warming presupposes that global warming causes much suffering. As long as we accept Carr's theory, that a common experience is a necessary part of forming a community, this dire conclusion seems well justified. However, we do not need to suppose that this is a situation of all or nothing. That global warming could lead to increased suffering might be enough for people to consider this an important shared experience. Interestingly, global warming has the potential of uniting mankind just because we can see ourselves as part of the story about the management and/or endurance of this problem.

Another point is that the suffering caused by global warming itself has only a very limited meaning. Even if we agree that suffering is bad, this does not say anything about how we ought to relate to it as a phenomenon. This is where the importance of self-transcending meaning comes into play. If we adopt a narrative perspective that places our suffering into a history of past suffering, it is possible to find another kind of meaning in suffering. This is a crucial step because the only thing that could be worse than suffering per se is meaningless suffering.

The idea is to accept that mankind has always suffered to various degrees. However, people have managed to go on living in spite of suffering because they have situated the suffering in a narrative. Suffering becomes a part of life that must be endured and/or managed. An essential aspect of the endurance of suffering is that we can envision the possibility for a future that is free from it. One concept that captures this relation to suffering is *hope*. As long as there can be a future without suffering, suffering can be incorporated in a narrative that gives it meaning. In regard to this, global warming becomes just one of the many problems that mankind has faced, and which we hope to either manage and/or endure.

The Story of Mankind

If we adopt a self-transcending perspective, i.e. a narrative comprehension of our own life and of society, what follows? How

should we comprehend the relationship between us and future generations?

A starting-point is Carr's suggestion that we can adopt different perspectives on our own narrative. These perspectives can also be used to relate the individual to different collective narratives. As such, we can be protagonists, storytellers/authors and part of the audience in relation to a specific narrative. If it is possible, and reasonable, to talk about a story of mankind, it should be possible for us to adopt these three perspectives to that story. This might give us new insights about how we are related to future generations.

A story of mankind can be articulated in terms of a certain kind of narrative, that of a novel. This novel follows a simple narrative structure in the sense that it is chronological. Accordingly, we are *protagonists* in the novel *The Story of Mankind*. However, we are just the latest protagonists in a long line. We are like a group of people that is introduced in chapter 20 and disappear in chapter 21. We do not know exactly how many chapters might follow because we are inherently tied to our place in history, and can not adopt a perspective that transcends the entire story. However, we do know that the actual occurrence of future protagonists, even if they can not be identified, is essential both to the overall story and the more limited stories we are part of. It is noteworthy that these future protagonists can only be conceived as a collective because we can not identify any individuals as long as they have not been introduced into the story.

Furthermore, actions performed early in the story can, and will, often influence later parts. However, a compelling story must in some sense be open in order to make it captivating. When later chapters are thoroughly limited because of the actions in earlier chapters we usually want a good explanation if we are to find the story compelling. What could such an explanation be? An ethical explanation might be that earlier protagonists found themselves in such dire situations that they were forced to act to preserve what they valued. How we judge their acts is dependent on our own judgments of their values, but also on how well their actions fit together with the rest of the story. Terrible acts or incidents can often be a fitting and meaningful part of the story.

One problem is that we could have different ideas about what is fitting and meaningful for the story. There can obviously be disagreement about this and maybe some subjectivity is impossible to

avoid. On the other hand, The Story of Mankind involves many generations of protagonists. When some generations make choices that restrict the acts of later generations it could be acceptable as long as there are new openings. A permanent restriction of a story can also be acceptable as long as it is used to express a specific meaning. However, what would that meaning be in The Story of Mankind? The question of meaning can not be abstracted from the question of purpose, but it is here that the analogy seems to fail, because there seems to be no purpose for this story.

Concerning the purpose of the story, it is essential that we are *co-authors* of The Story of Mankind. This means that we can act in ways that shape the story in different directions.⁴¹⁴ We are not special in any ethically relevant sense because of our temporal location. What makes us special is how our actions relate to the rest of the story. As co-authors it is our prerogative to shape the story, nevertheless we can not ignore past authors and the possibility of future ones. Both of these groups must be taken into account and be related to our own authorship. The past will influence our actions causally, but the future, on the other hand, can be shaped to our own liking.

We must choose how the story should develop, but are there any limitations to this choice? The answer is simply that there are many ideas about what we ought to choose. There is a multitude of *storytellers* and all of them might provide a fitting story of mankind. It is also quite presumptuous to identify one of these stories as the best possible one. We might as well doubt that there is one story that is most fitting as The Story of Mankind. If we accept this pluralism, and if it is impossible or unreasonable to establish one story of mankind over all others, it seems that the only choice we have is to act in a way that safeguards future authorship. Few of us want the story to end definitely, instead, we are probably more inclined to prefer that the story gets better in the sense that it articulates our own authorship. If that is impossible, we can only hope that someone in the future shapes the story the way we want it to be. That the story ought to be open is a

⁴¹⁴ This presupposes that it is meaningful to talk about authorship in the sense that we are free to choose which story is most fitting for our individual and communal lives and that this is important for us. This raises the question of free choice. Due to the difficulty of this question, this is hardly the place to consider it at length. However, it is noteworthy that the narrative theory about responsibility towards future generations is utterly incompatible with fatalism. The narrative theory presupposes that the future is open and that we could act differently if we had another disposition.

conclusion based on the limitations of our own authorship and the hope for change in the future. Possibly, those that prefer that the story ends have either not fully grasped the idea of self-transcendence, or failed to find a narrative that can render the present and future meaningful.

If we and future generations are part of The Story of Mankind, and pluralism is the norm, and we ought to be sceptical about the idea that there is just one correct story of mankind, future generations must have a distinct moral status in the sense that they are our fellow co-authors. The moral status of future generations can therefore not be reduced to only our own beliefs and preferences. Co-authorship implies some autonomy from the past, in the sense that the authorship of future generations can be significantly different from our own.

Moreover, it seems that if authorship is to have any importance it presupposes that there is someone that might listen to or relate to the story that is actually told. We can only be authors as long as our story makes some sense to others. It is therefore necessary to consider the third perspective, that we and future generations are parts of an *audience* that watches how The Story of Mankind unfolds.

By taking the perspective of an audience it becomes possible to gain comprehension of our actions from the audience's point of view. We can imagine that our actions are located on a stage in front of an audience consisting of both past and future generations. Protagonists and co-authors must interpret their actions in relation to the conceived historical audience. This too illustrates that, if a narrative should be able to give us self-transcending meaning, which is the primary function of a narrative, it must show the continuity between the past, present and future.

It is also noteworthy that the narrative theory expressed in The Story of Mankind captures some of the content of Jonas' ontological idea of mankind. Both of these theories accentuate that each generation is a part of the whole of mankind. Also, both stress that it is necessary to safeguard some characteristics of this larger whole, and that this has normative implications. On the other hand, the narrative theory does not presuppose a specific metaphysical theory. Instead, the narrative theory focuses on how self-transcendent meaning can be found in a world characterized by a wide range of stories, which all claim to be the most appropriate one to capture mankind's past, present and future.

Conflicting Narratives and Other Problems

Generally, each community faces a serious problem if it contains several parallel and irreconcilable narratives about the community's history. An example would be that several narrators claim to tell the correct story of the community's past, they all claim that their own narratives are the most fitting for telling the communal past. It is the community itself that must decide which story is the most fitting and acceptable to the community's members. Interestingly, if the members of a community should be able to decide which story is the most fitting, this already presupposes that they at least share some common narrative. There can also be partial agreement in which the different members accept a common narrative up to a certain point, but they disagree about how the narrative should be extended into the future. Carr remarks that there are no straightforward solutions to this kind of problem. Some communities dissolve because of their inability to find a common narrative.⁴¹⁵

This problem is especially pressing for the idea that there is a story of mankind. There are many ideas about this story and they are not easily reconcilable. I do not believe there are any easy answers to this problem. A partial answer can be that the occurrence of global warming gives an empirical precondition for outlining a story that is wide enough to provide the possibility for many interpretations. This story can then be incorporated into specific stories, like traditions or religions. It can never be a question of all or nothing, that everyone accepts the story or the story should be discarded, instead, it might be enough if we find some limited common narrative.

Based on this, *The Story of Mankind* should be understood as a patchwork of stories whose unifying structure is the relation to a common set of social, cultural and environmental phenomena. This makes it possible to accept both that there are many specific stories of mankind, and that these stories are not entirely different from each other. The stories are all related to similar phenomena. Successful stories must also be able to incorporate new kinds of phenomena because their primary function is to provide life with meaning. A story that fails in this way will be replaced or reinterpreted, because the narrative form is essential for how humans relate to the world.

⁴¹⁵ Carr, David, *Time, Narrative and History*, pp. 157-159.

However, even if there are good grounds for accepting that there is a story of mankind, in the form of a patchwork, there is still a practical problem. Despite our common experience of phenomena like global warming, we might still consider each other as competitors or antagonists. The most important challenge is to see our common problem as a reason for global action instead of seeing it as a reason for prudent individual or group-based action. What is needed is a conception of ourselves as part of the same human project, a project aimed at finding the good for mankind. A problem with such a conception is that one could claim that the only way of being part of the human project is by involving oneself in the projects of a given group. That is, the human project can only be realized through the realization of culture-specific projects.

A response to this problem can be found in MacIntyre's conception of social roles. In regard to social roles, we as an example state that a good citizen should act in a certain way. On the other hand, we can also see that the role of the citizen can come into conflict with other roles, like the role of being a parent. Such conflicts are tragic and must not have a clear-cut solution; they might just be a regrettable part of human life.⁴¹⁶ Is there a role that every human inhabits just because they are part of the human race?

At first sight, such a claim seems rather empty of any specific meaning, but there are moral concepts that are inherently tied to ideas about what a good member of the human race should do. Few persons would like to be called inhumane and this might indicate that there are some things we ought to do just because we are members of the human race. Whatever roles we might inhabit in life, we are also parts of the human race. This means both that there can be goods that are internal to that role, and that people can end up in a situation where there is a real conflict between roles, e.g. between being a citizen and being part of humanity. The important insight is that the role we inhabit just by being members of the human race could be justification enough for acting in a way that might conflict with other roles. It is difficult to give an easy answer to when such acting ought to be performed but that is a limitation we have to live with. On the other hand, adopting a narrative perspective might increase the occasions when such acting seems justified and also makes it meaningful to perform.

⁴¹⁶ MacIntyre, Alasdair, *After Virtue: A Study in Moral Theory*, pp. 220-225.

Besides problems of conflicting narratives, there is an inherent limitation of the narrative structure. A narrative presupposes a telos, or at least a teleological comprehension of time, and that seems to imply an idea of progress in which the future is subjected to the human will. Carr notices that some non-Western religions, like Buddhism, deny a linear passing of time and have a cyclical comprehension of time. This means that time includes events that keep on repeating themselves and that human intentions can not cause any change. The overarching aim for humans is to transcend this cycle, not to shape it.⁴¹⁷ The important question is if these religions are inherently non-narrative, or if they include some narrative structure. Carr argues that even if it would be possible to have a non-narrative comprehension of temporality, such comprehension would be impossible to understand for a person who has a narrative comprehension.⁴¹⁸

If it is reasonable that a meaningful experience presupposes a narrative comprehension of time, there is a limit on how distinct people, and communities, could be from each other. It becomes impossible to share experiences between narrative and non-narrative communities.

The conclusion is that there are some common experiences that could provide the empirical preconditions for a story of mankind. Moreover, it is also reasonable that being part of that story includes the obligation to act in a certain way. One problem is that such acting will have to compete with acting tied to other social roles and that there are few easy ways to solve such conflicts. Another problem is that a shared experience is not enough to make common actions possible, or even worthy of pursuit. It is possible to agree about the content of shared experiences, but to disagree about what actions ought to be performed as a response to these experiences. Common actions presuppose that we can agree about what is important in life and what ought to be protected or sought after, i.e. what is valuable.

Value and Meaning

Values can not be discussed as entirely separated from considerations of meaning, understood as making sense of life. This part tries to

⁴¹⁷ Carr, David, *Time, Narrative and History*, p. 179.

⁴¹⁸ Op. cit., p. 183.

discuss the connection between both of these concepts without neglecting their inherent differences.

As was stated before, values are the carriers of meaning, in the sense that a desire to make sense of life will usually involve an identification of what is important, what is valuable. Nevertheless, it is also reasonable that a new or different comprehension of meaning can give new insights into values. It is therefore not possible to reduce the search for meaning only to a search for values, instead, the search for value might require the search for meaning which can affect how values are conceived. Self-transcendence provides a special kind of meaning in life. This is in need of some qualification because it can be interpreted as either claiming that self-transcendence gives us a special comprehension of values that are already there, or that there are values that can only be grasped after the adoption of self-transcendence.

A starting-point for this discussion is the relationship between values and meaning in a welfarist framework. Welfarism claims that the only thing that is important for an ethical evaluation is how the well-being of people, and/or animals, is affected by acts, rules or dispositions for actions (virtues). In theory, every act, rule or disposition can be isolated and understood in separation from all other acts, rules and dispositions. It is then possible to determine how well-being is affected by this act, rule or disposition. This reasoning implies that well-being, as a distinct experience or state of affairs, can be comprehended in isolation. Is this reasonable?

It seems quite uncontroversial that well-being is often important when we try to make sense of life generally. E.g., most of us can agree that joy is an important part of life and that pain is not. It is possible to claim that in order to make sense, life must include joy, i.e. joy seems to have some meaning for most of us. However, it is far less reasonable that we can comprehend well-being in isolation from other considerations, that well-being has some kind of *isolated meaning* available for everyone to grasp. The narrative theory presupposes that the narrative is foundational for human experiences and it is therefore impossible to talk about meaning, and value, in this sense. The meaning of well-being must be found in the greater context of a narrative. Moreover, even if it is possible to talk about isolated meaning, that would be insufficient if we are to make sense of the concept of self-transcendence. This concept is inherently tied to a notion of reaching beyond the limited lifetime of the individual, and

well-being is usually tied to individuals. We must therefore try to find another comprehension of both value and of meaning.

A reoccurring idea in this dissertation is that the responsibility towards future generations must move away from acts towards processes. One value theory that accentuates this is the theory of *organic unities*, or how individual experiences, or states of affairs, are related to each other. Thomas Hurka claims that there are two alternative interpretations of how the value of individual experiences can be combined into organic unities. The question concerns how different values are related to each other, and whether different combinations of individual values can be more valuable than the sum of their parts. Hurka claims that either the combination adds separate value that is independent from the value of the individual parts (which Hurka calls the holistic interpretation), or the combination changes the value of the separate parts (which Hurka calls the variability interpretation).⁴¹⁹ Of these two interpretations, the second captures how we can evaluate the achievement or non-achievement of an individual or collective goal, i.e. a telos. This captures the idea that a narrative is always teleological even if it is not always possible to identify just one overarching goal.

The idea that the relative weight of values can change in relation to a whole gives us another insight into what meaning can be. One can talk about meaning in the sense of grasping a wide range of individual experiences, or state of affairs, and fit them together into a coherent whole, i.e. *holistic meaning*. Holistic meaning includes the idea that meaning can be found even if one's own life is miserable. This means that the meaning of individual experiences, acts or state of affairs can change when they are put into the common framework of a narrative. This perspective is holistic in the sense that a correct comprehension of experiences, acts and states of affairs includes fitting them together, and when this is performed successfully, it changes the interpretation of each of these distinct phenomena. By talking about holistic meaning it is easier to understand why we can claim that pain is bad but meaningful. Pain is not only instrumental because it has an important part to play in a whole. The whole can not be fully appreciated without the pain, and might actually be less meaningful if the pain was abstracted. Great endeavours are usually associated with

⁴¹⁹ Hurka, Thomas, 'Value Theory', in Copp, David (ed.), *The Oxford Handbook of Ethical Theory*. Oxford University Press, Oxford, 2006, pp. 371-375.

risks, suffering, fear and other experiences that are usually avoided. But would it be the same thing to climb Mount Everest if all risks were abstracted? Would it be any different from talking a stroll in the park?

Another feature of holistic meaning is that it is closely related to cultural differences. Trying to establish experiences in a coherent whole must include a search for a narrative. It is impossible to gain holistic meaning without relating oneself to some kind of context. However, one might still claim that it could be possible for an individual to gain holistic meaning without accepting self-transcendence, i.e. to focus on one's own personal narrative without referring to others. This perspective can only provide an egocentric kind of holistic meaning.⁴²⁰

Instead, the point is that narratives are deeply interrelated with other narratives up to and including The Story of Mankind. Any attempt to abstract oneself will necessarily distort any kind of holistic meaning that is gained. It is therefore impossible for an individual to find holistic meaning without either adopting or reinterpreting the common narratives that he or she finds himself or herself being part of.

It is now possible to answer how self-transcendence relates to both meaning and value. The connection between meaning and self-transcendence is that to gain self-transcendence is to obtain the holistic meaning of being part of a narrative that includes past, present and future generations, i.e. The Story of Mankind. It is not possible to obtain holistic meaning in the absence of this narrative, which implies that future generations are a precondition for holistic meaning. Concerning the connection between self-transcendence and value, we ought primarily to understand self-transcendence as providing a different perspective on values. Self-transcendence includes an ambition to grasp holistic meaning, a meaning that will change the values found in individual experiences.

However, there is no simple connection between meaning and value. There are some kinds of meaning that can only be found in a

⁴²⁰ This perspective has similarities with what Parfit calls the self-interest theory of rationality. This is not the place for a comprehensive analysis of the connection between meaning and rationality, but it is noteworthy that both concepts presuppose some kind of interpretative context in which they can be properly understood. See, e.g., MacIntyre, Alasdair, *Whose Justice? Which Rationality?* Duckworth, London, 1989.

certain combination of values, and it might be irrelevant to determine if this means that some new values have been obtained, or if the combination of old values is new. Possibly, a new combination of values might be so different that it is appropriate to talk about new values.

Moreover, even if we accept the claims that holistic meaning is found in a common narrative we must still consider how this affects the relative weight of different values, and how values are to be incorporated into an organic unity. The question is: What is the appropriate relation between different values according to The Story of Mankind?

An essential feature of The Story of Mankind is that it is *open-ended*. This gives some indications for how values ought to fit into the story. We must first notice that whatever we value, we do not know which values future generations might accept. Future generations might reject even our own most cherished values although we do everything in our power to stress their superiority. It is not only that we do not know which specific values future generations will have; we do not know the relative importance each value will have and how values are combined into a meaningful whole, i.e. we lack knowledge of future generations' ideas of holistic meaning. The conclusion of this reasoning is that we lack knowledge regarding future generations' ideas about the good life, understood as considerations about both meaning and value.

Does this give us any insights? One insight is that we should be sceptical about our own ideas of the good life. Scepticism implies the acceptance of human fallibility, that every single one of us could be mistaken about our idea of the good life, even though we do not believe that to be the case. Barry stresses the importance of scepticism as a precondition for conflict resolution; moreover, I believe that it is also important to accentuate how scepticism tells us something about our place in history.

It seems that history tells us that pluralism is the norm when it comes to ideas about the good life. Not only have different generations disagreed about what is valuable; there are few examples of societies that have had a homogenous comprehension of values during a particular time. Given that we are part of history, and are essentially similar to previous generations, it is rather difficult to believe that we, because of progress or luck, have developed the best

possible idea of the good life. The insight is that responsibility to those generations that are remote from us should be based on some kind of universalistic theory, or at least a theory that does not make responsibility dependent on some specific shared values.

Interestingly, MacIntyre provides an idea that can help us define which values could be shared by all mankind. MacIntyre claims that personal identity is the unity of a narrative quest. This means that we are trying to give our individual lives meaning by trying to comprehend them as stories with a certain direction. A distinctive character of a quest is that the goal is not entirely defined in the beginning but evolves during that quest. It is therefore not possible to give a precise definition of what is good for a person before that person has started his or her journey. However, a characteristic of what is good for a person is that it can be described in a narrative that fits it together with the rest of his or her life.⁴²¹

MacIntyre's reasoning can be abstracted from its communitarian background and reinterpreted in a way that makes it applicable to *The Story of Mankind*. This story is also a quest for a telos, for an idea of the good for mankind. However, because there is no way of giving an absolute answer to what this good actually consists of, or even that there is just one good for mankind, the quest must continue. Or, to use a quote from MacIntyre: '... the good life for man is the life spent in seeking for the good life for man.'⁴²² This does not presuppose that there actually is an overarching human telos, or one final idea of the good life. *The Story of Mankind* is teleological, but not aimed at one specific telos. Instead, the striving towards a telos is the most important feature in the absence of a clearly defined and determined telos. Based on this, it is reasonable to claim that the value in *The Story of Mankind* is the value of trying to find out what the good life is all about. The focus is on the process that is the precondition for all other values. That it is the quest that is important, and not the goal, captures the idea that the story ought to be characterized as being open-ended.

There is no need to suppose that there is only one single good life. This is an argument for supporting a range of different conceptions of the good life. Normatively this means that responsibility towards future generations aims at providing a future, which includes, or can

⁴²¹ MacIntyre, Alasdair, *After Virtue: A Study in Moral Theory*, p. 219.

⁴²² Op. cit., p. 219.

include, a wide spectrum of values so that it is possible to continue the quest for human good. The normative claim is therefore that The Story of Mankind should be open and not committed to a certain path.

Finally, the narrative theory claims that if we adopt a self-transcending perspective, this implies that we adopt a narrative comprehension of life. This means that we are co-authors, protagonists and part of the audience. All three perspectives focus on different aspects of human life, but none of them is compatible with the idea that we can talk about a story except in terms of a story for and about people. As long as values are attached to meaning, and meaning is about making sense of life, there seems to be no place for values that are independent of humans. One could possibly claim that there might be impersonal values, but if there are, these values are meaningless, and as such, irrelevant.

The Background for Normative Claims

The primary value of The Story of Mankind is found in the continuous quest for the good life for man. The normative requirement of this value is that the story ought to be open-ended. However, as a normative claim about our responsibility towards future generations, being open-ended is in need of a more systematic explanation. This discussion shifts the focus from value and meaning, towards questions about what ought to be done.

The aim is to formulate one or several normative claims that specify what responsibility towards future generations entails. Such claims provide a standard that can be used to evaluate acts or scenarios and therefore give us insights into how we ought to manage nuclear waste.

Two questions must be answered. First, how many normative claims should there be? And second, what kind of normative claims should there be? This section has a general character that provides a background for a specific formulation of normative claims that are put forward in the next section.

The first questions can also be answered in two ways. Either there is just one basic normative claim, in the sense that every other specific normative claim can be derived from this general claim, i.e. *monism*, or there are several claims that can not be reduced to a basic claim, i.e. *pluralism*.

Concerning monism and pluralism, one can start off by noticing that the best argument for a monistic theory is that it does not lead to conflicts. There is only one claim that is relevant in the determination of which act is right or wrong. The most common examples are total or average utilitarianism and Kant's categorical imperative.

The obvious problem with monistic theories is that they only focus on some aspects of human life as morally relevant and exclude everything else. A total utilitarian theory that discounts every other moral consideration except the question of the well-being of the affected parties, can justify severe inequality as long as it maximizes the total amount of well-being. Also, it is noteworthy that Kant claims that the only thing that is absolutely good is the good will. His basic normative claim is formalistic and claims that a maxim must be universalized, i.e. act only on that maxim whereby you can at the same time will that it should become a universal law. The problem with Kant's monism is that it places no moral weight on the effects on actions. This can lead to the conclusion that someone that acts with a good will performs the right act, although the effects of this act were horrible for everyone and could easily have been avoided.

Both utilitarian and Kantian monism implies a narrow and distorted picture of moral relations. Narrow in the sense that they ignore many aspects that are usually seen as important for how we ought to treat an ethical problem. They will on many occasions distort such problems by placing all weight on just one aspect. Even if it might be possible to formulate one claim that captures all essential aspects of morality, there are those that find such reasoning unnecessary and turn to pluralism.

The most famous proponents of pluralistic theories are John Rawls, and Beauchamp and Childress.⁴²³ There are several problems facing a pluralistic theory. The main problem is, obviously, that there can be conflicts between different kinds of claims. According to critics of pluralism, the occurrence of such conflicts is a strong argument against it. There are several answers to this criticism.

The first way of dealing with conflicts between claims is simply to accept them. One can claim that there are many morally relevant aspects of a certain situation and the only way of dealing with that

⁴²³ Rawls, John, *A Theory of Justice*. Beauchamp, Tom L. and Childress, James F., *Principles of Biomedical Ethics*. Fourth Edition. Oxford University Press, Oxford, 1994.

situation in a sensible way is to accept that there can be conflicting demands. Morality can be so complex that there is no reason to suppose that there is a straightforward answer to every ethical problem (this is the strategy of Beauchamp and Childress). Seeking a monistic formulation can only be motivated by a striving towards simplicity in accordance with Occam's razor. But there is no compelling reason to suppose that moral relations are simple phenomena. Complexity might be an essential feature of ethical theory just as it is in some other human affairs.

Another response to a conflict between claims is to propose a special rule that ranks the claims according to their relative importance, a strategy used by Rawls. However, this approach might imply backing into some kind of monism, in the sense that one claim might be more basic than the others. On the other hand, a ranking does not need to presume that all other claims can be reduced to a basic one, which is the claim of monism.

In response to the problems of both monism and pluralism, it seems better to accept that there are several claims, which might sometimes conflict, than to formulate one basic claim. Even if monism can be simpler, both in terms of coherence and in terms of providing definitive answers to ethical problems, it does seem to be inappropriate as a response to the complexities of our social world. Given that normative ethics covers many different moral phenomena, e.g. special obligations, questions about distribution, doing good for others, trying to live a good life, and respecting others, we do not need to presume that all of these aspects can be addressed with one basic claim. Both Agius and de-Shalit see a need for several claims based on different considerations.

Turning to the second question, what kind of normative claims should there be? There seem to be primarily two kinds of claims, substantial and formal.

A *substantial* claim includes a claim about what is valuable. An example could be a claim of beneficence that must include some idea of what is better or worse, e.g. a hedonistic utilitarian claim that states that more happiness is better and that a loss of happiness is worse.

The general benefit with substantial claims is that they make it relatively simple to find out what ought to be done in a certain case. If a theory claims that people should act in way that brings about a maximum of happiness, it is at least possible to have some idea about

what ought to be done according to this theory, even if one rejects both hedonism and consequentialism. Then again, substantial claims can be counter-intuitive if they are based on values that the majority of people reject. This is not a problem if one has an extremely elitist comprehension of ethics, but becomes a more pressing problem if some importance is placed on ordinary people's intuitions.

Formal normative claims do not make explicit value claims, they set a precondition for what right actions must include, e.g. maxims must be capable of being universalized without inconsistency, or include the preferences of everyone affected by the act. Moreover, it is important to note that even formal claims usually include an implicit value claim. That a maxim can be universalized, i.e. possible to follow in every situation without being inconsistent, is only preferable if moral claims must include such a feature. Someone that proposes a relativistic ethical theory, according to which only the specific context is relevant for the evaluation of an act, can argue that there is no reason to accept that moral claims should be universalized. Claims do not need to be applicable to all similar situations because the context does affect what ought to be done.

One important benefit with formal claims is that they can make recommendations that can be compatible with a wide range of values. A theory that claims that we ought to bring about the maximum preference satisfaction of the people affected by the act does not have to specify what every person actually prefers. The goal is to maximize preference satisfaction without specifying the content of those preferences.

An important drawback is that formal claims might be normatively empty in many situations. In the case of the claim for preference satisfaction, one does need to take a stand on which preferences should be included. Some people have preferences regarding other people's lifestyles, so-called other-regarding preferences. It is necessary to make a specific value claim in order to restrict the influence other-regarding preferences should have on the maximization of preference satisfaction. This means that it is necessary to make some value claims even if one proposes formal normative claims.

The conclusions of this lengthy discussion are that a pluralistic account of normative claims might have a greater chance of grasping several aspects of moral relations. Moreover, it is impossible to refrain

from taking a stand on what is important as long as one wants to make a normative claim. One of the aims of this dissertation is to make such a claim, which means that a pluralistic account must include both substantial and formal normative claims.

Equal Opportunities for Resources

Striving for self-transcendence makes it possible for us to grasp a holistic meaning. The meaning is obtained by regarding ourselves as participants of The Story of Mankind. The basic normative requirement of The Story of Mankind is that it ought to be open-ended. Specifically, this means that the story should not be permanently committed to just one or few specific stories but be a patchwork of many stories. This is supported by the claim that there is no compelling reason to believe that we have found the best idea of the good life. If this is the case, it seems presumptuous and arbitrary to act in ways that might put permanent restrictions on how future generations comprehend the good life. The aim of this section is to present a systematic expression of normative claims. The following discussion will be similar to Agius' discussion about the collective rights of mankind. However, as has been noted before, I reject the need for making use of the rights language as a way of expressing normative claims.

Agius claimed that the first right of mankind is that of survival, mankind ought to continue to exist. Following the structure of Agius' discussion, the first step is to relate the narrative theory to the question of mankind's continued existence. The answer is quite straightforward, future generations are necessary if we are to find holistic meaning. This means that the question about mankind's existence is in a sense already settled. If we search for the meaning by self-transcendence, it is already presumed that mankind should continue into the future. To reject the importance of the continued existence of mankind must either presume that the striving for self-transcendence is a mistaken effort, or that we can somehow evaluate human existence from the outside and come to some kind of conclusion, e.g. that human existence is connected with too much suffering and ought to end. The first assertion can be met by claiming that self-transcendence is a normative ideal, which makes our finitude less exhausting, it provides some existential remedy. A response to the

second assertion is that it presupposes something we can never do, which is to go outside our own frame of reference and look back.⁴²⁴

Another, and similar, argument against the continuation of mankind is that human existence is meaningless and therefore unnecessary to uphold. A response is that human life is a constant struggle about finding meaning. Meaning can not be obtained without some effort by which different individuals try to find out which narratives they are part of. Meaning can not be obtained outside the narrative framework.

A conclusion of this reasoning is that the continuation of mankind is implicitly presumed in the narrative theory. However, in the context of normative claims, this precondition should be made explicit. It is a claim about what is important, a substantial claim. Accordingly, the first normative claim is simply:

- (1) Mankind should continue to exist.

Moving on, the second collective right of mankind, according to Agius, is that each generation has a right to the collective heritage of mankind. The next step in this discussion turns from the precondition that mankind should exist, to what ought to characterize human existence. Two basic ideas indicate how the next claim should be formulated. First, The Story of Mankind ought to be open-ended. Second, we ought to be sceptical about our own idea of the good life because there exist many other ideas of the good life. We ought to be sceptical in the sense that it is presumptuous to believe that our idea is the best possible. The conclusion of these two claims is that each generation ought to be able to determine how they should lead their own life. Or, as long as we can not in any conclusive way judge what kind of life is the best ever, we must leave it up to future generations to be the co-authors of their part of The Story of Mankind. This conclusion also implies that normative claims should be formulated in a way that promotes and upholds this story.

This kind of reasoning echoes a kind of liberal comprehension of the good life that might not take an explicit stand on what the good life is, but nevertheless implies one comprehension of the good life. It stresses the importance of individual choice and that we are all responsible for how our lives turn out. As long as we are sceptical, it

⁴²⁴ This reasoning is similar to Heyd's. See Heyd, David, *Genethics: Moral Issues in the Creation of People*, pp. 222-228.

makes no sense to permanently restrict how The Story of Mankind turns out. This is captured by Barry's idea that we owe future generations equal opportunities.⁴²⁵ However, we should note that equal opportunities is a substantial claim about what is important; that each of us should be able to lead a life according to our own idea of the good life. This can not be fully expressed in a formal normative claim. The only real limitation of the kind on lives people should live is that they should not affect the open-endedness of The Story of Mankind. Nevertheless, the concept of equal opportunities is quite unspecific and it is therefore necessary to provide it with some content.

It is noteworthy that equal opportunities already presuppose that each person is responsible for the life he or she leads as long as he or she has the appropriate means to lead it. Even if we accept that future generations are to have equal opportunities to lead their own lives, the concept is still quite empty. It is necessary to define how equal opportunities to lead one's life is related to other conceptions of equal opportunities, e.g. equal opportunity for welfare or equal opportunity for resources.

Turning first to equal opportunity for *welfare*: Is it reasonable that we ought to provide future generations with the opportunity to reach the same level of well-being that we have reached? Even if that would be a worthy aim, there is a practical problem, we do not know future generations' comprehension of well-being. Neither do we know what other values they endorse, e.g. holistic values, or how they incorporate well-being within their striving to make sense of life. Also, we lack any knowledge about their procreation habits or how they evaluate the relative importance of individual welfare compared to aggregated social welfare. The lack of this information seems to suggest that well-being is a too indeterminate concept in order to be the primary focus for equal opportunities.

As was noted by Barry, the problem with lack of knowledge is not only practical, the claim is that we can not know, even in theory, how future generations should lead their lives and we should refrain from acting in ways that restrict these lives. We can of course make some qualified guesses about what such lives will include, e.g. absence of

⁴²⁵ It is important to note that the narrative theory is quite a different kind of theory than both Barry's theory of fundamental equality and his contract theory. That some of Barry's normative claims capture the claims of the narrative theory does not imply that one has to commit to other aspects of it.

harm, but they are only guesses. Instead, we should not consider how much welfare future generations might obtain. It is irrelevant for distributive concerns, at least if we are talking about what we can do now to give future generations a good life. Our focus must be on creating circumstances in which future generations can make up their own ideas about harms and benefits. For this they need *resources*.

The overall idea with equal opportunity for resources is that future generations ought to have resources that they can use to lead their lives as they see fit. One suggestion is to specify this as equal opportunities for resources. The second normative claim should therefore express the idea that future generations should have an equal opportunity for resources and that this provides a precondition for future generations to live in accordance with their own ideas about the good life. This claim accentuates that the issue is to preserve the possibility to live different kinds of lives, and that resources provide the necessary context for such lives. Accordingly the second claim is:

(2) We owe future generations equal opportunities for resources.

The term resources naturally relates to humans and what we consider resources to be. It is noteworthy that what we identify as resources can also have non-instrumental value. Their worth is not reducible to what we can do with them. However, by focusing on resources, the primary question becomes what is an illegitimate use or transfer of resources.

Resources come in two kinds: *natural* and *man-made*. The important difference between these kinds of resources is that some natural resources can not be replaced by man-made ones. The most important of such natural resources are ecosystems, which are characterized by intricate and complex systems of relations between fauna and animal life. As long as humans can not fully comprehend how ecosystems work or how to recreate them, it is just not possible to replace them. This suggests that equal opportunities for the benefits of resources must imply that ecosystems are preserved.

There are other kinds of resources, like coal or iron, and these can be treated differently. Barry's idea of *productive opportunity* suggests that some resources can be depleted as long as they are replaced. It seems obvious that mankind can not sustain itself without some environmental impact. As long as we are unwilling to turn back to a hunter-gatherer or small scale farming society, we must accept the

depletion of some resources. On the other hand, it is dangerous to ignore that human activity threatens life-sustaining ecosystems. We might have to reduce or change our consumption patterns in order to safeguard ecosystems.

Man-made resources, like those included in culture, technology and science, can be replaced. Culture can change and new technology can replace older one. These resources are inherent in The Story of Mankind. The story is partly a story about culture, technology and science. As long as the story ought to be open, it presupposes knowledge of history as a reference point. Man-made resources are an essential part of any future conception of the good life as long as these lives are situated in The Story of Mankind.⁴²⁶ Accordingly, there must be a third claim that defines the status of different kinds of resources:

(3) Non-replaceable and life-sustaining natural resources, like ecosystems, should be maintained. Other non-replaceable natural resources can be depleted as long as they are replaced with man-made resources at a rate that can uphold a constant productive opportunity.

This claim leaves one question unanswered, the question of where to set the starting point, or baseline, that should be used to determine whether opportunities are reduced or increased. It is difficult to imagine that there is a single objective baseline; it is more reasonable to accept Barry's idea that the baseline should be now. We can not change how previous generations acted towards us, but we can obviously make a huge impact on future generations.

Accepting the present as the baseline implies that we ought to ask ourselves if our actions, rules for actions or the dispositions we promote will in fact reduce or increase future generations' equal opportunities to benefit from resources. And this question must be asked every time we might affect future generations in a non-trivial way. The fourth claim is therefore:

(4) The baseline for reduction and increase in the range of opportunities for resources should be determined on a case-by-case basis in relation to the current situation.

⁴²⁶ One possible problem with equal opportunities for resources concerns whether human talents should be included in the concept of resources. I find no compelling reason to extend the concept of resources to include individual talents. As long as individual achievement is caused by a combination of talents *and* environmental factors, it is better to focus on creating a context in which talents can be developed.

One problem facing this claim is that our present lifestyles are impossible to sustain indefinitely. We might consume resources at a rate that is just too rapid for any possible combination of man-made resources to compensate. This claim means that our consumption must either be reduced or that our investment in replaceable resources must increase. Either way, we face a situation where fewer resources can be spent on non-essential activities. This can reduce the total aggregated well-being in our societies. The answer to this is that any reduction of well-being might be temporary. The value and meaning of well-being might change and as long as the future is open, there is still a possibility for many different solutions to the problems connected with our present lifestyle. Even if this seems to echo the optimistic perspective there is one difference. The optimists believe that the situation will be changed more or less by itself; I believe the situation might change but that it will take more time and it will surely imply some changes in lifestyles, at least for some of us.

These four claims provide a general normative framework that can be used to determine what we ought to do in order to take our responsibility towards future generations.

Practical Questions

Regarding the seventh analytical question, who should take responsibility and to whom, I find it reasonable to support a multi-level approach. This approach claims that responsibility should be located on all three levels, on individuals, on groups, and on institutions.

The question about who is responsible refers to who should act in a way that satisfies our responsibility to future generations. Obviously, there are many different acts that can affect future generations, but most of them have trivial effects that will become unnoticeable after a few years. However, there are acts with profound effects that can affect even remote future generations, e.g. the extinction of species, the emission of greenhouse gases and the generation of nuclear waste. Such acts have great moral importance and it is therefore necessary to find a system of responsibility that regulates such acts.

Many acts can harm the remote future in a direct way. E.g., nuclear waste might harm individuals up to 100,000 years from now. However, the most important kind of acts are arguably those

undistinguished individual acts, which bring about profound effects when many people perform them during an extended period of time, acts that cause accumulating effects.⁴²⁷ As long as such accumulating effects might be negative, it is necessary to place limitations on the acts that cause them. It seems reasonable that institutional arrangements can co-ordinate individual actions in ways that reduce the occurrence of such acts. E.g., it might be necessary to implement institutional arrangements that provide incentives for those that refrain from acting in the relevant way and penalize those that do. One example can be a system of tolls for those that drive their cars to the city centre.

However, any institutional system, short of a totalitarian one, will include a large number of actors who either disregard the rules altogether, or do their best to avoid them. Such free-rider behaviour can only be avoided by bringing about a change in each individual's disposition for acting. Hence, it is also reasonable to locate responsibility on the individual. It is certainly possible that all of us have some small effect on future generations. As participants in a society, we use and support different kinds of technology and energy sources, and these can affect the future. E.g., if we as individuals become informed about the effects of energy sources, we are responsible for our own contribution to this effect. Taking responsibility must include a willingness to change our individual behaviour and, if that is impossible, to promote and accept the necessary institutional arrangements which can bring about such a change.

Additionally, it is significant that individuals in industrialized countries are part of a group that has a large impact on the earth's environment by its extensive use of technology and certain energy sources. If these individuals are considered as a group, it makes sense to place an extra responsibility on them. It makes sense to claim that those that make the greatest impact ought to make the largest sacrifices in order to reduce the negative aspects of that impact. Or

⁴²⁷ These are the kinds of acts that Jonas was most concerned with. He also stressed a further point, which is that effects might start to accumulate on their own, separately from acts. Technology is the most important example. Nevertheless, it is also reasonable to assume that the effects of technology are caused by the widespread use of technology. The effects of technology can be traced both to its tendency to reinforce its own effects, and to how it is adopted by many individual and institutional actors.

alternatively, it seems quite unfair that those that make the smallest impact should make the largest sacrifices.

Moreover, the human population is increasing, which also causes increased effects on the environment. It is difficult to believe that an increased population will make it easier to safeguard the abilities of future generations to live according to their own ideas of the good life. If our responsibility entails the preservation of the resources available for a wide range of ideas of good, we should not expand the human population any further. As long as the population increase is mostly to be found in developing countries, they as a group must take steps to reduce their population. Optimism aside, it is hardly controversial that both over-consumption and over-population are problematic. These two phenomena can not continue unchecked if we are to take our responsibility towards future generations seriously.

Turning to the topic of the object of responsibility, I find it reasonable that responsibility must be owed to future generations as a collective. It is impossible to identify specific future individuals because future generations are always future, in the sense that we can never meet them. Instead, we must conceptualize future generations in the form of a collective, a collective that is a necessary precondition for finding holistic meaning through self-transcendence. Also, future generations can not be abstracted from the narrative structure. They become an object of responsibility as part of this structure. As I have argued, there can not be any moral status that is entirely separate from the narrative. On the other hand, the moral status of future generations is separate from our own interests and beliefs, which satisfies the first evaluative criterion.

The eighth analytical question concerns the time limits of responsibility. One noticeable aspect is that only one of the five philosophers that have been discussed in the previous chapters proposes that responsibility should diminish with time. de-Shalit claims that in regard to close generations, we have both the obligation to do good, because they share our idea of good, and refrain from acts that might harm. However, in regard to remote future generations, the obligation is only to refrain from doing harm. This distinction presupposes that we and close future generations share a criterion to determine the difference between harm and good. This might be the case as long as we consider specific homogenous communities but it is certainly not the case generally. As we saw earlier, one problem

facing de-Shalit's theory is that it is contextual, but the problems facing future generations are not confined to specific communities. These problems are trans-cultural and it is therefore necessary to try to develop a trans-cultural perspective even if that might be difficult or even impossible.

The argument that it is difficult to establish the exact boundaries between doing good and refraining from harm and therefore unreasonable to refrain from placing a limit on one of them but not the other, is a response to a contextual theory of good. However, for those that accept a universalistic theory, responsibility is not limited by time. Parfit, Barry, Agius and Jonas, all reject the claim that time in itself reduces our responsibility towards future generations. The problem with universalism is that it presupposes that it is possible to determine what is good or bad generally. This is a problematic claim because it might just be wrong. It is therefore better to claim that the final judgment over our actions can only be made by future generations. However, as long as we must act, we ought to act in accordance with our own ideas of good but we should also be conscious of the obligation to safeguard the possibilities for other ideas of good in the future. It is reasonable to conclude that there can not be any time-limit on responsibility as long as we can act in ways that affect remote future generations.

In order for individuals to take responsibility they have to have correct information. This takes us to the ninth question, about the limitation of knowledge about the future. The main problem becomes how we can transfer resources in a legitimate way, given this insecurity about the future.

Obviously, some activities might have effects that are impossible or difficult to determine. E.g., we might come to believe that we have found a useful replacement for oil. But after some time, our beliefs might change, and we might come to believe that our previous prediction was simply wrong. How do we solve this kind of problem?

One response is that we must acknowledge the different kinds of resource transfers between generations. Some resource transfers could cause severe effects. E.g., some crucial resource is depleted without being replaced, or the replacement is combined with risks. The key to handle such questions is a basic choice between being optimistic or pessimistic, i.e. either to disregard the risks because they are unlikely, or prepare for them because the risks are possible. In response to such

situations there are good grounds for using Jonas' 'heuristics of fear' and absolutely refrain from actions that might endanger the continued human presence on earth. This means that if there is a remote risk that global warming might endanger the earth's ecosystems, this is a strong moral reason to avoid such activities.

However, many actions do not risk the continuation of human life. Instead, they just include larger or smaller risks that future generations might come to harm. The idea behind equal opportunities for resources is that this implies that we should not transfer any risks! The whole idea of transferring risks seems incompatible with trying to establish a situation where future generations can lead their own lives and thus, keep the story open.

Of course, reality is not that simple. Resources are often tied to risks, at least man-made resources. One response to this is to accept Barry's idea that it is immoral to act in a way that could lead to great harm for people who have neither consented nor benefited from that act. The crucial question becomes whether future generations might benefit from or consent to a resource that is associated with some risks. If close generations share our idea of the good life, they might accept the burdens of that good life. However, there are no reasons to suppose that remote future generations would consent to any risks that are associated with activities from which they have not gained any benefits.

The conclusion is that any transfer of resources that are inherently tied to great risks, i.e. risks that nobody of sound mind would freely consent to and accept without a huge compensation, is morally wrong. Such transfers should simply be avoided or minimized.

Conclusion

This chapter attempts to provide a reasonable theory about responsibility towards future generations.

Concerning the justification, I have claimed that the reason why we have responsibility towards future generations is that we are all part of The Story of Mankind. This presupposes the adoption of a specific comprehension of our own lives. Even if it is not empirically necessary to adopt this perspective, it is beneficial in the sense that it provides life with a different kind of meaning.

In regard to values, the argument is that there is only one value that can be shared by all of mankind. That is the value of an open future. This provides the precondition for many ideas about the good life. Besides, it is unreasonable to claim that there is a universal conception of well-being that is shared by all generations. The existence of many other values make such universalistic ideas dubious.

The basic normative claim is that we are obligated to provide future generations with resources that make it possible for them to lead their lives according to their own ideas of good. The reason why we can not focus on providing future generations with a certain level of well-being is simply that we lack any knowledge about their conceptions of well-being. Moreover, we do not know their other values, or how they incorporate well-being in their ideas about the good life.

In response to the practical questions, it is imperative that responsibility be placed on several levels. Individuals, groups and institutions can all affect the future and should therefore also be partly responsible. Also, responsibility can not be diminished by time because there is no exact point where it should end. Finally, I argued that Barry's theory of risk distribution seems to provide one appropriate way of handling our limited knowledge about the future.

The next step is to apply the narrative theory to the problem of nuclear waste management. This is essential in order to show that the theory is relevant for real-life problems that raise questions about responsibility towards future generations.

7. Future Generations and Nuclear Waste Management

Introduction

There are several problems that highlight responsibility towards future generations. Issues like global warming and the destruction of tropical rainforests have become more and more important in mainstream political discussions. However, even if these issues have gained a larger share of media and political focus, they are also connected with huge uncertainties and controversy. Some people even deny that they are of any moral significance. The question about how we should manage nuclear waste is different. It is obvious that the waste is hazardous so the controversy primarily concerns how we should manage the waste, not whether it should be managed. Also, the waste is fully artificial in the sense that we have produced it, which makes it even more relevant to consider its moral implications. It is therefore important to consider how this issue can be related to our responsibility towards future generations.

Subsequently, the aim of this chapter is to analyse the relation between the narrative theory of responsibility towards future generations and the problem of nuclear waste management. This is imperative because the third aim of this dissertation is to apply the idea of a common narrative to a concrete problem. If this narrative theory can give us a framework to understand and solve this problem, it would show that this theory can be beneficial not only to normative ethics but to applied ethics as well.

It should be noted that the exclusive focus on nuclear waste has some limitations. One can argue that the question of nuclear waste must be considered in the context of the energy production generally. Nuclear power is an energy source that is part of an energy mix that can reduce the emissions of greenhouse gases. As such, nuclear power

ought to be evaluated in relation to other kinds of energy sources. However, such an evaluation would imply an ethical evaluation of many different energy sources and energy technologies. Such a complex and thorough discussion is beyond the scope of this dissertation. However, it seems reasonable that the conclusions of this chapter could influence a more comprehensive study of the ethical implications of present and future energy sources and technology.

Nuclear Waste and Its Management

Although there are several types of nuclear waste, this dissertation will focus only on high-level waste (HLW) because it is the most hazardous type of nuclear waste.

Generally, *Nuclear waste management* refers to the process of taking care of different types of nuclear waste and other radioactive material. Although the techniques vary with the different types of waste, the management process is similar for all kinds of nuclear waste. This includes four steps:

The first step is *pre-treatment*, which is the step that occurs after the generation of the waste. This may include a wide range of activities, e.g. collection, or interim storage of the waste. It can also provide the opportunity to segregate the waste for either storage or disposal.

The second step is *treatment*. This includes operations to improve the safety or economy of the waste by changing its characteristics. Basic treatments include volume reduction, radionuclide removal and change of composition. The treatments range from incineration and compaction, to filtration, depending on the form and type of waste.

The third step is *conditioning*, which includes operations that transform the waste into forms that are suitable for handling, transportation, storage and disposal. This can include immobilizing the waste through solidification and/or placing it in containers.⁴²⁸ The waste can be placed in different containers ranging from 200 litre steel drums to highly advanced thick-walled containers weighing several tonnes. Treatment and conditioning are often performed in close conjunction with each other.

⁴²⁸ Solidification is a process in which liquid is made solid. Liquid high-level waste is usually vitrified, i.e. made into a form of glass.

The fourth and final step of waste management, after a longer or shorter period of storage, is the *disposal* of the waste. This implies the emplacement of the waste in a facility with reasonable security, without the intention of retrieval, and without reliance on long-term surveillance or maintenance. The safety is achieved by isolating the waste from the biosphere. This implies the construction or use of a system of natural and man-made barriers.⁴²⁹

Besides the different steps in the waste management, it is important to note that HLW comes in three different types. The first type is the spent nuclear fuel from nuclear reactors, when it has been defined as waste, i.e. it can no longer be used as fuel.⁴³⁰ The second type is the liquid waste from the reprocessing of spent fuel, prior to and after it has been solidified. And the third type is any other waste with similar radioactive characteristics.⁴³¹

I use the term HLW to refer to all three types and also to the spent fuel that is not considered to be waste. Whether the spent fuel actually is waste or not is not a question for this dissertation. Instead, I want to focus on the risks of a certain kind of material, and its potential as a resource associated with risks. As long as spent fuel has the same level of hazards, it should be included in HLW.

HLW consist partly of radioactive substances, e.g. various by-products of the nuclear reaction in fission reactors (like fission products⁴³² and actinides⁴³³). These substances have a half-life ranging from seconds to thousands of years and it is the longevity of many radioactive substances in the waste that makes it hazardous for thousands of years.⁴³⁴ E.g., spent nuclear fuel releases the highest

⁴²⁹ International Atomic Energy Agency, *The Principles of Radioactive Waste Management*. Safety Series No. 111-F. IAEA, Vienna, 1995, pp. 13-15.

⁴³⁰ International Atomic Energy Agency, *IAEA Safety Glossary: Terminology Used in Nuclear Safety and Radiation Protection*. 2007 Edition. IAEA, Vienna, 2007, p. 189.

⁴³¹ Op. cit., p. 213.

⁴³² 'Fission products are the new materials that are formed when heavy atomic nuclei, such as uranium and plutonium, are split in the nuclear process in the nuclear reactor.' Hedin, Allan (Swedish Nuclear Fuel and Waste Management Company, SKB), *Spent Nuclear Fuel - how Dangerous Is It? A Report from the Project "Description of Risk"*. Technical Report TR-97-13. SKB, Stockholm, 1997, p. 13.

⁴³³ An *actinide* is 'any of the series of fifteen radioactive metallic elements of from actinium (atomic number 89) to lawrencium (atomic number 103) in the periodic table.' From *The Concise Oxford Dictionary*. Revised Tenth Edition, Oxford University Press, Oxford, 2002.

⁴³⁴ There is some controversy about which standard should be used to represent a safe level. One common, but still controversial, standard is to use the radioactivity of

amount of radiation when it is extracted from the reactor. The radioactive decay produces heat, which makes it necessary to place the waste in a cooling storage close to the nuclear plant, before it can be transported to other facilities.

How hazardous is HLW? This is actually quite difficult to determine because the hazard is dependent on several factors, e.g., the amount of waste, its radioactivity, the period of time a person is exposed to the waste and how he or she is exposed. However, it is still important to have some general comprehension of its hazard.

Radiation can be harmful to living organisms because of its capacity to damage or kill biological cells. Depending on the dose, radiation can kill humans by damaging the nervous system, the gastrointestinal tract, the bone marrow, or cause cancer or chromosomal damage.⁴³⁵ The hazard of radiation is determined by the radiation dose a person is exposed to, measured in *sievert* or *Sv*. It is defined as ‘a dose which delivers a joule of energy per kilogram of recipient mass.’⁴³⁶ Because one Sv is a very large dose, it is more common to measure exposure in millisieverts, mSv. E.g., one year after the waste is discharged from the reactor its dose rate is around 1,000,000 mSv/h. A person standing one meter from one ton of waste receives a lethal dose (5,000 mSv) in about 20 seconds. After 40 years the dose rate is 65,000 mSv/h.⁴³⁷ The hazard of such *external irradiation*, radiation from outside the body, is reduced significantly during more extended periods of time because of the declining radioactivity of the waste. To illustrate this decline, it is noteworthy

naturally occurring uranium ore as the safe level. This means that the waste is presumably safe when it reaches that level of radioactivity. This takes about 100,000 years. E.g., Swedish Nuclear Fuel and Waste Management Company (SKB), *Treatment and Final Disposal of Nuclear Waste*. Program for Research, Development and Demonstration of Encapsulation and Geological Disposal 98. SKB, Stockholm, 1998, p. 27. However, the point is not whether the waste will be hazardous for 100,000 years or a million years, the point is that the waste will be hazardous for such a long time that it seriously questions our ability to manage it in a proper way.

⁴³⁵ Hedin, Allan (Swedish Nuclear Fuel and Waste Management Company, SKB), *Spent Nuclear Fuel - how Dangerous Is It? A Report from the Project "Description of Risk"*. Technical Report TR-97-13. SKB, Stockholm, 1997, p. 19.

⁴³⁶ *The Concise Oxford Dictionary*.

⁴³⁷ Hedin, Allan (Swedish Nuclear Fuel and Waste Management Company, SKB), *Spent Nuclear fuel - how Dangerous Is It? A Report from the Project "Description of Risk"*, p. 21. Hedin uses the term *spent nuclear fuel* where I use the term *high level waste*.

that compared with the initial radioactivity, the activity after 100 years is 0,5 %, and after 10,000 years, it is about 0,005%.⁴³⁸

In addition to the external irradiation, there is also *internal irradiation*, radiation that is emitted inside the body. This kind of irradiation could be caused by the ingestion or inhalation of radioactive particles. The effects of internal irradiation are difficult to determine due to the limited empirical evidence. However, an increased likelihood of cancer could be one effect.⁴³⁹

Moreover, one of the by-products in HLW is plutonium, which is the main material for nuclear weapons. Even if the plutonium in HLW is sub-optimal as material for nuclear weapons, few people deny that material that could possibly be used as nuclear weapons should be closely monitored, protected or even destroyed.

Risks of High-level Waste

Whatever methods are used to manage HLW, we can not avoid the physical handling of the waste. Because of the radiation, this handling is always associated with a risk of contamination and exposure to radiation. E.g., the ordinary way of transporting HLW is by enclosing it in large special containers. Each container must protect humans and the environment from radioactive exposure and this requires heavy shielding that makes the containers bulky and heavy (80 tons).⁴⁴⁰ Obviously, this bulk and weight makes the transportation more difficult.

Apart from the risks associated with transportation, several countries (like Great Britain, France and Russia)⁴⁴¹ also subject their HLW to reprocessing and recycling, a process that includes several

⁴³⁸ Op. cit., p. 14.

⁴³⁹ Op. cit., pp. 19f. and p. 31. Hedin mentions only one example that demonstrates the long-term effects of internal irradiation: the increased incidents of cancer among children in the Chernobyl region. Such limited empirical material seems to make it difficult to make any conclusive claims about the harm caused by low doses of internal irradiation.

⁴⁴⁰ Swedish Nuclear Fuel and Waste Management Company (SKB), *Treatment and Final Disposal of Nuclear Waste*. Program for Research, Development and Demonstration of Encapsulation and Geological Disposal 1998. SKB, Stockholm, 1998, p. 33.

⁴⁴¹ Op. cit., p. 40.

steps, which are part of the overall nuclear fuel cycle.⁴⁴² First of all, the HLW must be transported to the reprocessing facility. Second, the waste is subjected to chemicals that separate the plutonium and the uranium from other high-level waste in the spent fuel (fission products and actinides).⁴⁴³ Third, the uranium can be re-enriched and used in new nuclear fuel. Also, the plutonium can either be stored, or used in combination with new uranium to create mixed oxide fuel (MOX-fuel) a fuel type that can be used in several types of nuclear reactors. Each step in this cycle increases the risks of accidents or some kind of human intrusion, with the possibility of contamination (and death) as a very real risk.

Besides the risks that we face with HLW, future generations face three types of risks caused by the existence of this waste: direct exposure to the waste itself, indirect exposure by contamination, and the future use of the waste as a source for nuclear weapons.

Direct exposure involves close contact with the waste itself. This exposure can either be accidental, e.g. drilling for water, or intentional, i.e. intending to use the waste in some way.

Direct exposure caused by *intentional* intrusion is not ethically problematic. As long as an agent fully understands what he or she is doing, that agent is responsible for that act, and the harm caused by this act. He or she can therefore be blamed for his or her action. E.g., someone enters a HLW storage facility with the intention of killing himself or herself by radiation exposure.

Nevertheless, and less obvious, is the fact that we are partly responsible, at least in a causal way. Our activity is a necessary condition for the harm. The intentional acts of future generations place the primary responsibility on them. But it is still reasonable to assume that we have some responsibility for that harm, especially, if we did not do anything, or 'enough', to discourage intentional intrusion.⁴⁴⁴

However, primarily *accidental*, or unintended intrusion, is of ethical significance. The problem is that it is impossible to establish the probability that it will actually occur. But it is still reasonable to claim that if future generations suffer direct exposure through

⁴⁴² Nuclear fuel cycle refer to all the stages involved in the process of producing and using nuclear fuel, from the mining of uranium to waste management. The more exact structure of the cycle depends on the kind of reactor and the fuel type.

⁴⁴³ The remaining high-level waste is converted into glass before storage and disposal.

⁴⁴⁴ The question of what is 'enough' can not be determined without referring to the goals of waste management and the different management methods.

accidental intrusion, this mitigates their responsibility, and shifts responsibility to us.

Indirect exposure involves being exposed by a radiation leakage that contaminates water, soil and plants. Such contamination might lead to accidental ingestion or inhalation of radioactive substances. The effects of this are unknown, or at least very difficult to determine.⁴⁴⁵ Indirect exposure is problematic in the sense that there is limited knowledge both about the probability of exposure, and the hazard of such exposure. It seems reasonable that if indirect exposure is harmful, any agent that brings about such exposure must be responsible for such harm, and could be blamed for his or her action. This makes it reasonable that we should avoid causing indirect exposure to future generations.

The spread and use of nuclear weapons provides a third risk of HLW. Future generations might be exposed either to a ‘dirty bomb’, which harms by exposing people to radiation, or by the actual construction and use of nuclear weapons. If either is the case, it is reasonable that we are partly responsible for this harm if we have not done ‘enough’ to discourage the use of the waste for these purposes. Also, as long as we find the risk for future use of nuclear weapons in itself morally repugnant, we do have a reason to avoid or limit the probability that HLW will be used in such weapons.

Methods for HLW Management

There are three principle ways of managing HLW, *storage*, *disposal* and *ultimate removal*. The differences between the first two is that storage refers to deposits that are intended to be temporary, and disposal to deposits that lack the intention of retrieval (which could still be theoretically possible).⁴⁴⁶ Ultimate removal implies that the

⁴⁴⁵ Hedin, Allan (Swedish Nuclear Fuel and Waste Management Company, SKB), *Spent Nuclear Fuel - how Dangerous Is It? A Report from the Project "Description of Risk"*. Technical Report TR-97-13. SKB, Stockholm, 1997, pp. 19f. and p. 31.

⁴⁴⁶ E.g., in International Atomic Energy Agency, *The Long Term Storage of Radioactive Waste: Safety and Sustainability, A Position Paper of International Experts*. IAEA, Vienna, 2003, pp. 2-3. A difficulty with IAEA’s definition is that the only criterion for determining the difference between storage and disposal are the *intentions* of the agent. Another suggestion is to define storage as a deposit that can not, in practice and theory, be ignored by future generations because of the risk of accidental harm. Correspondingly, disposal refers to a deposit that could theoretically be totally ignored by future generations; disposal would then be similar to ultimate

waste is made totally inaccessible and can not possibly cause any risks of either direct or indirect exposure, or be used for the construction of nuclear weapons.

Rejected Methods

The following methods have been considered, but have been rejected because of both safety issues and for political reasons.⁴⁴⁷

Ultimate Removal in Space

If it would be possible to get the waste into space, it could be disposed off in a way that eliminates any future risk of harm. As a theoretical solution, this method would certainly be the best solution to the waste problem. Practically, this method is hopelessly unrealistic.⁴⁴⁸

Currently, the only way to reach space is by using rockets. The huge amount of highly radioactive HLW, and the limited payload of current launchers, would make this a very time-consuming project. Besides time, the most important problems are costs and safety. The current price of transporting one kilogram of cargo to a geostationary orbit is thousands of dollars, and it would therefore be necessary to find some way of reducing this cost in order to apply this method.

However, it is doubtful that even the implementation of a massive launch program would reduce the price to a level where it would be economical to use this method. Cost aside, space disposal will include the risk of rocket failure. Even the most reliable launcher suffers occasional failures, like launch or in-flight explosion. The negative

removal. However, the key phrase is *theoretically*. It is very difficult to justify the claim that a method includes no theoretical risk whatsoever that future generations could suffer accidental harm, it is therefore more sensible to claim that the goal is to reduce and minimize risks of harm, and not to avoid the risk altogether. However, because of the common use of IAEA's definition of disposal and storage it still makes sense to use that terminology in spite of these problems.

⁴⁴⁷ E.g., Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2007 – Responsibility of Current Generation, Freedom of Future Generations*. SOU 2007:38. Fritzes, Stockholm, 2007, p. 38.

⁴⁴⁸ Swedish Nuclear Fuel and Waste Management Company (SKB), *Treatment and Final Disposal of Nuclear Waste*. Program for Research, Development and Demonstration of Encapsulation and Geological Disposal 1998. SKB, Stockholm, 1998, p. 40.

effects associated with a failure involving a rocket loaded with HLW could be considerable. It is doubtful if any society would accept this price for managing HLW.

Deep Seabed Disposal

A second class of rejected methods is different versions of deep ocean disposal.⁴⁴⁹ There are two ways of doing this. The first, *deep seabed disposal*, involves placing HLW in containers and dropping them into the Ocean. The containers will sink about 4,000 m and be buried in deep-sea sediments.

The second, even more tentative, method is *deep sub-seabed disposal*. It aims at the construction of a geological depository on the deep ocean seabed. One way of doing it is to drill deep boreholes and deposit the waste in these holes.⁴⁵⁰

There are three possible benefits with deep ocean disposal. If either of the two methods were technically possible and implemented, the waste would be extremely difficult to retrieve. The vast amount of seawater would also help to disperse any contamination and offer good shielding of the radioactivity.

The method faces four problems. The first problem is the limited amount of knowledge about the seabed environment. A considerable research program would be necessary just to evaluate this environment. The second problem is that it is technically difficult to carry out construction on and under the seabed. The method presupposes substantial technical development before it can be realized. A third problem is that one must find a way to guarantee that there could be no contamination, and this will also include researching the effects of such contamination. The fourth problem is that the deep ocean seabed is positioned in international waters and subjected to regulations. Politically, it would be very difficult for a country to get permission for deep ocean disposal.

⁴⁴⁹ It is more appropriate to use the term *disposal* for these methods instead of *ultimate removal* because it might be possible to develop techniques to retrieve the HLW.

⁴⁵⁰ Op. cit., p. 40.

Realistic Methods

There are three realistic methods for HLW management: surface storage, geological disposal, or portioning and transmutation. These methods are realistic in the sense that they are either technically possible or already researched and endorsed. It should also be noted that these methods are not mutually exclusive; it is possible to complement two or all three of these methods in different stages of the management process.

Surface Storage

Surface, or near surface, interim storage of HLW is already used in many countries with nuclear facilities.⁴⁵¹ It has been suggested that this method should be used to store HLW for more extended time periods, including storage that is intended to be more or less permanent.⁴⁵² This can be accomplished by either extending the lifetime of current interim storage facilities, or by constructing completely new facilities. This implies that the current interim storage period would be extended from around 30 years to several hundred years. The method is usually considered to be a zero alternative, it implies a ‘do nothing or little’ response to the HLW problem.⁴⁵³

There are several benefits with surface or near surface storage. The first is that the technology is readily available and used because HLW must ‘cool off’ in an interim storage during a number of years before it can undergo any further processing or be placed in another kind of storage. There is therefore no need for any substantial research and development of this method. A second benefit is that this method makes it easy to monitor, retrieve and transport HLW. A third benefit

⁴⁵¹ The Swedish facility CLAB in Oskarshamn is one example. Several thousand tonnes of highly radioactive waste is stored in caverns 30 m below ground level. The waste itself lies in pools filled with cooling water. Cooling water is continually fed into the pools. Some dry storage methods, Dry Rock Deposits, are not dependent on such active interventions. Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2007 – Responsibility of Current Generation, Freedom of Future Generations*, pp. 38-39.

⁴⁵² This implies that one could use the term disposal for this method. However, this is dependent on whose intentions are considered. We might intend to dispose of HLW by placing it in surface facilities. However, this facility could be considered as storage by some future generation. It is then impossible to determine if the facility is a storage facility or a disposal facility.

⁴⁵³ Op. cit., pp. 38-40.

is that this method provides the maximum flexibility in response to changing circumstances including the possibility of new technological breakthroughs in waste management.⁴⁵⁴

The benefits of this method can also be its drawbacks. This kind of facility requires constant monitoring of the waste and is therefore dependent on the present and future society. This involves two problems. First, because the long half-time of the radioactive substances in the waste, a surface storage must be manned for a very long time. This means that there must exist institutions that can train new personnel, provide security, and supply spare parts and electricity. However, it is not reasonable to suppose that such stable and strong institutions can be maintained during many thousands of years.⁴⁵⁵ The conclusion is that a continuous use of surface storage needs a very stable society. It is not possible to guarantee that a society can be stable for several thousand years. Societies can and do dissolve and there is no way of securing that technology will provide new and better solutions to the waste problem.⁴⁵⁶

The second problem is that the facility is close to the surface, which makes it sensitive in relation to different physical threats and human intrusion. The safety of the nuclear material is therefore difficult to guarantee even in scenarios where current societies remain stable for thousands of years.

Geological Disposal

Geological disposal includes several similar methods aimed at disposing HLW in repositories located in various rock, salt or clay formations. These methods involve either placing canisters with HLW in structures, caverns or tunnels, at a depth of 100-1,000 m (medium

⁴⁵⁴ One important proponent of this method is Shrader-Frechette. Shrader-Frechette, Kristin, *Burying Uncertainty: Risk and the Case against Geological Disposal of Nuclear Waste*. University of California Press, Berkeley, 1993, pp. 213-251.

⁴⁵⁵ The Catholic Church is one institution that has maintained itself for a very long time. It is however very difficult to comprehend what kind of institution could be so stable that it can maintain technological knowledge and high physical security even in situations where society itself can not.

⁴⁵⁶ Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2007 – Responsibility of Current Generation, Freedom of Future Generations*, p. 40.

depth disposal)⁴⁵⁷ or drilling boreholes to a depth of 4,000 m (deep boreholes).⁴⁵⁸

Medium depth geological disposal has several benefits. First, because it has been viewed as a promising management method for several decades, the technology is well researched and widely accepted.⁴⁵⁹ Second, geologists have significant knowledge about the geological environment at this depth. Third, due to the relative shallowness of this depth, it is possible to construct several protective barriers, e.g. the canister, the clay and the surrounding bedrock.⁴⁶⁰ It is noteworthy that the actual durability of the last barrier is dependent on the proper selection of suitable bedrock. Moreover, it is also possible to attain high levels of safety during the placement of the canisters inside the depository.

The critical problem facing this method is that this depth is shallow enough to contain moving groundwater. If the depository is placed in an area with such groundwater, this might affect the consequences of a leakage. The groundwater could transport radioactive substances to the surface.⁴⁶¹ Also, a second drawback is that there are some uncertainties concerning the fabrication quality, durability and consequent failure rate of the storage canisters and other engineered barriers throughout extended time-spans.⁴⁶² A third drawback with this method is that the depository is shallow enough to risk intended or unintended intrusion by future generations.

Turning to the second variant of geological disposal, *deep boreholes*, a possible benefit with this method is that it might be possible to deposit the waste in a rock environment with either stagnant or very slow moving groundwater. If there is no or little vertical movement of the groundwater, this will either prevent or significantly slow the spread of any leakage from the waste canisters.

⁴⁵⁷ Two examples are the Swedish KBS-3 and the Yucca Mountain project in the United States.

⁴⁵⁸ Op. cit., pp. 43f.

⁴⁵⁹ The method is at least widely accepted in the technical community. International Atomic Energy Agency, *The Long Term Storage of Radioactive Waste: Safety and Sustainability, A Position Paper of International Experts*. IAEA, Vienna, 2003, p. 13.

⁴⁶⁰ Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2007 – Responsibility of Current Generation, Freedom of Future Generations*, p. 43.

⁴⁶¹ International Atomic Energy Agency, *Scientific and Technical Basis for the Geological Disposal of Radioactive Wastes*. Technical Report Series, No. 413. IAEA Vienna, 2003, p. 43.

⁴⁶² Op. cit., p. 70.

The slow moving groundwater will increase the period of time for any leakage to get to the surface. This increases the probability that the radioactive substances will be less hazardous if they reach the surface.

The main drawback with this method is that there is, currently, not sufficient knowledge to thoroughly evaluate it. It is therefore speculative to compare it with other methods. A second drawback is that the method involves only two barriers, the canister and the bedrock. If a depository should be protected by multiple barriers this could be considered a limitation. The third drawback is that it might be difficult, or impossible, to retrieve a canister during and after the placement in the boreholes.⁴⁶³

Partitioning and Transmutation (P&T)

This is a group of techniques that are not intended to permanently solve the HLW problem, but to complement other management methods. The benefit with P&T is that it reduces the amount of radioactive material and the amount of time during which the material is dangerous by transforming highly radioactive substances into less radioactive ones. The radioactive substances left after the process must be managed in some other way.

The obvious benefit with P&T is that it might be possible to reduce the duration of the most harmful substances in HLW with a factor of 100. This might make it possible to reduce the half-life from 100,000 to 1,000 years or less.⁴⁶⁴ Because it is more likely that we can construct a storage or disposal facility that is safe for up to a 1,000 years, P&T makes it easier to safeguard future generations from accidental leakage.⁴⁶⁵

A second benefit with transmutation is that the technique is based on known scientific data and does not need new scientific breakthroughs, like nuclear fusion. Additionally, the transmutation process might burn off all or most of the remaining plutonium and

⁴⁶³ Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2007 – Responsibility of Current Generation, Freedom of Future Generations*, pp. 43f.

⁴⁶⁴ International Atomic Energy Agency, *Technical Implications of Partitioning and Transmutation in Radioactive Waste Management*. Technical Reports Series, No. 435. IAEA, Vienna, 2004, p. 2 and p. 109.

⁴⁶⁵ Op. cit., pp. 119f.

could therefore reduce the risk that the waste becomes a source for nuclear weapons.⁴⁶⁶

A general problem with P&T is that it presupposes the continued existence and use of nuclear power for many decades, with all its associated risks.⁴⁶⁷ P&T includes the reprocessing of HLW and the use of MOX-fuel. There are severe drawbacks associated with such activities, e.g. the risks of accidents and radioactive contaminations.

Moreover, a more specific drawback with this method is that it includes an extended fuel cycle. This extended cycle implies that the waste must be reused, cool off, and reprocessed several times. Including the cooling, just one step in this cycle will take at least several decades.⁴⁶⁸ Several repetitions must therefore take many decades, possibly up to 100 years. This means that P&T includes committing the next two or three generations to nuclear power and reprocessing. This is a very controversial outcome, and must be rejected by those who find nuclear energy inherently wrong.

A second significant drawback with P&T is that the technique is not readily available now. One estimate is that it will require at least 25 years of extensive, and expensive, research and development to construct a facility (either a fast reactor or an accelerator driven system) that can fully use the reprocessed fuel, and its additional infrastructure (like fuel fabrication facilities and storages).⁴⁶⁹

Finally, P&T is also associated with higher operating costs in the production of nuclear energy.⁴⁷⁰

HLW Management and Ethics

Before starting an ethical evaluation of management methods, it is important to note the limitations of such a task. As an ethicist, my expertise is on the subject of ethics, i.e. questions about the good and

⁴⁶⁶ Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2004*. SOU 2004:67. Fritzes, Stockholm, 2004, p. 407.

⁴⁶⁷ Op. cit., pp. 406-408.

⁴⁶⁸ International Atomic Energy Agency, *Technical Implications of Partitioning and Transmutation in Radioactive Waste Management*. Technical Reports Series, No. 435. IAEA, Vienna, 2004, p. 104.

⁴⁶⁹ Op. cit., pp. 109-111.

⁴⁷⁰ Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2004*. SOU 2004:67. Fritzes, Stockholm, 2004, p. 408.

bad, right and wrong. It is therefore reasonable to accept an empirical limitation in any ethical investigation of HLW management. Many considerations about HLW management are dependent on precise technical knowledge about such issues as physics, metallurgy and geology. My expertise does not include any deep knowledge about these subjects, and it is therefore necessary to avoid making any claims that concern empirical issues that are outside my field of expertise.

However, as far as I can see, the relevance of ethical theories and ethical reasoning to HLW management is justified, because every endeavour needs goals or objectives. The objectives can be of different types depending on the endeavour. E.g., HLW management might include low costs and public acceptability. Besides these economic and social objectives, it is possible to argue for different moral objectives. Such objectives can be evaluated in relation to ethical theories.⁴⁷¹ It is therefore possible to make an ethical evaluation of methods in regard to their aptness for reaching moral objectives. Of special importance is the question about how risks should be distributed, which is primarily a moral question.

How then can the narrative theory be applied to the problem of nuclear waste? This accentuates a methodological problem. The theory and its normative claims are general. The theory should be applicable to several problems, which means that there is a need of specifications before any application. Also, due to this general nature of the theory, it is unlikely that one can make a simple application of the theory and get a reasonable direct answer. That happens very seldom in ethics. Also, we should probably be sceptical of any simple answers. Life is complex and most problems can not be solved in any simple way. A theory that provides simple answers is probably guilty of simplifications.

The solution to this methodological problem is to start in the problem itself, and to identify several moral aspects of HLW management. The narrative theory can then be related to these aspects. There has been a significant debate about HLW management and some of the arguments in this debate express moral claims in a more

⁴⁷¹ The importance of ethical reasoning in response to HLW management is illustrated in Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2004*. SOU 2004:67. Fritzes, Stockholm, 2004, pp. 421-457. Also in Shrader-Frechette, Kristin, *Burying Uncertainty: Risk and the Case Against Geological Disposal of Nuclear Waste*. University of California Press, Berkeley 1993.

systematic way, and attempt to provide these claims with some kind of theoretical support. Moreover, there are claims about which management methods can be defended on moral grounds, and which can not. E.g., few, if any, have proposed that we leave the waste problem totally in the hands of future generations, i.e. it is presumed that we should do something. It is therefore quite straightforward to identify moral aspects of HLW management.

The moral aspects of HLW management can be formulated as a set of moral objectives, which a reasonable management method should try to achieve. By identifying these objectives, it becomes possible to bridge the gap between normative ethics and applied ethics. The moral objectives are part of the debate about HLW management, and tied to the problem itself. Also, it is quite difficult to abstract these objectives from the arguments made in their support, and some arguments even refer explicitly to ethical theories.⁴⁷²

This means that an ethical evaluation of these objectives is not fundamentally different from the actual discussion about HLW management, part of that discussion *is* ethical. However, it is still appropriate to talk about moral objectives instead of ethical ones, because these objectives might be accepted by all of us, even if they have little, or insufficient, ethical justification.

There are at least four possible moral objectives for HLW management:

1) *Reduce the risks of accidental direct or indirect exposure to radiation.*

This is a straightforward objective. The moral claim is that we should manage the waste in a way that minimizes the risks for both us and future generations. We should not expose future generations to higher risks than those we accept.⁴⁷³ We act wrongly if HLW is managed in a way that causes contamination because of our own faulty construction techniques. On the other hand, the question becomes more complicated if one asks who should determine which risks are acceptable.

2) *Prevent the spreading of nuclear weapons.*

⁴⁷² E.g., Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2007 – Responsibility of Current Generation, Freedom of Future Generations*, pp. 31-35.

⁴⁷³ E.g., safety principle 4 in International Atomic Energy Agency, *The Principles of Radioactive Waste Management*. Safety Series No. 111-F. IAEA, Vienna, 1995, p. 6.

This objective claims that any management method must make it hard or impossible to retrieve the waste so that it can be used in the construction of nuclear weapons. However, it is obviously impossible to develop a management method that is sensitive to the intentions of any attempt to retrieve the waste, and it is therefore necessary to make it as difficult as possible to retrieve the waste.

3) *We should finance, develop and implement the HLW management method.*

This claim is supported by the egalitarian idea that the generations who benefited from nuclear power should have the main responsibility for managing the waste.⁴⁷⁴ It seems reasonable that it is wrong to transfer burdens onto a group that has not gained any benefits associated with these burdens. However, it is more problematic to argue that such responsibility must entail the further claim that we must also develop and implement the waste management method now, without regard to other moral objectives.

4) *Future generations should be able to retrieve the HLW.*

Several arguments support this objective. The first argument is that the waste management method might fail and it is therefore imperative that the waste can be retrieved. A second argument is the possibility that future generations might develop a better management method. The waste must then be retrieved in order to implement the new method. A third argument is that future generations should be entitled to use the waste if they choose to.⁴⁷⁵ The problem is to determine how easily accessible the waste should be. Should the waste be very easy to access? Should it be possible to retrieve the waste with present-day technology? Should it be possible to retrieve the waste with future technology?

These four moral objectives can be at least partially, if not fully, incompatible depending on their exact formulation. The first and second objectives are focused on the distribution of risks, albeit different kinds of risks. The third and fourth objectives specify limitations for how the first two objectives can be reached. Based on this it is reasonable to try to decide which of these objectives is most

⁴⁷⁴ E.g., safety principle 5, section 317 and 318, in International Atomic Energy Agency, *The Principles of Radioactive Waste Management*. Safety Series No. 111-F. IAEA, Vienna, 1995, p. 7.

⁴⁷⁵ E.g., International Atomic Energy Agency, *The Long Term Storage of Radioactive Waste: Safety and Sustainability, A Position Paper of International Experts*. IAEA, Vienna, 2003, p. 7.

important, and on which grounds. How can one rank these objectives? One approach is to apply some kind of ethical standard on these objectives, and try to identify their relative importance in comparison to that standard. It is therefore necessary to turn to the narrative theory and interpret it in a way that can provide such a standard.

Risks and Equal Opportunities for Resources

A reoccurring subject in these pages is the question of risks. I believe that the most pressing issue of HLW management is the distribution of risks. As we have seen there are two main types of risks, unknown risks and indeterminate risks.

Some risks are *unknown*. These risk are most problematic because they might be crucial, but we lack the imaginative facility to grasp them. Obviously, it is rather difficult to discuss them!

The most relevant type or risks are those that are indeterminate. Some risks are *necessarily indeterminate*. It is impossible for us to determine their magnitude because they are partially dependent on the acts of future generations. Given the condition that humans are free, we can not hope to establish the probability that they act in a certain way.

Other risks are *contingently indeterminate*. There might be data that could help us to determine the probability of the risk, but we simply lack this data. Two examples are the probability of indirect exposure caused by leakage, and the hazards of internal irradiation. The risk of leakage is difficult to determine because there are several interrelated factors, like natural events and human error, which can all affect the likelihood of such leakage.

Also, this makes it difficult to determine how wide the safety margins need to be in order to handle a wide range of factors. There can be several ideas about how wide the safety margins should be, and it is difficult to imagine that there are any objective criteria to establish the appropriate idea. In addition, there is too little knowledge about the effects of internal irradiation in order to determine its exact hazard.

The fact that nuclear waste is hazardous for long periods of times makes it even more difficult to determine the probability of exposure. The long time frame and the lack of information make nuclear waste

management morally problematic. Can the narrative theory provide some answer to this problem? The next step is to consider just that.

First, it is noteworthy that HLW does not threaten continued human life on earth. The first normative claim is not relevant in relation to this problem. However, HLW can make a significant impact on how future generations can live according to their ideas of the good life. This is what the second claim attempts to safeguard. However, the second claim needs to be reformulated as a claim about right and wrong if it is to be relevant to the question of HLW management, thus:

We act wrongly if we restrict future generations' equal opportunities for resources.

The key aspect is that we ought to transfer resources to future generations. Resources provide the tools which future generations can use to lead their lives. However, there are three complicating issues.

First, it is possible to claim that spent nuclear fuel that can undergo reprocessing can not be considered waste, but should be considered to be a resource for future energy production. This raises the question of how we can distinguish between waste and resources. The answer is that something can be both, depending on our intentions to use it again or not. It might be reasonable to talk about nuclear resource management instead of nuclear waste management. However, as a resource, spent nuclear fuel is still extremely hazardous and we lack the knowledge about future generations' intentions concerning the spent fuel. It is therefore better to err on the safe side, and manage spent nuclear fuel as waste.

Second, even if HLW is considered to be a resource, some resources are inherently risky, which is a reason to avoid transferring them to future generations. Why should such transfers be avoided? The answer can be found in how we should handle the uncertainty of the future. E.g., Barry claims that it is irrational to treat uncertainty as a reason to act in a way that could be fatal. Similarly, if an agent follows the same reasoning, but acts in a way that could inflict fatal harm to other people, that agent acts immorally.⁴⁷⁶

⁴⁷⁶ Barry, Brian, 'Intergenerational Justice in Energy Policy'. Barry's reasoning is also noted by Shrader-Frechette, Kristin, *Burying Uncertainty: Risk and the Case Against Geological Disposal of Nuclear Waste*, 1993, pp. 170f. This work also includes a more comprehensive ethical discussion on pp. 182-212.

Instead, risks and benefits should be distributed in an equal manner. There should be symmetry between those who are exposed to risks and those who gain benefits. The same people who are exposed to risks should gain the benefits. The precondition is that people should be informed about the risks and be able to reject them, and the benefits, if they choose to do so. This means that transfers of risks are morally illegitimate without the consent of the people that will face them. Also, one can claim that a transfer of risks becomes less legitimate when there is no longer a close correlation between benefits and risks, and morally illegitimate if there is total asymmetry, i.e. one party gains all the benefits and another party faces all the risks.

Moreover, there is no good reason to believe that those who live several hundred or thousands of years from now will consent to any risk. And, it is equally difficult to comprehend how remote future generations can benefit from HLW in the future. HLW will become less useful as an energy resource in the remote future because much of the initial energy has been lost due to radioactive emissions.

Third, one might also argue that, even if future generations are exposed to some hazard, we could compensate this harm by transferring extra resources. This argument misses the point. It is wrong of us to transfer risks to future generations if they do not consent and benefit. There is no reason to suppose that remote generations will consent. Similarly, there is no reason to suppose that those generations would accept any compensation based on our own ideas about compensation. We simply lack knowledge about their ideas of a fair compensation.⁴⁷⁷

Summing up, the reason why it is wrong for us to store or dispose HLW in a way that might expose future generations to radiation hazards is because such measures do not provide future generations with equal opportunities for resources. Instead it provides them with a possible resource *and* a very real risk. An objection to this claim is that it is unnecessarily complicated. Why not just claim that we might harm future generations, and that is a good reason to refrain from transferring risks? There are two answers to this objection.

The first answer is that there are many ideas about what constitutes harm and well-being, and they are all related to specific values or

⁴⁷⁷ The questions about consent and compensation are also discussed in Shrader-Frechette, Kristin, 'Ethical Dilemmas and Radioactive Waste: A Survey of the Issues'. *Environmental Ethics* Vol. 13, Winter 1991, pp. 329f.

ideas about the good life. Even if there were good grounds for a limited universalistic comprehension of well-being, which I find quite doubtful, it would be better if one could determine why some actions are wrong, independently of such comprehension.

The second answer is that we do not know how future generations incorporate harm into their attempts of making sense of life, i.e. we do not know the connection between harm and meaning. A proper comprehension of harm presupposes some knowledge of the meaning of harm. And we lack the proper knowledge about future generations in order to determine this meaning.

On the other hand, it is essential to note that, even if a few generations manage to incorporate the harm caused by radioactive exposure into their idea of the good life, e.g. by making it a meaningful part of their stories, this might not be the case for the other generations. Because of the extremely long period of time, it is unreasonable to believe that many, or any, future generations might render radioactive contamination meaningful. In the absence of any knowledge about future generations' ideas of the good life, it is reasonable to emphasize that human beings should not be restricted by risks that they have not consented to.

Ranking of Moral Objectives

The first objective is the reduction of risks of direct and indirect exposure. It was noted that it is necessary to have a standard for which level of risk is safe enough. Equal opportunities for resources provide such a standard. The only acceptable level of risk for a group that has not benefited from an activity that generates risks is zero. There is no compelling reason to presume that future generations will consent to the risk of becoming exposed to contaminations caused by HLW. Also, the transfers of risks become even more morally illegitimate when risks are transferred onto the remote future, because there is no longer any strong connection between the risks and possible benefits.

Equal opportunities for resources imply that the most important part of responsibility towards future generations is to transfer resources and to minimize the risks of those resources. Based on this, the first objective is the primary one. We should focus on reducing the risks of accidental direct or indirect exposure to radiation. This means that other objectives must therefore either be reinterpreted in ways that

make them compatible with this objective, or rejected as unreasonable objectives for nuclear waste management, at least from the perspective of responsibility towards future generations.

How important is the objective of preventing the spreading of nuclear weapons? Arguably, the reason why many individuals find nuclear weapons repugnant is because of their capacity to bring about massive harm. By preventing future generations from gaining access to the waste, one might at least prevent the occurrence of harm brought about by nuclear weapons constructed from plutonium from the waste. This argument implies that we would be responsible for the future use of nuclear weapons if those weapons were to be constructed from the HLW.

As long as future generations have the technological capacity to construct nuclear weapons, they can do that without using HLW. If future generations lack such technology, they will not be able to retrieve or use the waste in an aggressive manner. It is reasonable that any handling of HLW includes a high level of technology and knowledge, above all about radioactive shielding. It is at least quite unreasonable that a future society might lack the technology to construct nuclear weapons, but control the technology for radioactive shielding. Of course, this last argument might prove to be false, which would strengthen the case for this objective.

On the other hand, there seems to be a quite simple connection between easy access and safety. Due to its hazardous nature, any direct access increases the risks of contamination because easy access presupposes either fewer or more flexible barriers, which might protect humans from direct or indirect exposure. It is therefore likely that any management method that reduces the risk of accidental contaminations could be constructed in a way that also reduces the risk of gaining easy access to the HLW. Objective one and two would coincide in practice.

Third objective states that we should finance, develop and implement the management method. One strong argument in its support is that we have no control over the future and it is therefore reasonable that the waste is disposed of now rather than in the future. As a general statement, this is a strong conclusion about our limited knowledge of and control over the future. However, this argument supports using the best method which is available now, i.e. surface storage and it also presumes that we immediately stop using nuclear

power. Except for surface storage, every other method will operate under several decades because we are still producing nuclear waste and the waste must 'cool off' in interim storage for several decades before it can be disposed of.⁴⁷⁸ It is therefore reasonable to acknowledge that any HLW management method must be implemented by at least two generations, i.e. 30 years. This means that any method will at least include the transfer of some risks to at least one group of future generations, our children.

More important, however, is the claim that there can be no inherent benefits from the use of a sub-optimal method, justified by our limited knowledge of and control over the future, when it is possible that further technological development could bring about a better method.⁴⁷⁹ The third objective must therefore be rejected as less pressing compared to the first and less relevant if it is incompatible with the first objective.

Turning to the fourth objective, it becomes necessary to answer the question about how easily accessible the waste should be for future retrieval. The answer to this question is fundamental for determining how compatible this objective is with the first and second objectives. We should start by noting that retrievable means gaining access to the waste whatever intentions one might have. It can be to repair the management facility or to construct nuclear weapons from the waste. As long as it is impossible to create a facility that is sensitive to intentions, the fact that the HLW is retrievable can always be both potentially good and bad.

If retrievable entails direct access, it implies larger risks for accidental exposure to radioactivity. Also, easy access is obviously incompatible with the objective of preventing the spreading of nuclear weapons. The waste would be directly available for the production of nuclear weapons.

If retrievable means that the waste can be accessed with present day technology, this could be partially compatible with the first and

⁴⁷⁸ International Atomic Energy Agency, *The Long Term Storage of Radioactive Waste: Safety and Sustainability, A Position Paper of International Experts*. IAEA, Vienna, 2003, p. 2. Also in, Swedish Nuclear Fuel and Waste Management Company (SKB), *Treatment and Final Disposal of Nuclear Waste*. Program for Research, Development and Demonstration of Encapsulation and Geological Disposal 1998. SKB, Stockholm, 1998, p. 37.

⁴⁷⁹ Argued by Shrader-Frechette, Kristin, 'High-level Waste, Low-level Logic', *The Bulletin of Atomic Scientists*. Nov/Dec, 1994, p. 43.

second objectives. If we have the technology to put the waste there in the first place, we might as well have the technology to retrieve it, if we really want to. The question is then not really about technology but about how much of our financial resources we are ready to spend on retrieving the HLW. Obviously, this can not prevent someone who has large resources and great determination to retrieve the waste but might stop those with more limited resources and less determination.

Moreover, if retrievable means retrievable with future technology, it could possibly also be compatible with the first two objectives. This would make retrievable a more theoretical question, and would make it possible to combine it with many different kinds of methods, even if it is now difficult to consider how such retrieving could be performed. This last point stresses that retrievable might be compatible with the first and second objective depending on how hard it is to gain access to the waste.

This short discussion accentuates the need to be specific in the characterization of moral objectives in HLW management. It shows that as long as the first and the second objectives are prioritized, it is impossible to include other objectives without limiting their scope or weight. The next question is: Given the priority of the first and second ethical objectives, how do the realistic methods perform in an ethical evaluation?

Evaluation of Surface Storage

This method could be justified by referring to the third and fourth objectives, which it satisfies to a large degree. The method is already used and one can then claim that we have taken our responsibility by financing, developing and implementing the storage method. Also, given that this method keeps the HLW close to the surface, future generations have ready access to it.

However, as long as objectives three and four are less pressing than the first and second objectives, this does not provide any compelling reason to accept this method, because surface storage transfers all possible risks, direct exposure, indirect exposure and spreading of nuclear weapons, onto future generations. Such transfers could be acceptable in the short run but it is illegitimate to transfer risks to remote future generations who have not benefited in any conceivable way from nuclear power.

This means that this method can not possibly be viewed as an ultimate solution to the HLW problem without a very optimistic view about the future.⁴⁸⁰ I have argued that there are no compelling reasons to accept such an overly optimistic view of the future. Human folly and the risk of accidents are always pressing, and their effects will probably increase during longer time-periods.

The conclusion is that surface storage can not be considered a long-term solution to the HLW problem. It must be either rejected, or complemented by one or both of the other realistic methods.

Evaluation of Geological Disposal

In regard to the first and second objectives, the problem with medium depth disposal is how to determine the probability of contamination and the probability that this contamination could inflict harm.

It is noteworthy that according to the philosopher Kristin Shrader-Frechette, every determination of risks, i.e. risk assessments, includes at least some more or less reasonable methodological value judgments. These are especially important when they concern the use of different models for determining future events, e.g. earthquakes and groundwater flow. Different methodological value judgments can lead to different risk assessments and it might be impossible to determine which of these assessments is wrong. The implications are that both the determination of risks, risk assessment, and the evaluation and determination of the appropriate response to risks, i.e. risk management, are value-laden and therefore much closer to politics (and ethics) than hard science.⁴⁸¹

Another pressing problem is that the waste is hazardous for such a long time that every risk assessment must be tentative at best. There is limited empirical data available, and it is therefore necessary to extrapolate short-time data from different experiments and apply them to longer time periods. Such methods include methodological value judgments and are therefore not uncontroversial.⁴⁸² Extrapolation is

⁴⁸⁰ Shrader-Frechette, Kristin, *Burying Uncertainty: Risk and the Case against Geological Disposal of Nuclear Waste*. University of California Press, Berkeley 1993, p. 50.

⁴⁸¹ Op. cit., pp. 32f. Shrader-Frechette focuses exclusively on the Yucca Mountain project but her reasoning is general enough to be applied to other geological depositories.

⁴⁸² Op. cit., p. 73.

always problematic because it is logically invalid that a given set of data can assure that something might or might not occur in the future. There is no possible way of correcting this basic epistemological problem. It is a basic problem associated with all inductive reasoning. Hence, there is no reasonable way to prove that any geological depository will be safe for 100,000 years or more. At most one can claim that risks are real, but extremely low.⁴⁸³

Turning to deep boreholes, it is difficult to evaluate this method from an ethical perspective because this method has not been thoroughly evaluated and has been associated with limited research and development. However, if it would be technically feasible to bury the waste below the level of moving groundwater, without causing the deep steady groundwater to shift upwards, the waste would be put in an environment that avoids exposing future generations to hazards other than intended or unintended exposure caused by drilling. Because of the depth of the boreholes, it is less probable that drilling causes accidental direct exposure. Also, it could be impossible for the waste to cause indirect harm through leakage if there is no moving groundwater. If the goal is to eliminate the risks for future generations, this is an argument in support of deep boreholes. Also, this is a good ethical reason to try to gain more geological and technical knowledge about this method.

It is also noteworthy that deep boreholes face the same problem as other geological management methods. It is impossible to prove that this method will be safe for long periods of time. The only hope is to show that the method is better than alternative methods. This too supports more research into that method.

Concerning the third objective, it is noteworthy that medium depth geological disposal is a method which has undergone significant development and is close to being implemented. However, even if this method were implemented today, it would need to operate for many decades. If we stopped using nuclear power today, the waste must still cool off for 30 years. Accordingly, we must either keep the depository open throughout this period of time, or build several depositories. Both alternatives imply that we still have plenty of time to complement this method with other methods, e.g. transmutation. This supports a continuation of both the debate about and research into management methods.

⁴⁸³ Op. cit., p. 177 and p. 181.

The use of medium depth geological disposal might be compatible with the fourth objective, depending on how that objective should be interpreted. Given that work is at present carried out on such depth, it seems that it is not too difficult to retrieve the HLW from such depth, given enough resources and time. This would therefore be incompatible with the second objective, which is an argument against this method. Possibly, deep boreholes might make retrieving more problematic, if not impossible. Deep boreholes would then satisfy the second objective to a higher degree than medium depth disposal.

One general conclusion of this discussion is that it is impossible to determine the exact nature of the risks associated with medium depth geological disposal and deep boreholes. If the transfer of risks without benefits and consent is illegitimate, these methods seem quite unsuited. On the other hand, the issue can not be about avoiding the transfer of all risks; instead it must be about minimizing the transfers. One solution is to reduce the period of time in which people face risks. That is the main benefit of the P&T.

Evaluation of Partitioning and Transmutation

As was just noted, the strongest argument in support of P&T is that it can significantly reduce the period of time during which future generations face risks. This method still implies some kind of storage or depository. But as the period of time is reduced, it is more reasonable to assume that a facility can be constructed in a way that reduces the risk of leakage. From the perspective of responsibility towards future generations, this is a reasonable conclusion. However, HLW is not an ethical issue that concerns only future generations, the waste can of course cause harm to present generations.

The major problem with P&T is that this management method will increase the risks of harm to both us and those that live up to a hundred years from now. These increased risks are caused by the handling of the waste, the use of new nuclear technology, and the nuclear fuel cycle. One can conclude that transmutation will increase the risk for some, but decrease the risk for others. Is this a legitimate outcome?

The answer is yes. If it takes 30 years to develop transmutation technology, and commence implementation of this management method, the only people around that are threatened with increased

risks are generations that have benefited directly from nuclear power. On the other hand, the process of transmutation includes repeated waste cycles in order to reach the maximum reduction of long-lived hazardous substances. This process takes several decades, or even up to a hundred years. Is it then legitimate to increase the risks for our own children and our children's children? This too, seems legitimate because our closest descendants have surely benefited much more from nuclear power than generations living hundreds or thousands of years in the future. It is therefore reasonable to prioritize the reduction of those risks that remote future generations are exposed to.

It is ethically significant that the situation of close future generations is characterized by a much larger symmetry between benefits and risks, compared to the situation of remote future generations. Accordingly, if one must choose between transferring the risks associated with HLW onto remote future generations, or transferring these risks to close future generations, the latter is preferable because of the closer relation between actual benefits and the risks associated with the benefits.

An argument against the priority of remote generations is that close future generations might be unwilling to accept this increased risk. In the absence of their consent, it is unjust to expose them to a risk. Obviously, the same argument could be used by remote future generations, and this argument should therefore be rejected as a way of prioritizing close generations. An egalitarian distribution of risks will make it more legitimate to transfer risks to those that gained most benefits.

Conclusion

A general conclusion of this last chapter is that any transfer of risks is regrettable and should be avoided. However, due to the conundrum of nuclear waste, we can not avoid increasing the risks to our close descendants as long as our main goal is to avoid harming remote future generations. Yet, HLW management includes the choice between increasing risks in the short run or in the long run.

However, it seems that the method which provides the most ethically legitimate distribution of risks is the method that reduces the period of time within which the waste is hazardous, i.e. partitioning

and transmutation. This conclusion is unfortunate, at least if transmutation presupposes the continued use of nuclear power. Nuclear power is associated with several other ethical problems besides the question of waste management. E.g., issues about a centralized bureaucracy that wields significant power over people, the continued threat of the spreading of nuclear weapons, and the general risk of radioactive contamination.

Moreover, even if I have focused exclusively on future generations, there are other ethical considerations. Some ethicists claim that any management method should include considerations about animals, plants and ecosystems. These ideas are important, but it is also reasonable that any hazards that might affect future humans will also affect future animals and/or ecosystems. There is therefore no necessary opposition between responsibility towards future human generations and responsibility towards future animals, plants and ecosystems, these responsibilities can coincide.

Furthermore, it is imperative to stress that the final decision about HLW management is political, which includes many considerations, besides the question of responsibility towards future generations.

One example is that any management decision should have a strong democratic foundation. As long as the government's mandate is provided by contemporary citizens, it can be justified to transfer risks onto future generations in response to some horrible situation facing us. Nevertheless, in the absence of dire situations, such transfers are wrong, at least from the viewpoint of the ethical reasoning presented in this dissertation.

Another kind of considerations are different economic issues. How are we to prioritize society's limited financial and technical resources in response to several conflicting goals? Any management method will include substantial costs, and given the need to make the best use of the available resources one can argue that the cheapest is the best. Whether this is a good argument might be the most important political question about HLW management.

Obviously, there are many questions about HLW management that can not be answered by an ethicist; at best one can hope to stress the importance of one type of arguments. I hope that the arguments presented here demonstrate the importance of avoiding morally illegitimate transfers of risks, and that there are strong reasons for us

to accept and take seriously our responsibility towards future generations.

Bibliography

- Agius, Emmanuel, *The Rights of Future Generations. In Search of an Intergenerational Ethical Theory*. Catholic University of Leuven, Leuven 1986.
- Agius, Emmanuel, 'Towards a Relational Theory of Intergenerational Ethics', in Agius, Emmanuel et al. (eds.), *Our Responsibilities Towards Future Generations*. A programme of UNESCO and the International Environment Institute. UNESCO and Foundation for International Studies at the University of Malta, Malta, 1990, pp. 73-93.
- Agius, Emmanuel, *Problems in Applied Ethics*. Malta University Publishers, Malta, 1994.
- Agius, Emmanuel, 'Patenting Life: Our Responsibilities Towards Present and Future Generations', in Agius, Emmanuel et al. (eds.), *What Future for Future Generations? A programme of UNESCO and the International Environment Institute*. Foundation for International Studies at the University of Malta, Malta, 1994, pp. 99-118.
- Agius, Emmanuel, 'The Earth Belongs to All Generations: Moral Challenges of Sustainable Development', in Agius, Emmanuel et al. (eds.), *Caring for Future Generations. Jewish, Christian and Islamic Perspectives*. Praeger Publishers, Westport, Connecticut, 1998, pp. 103-122.
- Agius, Emmanuel, 'Obligations of Justice Towards Future Generations: A Revolution in Social and Legal Thought', in Agius, Emmanuel et al. (eds.), *Future Generations and International Law*. Earthscan Publishers, London, 1998, pp. 3-12.
- Agius, Emmanuel, 'What Future for Future Generations? A Whiteheadian Intergenerational Ethical Perspective', in Cloots, André et al. (eds.), *Framing a Vision of the World*. Essays in Philosophy, Science and Religion 14. Leuven University Press, Louven, 1999, pp. 247-264.
- Agius, Emmanuel et al. (eds.), *Our Responsibilities Towards Future Generations*. A programme of UNESCO and the International Environment Institute. UNESCO and Foundation for International Studies at the University of Malta, Malta, 1990.
- Agius, Emmanuel et al. (eds.), *What Future for Future Generations? A programme of UNESCO and the International Environment Institute*. Foundation for International Studies at the University of Malta, Malta, 1994.

- Agius, Emmanuel et al. (eds.), *Caring for Future Generations: Jewish, Christian and Islamic Perspectives*. Praeger Publishers, Westport, Connecticut, 1998.
- Agius, Emmanuel et al. (eds.), *Future Generations and International Law*. Earthscan Publishers, London, 1998.
- Agius, Emmanuel et al. (eds.), *Germ-line Intervention and Our Responsibility to Future Generations*. Kluwer Academic Publishers, Dordrecht, 1998.
- Ariansen, Per, 'Beyond Parfit's Paradox', in Agius, Emmanuel et al. (eds.), *Future Generations and International Law*. Earthscan Publishers, London, 1998, pp. 13-17.
- Arneson, Richard, 'Equality and Equal Opportunity for Welfare'. *Philosophical Studies* 56, 1989, pp.77-93.
- Arrhenius, Gustaf 'Mutual Advantage Contractualism and Future Generations'. *Theoria*, Vol. 65, part 1, 1999, pp. 25-35.
- Arrhenius, Gustaf, *Future Generations: A Challenge for Moral Theory*. Uppsala University Printers, Uppsala, 2000.
- Auerbach, Bruce E., *Unto the Thousandth Generation: Conceptualizing Intergenerational Justice*. Peter Lang, Frankfurt, 1995.
- Avineri, Shlomo and de-Shalit, Avner (eds.), *Communitarianism and Individualism*. Oxford University Press, Oxford, 1992.
- Baier, Annette, 'The Rights of Past and Future Persons', in Partridge, Ernest (ed.), *Responsibilities to Future Generations*. Prometheus Books, New York, 1981, pp. 171-183.
- Barry, Brian, 'Justice between Generations', in Hacker, P.M.S. and Raz, J. (eds.), *Law Morality and Society: Essays in Honour of H. L. A. Hart*. Clarendon Press, Oxford, 1977, pp. 268-284.
- Barry, Brian, 'Rawls on Average and Total Utility: A Comment'. *Philosophical Studies* 31, 1977, pp. 317-325.
- Barry, Brian, 'Circumstances of Justice and Future Generations', in Sikora, R.I. and Barry, Brian (eds.), *Obligations to Future Generations*. Temple University Press, Philadelphia, 1978, pp. 204-248.
- Barry, Brian, 'Intergenerational Justice in Energy Policy', in MacLean, Douglas and Brown, Peter G. (eds.), *Energy and the Future*. Rowman and Littleman, Totowa, NJ, 1983, pp. 15-30.
- Barry, Brian, *A Treatise on Social Justice Vol I. Theories of Justice*. University of California Press, Berkeley, 1989.
- Barry, Brian, *A Treatise on Social Justice Vol II. Justice as Impartiality*. Clarendon Press, Oxford, 1995.
- Barry, Brian, 'Sustainability and Intergenerational Justice', in Dobson, Andrew (ed.), *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice*. Oxford University Press, Oxford, 1999, pp. 93-117.
- Barry, Brian, *Why Social Justice Matters*. Polity Press, Cambridge, 2005.
- Beauchamp, Tom L. and Childress, James F., *Principles of Biomedical Ethics*. Fourth Edition. Oxford University Press, Oxford, 1994.

- Beckerman, Wilfred and Pasek, Joanna, *Justice, Posterity and the Environment*. Oxford University Press, Oxford, 2001.
- Bóasdóttir, Sólveig Anna, *Violence, Power, and Justice: A Feminist Contribution to Christian Sexual Ethics*. Uppsala Studies in Social Ethics. Uppsala University, Uppsala, 1998.
- Brink, David O., 'Some Forms and Limits of Consequentialism', in Coop, David (ed), *The Oxford Handbook of Ethical Theory*. Oxford University Press, Oxford, 2006, pp. 380-423.
- Carlson, Eric, *Some Basic Problems of Consequentialism*. Uppsala University, Uppsala, 1994.
- Carr, David, *Time, Narrative and History*. Indiana University Press, Indianapolis, 1986.
- Cloots, André et al. (eds.), *Framing a Vision of the World*. Essays in Philosophy, Science and Religion 14. Leuven University Press, Louven, 1999.
- Cobb, John B. and Griffin, David Ray, *Process Theology: An Introductory Exposition*. Christian Journals Limited, Belfast, 1977.
- The Concise Oxford Dictionary*. Revised Tenth Edition, Oxford University Press, Oxford, 2002.
- Cowen, Tyler and Parfit, Derek, 'Against the Social Discount Rate', in Laslett, Peter and Fishkin, James S. (eds.), *Justice Between Age Groups and Generations*, Yale University Press, New Haven, 1992, pp. 144-161.
- Craig, Edward, 'Metaphysics', in Craig, Edward (ed.), *Routledge Encyclopaedia of Philosophy*. Volume 6. Routledge, London, 1998, pp. 338-341.
- Craig, Edward, 'Ontology', in Craig, Edward (ed.), *Routledge Encyclopaedia of Philosophy*. Volume 7. Routledge, London, 1998, pp. 117f.
- de-Shalit, Avner, 'Environmental Policies and Justice between Generations: On the Need for a Comprehensive Theory of Justice between Generations'. *European Journal of Political Research*, Vol. 21, 1992, pp. 307-316.
- de-Shalit, Avner, 'Community and the Rights of Future Generations: A Reply to Robert Elliot'. *Journal of Applied Philosophy*, Vol. 9, No 1, 1992, pp. 105-115.
- de-Shalit, Avner, *Why Posterity Matters: Environmental Policies and Future Generations*. Routledge, London, 1995.
- de-Shalit, Avner, 'Down to Earth Environmentalism: Sustainability and Future Persons', in Fotion, Nick and Heller, Jan Christian (eds.), *Contingent Future Persons: On the Ethics of Who Will Live, or Not, in the Future*. Kluwer Academic Publishers, London, 1997, pp. 123-135.
- de-Shalit, Avner, *The Environment: between Theory and Practice*. Oxford University Press, Oxford, 2000.
- Dobson, Andrew (ed.), *Fairness and Futurity: Essays on Environmental Sustainability*. Oxford University Press, Oxford, 1999.
- Feinberg, Joel, 'The Rights of Animals and Unborn Generations', in Partridge, Ernest (ed.), *Responsibilities to Future Generations*. Prometheus Books, New York, 1981. pp. 139-150.

- Fotion, Nick and Heller, Jan Christian (eds.), *Contingent Future Persons: On the Ethics of Who Will Live, or Not, in the Future*. Kluwer Academic Publishers, London, 1997.
- Føllesdal, Dagfinn, 'Husserl, Edmund', in Craig, Edward (ed.), *Routledge Encyclopaedia of Philosophy*. Volume 4. Routledge, London, 1998, pp. 574-588.
- Gauthier, David, *Morals by Agreement*. Clarendon Press, Oxford, 1986.
- Golding, Martin P., 'Obligations to Future Generations', in Partridge, Ernest (ed.), *Responsibilities to Future Generations*. Prometheus Books, New York, 1981, pp. 61-72.
- Grenholm, Carl-Henric and Kamergrauzis, Normunds (eds.), *Sustainable Development and Global Ethics*. Uppsala Studies in Social Ethics 33. Uppsala University, Uppsala 2007.
- Gölstam, Algot, *Frihet, jämlikhet, demokrati. Etik och människosyn inom liberal och socialistisk tradition*. Uppsala Studies in Social Ethics 16. Uppsala University, Uppsala, 1995.
- Hare, Richard M., *Moral Thinking: Its Levels, Method and Point*. Clarendon Press, Oxford, 1981.
- Hare, Richard M., 'Ethical Theory and Utilitarianism', in Sen, Amartya and Williams, Bernard (eds.), *Utilitarianism and Beyond*. Cambridge University Press, Cambridge, 1982, pp. 23-38.
- Hedin, Allan (Swedish Nuclear Fuel and Waste Management Company, SKB), *Spent Nuclear Fuel - how Dangerous Is It? A Report from the Project "Description of Risk"*. Technical Report TR-97-13. SKB, Stockholm, 1997.
- Heller, Jan Christian, *Human Genome Research and The Challenge of Contingent Future Persons: Toward an Impersonal Theocentric Approach to Value*. Creighton University Press, Omaha, Nebraska, 1996.
- Heyd, David, *Genethics: Moral Issues in the Creation of People*. University of California Press, Berkeley, 1992.
- Holtug, Nils 'Person-affecting Moralities', in Ryberg, Jesper and Tännsjö, Torbjörn (eds.), *The Repugnant Conclusion: Essays in Population Ethics*. Kluwer Academic Publishers, London, 2004, pp. 129-161.
- Howarth, Jane, 'Phenomenology, Epistemic Issues in', in Craig, Edward (ed.), *Routledge Encyclopaedia of Philosophy*. Volume 7. Routledge, London, 1998, pp. 343-348.
- Hurka, Thomas, 'Value Theory', in Copp, David (ed.), *The Oxford Handbook of Ethical Theory*. Oxford University Press, Oxford, 2006, pp. 357-379.
- Höglund, Anna T., *Krig och Kön. Feministisk etik och den moraliska bedömningen av militärt våld*. Uppsala Studies in Social Ethics 26. Uppsala University, Uppsala, 2001.
- International Atomic Energy Agency, *The Principles of Radioactive Waste Management*. Safety Series No. 111-F. IAEA, Vienna, 1995.
- International Atomic Energy Agency, *Scientific and Technical Basis for the Geological Disposal of Radioactive Wastes*. Technical Report Series, No. 413. IAEA Vienna, 2003.

- International Atomic Energy Agency, *The Long Term Storage of Radioactive Waste: Safety and Sustainability, A Position Paper of International Experts*. IAEA, Vienna, 2003.
- International Atomic Energy Agency, *Technical Implications of Partitioning and Transmutation in Radioactive Waste Management*. Technical Reports Series, No. 435. IAEA, Vienna, 2004.
- International Atomic Energy Agency, *IAEA Safety Glossary. Terminology Used in Nuclear Safety and Radiation Protection*. 2007 Edition. IAEA, Vienna, 2007.
- Jarl, Ann-Cathrin, *Women and Economic Justice: Ethics in Feminist Liberation Theology and Feminist Economics*. Uppsala Studies in Social Ethics 25. Uppsala University, Uppsala, 2000.
- Jonas, Hans, *The Phenomenon of Life: Toward a Philosophical Biology*. Dell Publishing Co, New York, 1966.
- Jonas, Hans, *Philosophical Essays: From Ancient Creed to Technological Man*. The University of Chicago Press, Chicago, 1974.
- Jonas, Hans, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*. The University of Chicago Press, Chicago, 1984.
- Jonas, Hans, *Technik, Medizin und Ethik: Zur Praxis des Prinzips Verantwortung*. Suhrkamp, Frankfurt am Main, 1985.
- Jonas, Hans, *Mortality and Morality: A Search for the Good after Auschwitz*. Vogel, Lawrence (ed.). Northwestern University Press, Evanston, Illinois, 1996.
- Kahn, Herman et al., *The Next 200 Years: A Scenario for America and the World*. Sphere Books Ltd, 1978.
- Kamergrauzis, Normunds, *The Persistence of Christian Realism: A Study of the Social Ethics of Ronald H. Preston*. Uppsala Studies in Social Ethics 27. Uppsala University, Uppsala, 2001.
- Kronlid, David, *Ecofeminism and Environmental Ethics: An Analysis of Ecofeminist Ethical Theory*. Uppsala Studies in Social Ethics 28. Uppsala University, Uppsala, 2003.
- Kvassman, Staffan, *Samtal med den värdefulla naturen. Ett studium av miljöetiken hos Knud Løgstrup, Holmes Rolston III och Hans Jonas*. Uppsala Studies in Social Ethics 22. Uppsala University, Uppsala, 1999.
- Laslett, Peter and Fishkin, James S. (eds.), *Justice Between Age Groups and Generations*. Yale University Press, New Haven, 1992.
- Lomborg, Bjørn, *The Skeptical Environmentalist: Measuring the Real State of the World*, Cambridge University Press, 2001.
- Löfstedt, Malin, *Modell, människa eller människosyn? En analys av kritiska perspektiv på bilden av människan i neoklassisk ekonomisk teori*. Uppsala Studies in Social Ethics 31. Uppsala University, Uppsala, 2005.
- MacIntyre, Alasdair, *After Virtue: A Study in Moral Theory*. Second Edition. Duckworth, London, 1985.
- MacIntyre, Alasdair, *Whose Justice? Which Rationality?* Duckworth, London, 1989.
- MacLean, Douglas and Brown, Peter G. (eds.), *Energy and the Future*. Rowman and Littleman, Totowa, New Jersey, 1983.

- Malmsten, Kersti, *Reflective Assent in Basic Care: A Study in Nursing Ethics*. Uppsala Studies in Social Ethics 24. Uppsala University, Uppsala, 1999.
- Meyer, Lukas H, 'More than They Have a Right to: Future People and Our Future-oriented Projects', in Fotion, Nick and Heller, Jan Christian (eds.), *Contingent Future Persons: On the Ethics of Who Will Live, or Not, in the Future*. Kluwer Academic Publishers, London, 1997, pp. 137-156.
- Narveson, Jan, 'Future People and Us', in Sikora, R.I. and Barry, Brian (eds.), *Obligations to Future Generations*. White Horse Press, Cambridge, 1978, pp. 38-60.
- Nilsson, Staffan, *Den potentiella människan. En undersökning av teorier om självförverkligande*. Uppsala Studies in Social Ethics 30. Uppsala University, Uppsala, 2005.
- Nozick, Robert, *Anarchy, State and Utopia*. Basic Books, New York, 1974.
- Nussbaum, Martha C., *Women and Human Development: The Capabilities Approach*. Cambridge University Press, Cambridge, 2000.
- O'Neill, Onora, 'Universalism in Ethics', in Craig, Edward (ed.), *Routledge Encyclopaedia of Philosophy*. Volume 9. Routledge, London, 1998, pp. 535-539.
- Page, Edward A., *Climate Change, Justice and Future Generations*. Edward Elgar Publishing Limited, Cheltenham UK, 2006.
- Parfit, Derek, 'Future Generations: Further Problems'. *Philosophy and Public Affairs* 11, Nr. 2. Spring 1982, pp. 113-172.
- Parfit, Derek, 'Energy Policy and the Future: The Social Discount Rate', in MacLean, Douglas and Brown, Peter G. (eds.), *Energy and the Future*. Rowman and Littlefield, Totowa, New Jersey, 1983.
- Parfit, Derek, *Reasons and Persons*. Clarendon Press, Oxford, 1984.
- Parfit, Derek, 'Overpopulation and the Quality of Life', in Singer, Peter (ed.), *Applied Ethics*. Oxford University Press, Oxford, 1986, pp. 145-164.
- Parfit, Derek, 'Equality and Priority'. *Ratio* 10, Nr. 3, Dec. 1997, pp. 202-221.
- Partridge, Ernest, 'Why Care About the Future?', in Partridge, Ernest (ed.), *Responsibilities to Future Generations*. Prometheus Books, New York, 1981, pp. 203-220.
- Partridge, Ernest (ed.), *Responsibilities to Future Generations*. Prometheus Books, New York, 1981.
- Persson, Ingemar, 'The Root of the Repugnant Conclusion and Its Rebuttal', in Ryberg, Jesper and Tännsjö, Torbjörn (eds.), *The Repugnant Conclusion: Essays in Population Ethics*. Kluwer Academic Publishers, London, 2004, pp. 187-199.
- Philipson, Sten M., *A Metaphysics for Theology: A Study of Some Problems in the Later Philosophy of Alfred North Whitehead and Its Applications on Issues in Contemporary Theology*. Almqvist and Wiksell International, Stockholm, 1982.
- Rachels, Stuart, 'Repugnance or Intransitivity: A Repugnant but Forced Choice', in Ryberg, Jesper and Tännsjö, Torbjörn (eds.), *The Repugnant*

- Conclusion: Essays in Population Ethics*. Kluwer Academic Publishers, London, 2004, pp. 163-186.
- Rawls, John, *A Theory of Justice*. Oxford University Press, Oxford, 1973 (1971).
- Richards, David A.J., *A Theory of Reason for Action*. Clarendon Press, Oxford, 1971.
- Richards, David A.J., 'Contractarian Theory, Intergenerational Justice, and Energy Policy', in MacLean, Douglas and Brown, Peter G. (eds.), *Energy and the Future*. Rowman and Littleman, Totowa, NJ, 1983, pp. 131-150.
- Routley, Val and Routley, Richard, 'Nuclear Energy and Obligation to the Future'. *Inquiry*, 21, 1978, pp. 133-179.
- Ryberg, Jesper and Tännsjö, Torbjörn (eds.), *The Repugnant Conclusion: Essays in Population Ethics*. Kluwer Academic Publishers, London, 2004.
- Sandel, Michael J., *Liberalism and the Limits of Justice*. Second Edition. Cambridge University Press, Cambridge, 1998.
- Scanlon, Thomas M., 'Contractualism and Utilitarianism', in Sen, Amartya and Williams, Bernard, *Utilitarianism and Beyond*, Cambridge University Press, Cambridge, 1982, pp. 103-128.
- Scanlon, Thomas M., *What We Owe to Each Other*. The Belknap Press of Harvard University Press, London, 1998.
- Scheffler, Samuel (ed.), *Consequentialism and Its Critics*. Oxford readings in Philosophy. Oxford University Press, Oxford, 1988.
- Schwartz, Thomas, 'Obligations to Posterity', in Sikora, R.I. and Barry, Brian (eds.), *Obligations to Future Generations*. White Horse Press, Cambridge, 1978, pp. 3-13.
- Schweiker, William, *Responsibility and Christian Ethics*. Cambridge University Press, Cambridge, 1995.
- Sen, Amartya, 'Utilitarianism and Welfarism'. *The Journal of Philosophy*, Nr 9, September 1979, pp. 463-489.
- Sen, Amartya, *Development as Freedom*. Oxford University Press, Oxford, 1999.
- Sen, Amartya, and Williams, Bernard (eds.), *Utilitarianism and Beyond*. Cambridge University Press, Cambridge, 1982.
- Shrader-Frechette, Kristin, 'Ethical Dilemmas and Radioactive Waste: A Survey of the Issues'. *Environmental Ethics* Vol. 13, Winter 1991, pp. 327-343.
- Shrader-Frechette, Kristin, *Burying Uncertainty: Risk and the Case against Geological Disposal of Nuclear Waste*. University of California Press, Berkeley, 1993.
- Shrader-Frechette, Kristin, 'High-level Waste, Low-level Logic'. *The Bulletin of Atomic Scientists*, Nov/Dec, 1994, pp. 40-45.
- Sikora R.I., and Barry, Brian (eds.), *Obligations to Future Generations*. White Horse Press, Cambridge, 1978.
- Singer, Peter (ed.), *Applied Ethics*. Oxford Readings in Philosophy, Oxford University Press, Oxford, 1986.

- Sumner, L.W., *Welfare, Happiness, and Ethics*. Clarendon Press, Oxford, 1996.
- Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2004*. SOU 2004:67. Fritzes, Stockholm, 2004.
- Swedish National Council for Nuclear Waste (KASAM), *State-of-the-Art Report 2007 – Responsibility of Current Generation, Freedom of Future Generations*. SOU 2007:38. Fritzes, Stockholm, 2007.
- Swedish Nuclear Fuel and Waste Management Company (SKB), *Treatment and Final Disposal of Nuclear Waste*. Program for Research, Development and Demonstration of Encapsulation and Geological Disposal 1998. SKB, Stockholm, 1998.
- Tännsjö, Torbjörn, 'Why we Ought to Accept the Repugnant Conclusion', in Ryberg, Jesper and Tännsjö, Torbjörn (eds.), *The Repugnant Conclusion: Essays in Population Ethics*, Kluwer Academic Publishers, London, 2004, pp. 219-238.
- Walzer, Michael, *Spheres of Justice: A Defence of Pluralism and Equality*. Basil Blackwell Ltd, Oxford, 1983.
- Warren, Mary, 'Do Potential People Have Rights?', in Sikora, R.I. and Barry, Brian (eds.), *Obligations to Future Generations*. White Horse Press, Cambridge, 1978, pp. 14-30.
- Wolf, Clark in 'O Repugnance, where Is Thy Sting?', in Ryberg, Jesper and Tännsjö, Torbjörn (eds.), *The Repugnant Conclusion: Essays in Population Ethics*, Kluwer Academic Publishers, London, 2004, pp. 61-80.
- Wong, David B., 'Moral Relativism', in Craig, Edward (ed.), *Routledge Encyclopaedia of Philosophy*. Volume 6. Routledge, London, 1998, pp. 539-543.

Index

- Agius, Emmanuel, 23, 37-38, 42, 144, 145-173, 192, 198, 201, 226-228, 235
- Ariansen, Per, 69, 157, 164
- Arrhenius, Gustaf, 34
- Auerbach, Bruce, 37-38
- Baier, Annette, 36, 157
- Barry, Brian, 22, 35, 38, 41-42, 80-113, 133, 136, 139, 143-144, 168-172, 221, 229-232, 235-237, 256
- Carr, David, 203-212, 215, 217-218
- Close and remote future generations, 19, 129, 142
- Communitarianism, 116-118, 127, 131, 136, 202-203
- Community, 23, 36-37, 42, 69, 87, 107, 117, 119-144, 168, 191-192, 202, 208-211, 215
- Community of mankind, 136, 153-154, 156, 159, 173
- Common good, 42, 106-107, 153-157, 161-167, 169-170, 172-173, 187
- Consequentialism, 33-34, 38, 41, 45-52, 54, 62, 64-65, 69, 73-76, 78, 83, 226
- de-Shalit, Avner, 22-23, 36-38, 42, 68, 88, 107, 115-144, 149, 153, 168, 192, 198, 202-203, 226, 235
- Equal opportunities for well-being, 98, 105-108
- Equal opportunities for resources, 41-42, 98, 108-109, 169, 172, 227-232, 255-258
- Feinberg, Joel, 35
- Fundamental equality, 35, 41, 84, 91-95, 101, 103-105, 108, 112
- Gauthier, David, 35, 81-82
- Golding, Martin, 36
- Hare, Richard, 48
- Heller, Jan, 37, 39
- Heyd, David, 34, 38, 65-68, 96, 128, 200, 202-203
- Heuristics of fear, 188-189, 193-196, 236
- High-level waste (HLW), 239-266
- Intergenerational justice, 22-23, 91-92, 101, 106, 118-119, 125, 128

- Jonas, Hans, 23-24, 42-43, 173-198, 200-201, 214, 235-236
- MacIntyre, Alasdair, 115, 202-209, 215, 221
- Meyer, Lukas, 35
- Moral pluralism, 29, 41-43, 71-72, 82, 106-108, 112, 133, 139-140, 142, 164, 166-167, 171-172, 190-191, 197
- Moral objectives for HLW management, 43, 252-255, 258-262
- Narveson, Jan, 33-34
- Narrative theory, 43, 202-236
- Nozick, Robert, 48-49, 52, 88
- Nussbaum, Martha, 105
- Page, Edward, 37, 39
- Parfit, Derek, 22, 34, 40-41, 44-79, 95, 102, 112, 122, 127, 166, 182, 199-200, 234
- Partridge, Ernest, 198-200
- Philipson, Sten, 145
- Precautionary principle, 101-102, 188, 194-195
- Rawls, John, 34, 80-81, 85, 88, 105, 115-116, 223-224
- Repugnant conclusion, 58-59, 61, 69-72, 74, 76, 78, 93, 102-104, 166
- Richards, David, 34, 89
- Rights of future generations, 35-36, 88, 92, 144, 148, 157-159, 167-168, 171, 226
- Routley, Richard and Val, 38
- Sandel, Michael, 115
- Scanlon, Thomas, 81, 85-86, 90, 96
- Schwartz, Thomas, 33-34
- Self-transcendence, 122, 127, 142, 177, 198-201, 205, 213, 217, 219, 226, 233
- Sen, Amartya, 46, 105
- Shrader-Frechette, Kristin, 38, 261-262
- Sustainable development, 12, 99-101
- The idea of mankind, 172, 180, 185, 188-190, 192, 196
- Taylor, Charles, 115
- Tännsjö, Torbjörn, 69
- Walzer, Michael, 115, 133
- Welfarism, 45-46, 50-51, 71, 217
- Whitehead, Alfred, 23, 145

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