HANDBOOK OF INTERGENERATIONAL JUSTICE

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Handbook of Intergenerational Justice

Edited by

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Introduction

Dear reader,

The concept of 'intergenerational justice' may very well become an intellectual leitmotif of the new century. It does not only deal with the future, it might have a future career in philosophy and politics itself. In 1980, Ernest Partridge wrote: 'The lack of manifest philosophical interest in the topic is further indicated by the fact that of the almost 700 000 doctoral dissertations on file at University Microfilms in Ann Arbor, Michigan, only one has in its title either the words "posterity", "future generations" or "unborn generations" (1980, p. 10). A lot has changed since then. In the last few years, the number of scientific magazines and articles referring to justice between generations and to future ethics (in a broader sense) has soared: in the 1980s in the USA,² and in recent years maybe even more in Europe. Justice between generations is still not as salient on the agenda as justice between rich and poor (social justice) or between men and women (gender justice). But the gap is narrowing. In Germany, for instance, four quality newspapers cited the term 'intergenerational justice' only 19 times in 2001, but 129 times in 2003 with further buoyancy (Nullmeier 2004).³

Since the earliest days of the environmental movement, the rights and interests of future generations have been invoked in argumentative discourse (see Palmer 2001). These days, however, barely a budget debate passes in a parliament anywhere in the world without the Minister of Finance justifying his planned cuts on the grounds of their generational justice or 'financial sustainability'. In many European countries, youth movements for intergenerational justice have formed and members of the younger generation use moral issues on talk-shows to put their opponents from the older generation under intense pressure: is it just if the younger generation stands to inherit the greenhouse effect, the ozone hole and atomic waste from previous generations? Is it just if the unemployment rate is higher amongst young people than amongst the population as a whole? Is it just if the younger generation are likely to receive a lower yield on their contributions to the retirement system than the older generation? And all this when young people below the age of 18 are not allowed to elect their own members of parliament? When the younger generation stands to inherit a heavily-indebted state? When more than twice as many young people than old-age pensioners are receiving income support? Is it just if barely any under-40-year-olds are to be seen in parliament, in corporate boardrooms and on the editorial committees of the press?⁴ Justice between the old and young respectively between present

and future generations is, in itself, one of the most important reasons why environment and nature should be protected. However, this concept represents much more than this. It contains a complete political programme – from environmental and financial to educational policy.

Another indication of the impact of 'intergenerational justice' is that constitutions that were recently adopted or changed, especially in central Europe, include wording that refers to 'future generations' or 'sustainability' (see Tremmel, Häberle and Bourg in this volume). To discuss the scientific meaning of the concept, an interdisciplinary magazine has been created that deals with the topic of justice between generations: *Intergenerational Justice Review* (ISSN 1617-1799).

This boom of 'intergenerational justice' is astonishing because each political philosophy by definition criticizes current situations. If we want to change such situations, we can only do so in the future. Therefore every social theory that aims at improving the lot of mankind – be it the theories of the enlightenment (for example Condorcet), Marxism, neo-classical economic theories, or rights-based philosophy – focuses on future generations (see Birnbacher in this volume).

Explicitly, the question of justice between generations, or more broadly speaking, the fate of future generations, has been dealt with since the advent of ecological consciousness. The Club of Rome deserves the historical merit of having paved the way for a theory about respecting the limits of nature (Meadows *et al.* 1972).⁵ Until this point, almost all philosophers in the preceding millenia had been relying on a quasi natural law for the improvement of the living conditions of future generations. Kant (1785/1968, p. 53) committed the following lines to paper:

It is still strange that the older generations seem to do their cumbersome business only for the sake of the younger generation to prepare a platform from which they can go one step further, towards the target aimed for by nature, and that only the last generations will be lucky enough to dwell in this abode built by a long row of their predecessors (albeit not deliberately), who were not able to have their share in the joy they were preparing. ⁶

Even Rawls thought of an autonomous savings-rate as the central point in his concept. It was Hans Jonas (1979) who finally stated in his fundamental book, *The Imperative of Responsibility*, that mankind is about to affect nature negatively and irreversibly. Colorfully, he describes mankind's relation towards nature before modernity:

With all his boundless resourcefulness, man is still small by the measure of the elements, precisely this makes his sallies into them so daring (...). Making free with the denizens of land and sea and air, he yet leaves the encompassing nature of those elements unchanged, and their generative powers

undiminished. (. . .) Much as he harries Earth, the greatest of Gods, year after year with his plough – she is ageless and unwearied; her enduring patience he must and can trust, and to her cycle he must conform. (Jonas 1980, p. 25)

Even though Man labored as much as he could he did not affect the equilibrium of nature. Under these conditions, an environmental ethic was obviously not essential.

Nature was not an object of human responsibility – she taking care of herself and, with some coaxing and worrying, also of man: not ethics, only cleverness applied to her. (ibid, p. 26)

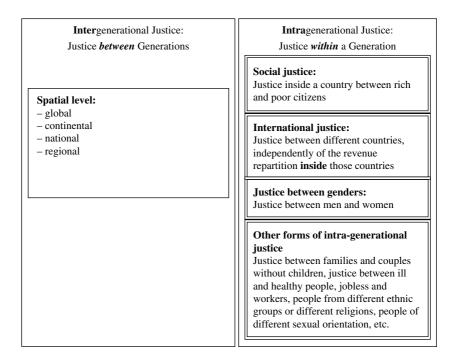
As long as this was true, the ethicist could confine himself to devising intragenerational ethics. His ethical universe was composed by contemporaries with a foreseeable life span. Jonas dubs this the 'neighbor ethics':

To be sure, the old prescriptions of the 'neighbor ethics' – of justice, charity, honesty and so on – still hold in their intimate immediacy for the nearest, day by day sphere of human interaction. But this sphere is overshadowed by a growing realm of collective action where deed and effect are no longer the same as they were in the proximate sphere, and which by the enormity of its powers forces upon ethics a new dimension of responsibility never dreamt of before. (ibid, p. 28)

We can criticize Jonas's vision of nature before mankind's advent as a too steady and invincible one. If we refer to the five geological stages of species extinction, nature must be seen as normally affected by catastrophes. But Jonas's indisputable point of view is that the first human beings had relatively little influence on global nature and thus they could limit themselves, as ethicists, to developing ethics for an intragenerational context. This explains why most important previous ethics theories have neglected intergenerational problems. Outside the ecological field, it was probably Thomas Jefferson who picked out intergenerational justice as a central theme when, for instance, he wrote: 'Funding I consider to be limited, rightfully, to a redemption of the debt within the lives of a majority of the generation contracting it.'

Against this backdrop, it might be asked how to determine the limits of the subject discussed in this *Handbook of Intergenerational Justice*. What distinguishes this handbook from a handbook on sustainability? Before we can answer this question, we first have to look at the distinction between inter- and intragenerational justice (see Figure I.1).

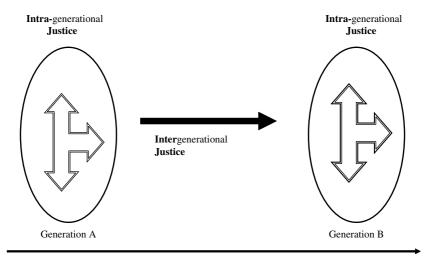
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Figure I.1 Distinction between intergenerational justice and intragenerational justice

Intragenerational justice has of course a temporal component. If we want to reach a goal, for instance more equality between North and South, we can by definition only achieve it in the future. The status quo takes place in the present and necessarily the goal of the process concerns the future (see Figure I.2).



Time

Own source

Figure I.2 Temporal scale of intergenerational and intragenerational justice

But the 'future' usually has a short-term time horizon here. Intragenerational justice goals are not supposed to materialize in a hundred years, but within the next legislative period.

Intergenerational justice and intragenerational justice are fundamentally different in the sense of intergenerational justice comparing *average* individuals, whereas intragenerational justice analyses the various circumstances and living conditions of individuals at a given point in time.

Now, sustainability as a concept combines intergenerational and intragenerational (especially international) justice. This is a result of a comparative study of 60 definitions used by scientists (Tremmel 2003). It has often been lamented that there is an unmanageably large amount of definitions of the contested concept of 'sustainability/sustainable development' (Dobson 2000). Not surprisingly, part of this dispute is how it should be normatively justified – only by intergenerational justice (17 nominations), only by intragenerational justice (five nominations) or both combined (34 nominations). Usually, generational justice is connected with the environment and intragenerational justice is connected with development. The majority of scientists – as well as the political actors at UN conferences – prefer the definition that green policies have no priority to development aid policies (see Table I.1).

Table I.1 Grouping of definitions of sustainability into two ideal types

Ideal type	Definition ^a	User	Exemplary statement
'priority for ecological generational justice' (number of nominations: 15)	The dynamic equilibrium ^b is the main feature. Hence, many social problems are not mentioned.	Scientists working with the definition are primarily active in the environmental area (mainly in developed countries)	'The concept of sustainability in the spirit of intergenerational justice must be separated from the concept of just distribution between the countries and regions.' (Renn and Knaus 1998, 78)
'inter- and intra- generational justice are weighted equally' (number of nominations: 34)	The dynamic equilibrium is just one aspect and social justice must be included. Green policies and development aid policies goals coincide.	Scientists focused on international justice.	'Sustainability in the spirit of prohibition of impairment seems to be a good basis for developed countries, which have the aim to save economic, cultural, social and environmental resources for future generations. But this principle is not sufficient for developing countries, in which the basic rights of human life are not fulfilled.' (Jörissen et al., 24)

Notes:

Source: Tremmel 2004.

^a Sixty definitions by different institutions/scientists where evaluated. Due to the fact that not all definitions provide information about the normative justification of sustainability/sustainable development, the total of all nominations is smaller than 60. ^b Dynamic equilibrium: same input and output over time, for example a state in which harmful substances pollute soil, air, water and the atmosphere only to such an extent as these media can decompose the substances due to their natural regenerative capabilities in the respective period of time. Another example is a state in which renewable resources are not exploited to a greater extent than they are capable of renewing themselves.

Given the fact that sustainability by definition (of most scholars) is a concept that combines intergenerational justice, international justice, gender justice and social justice, it is clear that a *Handbook of Intergenerational Justice* cannot lay its focus on sustainability. Otherwise it would have to be twice as long. Of course, this does not mean that the authors of this volume ignore the inter-linkages between inter- and intragenerational justice. On the contrary, they are explicitly addressed in some chapters, for example Birnbacher's, Lumer's, Beckerman's or Gardiner's.

Summary of the chapters

This interdisciplinary anthology is composed of chapters by scholars from the international scientific community.

The first part of the volume clarifies basic terms and tracks down the origins of the idea of generational justice. Using a large variety of philosophical, economic and cultural approaches, the authors point towards a new ethical standpoint, which takes into account the rights of succeeding generations.

As a starting point, Prof. Dr Dieter Birnbacher, teaching at Heinrich Heine University in Düsseldorf, Germany, gives a philosophical assessment of the limits and scope of our responsibilities with regard to future generations. According to him, more and more aspects of existence are entering the sphere of human control, and we have a growing possibility to detect future dangers and risks early enough. These factors lead to an extension of our responsibility for future generations. In spite of the difficulties such as opportunity costs, restricted human ability and foresight, modern collective agents (present governments and leading industrial companies) have to take their responsibility for future generations seriously. How to fulfil this task must be based on fundamental ethics and must be well defined regarding different scopes. At any rate, according to Birnbacher we have to take the entire foreseeable future into account. Regarding the content of our responsibility for future generations, Birnbacher tells us that we have to care for a sustained preservation of the resources needed for human survival. Nevertheless, we need not go so far as to concern ourselves with the cultural enrichment for future generations. Comparing the responsibility for present generations with the one for future generations, we can distinguish a maximum and a minimum approach. By a maximum approach, we have to invest today's resources, wherever the welfare of future generations can be increased. In daily life, we follow the minimalist way, whereby we just have to preserve the stock of resources without making further provisions. However, this is not ethically sufficient because we neglect the natural growth of populations and refrain from improving the lot of future generations. Birnbacher reveals daily complacency to be a particular hindrance to efforts of acting responsibly towards future generations.

In this context, Prof. Dr Christoph Lumer, Professor of Moral Philosophy at the University of Siena, Italy, makes the case that maxims of generational justice could be seen as the application of norms of general justice. These general norms are themselves deduced from moral axioms behind them. Five such axioms are presented and explained by Lumer to show briefly which demands arise from these principles:

- 1. Ethical hedonism: only the welfare of human beings and more highly developed animals is intrinsically morally relevant.
- 2. Beneficiary universalism: all human beings and to a limited degree more highly developed animals as well should be equal beneficiaries of the morality of a subject, independent from space and time. Thus, beneficiary universalism excludes among other aspects temporal discounting, that is, a lower consideration of the fate of future generations.
- 3. Prioritarianism: the moral value of an action or a norm is roughly determined by the thereby produced changes in human welfare. More precisely, though, it should be given more weight than is given to changes in welfare of subjects worse off.
- 4. Limited commitment: moral commitment should reach at least a bit beyond socially valid moral duties which are legally or socially sanctioned. A further increase of commitment is not a moral duty. The principle demands the maximum of what can be demanded from rational subjects and helps to maintain achieved standards. At the same time, it raises moral commitment in the historical long term.
- 5. Efficiency or economy principle: moral commitment should be efficient and employed where the ratio of cost and moral benefit is most favourable.

According to Lumer, actual developments seem to lead to a reduction of the intergenerational savings rate (referring to pensions politics, high youth unemployment, unrestrained consumption of non-renewable resources, hardly restrained emissions of greenhouse gases). Lumer (like Beckerman in later chapters) argues in favour of benefiting the least favoured today, as this would automatically also realize intergenerational justice because it would improve the status of the least favoured of tomorrow. Plausible assumptions concerning the actual developments imply that even if current policies persist, future generations of the First World will still be better off than the currently dominant ones – and thus, also a lot better off than future Third World generations. Because of this, the ratio of cost to moral

benefit within the Third World countries would be the most favourable. Besides this, much of the damage provoked by the greenhouse effect only becomes a social problem because of widespread poverty. Therefore, according to Lumer, direct investment in the Third World's development is the most salient policy measure.

Prof. Dr Wilfred Beckerman, Emeritus Fellow of Balliol College, Oxford, UK, plays the advocatus diabolus in this handbook. It is well-known that he believes that Sustainable Development is an overrated concept. In addition, the argument of his chapter is that a theory of intergenerational justice is not only impossible but also unnecessary. When the Foundation for the Rights of Future Generations invited him to the symposium preceding this book, he answered that he could not remember having been invited before to a meeting in which the opinions of all other participants differed so much from his own. Moreover, when we received proposals for publishing contracts from different publishing houses, one potential publisher demanded that the chapter by Dr Beckerman be dropped 'because its essential message is at odds with the overall trajectory of the book, and to have a chapter that in effect undermines the main argument of the book is problematic in editorial terms and in terms of unnecessarily weakening the defenses of the book against critical reviews'.

But we decided to follow Voltaire's famous maxim: 'I disapprove of what you say, but I will defend to the death your right to say it.' A curious mind must always be eager to learn and willingly submit to whoever has the better argument. The idea of critical rationalism is to constantly challenge our own theories. But of course, this test could also show that Dr Beckerman's arguments are wrong, not those of the others.

In his chapter, Dr Beckerman outlines his arguments by the following syllogism:

- Future generations of unborn people cannot be said to have any
- 2. Any coherent theory of justice implies conferring rights on people, therefore
- 3. the interests of future generations cannot be protected or promoted within the framework of any theory of justice.

The crux of the argument that future generations cannot have rights to anything is that properties, such as being green or wealthy or having rights, can be predicated only of some subjects that exist. Theories of justice imply ascribing rights to somebody or to some institution or group of people in such a way that if a class of individuals cannot be said to have any rights,

their interests cannot be protected within the framework of any coherent theory of justice. However, Beckerman emphasises that rights and justice do not exhaust the whole of morality, and that we still have moral obligations to take account of the welfare of future generations. Our main obligation is to bequeath to future generations a society in which there is greater respect for basic human rights than is the case today.

The theses put forward by Dr Beckerman are further discussed in this volume in the articles by Wallack and Tremmel.

The next chapter by Prof. Dr Claus Dierksmeier, teaching Philosophy at Stonehill-College in Easton/Boston, USA, focuses on Rawls's theory. Rawls's famous text passage on future generations in his A Theory of Justice (Rawls 1971) belongs to the most quoted paragraphs within the literature on intergenerational justice. According to Dierksmeier, John Rawls's theory on justice for future generations fails to provide an argumentative basis for the rights of future generations. First, Dierksmeier looks for the rational devices enabling us to think of justice between generations within the realm of Rawls's A Theory of Justice, then he explores whether the systematic foundation of these devices is convincing. Specifically, he investigates Rawls's attempt to derive the notion of rights from a conception of reciprocal arrangements to enhance the individuals' self-interests. Second, as becomes evident in Dierksmeier's argumentation that Rawls's theory cannot provide a satisfactory foundation for the rights of future generations, Dierksmeier outlines how to establish a theory of the unconditional as well as asymmetrical obligations of the present generations towards future generations. According to Dierksmeier, such a theory of obligations can also serve to answer the questions about the 'rights' of future generations because our obligations correspond to such rights.

The bottom line of Dierksmeier's account is that any good theory of intergenerational justice cannot exclusively be explained by rational choice theory and sheer human self-interest. In contrast, a moral-based explanation is essential to justify generational justice.

Prof. Michael Wallack, Associate Professor of Political Sciences at Memorial University of Newfoundland, Canada, investigates the difficulties of liberal and utilitarian theories with respect to the field of justice between generations. According to Wallack, utilitarians struggle to solve the central issue of justice between generations: the determination of a savings rate that maximizes the utility attached to the welfare of both present and future citizens. According to him, utilitarians take consumption to be an unalloyed good. Since what is saved (invested) cannot at the same time be consumed, present generations suffer losses from denied and delayed consumption and opportunity costs. So which rate of savings would utilitarians choose if they were in Rawls's original position? The

auxiliary hypothesis, which incorporates their risk proclivity into their decision-making process, does not solve the central issue: the risk horizon of contemporaries cannot be assured to extend farther than their own lives.

Second, Wallack identifies liberal, rights based responses to the problem of justice between generations. According to Wallack, liberals adhere to general principles of procedural justice that implicitly fail to take into account the dimensions of time. Hence, they cannot deal with the special problems of intergenerational justice.

Like Dierksmeier, Wallack criticizes Rawls's account of intergenerational justice. But Wallack focuses not on A Theory of Justice but on important modifications to Rawls's advocacy for intergenerational justice in his later work *Political Liberalism*. According to Wallack, the problems that were produced by introducing parental affection into the original position, a notion for which Rawls received a lot of criticism, are gone in his later work, doubtlessly an aesthetic gain. But now introducing a deontological logic produces new fractures in Rawls's argumentation. The appealing idea of the original position – the forced impartiality produced by reduced information relating to calculations of one's personal advantage without any special assumptions – is watered down beyond recognition. As a solution to these difficulties, Wallack offers a revised 'difference principle' that he calls the Principle of Minimum Irreversible Harm (MIHP). According to Wallack, this principle supplies the concrete content to the Kantian admonition which Rawls provided in *Political Liberalism* to invest at a rate 'any generation would have wanted' in each generation.

At the end of his chapter Wallack takes up Beckerman's thread. He notes that Beckerman himself implicitly offers a theory of justice for future citizens at least in his contention that we today have a moral obligation to avoid doing severe harm to future people.

Dr Axel Gosseries and Dr Mathias Hungerbühler outline a seldomly theorized issue of intergenerational justice: the problem of rule change. When rules are changed, some lose and others win. Sometimes, losers and winners are distributed across generational lines. Then rule change is a problem of intergenerational justice, not of mere co-ordination. Gosseries and Hungerbühler argue that, in some cases, the losing cohorts should be compensated for their losses. Such a generational impact assessment is applied to three examples: cancelling mandatory retirement, phasing out the right to early retirement and cancelling mandatory military service. Each of these cases exhibits a distinctive intergenerational distribution of transition losses or gains. Gosseries and Hungerbühler offer a precise definition of 'transition losses', restricted to two cases in which either rule change leads to losses in the expected return of investments that were effectively made (if the person invested but would have not done so had the new rule applied

at the moment of investment), or in which the losses result from the opportunity cost of non-investment (if the person would have made such investments had the rule applied earlier). In Gosseries's and Hungerbühler's reasoning, in order to decide if a compensation is morally justified, the criteria of predictability and legitimacy should be applied to the situation.

Having heard accounts of the just savings rate that is necessary to produce a certain capital in different articles, the question arises what exactly does this capital consist of? Basically just institutions or much more? The answer to this question also provides us with an answer as to whether tomorrow will be worse than today. This is a widespread assumption among ecologists since the first report to the Club of Rome (Meadows et al. 1972), whereas economists generally claim the opposite (Simon 1998). The heated debate about strong versus weak sustainability is another facet, yet it does only cover the first two forms of capital in Table I.2. Cultural, social or human capital are not included. To answer the question of whether the 'savings rate' is positive or negative we must take a look at the overall legacy that is passed on from one generation to another. It can be depicted as the entirety of capital (natural, man-made, social, cultural and human capital) which is transferred from one generation to another.

Table I.2 Forms of capital

Natural capital	Resources provided by nature which are of use for mankind
Artificial and financial capital	Machinery, infrastructure and buildings as well as financial assets
Cultural capital	Institutions (democracy, market economy), constitutions and legal codes
Social capital	Existing solidarity within society, stable relationships between individuals and groups, values
Human capital	Health, education, skills and knowledge

Own source.

It is obviously a highly complex task to devise indicators that measure the intergenerational capital transfer. Dr Peer Ederer, Dr Philipp Schuller and Stephan Willms undertake the endeavour in their economic chapter. The methodology of their Economic Sustainability Indicator (ESI) measures how much net capital is being handed down from current generations to future generations as a percentage of how much net capital these current generations have inherited. If the ratio is above 100 per cent, then the current generations have increased the stock of capital for future generations and thus increased sustainability, and if it is below 100 per cent, then

the reverse has occurred. For that purpose the indicator defines and measures five types of positive or negative legacy: real capital, human capital, natural capital, structural capital and intergenerational debt:

- Real capital comprises the costs of the complete set of production machinery and commercially used real estate buildings that are being employed in a society.
- 2. Human capital is defined as the number of all people who are employed in the workforce of a society multiplied with the cost of their formal and informal education.
- 3. Natural capital comprises all natural resources that are being used in the production process.
- 4. Structural capital arises from all the formal and informal rules and institutions which a society has created for itself in order to organize itself.
- 5. Intergenerational debt comprises all future promises of payments that current generations expect from future generations, netted with the implicit cash flow embedded in private capital inheritance. In other words: net debt or surplus that the future generations have towards the current generation.

Because only the economic impact is measured, natural capital has a relatively small portion within the totality of the capital.

In the second part of the chapter, they justify that their ESI does not discount future cash-flows. They cite economic, legal-political, mathematical and conceptual reasons for this.

The last two chapters of Part I already build a bridge to Part II of the book. They describe in detail forms of intergenerational buck-passing but unlike the articles in the second part they do not focus on devising solutions (for example new laws or institutions) to end this injustice. Prof. Steve Gardiner, teaching at the Philosophy Department at the University of Washington, Seattle, USA, describes two ecological trade-offs between the interests of present and future generations: climate change and nuclear protection. He claims that our basic position in respect to the distant future can be characterized by what he calls the problem of intergenerational buck-passing. This problem implies that our temporal position allows us to impose costs on future people that they ought not to bear, and to deprive them of benefits that they ought to have. Next, he suggests that the problem is exacerbated by a problem of theoretical inadequacy: at present, we lack the basic conceptual tools with which to deal with problems involving the farther future. He illustrates this problem by a discussion of cost-benefit analysis and – deepening the criticism by Ederer, Schuller, Willms – using a standard discount rate. Finally, he makes two basic proposals. The first is that we should investigate a promising form of the precautionary approach, which he calls 'the Global Core Precautionary Principle'. The second is that we should not lose sight of the fact that the problems of intergenerational buck passing and theoretical inadequacy create an atmosphere in which we are extremely vulnerable to moral corruption.

Dr Bernd Süssmuth and Prof. Dr Robert K. von Weizsäcker, both of whom teach Economics at the Faculty of Economics of the Technical University of Munich, outline in their chapter the gravity of public debt in the context of intergenerational justice. In particular the short-sightedness of politicians who prefer being re-elected rather than tackling fundamental issues constitutes an obstacle to solving long term problems. According to the authors, growing public debt is a serious constraint to the freedom of future generations. Economically, there is no reasonable justification to opt for it, morally, it hinders the society's newborns to solve problems in fields like education, science and research.

Based on recent data and indicators for the EU-15, institutional determinants of public debt are discussed along two central dimensions: first, the common resource problem denoting the externality which results from the fact that government spending is commonly targeted at specific groups in society while being financed from a general tax fund to which all taxpayers, possibly including future ones, contribute. This problem of modern democracies is aggravated by the number and ideological range of ruling parties, institutional characteristics of the electoral system, and the fragmentation of the budget process. Second, it is most reasonable to proceed from myopic foresight of incumbents, seeking to protect claims and power by instrumentally misusing public expenditures financed by issuing debt to maximize re-election probability. The authors show that the more frequently coalitions or ruling parties in a European democracy have changed during the last two decades, the more the respective government tended to accumulate debt. In addition to this and other evidence, it is suggested that this relationship is nonlinear, that is convex, in nature: both too few and too frequent changes generate a negative performance. A further aggravation of the implied shortsighted calculus of politicians is foreseeable by the ongoing demographic change in industrial societies.

In sum, the quantitative study of institutional determinants reveals a fundamental dilemma of the self-interests of economic and political agents on the one hand and intergenerational justice on the other.

The authors of the second part focus on how posterity can be institutionally protected. The chapters seek solutions for one of the paramount problems of our time: political short-termism.

Future individuals cannot vote today, therefore, their interests are all too often neglected. This is the rationale of the article by Dr Joerg 'Chet' Tremmel from the Foundation for the Rights of Future Generations. Focusing on national constitutions, he analyses the different approaches at institutionalization. In this context, a 'matrix of the institutionalization of intergenerational justice' is developed. On one axis, the two main possibilities are shown: 'written law versus new institution'. A second fundamental decision is 'range of coverage'. Both clauses in constitutions and new institutions can be conceived to deal with either ecological questions and financial questions or posterity in general.

In dealing with the wording, Beckerman's argument that we cannot attribute 'rights' to future generations is rejected. According to Tremmel, Beckerman's first premise is of minor importance and his second premise cannot be verified by Beckerman's line of argument. Afterwards, Tremmel proposes some concrete proposals for national constitutions. His ecological and financial generation protection clauses would significantly reduce intergenerational buck-passing.

But how could these clauses ever be implemented? Even in a scenario in which everybody maximizes his own self-interest there is an important difference between young and old MPs: the younger generation stands to inherit the burdens passed on into the future. Therefore one can assume that the chances for a change of the constitution are high where the percentage of young MPs soars. Tremmel's table shows the age distribution of the MPs in OECD countries.

Finally, current initiatives by young members of parliament are portrayed although their proposals are not bold enough.

Prof. Dr Peter Häberle, who is Director of the Bayreuth Institute for European Law and Law Culture, takes the same 'raw material' as Tremmel, the national constitutions, but he groups the relevant clauses differently. Apart from the explicit use of the formula of 'generation protection', he focuses on more indirect clauses inhering 'cultural and/or natural heritage'. According to Häberle, the preservation of both nature and culture – with nature providing the basic resources for culture – is essential to sustain human living conditions for future generations and is thus part of 'generation protection'. Another very topical sign of the intensification of generation protection is its expansion on the European level: whereas its precursors, the treaties of Maastricht and Amsterdam, incorporated generation protection only immanently, the Treaty establishing a Constitution for Europe now mentions it explicitly. Also on the European level, different text stages can be observed in the form of a mutual influence between member state constitutions and the supranational EU-level. Moreover, subconstitutional legal acts adopted by the European Court of Justice play a role as well.

The special difficulty regarding constitutional generation protection is its ambiguity. The two opposing key notions are obligation and exemption: on the one hand, generation protection implies norms and values that must be eternally valuable. On the other hand, these norms must not constrain the coming generations' liberty to design their future world. Thus, a compromising middle course between a certain degree of 'eternity clauses' and sufficient flexibility is needed for generation contracts.

The Head of the Centre of Research and Interdisciplinary Studies on Sustainable Development in Paris, Prof. Dr Dominique Bourg, further elaborates on the constitutional anchorage of sustainability by evaluating the effects of the recently adopted French Constitutional Environment Charter. France was not the first country to include environmental protection and sustainable development into its constitution. However, there is a relative originality about the French approach as it modified the preamble with reference to a new charter. This charter affirms the right to a healthy environment and includes a universal responsibility principle for ecological reparations. Despite this universalistic perspective, according to Bourg the effectiveness of the Charter remains questionable.

The remaining chapters describe institutions for the protection of the interests of future generations, either already established (Shoham/Lamay and Opstal/Timmerhuis) or currently roaming in the cobwebs of the parliamentary decision-making process (Javor) or conceived (Agius). Probably the most powerful of existing institutions is the Commission for Future Generations of the Knesset, the Israeli Parliament. Dr Shlomo Shoham, Commissioner or Future Generations, and Nira Lamay, Deputy Commissioner for the Knesset Commission for Future Generations, evaluate this young and worldwide unique institution. The establishment of the Commission is characterized as the result of a top-down process. The Commission was not born out of a public campaign or discussion but emerged from a parliamentary initiative, attempting to consider long-term implications of legislation. The initiation of the parliamentary institution itself probably made it possible to establish the institution and introduce the concept of the rights of future generations. It is funded by the Knesset's own budget and headed by a Commissioner.

The Commission has important authorities regarding the parliamentary legislative process in almost every area except matters of defence and foreign affairs. This includes the initiation and drafting of bills, later to be submitted by individual parliamentarians. It also enjoys the right to demand information from every inspected government-related institution under the law of the State's Comptroller. Along with the general authority to advise the parliament regarding any matter that is of special interest for future generations and its physical location within the parliament, this

created a whole new dimension in the parliamentary, executive and public levels in Israel.

Dr Benedek Jávor, Assistant Professor of Environmental Sciences at the Department of Environmental Law at Pazmany Peter Catholic University in Budapest, Hungary, describes in his chapter the initiative for an Ombudsman for future generations. In Spring 2000, the Hungarian NGO 'Protect the Future!' initiated a draft law to install such an institution which has been roaming in the cobwebs of political decision making since then, and there is hardly any chance of its realization in the short run. The idea is, however, still on the agenda and may provide an example for establishing other similar institutions. Javor gives an overview about the protection of future generations in international law and the activities of present Ombudsmen in other fields. He then outlines the criteria which are vital for an effective work of an Ombudsman for future generations: independence, wide competence and proactivity. Until the political will to set up the Ombudsman's office is gathered, Protect the Future! has founded and is operating 'REFUGE' (Representation of Future Generations), a civil initiative representing the coming generations in the spirit of the bill. REFUGE has been working for nearly five years and releases its results in annual reports similar to those of the existing Ombudsmen in Hungary. Finally, Protect the Future! makes a proposal to set up a European Ombudsman of Future Generations at the EU-level.

Having dealt with two non-governmental initiatives, the chapter by Rocus van Opstal and Jacqueline Timmerhuis from the Netherlands Bureau for Economic Policy Analysis (CPB) introduces how a rather independent governmental institution can trigger more long term thinking. Founded immediately after the Second World War, it was originally designed as a planning agency to facilitate the post-war reconstruction of the Dutch economy. But CPB soon evolved into a centre of economic information inside the government and, at the same time, an independent institute for economic forecasting and analysis. CPB provides politicians and policy-makers in- and outside the government with information that is relevant for decision making.

In most cases this amounts to sketching the relevant trade-offs that politician's face, as most policies having a positive effect in one field, will have some negative effect in another field.

In presenting the effects of policy options, along with the effects on the short term, CPB only provides information for policy makers. CPB does not provide direct policy recommendations. Rather, it tends to take an academic approach, stating facts and pointing out the expected effects of different courses of action, but refraining from normative judgements. The dual character of CPB's work – both scientific and policy oriented – is

reflected in its position: a research institute that is independent with respect to content, but at the same time formally part of the central government.

This ambiguous position often raises questions. However, CPB itself does not experience its position as constraining. Successive Ministers of Economic Affairs, formally responsible for the institute, have all respected and, if necessary, defended CPB's independence, even at times when they did not agree with the conclusions drawn by the bureau.

CPB also provides its analyses free of charge to the Dutch opposition parties. The analysis of election platforms in the months preceding general elections in the Netherlands is, in international comparison, a rather unique event. CPB studies on the sustainability of government finances in the long run and on cost-benefit analyses of government investment programmes play an important role in Dutch economic policy making. According to the authors, in this way the CPB contributes to more long-term thinking within the Dutch government.

From the perspective of a theologian and a philosopher, Prof. Emmanuel Agius from the University of Malta sets a framework of ethical principles that should be taken as a guide when realizing intergenerational justice. Such principles are formulated by the common heritage concept that was put forward for the first time by the government of Malta in 1967. This concept is not a new theory of property, but in fact implies the absence of property. Its key consideration is access to the common resources rather than ownership of it. Agius's account amounts to the proposal of a 'Guardian for Future Generations'. The assignation of a proxy for future generations to alert the international community of the threats to the well-being of future generations would be the most appropriate step in the right direction to safeguard the quality of future life. This 'guardian' should, as an authorized person or body, represent future generations at various international committees, particularly at the UN level.

The concluding chapter of the book also draws the attention to a relational theory of Intergenerational Justice. A.N. Whitehead's philosophical understanding of the universe as an interconnected web of relations offers a new paradigm of human society. Every generation is related to all preceding and succeeding generations which collectively form the community of mankind as a whole.

The chapter derived in part from a call for papers for the scientific symposium 'Institutionalisation of Generational Justice and Prospective Policies – International Experiences' which was held from 21–23 June 2005 in Berlin, Germany. The symposium was mainly sponsored by the Fritz-Thyssen-Stiftung, a private foundation dedicated to the support of schol-

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We welcome responses to this collection, especially by email, on ways to make future editions of the volume more useful. You can find the address of the Foundation for the Rights of Future Generations at the end of the book.

Dr Joerg 'Chet' Tremmel

Notes

- The terms 'intergenerational justice' and 'generational justice' are used synonymously.
 Just like 'gender justice' inevitably means by its inner logic justice between the genders
 (and not within one gender group), 'generational justice' is bound to mean justice
 between generations and not within one generation. Hence, the prefix 'inter' is dispensable.
- Delattre (1972), 254–258; Barry (1977), 204–248; English (1977), 91–104; Barry/Sikora (1978); Partridge (1980); Parfit (1981), 113–172; Bandman (1982), 95–102; Ahrens (1983); Daniels (1988); Barry (1989); Brown-Weiss (1989); Partridge (1990), 40–66; De-Shalit (1992); Laslett and Fishkin (1992); Auerbach (1995); O'Neill et al. (2002).
- These were 'Süddeutsche Zeitung', 'Frankfurter Allgemeine Zeitung', taz and 'Der Spiegel'.
- 4. Advocates of the older generation might retort: Is it, for instance, just that older people had fewer opportunities to take holidays or gain a university education when they were young? That young business start-ups can become multi-millionaires at 25?
- 5. Yet without developing a full theory of intergenerational justice.
- 6. In the original: 'Befremdend bleibt es immer hierbei: dass die älteren Generationen nur scheinen um der späteren willen ihr mühseliges Geschäft zu treiben, um nämlich diesen eine Stufe zu bereiten, von der diese das Bauwerk, welches die Natur zur Absicht hat, höher bringen könnten; und das nur noch die spätesten das Glück haben sollen, in dem Gebäude zu wohnen, woran eine lange Reihe ihrer Vorfahren (zwar freilich ohne Absichten) gearbeitet hatten, ohne doch selbst an dem Glück, das sie vorbereiteten, Anteil nehmen zu können.'

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PART I

FOUNDATIONS AND DEFINITIONS OF GENERATIONAL JUSTICE

1 Responsibility for future generations – scope and limits

Dieter Birnbacher

Future ethics – a contradiction in terms?

Responsibility, understood in an ex-ante or prospective way and referring to possibilities of conduct not yet realized, is necessarily futureoriented. Therefore, we are always responsible – in terms of an obligation to concern – for actions or events which, from the subject of responsibility's point of view, take place in the future or at least reach into the future. Thus, responsibility as such means always and necessarily responsibility for the future. If so, why do the terms 'responsibility for the future' and 'responsibility for future generations' require a special classification and accentuation? Under the present circumstances, responsibility for future generations, which in former times was more or less seen as an integral part of the traditional term of responsibility as a whole, has been given a new complexion. In his significant work The Principle of Responsibility Hans Jonas pointed out some of these new circumstances (Jonas 1979): one of them is the potential increased by modern technology to influence men's and nature's future fate by acting or refraining from acting. What once could be taken for fate is now gradually entering the sphere of human control. Another circumstance consists of the growth of possibilities of human foresight and the early detection of dangers and risks. It gets more and more difficult for agents to excuse themselves by claiming ignorance in order to avert uncomfortable situations. Even though the 'world of impacts' and the 'world of perception' still differ enormously and we can barely foresee the consequences of our present acting, the more historical experiences we make, the better backed up ideas we get of chances and risks of our interventions in nature and the human world.

Inevitably, both tendencies lead to an extension of our responsibility. The extended possibilities of interference in distant futures (for example concerning climatic problems) as well as grown possibilities of a farreaching risk calculation (regarding the consequences of climatic upheavals for the agricultural production in developing nations) does not remain without influence on the normative sphere. The knowledge about probable consequences of present acting and refraining from acting forces us – even though we may refuse to accept it – to take over an appropriate future

responsibility followed by a future ethics. With increasing knowledge power increases as well, but at the same time so does responsibility.

The idea of a future ethics regularly raises various objections. Some critics say that the idea of a 'future ethics' necessarily results in an anonymity of future responsibility in the long term. Responsibility gets vague and unspecific if – without considering the whole complexity of role relations – it is directed at people seen as 'abstract, homogeneous individuals' whom we do not know nor are able to know as they will live in the distant future (Becker 1989, p. 7). Becker states that responsibility cannot be separated from its archetype, the special responsibilities going with social roles in the context of small groups.

Other critics confine themselves to a rejection of a 'future ethics' from a pragmatic point of view and ask who – under real moral-psychological circumstances – could be expected to not only pay lip service to such an ethics but indeed show his or her allegiance to it. According to this opinion, responsibility has to be limited if it is not to be felt as overdemanding. As ethics is not concerned with ideal norms for fictitious agents but with reasonable and practicable norms for real agents, demands for responsibility cannot be extended indefinitely without defeating ethics' true purpose. Does this mean that the process of 'unlimiting responsibility', (Kamlah 1973, p. 105) which started with the Enlightenment and has persisted until now, ought to be annulled? Should the demand for more and widerreaching responsibility be rejected for being far too demanding? Not at all, I think. We need to keep an eve on the limits of responsibility, but at the same time we need to be open to the extension of responsibility resulting from an extended foresight, extended abilities but, above all, from an extended moral goodwill and a willingness to act.

Limits of responsibility

In some ways, responsibility is already limited by its semantic features and the meaning of the term 'responsibility' itself. The first limit to be mentioned may seem to be trivial at first glance, but is not if we have a closer look at it: when talking about responsibility an agent shall keep to or take upon himself, we normally do not refer to the entirety of moral obligations the particular agent has within a specific object area but, primarily, to the obligations of action he has in this area. Usually, taking over responsibility includes active acting and not merely refraining from acting. Taking over responsibility for somebody normally means doing something in an active sense in order to protect, support and provide for another person.

Summed up, the meaning of this in the first place purely conceptual feature lies in the 'costs' and 'opportunity costs' which are caused by taking over responsibility for a certain subject of responsibility. Taking over as well as carrying out obligations of action results in a greater effort and in a limitation of pursuing other interests than taking over and carrying out mere obligations of abstention.

The second limit consists in a restricted ability. Responsibility in terms of its scope and content is connected to objective and subjective power. The decisive objective power factor lies in the fact that it is first of all the situational conditions which make it possible to influence a specific event. The object of responsibility must not yet be removed from a possible source of influence because of objective reasons. It is not important if the subject of responsibility can influence an event directly, substantially or with a high chance of success, but if he or she is kept from influencing an event, no matter how indirect, insignificant or partly successful that influence may be. The decisive subjective factor is the subject's individual ability or inability to make use of the objectively given scope of intervention. Whoever is limited in his scope of conduct, for example because of neurotic constraints, is not as suited for taking over and carrying out responsibility as somebody who is emotionally in complete control. For instance, we are responsible for our own character just to the extent – but so far we are – of being able to influence it by controlling the deliberate choice and the avoidance of potentially formative influences and experiences.

The third limit is the restriction of human foresight. Nobody can be blamed for not having avoided troubles he or she could in no way foresee or expect under the given circumstances. In the field of new technologies it may well occur that some agents are expected to be responsible in order to provide against risks which are neither concretely defined nor backed up with a precise probability. However, in this connection assigning responsibility to somebody can be justified with the consideration that with historical experiences, especially in the field of new technologies with short testing intervals or a high testing risk, at least an abstract, less calculable and hypothetical risk has to be assumed.

Thus, a 'future responsibility', as it is claimed by Hans Jonas and other experts, cannot be regarded as wrong or inept just for conceptual reasons. It is absolutely legitimate to see the prototype of responsibility in the role-attached responsibility within the sphere of social proximity, which does not automatically mean to dogmatize it or limit the scope of responsibility for good. Beside the father's responsibility for his children, the teacher's responsibility for his or her students, the statesman's responsibility for the nation's welfare and so on, it is thoroughly possible to speak of a comprehensive, role-transcending responsibility, such as the foreigner's responsibility for another foreigner, the statesman's responsibility for the international community of nations and present people's responsibility for the future. A 'total responsibility' (Hans Jonas) is not a *contradictio in adjecto*.

The assignment of responsibility would only be confronted with conceptual objections if it disregarded essential conditions of a legitimate assignment of responsibility, that is if it was assigned to constructs like 'mankind' or 'the present generation' which cannot be reasonably assumed to be subjects of action, if present individual or collective acting had no kind of significant global or temporal long-distance effects; or if the carriers of future responsibility were not able to influence – in whatever direct form – the alarming developments. None of these conditions of exclusion applies to the responsibility for future generations. If responsibility is assigned to pseudo-subjects like 'man' or 'the present generation', it can normally be interpreted as an elliptical phrase for demands that are primarily directed to those collective agents who have the strongest influence, for instance present governments or leading industrialists in industrial nations. Neither are the other two conditions of exclusion fulfilled. Global and intergenerational long-distance effects of present acting or refraining from acting are not just inventions of ecological fanatics but undisputed reality. The fate of developing nations, the future of the global climate and the continued existence of nature's species depends very much on the leading industrial nations and their financial, economic, agricultural and environmental policies. Even though politically and ecologically involved citizens in those countries might tend to considerably overestimate their own influence on their governments' policies, it would be clearly wrong to deny them any, however indirect, political influence. At least those who hold a key position in politics or administration as well as lobbyists and other representatives of pressure groups, plus the heterogeneous group of academic political consultants, play a decisive role in the matter of longdistance strategies and decisions and thus are responsible for it as well.

Responsibility for the future: the optimistic and the pessimistic paradigm Two alarming global developments made responsibility for the future a key concept of political ethics:

- 1. the continuing though in the meantime slightly reduced exponential growth in population and its foreseeable consequences; and
- 2. the continuing exponential growth in the human utilization of nature.

The rapidly growing exploitation of nature by men does not only affect nature as a source of natural goods like soil, water, resources and energy, but also as a dump for substances and pollutants from production and consumption like waste, residues, air and water impurities and climate changing greenhouse gases. The excessive utilization of resources and dumping sites forms a major part of the burden that will be passed on to future

generations. Furthermore, there will be irreversible risks which coming generations will have to adapt to - risks like those that originate from radioactive waste from usage of nuclear energy or climatic risks provoked by the release of carbon dioxide from burning fossil fuels. So far, it is not the growth in population which is to blame in the first place for having produced this burden, but the growth in activities of a small part of the world population that intensified carelessly their exchange processes with nature in production and consumption without even thinking about the natural restrictions of our 'blue planet'. This situation might well change when emerging countries with a high population density like India or China join the club of industrial nations. As early as today, the greatest risks the atmosphere's ozone layer has to fear are not caused by the industrial nations, but by emerging countries rich enough to make use of raw materials but too poor to do without an environmentally hazardous exploitation of nature. Taken as ideal types, one can distinguish between an optimistic and a pessimistic paradigm of future ethics. The optimistic paradigm regards responsibility for future generations primarily as an obligation to prolong a more or less reliable process of progress which starts in present time and will continue in the future. This paradigm, in which future generations are generally better off than present generations, is characteristic of the main currents of the Enlightenment philosophy (Condorcet, Kant), of Marxism (Bloch), of 'neoclassical' economic theory and the liberal political philosophy including Rawls's 'theory of justice'. Regardless of existing differences, the representatives of these schools of thought share the opinion that the future will bring along a process of increasing perfection (Condorcet), increasing prosperity (Rawls, neoclassicism) or decreasing torment of labour (Marx). In contrast to this view, the pessimistic paradigm sees future generations in a potentially worse position than present generations. Responsibility for future generations thus is of a conservative nature and contains primarily the obligation to maintain the status quo, be it of a technological, economic or cultural nature, in order to avert harms, provide for future disasters and to minimize risks. The pessimistic paradigm forms the basis of nineteenth century Malthusianism, of the twentieth century eugenic movement and many specifically ecological future-ethical ideas. The leading affect is the fear of future deteriorations instead of the hope for coming improvements. Within Malthusianism, it is the fear of an unlimited growth in population, within eugenics the fear of a degeneration of the genetic pool, and in many models of ecological economy it is the fear of an endangering of the natural bases of living and thus the fear of endangered conditions for mankind's continuing existence in general. This attitude is reflected in Hans Jonas's postulate of a 'heuristics of fear'. According to this postulate, risks shall be avoided in the first 28

place, while opportunities shall be seized only afterwards. Hence, the emphasis is put on the risks of harm instead on the opportunities of success. In case of doubt, people should do even without a possible technological progress for the benefit of minimizing the risk of imminent disasters.

That the distinction between an optimistic and a pessimistic paradigm only works in an ideal-typical way is among other things revealed by the fact that the probably most important implicit 'future ethicists' of the nineteenth century, Marx, Engels and Mill, took the side of both paradigms. The same Marx who hoped for the proletariat's liberation from the 'unleashing of productive forces' with the help of progressive technological control of nature at the same time sensed the 'disparagement' of nature through human exploitation, as well as the dangers of Raubbau, first mentioned by Justus von Liebig:

Any progress of capitalist agriculture is not only a progress in the workers' skills, but at the same time a progress in the skills of exploiting the soil, any progress in increasing its fertility for a given period of time at the same time means a progress in the destruction of the lasting sources of this fertility. The more a country, as for instance the United States of America, thinks of big industry as the foundation of its development, the faster progresses this process of destruction. Capitalist production thus only can develop the technology and the combination of the social production process by undermining simultaneously the sources of all wealth: the earth and the workers. (Marx 1965, p. 529 et seq.)

The same holds true for Engels, for whom the destructive exploitation of natural resources forms one of capitalism's mortal sins. One of his examples still has a remarkable relevance to the present:

The Spanish coffee planters in Cuba who burnt down the woods along the slopes found enough fertilizer in the ashes to manure one generation of extremely profitable coffee trees – what did they have to worry about the tropical rainpours that afterwards would wash off the shelterless earth and leave nothing but bare rocks. (Engels 1973, p. 455)

The optimist in terms of progress, Mill, was not only one of the first persons to politically plead for birth control in public (among other things for the benefit of female emancipation from exclusively domestic tasks) but also for a stagnation of economic growth in order to maintain natural goods while simultaneously continuing cultural and moral development:

If the earth lost the very part of its pleasantness which it now owes to these things that an unlimited accumulation of property and an unlimited growth in population would take away from it just to nourish a numerously grown, but in no way better or happier population, I hope with all my heart for the sake of future generations that people will be content with constant conditions much earlier than they will be forced to. (Mill 1869, p. 62 et seq.)

The temporal and ontological scope of responsibility for the future

All theoretical basic questions in the field of future ethics are at the same time of practical relevance:

- 1. the question of the temporal scope of responsibility for the future (which period of time?);
- 2. the question of the ontological scope, of the objects of a responsibility for the future (for whom?);
- 3. the question of the contents of responsibility for the future (for what?);
- 4. the question of the significance of responsibility for the future compared with responsibility for the present, and
- 5. the problem of motivating people to accept and practically take over responsibility for the future.

Regarding the temporal scope of responsibility for the future, most moral philosophers share the opinion that it includes the entire foreseeable future and is limited only by the limits of prognostic knowledge. There is already an implicit connection to the total of future generations within the term irreversibility, which means that any future generation will have to live with certain changes. Animal and plant species that become extinct and non-regenerative raw materials that are exhausted are no longer available for any of the future generations. Theoretically, the consideration of all coming generations does not bring about great problems. As the number of generations living in the future is certainly finite, no 'infinity paradoxies' (like the non-existence of infinite utility integrals) will arise for a mathematical calculation. Still, there are a few moral philosophers who have normative doubts and thus deny the fact that we could be obliged to provide for more than the following two generations, as we will only get to know representatives of directly subsequent generations. (In contrast to the rather universalistic tendency of his ideas of justice, John Rawls supports this strict limitation of responsibility for the future in his 'theory of justice'.) The problem with these ideas is to explain why, on the one hand, intergenerational moral responsibility should be bound to face-to-face-contacts or spontaneous emotions of liking, while on the other hand moral obligations for affected abstract (or statistical) people do well exist, as for instance in the case of avoiding risks while we do not know ex ante the probable victims that might be affected by them. One of the essential social functions of moral obligations is to replace personal obliging relations and to extend the horizon of responsibility

beyond the narrow circle of emotional proximity. The guiding principle of a parent's responsibilty (Jonas and Passmore) must not be interpreted too narrowly. Many of the present damages to the environment (for example the global warming because of the emission of greenhouse gases) may effect not our generation but our great grandchildren's, which does not lessen in any way the present generation's responsibility to avoid such damages. That loving one's neighbour in the literal sense of exclusive solidarity with one's neighbours does not form a solid base for future-ethical norms has already been indicated by Nietzsche's polemic expression of the necessity of a 'Fernstenliebe' – a solidarity with those most far away.

There is considerably less consensus regarding the question for who responsibility shall be taken over. Anthropocentric concepts postulate that an obligation to provide for the future exclusively applies to the future descendants of mankind. An obligation to preserve nature and its subsystems (ecosystems, biotopes, species) exists only so far as it could be of use for future human generations, be it as a resource for a practicaltechnological purpose (instrumental value) or be it as an object of a contemplative (theoretical, religious or aesthetic) attitude (inherent value). As far as an explanation for this position is even considered (bearing in mind the traditional predominance of the humanist-anthropocentric point of view), it usually refers to the exceptional position of man as an intellectual being, a functional being (Jonas) or – in the Kantian tradition – a rational or moral being. By contrast, pathocentric concepts add animals with the capacity of sentience to the circle of morally significant beings, but in a restricted way through demanding only measures that aim at the avoidance of harm for the animals but not stating a right to exist for them. Biocentric concepts go far beyond this restriction by not only granting individual animals and plants a right to exist (as does Taylor 1986) but also generation-transcending ecosystems and biological species. From this point of view, the present generation is directly obligated to maintain the integrity of natural systems and species in the long term and irrespective of their practical use for men. However, in the case of conflict, restrictions in favour of men are made (though not by strict generic egalitarians like Taylor, for instance). Even irreversible losses of an ecosystem or a biological species shall be accepted if prohibitive costs or opportunity costs (costs of not using a resource) arise for men.

In spite of differences of opinion in basic principles, future-centred moral philosophers agree on numerous concrete evaluations, for example when diagnosing the danger of the present rapid extinction of biological species, or when demanding the protection of the most vulnerable natural cycles (for example the tropical rain forest) against human intervention.

The contents of future responsibility

The definition of the content of responsibility for future generations reflects the whole variety of normative opinions held in philosophical ethics today. In order to structure the variety of approaches (I only consider the anthropocentric ones) they will be divided into separate dimensions.

Provide exclusively for the well-being of people existing in the future or also provide for their existence?

An extreme position is taken by Patzig (1983, p. 16 et seq.) who answers this question as follows: 'We are only obliged to provide for the satisfaction of needs of those members of future generations who will live anyway, we are not obliged to safeguard the survival of mankind.' Of course it would be undoubtedly regrettable if mankind became sterile, but as long as nobody is harmed, it would not be morally questionable. (A similar answer would be given by average utility utilitarianism). The extreme answer on the opposite side is postulated by several Catholic moral theologians, who claim that mankind, irrespective of possible conditions that might not allow a life worth living, is obliged to reproduce. Between these extreme positions lies the answer of total utility utilitarianism and of analogous non-utilitarian theories. The important issue for these theories is not mankind's survival at whatever cost, but enabling all generations to achieve the highest sum of welfare. As long as people regard life as worth living, the continued existence of men (respectively the existence of conscious life) on earth is a high value. The disappearance of conscious life would be a moral disaster, even if it came in a subtle way and did not bring about additional harm. Therefore, a similarly important role has to be assigned to the sustained preservation of resources needed for human survival.

Want-regarding axiology versus ideal-regarding axiology

According to an exclusively want-regarding axiology, we are obliged only to make provisions for the (probable) needs of future generations. If we were convinced that the members of future generations had no direct or indirect interest – in whatever form – in biological species that are becoming extinct today, we would not be obliged (or not even entitled) to do anything in order to preserve those species. In contrast, an ideal-regarding axiology as, for example postulated by Hans Jonas demands provisions beyond that and requires a continued development and cultural enrichment of human preferences. At least there should not be a lowering of these preferences to an inferior level. This theory does not only aim at securing the (in each case subjectively judged) quality of life, but at securing the quality of men themselves.

Personally, I defend the priority of the want-regarding axiology over the ideal-regarding axiology, and I understand it in a quite strict and literal way

(Birnbacher 1982). As I see it, this priority can be explained with the substantially higher universalizability of the value of satisfaction of needs or preferences. While values like virtue, dignity, justice, harmony and beauty can be discussed extensively and have been discussed extensively, the assumption that those things that a subject itself – irrespective of the consequences – perceives as something positive and satisfying at the same time is something positive objectively is a common axiom of any axiology ever seriously proposed. The condition of universalizability is part of the very structure of moral responsibility, in virtue of the fact that moral responsibility is not only assigned to a person him- or herself but also to other persons. It is only possible to expect somebody else to take over the responsibility assigned to him or her if he or she is given reasons that can be understood and accepted.

It won't be possible to refer to axiological assumptions that can only be justified by quoting authorities such as positive law, popular tradition or religious authorities. One can only expect somebody else to accept the responsibility assigned to him or her if taking over and carrying out this responsibility results in the realization of a value that can be assumed to be accepted by anybody.

Intergenerational maximization versus future ethical minimalism

The concepts of intergenerational justice currently discussed differ in the extent to which the present generation is expected to make provisions for future generations. The most demanding requirement is made by utilitarianism, which requires an economical use of resources whenever the welfare of future generations can be increased in a degree exceeding the expenditure made in the present. As long as today's investments for tomorrow and the day after tomorrow promise a higher profit than the asset we lose by making those investments, we are obliged to invest.

The utilitarian model leads to a distribution of welfare that is extremely unequal over generations. Under realistic circumstances, the poorest generations (for example 'rebuilding generations' after crises like war) would have to economize a lot in order to make investments for future generations. If we assume circumstances characterized by inexhaustible resources, even the richest generations would no longer be obliged to economize as they would not be able to improve the situation of coming generations. This is the case when the marginal utility of an additional income has become so small that it cannot compensate for the investments.

The most common criticism when it comes to utilitarian models of intergenerational justice focuses on the expectation that former generations should make sacrifices in order to improve the welfare of future generations, even though it can be assumed that future generations (for example

because of technological progress) will be on a much higher level: doesn't this mean an intolerable unfairness of intergenerational distribution, a grave disproportion between cost and benefit? In practice, this undeniable unfairness could be reduced by making sure that obligations of provision of former generations do not exceed defined limits of reasonableness. Only in this way can they be accepted and complied with by former generations. The ideal scenario is not automatically the one we are morally obliged to realize. Thus, we cannot demand of today's poorest countries, which already have enough own problems of provision, to considerably economize for a future, more populous generation.

A pessimistic scenario, according to which the future will not be better but worse off, makes the consequences of utilitarian obligations of provision intuitively much more acceptable. From a pessimistic point of view, the sacrifices made by former generations do not serve to improve the welfare of future generations, which is anyway acceptable, but to avoid disasters.

The opposite extreme are minimalistic solutions of the intergenerational distribution problem that oblige the current generations to preserve the stock of resources inherited from the preceding generation but do not expect them to make any further provisions. Since the United Nations' Brundtland Report has become an integrative political key term, the principle of sustainable development occasionally has been interpreted in this minimalistic sense. According to the report, in a world of limited resources each country should have the right to develop its economy as long as the total stock of global resources is not reduced. Similar to John Locke's theory of property according to which an original acquisition of land is justified to the extent that 'enough, and as good' will remain for other people (Locke 1924, p. 130), each generation should use the available resources in a way that there will still remain enough resources of the same quantity and quality for the next generation.

As we know from experience, it is by no means easy, politically, to secure even this minimum standard of sustainability. From an ethical point of view, however, this standard is far too minimalistic and clearly insufficient. First, it does not consider the foreseeable – and in the short term unavoidable – global growth in population. If the next generation has at its disposal the same stock of resources as the present generation, but a population that is about 50 per cent larger (and the following generation twice as large), keeping to the minimalistic strategy results in a higher risk of disaster for the members of the next generations. That is why Gregory Kavka (1978) suggested rephrasing the Lockean Standard in a way that not the generations but the members of the generations should have the same resources. Under given circumstances, this standard claims considerably higher provisions than the minimalistic standard does.

Another critical issue is that the sustainability model completely disregards the initial level from which a policy of conservation starts. Thus, nations like Japan or the Netherlands achieve remarkable scores on the sustainability scale developed by Pearce and Atkinson only because the initial level of natural capital in both nations has been quite low from the beginning. The sustainability scale does not consider the total amount of natural capital nor the destruction of natural capital before the measured period (Scherhorn and Wilts 2001, p. 252).

Furthermore, the minimalistic model allows to refrain from improving the future generations' situation even when relatively great improvements of welfare for coming generations can be achieved by relatively small investments and sacrifices by former generations. This will sometimes be the case if technological progress allows future generations to make use of available resources in a much more effective way than the present generation, so that future generations might regard the present use of limited resources as a huge waste, for instance the use of mineral oil as fuel instead of as a chemical raw material.

A similar minimalistic model follows from an intergenerational application of Rawls's Difference Principle originally proposed for intragenerational distributions (Birnbacher 1977). Under the optimistic assumption of inexhaustible resources, constant population and an autonomous technological progress (independent of capital accumulation), this principle even allows a previous generation to leave less to the following generation than it inherited since it can rely on the fact that the following generation, thanks to technological progress, will be able to achieve the same level of welfare using less resources. Since each generation expects the following generation to be better off, tremendous possibilities of development will remain unused. The complete sequence of generations remains on the level of hunter-gatherers – a consequence that made Rawls change his intragenerational principles for the problem of intergenerational justice.

Discounting the future and the problem of motivation

Another controversial issue is the importance of obligations towards future generations in relation to the importance assigned to present generations. While utilitarianism as well as the Kantian tradition tend to see future and present responsibility as equivalent, numerous economic models adapt to the widespread psychological tendency to devalue future utility ('time preference') and to 'discount' future benefit and harm relative to present benefit and harm by treating them like a monetary factor which in a dynamic national economy gradually loses value the more it shifts into the future. The higher the supposed 'social discount rate', the less importance is

assigned to any future benefit and harm produced by present day behaviour and thereby to the obligations towards future generations.

Discounting monetary values and disvalues – and values commensurate with money – is justified whenever in the respective national economy a real interest rate can be expected that turns an amount saved today into a higher real future amount and thus, from a present point of view, devaluates future returns of the same amount as present returns. (This idea justifies 'discounting' but limits it at the same time.) However, this does not result in a corresponding devaluation of future benefit or harm unless discounting is justified by uncertainty, which can be expected to increase with futurity. As a statement of moral psychology it may be true that 'aware of the fact that he would lose his small finger tomorrow, [...] he would not get to sleep tonight; but if a million of his brothers died he would snore in the deepest peace of mind – provided that he had never seen them before' (Smith 1977, p. 202). But the same Adam Smith who made this statement as a moral psychologist insisted as a moral philosopher on the fact that this subjectively distorted perspective should be replaced for ethical purposes by the impartial and universal view of the 'ideal observer'. Morality is not merely a reduplication of affective relationships but their functional substitute. Richard Hare (1981, p. 100 et seq.) even was of the opinion that privileging the presence or the near future by 'discounting' future values is incompatible with the essential meta-ethical principle of universalizability which claims that facts identical in all relevant features should be judged in the same way. The mere temporal position of two facts (from the point of view of a currently deciding person) is, according to Hare, no feature that would allow different judgements. However, Hare seems to overlook that a differentiation of responsibility for future generations can be expressed by using relational terms expressing relative temporal distance. The principle of universalizability is perfectly compatible with postulating more farreaching moral obligations towards the generation of one's children than towards the generation of one's grandchildren and the generation of one's great-grandchildren.

If an objection can be raised against the practice of discounting future benefit and harm it is not by appealing to the principle of universalizability of moral and morally relevant judgements but by appealing to the principle of the impartiality of the moral point of view. Only judgements that are made from an impartial moral point of view have the chance to be candidates for the claim to universal validity characteristic of moral judgements. Once this point of view is taken, the question arises how privileging the present or the near future can be justified. Preferring what is present over what is future means to be heavily biased. Such a bias could not be justified by moral but merely by pragmatic considerations, that is by

considerations of the degree of conformity to be expected for future ethical norms, especially if these are felt to make excessive demands (Birnbacher 2003, p. 47 et seq.).

The question of moral pragmatics naturally leads to the problem of motivation connected with the issue of responsibility towards future generations. This problem arises from two sources: the temporal impartiality of responsibility claimed by almost all varieties of universalist ethics, and the causal asymmetry between present moral agents and future moral patients. We are able to harm future people, but they are not able to reciprocate. In contrast to intragenerational decisions, selfishness (neglecting other people in one's own favour), moral distance (neglecting foreigners in favour of friends), and time preference (the neglect of the future in favour of the present) remain without sanctions in intergenerational decisions. A selfish and myopic agent has no reason to make provisions for future people. An agent who is selfish but not myopic has at most a reason to make provisions to the extent that he wishes to be positively remembered by his descendants.

In comparison to human selfishness, which traditionally is a central topic of ethical anthropology, time preference and the tendency to be 'oblivious of the future' have been rarely discussed in philosophy. It was discussed explicitly by Spinoza, who thinks of it as a case of irrationality which should be corrected by sound reason, as well as by Hume and Bentham, who speaks of 'propinquity and remoteness' as one of the 'circumstances' on which the appropriate judgement on pleasure or pain depends (Birnbacher 1988, p. 87 and p. 197). Within economics, the phenomenon of time preference was best analysed by the Austrian capital theorist Eugen von Böhm-Bawerk who distinguished three motives because of which present consumption is preferred to future consumption:

- 1. pure (positive) time preference, the preference of the present merely because of it being present;
- 2. the expectation of a decreasing marginal utility because of increasing possibilities of consumption in the future; and
- 3. the chance to realize technological progress through present consumption which increases future possibilities of consumption (Böhm-Bawerk 1889, p. 262 et seq.).

A fact that complicates the practice of taking over future responsibility is the anonymity of future generations and the uncertainties of prognostic knowledge. Both facts make it easier for us to psychologically suppress recognized future dangers and to underestimate them in comparison to present dangers. The tendency to feel responsible for merely statistical

victims is much less pronounced than the tendency to feel responsible for known victims. The tendency to avoid certain future harm or to seize certain future benefits is far more pronounced than the tendency to avoid risks or to forgo chances. How is it possible to cultivate the motivation for a future ethic? In this context, concepts become relevant that are especially focused on in communitarian theories within social philosophy (de-Shalit 1995). It is important to develop a consciousness of one's own temporal position in the sequence of generations as well as a generationtranscending sense of community, if not with humanity as a whole, then with limited cultural, national or regional groups. The aim should be to develop gratitude towards past generations and to take over obligations for future generations at the same time. In order to correct distortions in the judgement of natural and cultural resources due to short-sightedness and selfishness, the model of a hypothetical future market might be useful on which future generations express their demands in addition to the present generation. (This model corresponds to the intergenerational variation of Rawls's original position.) The price non-regenerative resources would fetch on such a future market would be a better benchmark for the 'real value' than actual market prices, which insufficiently consider the shortage of natural resources.

In all probability, a changed consciousness will not do to make political decisions focus more on natural resources and their future usage instead of exclusively considering market prices (see the chapters in the third part of this volume). An additional step would be the representation of the (probable) needs and interests of future generations in present decisions, for example by appointing spokespeople for future generations on a local, regional, national and international level. Furthermore, the legal institution of a Verbandsklage (group action) could be extended beyond the issues of nature to the issues of future generations. In this way, the 'future compatibility' of government action could be monitored. For controlling and sanctioning national policies that disregard the future a global court of justice (Weiss 1989, p. 121) would be an additional option. Even a commission comparable to the UN's Human Rights Commission without sanctioning powers would be helpful, merely being able to make public and to denounce violations of the interests of future generations such as the clearing of rainforests, desertification and the emission of greenhouse gases.

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2 Principles of generational justice Christoph Lumer

Five principles of justice

Generational justice is justice in a particular area: it concerns the relation between the generations. Hence in the simplest case, maxims of generational justice could be seen as the application of norms of general justice. Yet there are numerous competing norms of justice, especially concerning distributive justice (Lumer 1999b). There is, for instance, the achievement principle: 'To each one according to his achievements!', the principle of needs: 'To each one at least as much as to satisfy his or her basic needs!', egalitarianism: 'To all goods of equal quantity!', or a variety of norms of sustainability such as: 'Each generation shall only use as much renewable resources as can be renewed within the period of usage and only as much non-renewable resources as it can provide equivalent substitutes for!' These norms are not only a confusing tangle but also in need of justification. Only if such justifications are at hand may it be manifest which of these norms can be seen as valid.

The first step of justification is to deduce such norms from even more general and abstract moral principles behind them. In the following, five such principles shall be presented, briefly demonstrated and differentiated from other critically competing principles. Subsequently, it shall be examined what follows from them with respect to present problems of generational justice.

Principle 1: Ethical hedonism, welfare orientation

The welfare of human beings and more highly developed animals is the only thing intrinsically (that is in itself) morally relevant. 'Welfare' here means the (individually sensed) well-being multiplied with its duration.¹

Principle 1 determines what carries an intrinsic moral value or a moral value in itself (that is independent of its consequences) and what can be considered as a final moral goal. In other words, principle 1 expresses what is *really* important. Thus, other things than welfare – like income, material resources or stable ecosystems – are also important, but not in an intrinsic way but only for the reason and to the extent of influencing welfare. In the first place, the *factual* degree of influence (which for example can be ascertained by social sciences) is important, not the opinion of the affected subjects.²

The fact that almost all ethics and, without exception, every human being see a certain kind of human welfare as an intrinsic good is a weak reason for moral hedonism. In so far as human welfare is a rather undisputed intrinsic good, what is controversial is the question as to whether there are still other intrinsically relevant goods and if so, what they are. A stronger reason for ethical hedonism is that our sympathy with other people is, apart from interests of co-operation, the most important basis for morality (Lumer 2002b). But sympathy cares precisely for the *welfare* of others.³

Alternatives to ethical hedonism are particularly uncritical preferentialism (for example Bateman and Arrow 1999; Jones-Lee 1982; critique for example: Brecher 1997) and need-orientation (Braybrooke 1987; Feinberg 1973), which postulate that the fulfilment of any actual human preference and the fulfilment of human needs respectively have intrinsic moral value. However, uncritical preferentialism is problematic in that it centres on *unfil*tered preferences, which themselves are based on intrinsic preferences and empirical assumptions. These empirical assumptions are often wrong. Furthermore, the total preferences are often not elaborated. Hence there is little reason to include these assumptions and the particular way of forming a total preference in the basis for moral judgements. However, hedonism takes into account the stable intrinsic preferences since they have the individual own welfare as their object.4 Even when we give a present to somebody with benevolent intentions, we do this in view of the consequences we expect for the welfare of the affected person and not directly in view of his or her assumptions and wishes. An argument against need-orientation is that the term 'need' is extremely vague: Do we have a need for a hot shower or for self-realization? A first, extremely broad specification of the term 'need' declares anything we wish for to be a need and thus leads to the already criticized uncritical preferentialism. A quite narrow specification sees 'needs' just as 'basic needs', such as for instance breathing, eating, drinking, sleeping, living and so on. But 'basic need' is unspecific as well – is our basic need for food satisfied if we eat the same each day? Is reproduction a basic need? Anyhow there are more things morally and intrinsically relevant than exclusively the satisfaction of our basic needs. If somebody is very content with his or her life because he or she carries out just the right profession or realizes projects of life important to him or her, many people would consider this to be morally relevant – though it is not a matter of satisfying basic needs.

Principle 2: Beneficiary universalism

All human beings (and in a limited degree more highly developed animals as well) should be equal beneficiaries of the morality of a subject.

The principle of beneficiary universalism gives an answer to the question *whose* welfare is morally relevant and who shall be beneficiary of

a morality: just the temporally and spatially limited more or less big group the moral subject forms part of, or, as a different extreme advocated here, mankind as a whole and the higher animals? Beneficiary universalism does not claim that the moral commitment of a person in fact has to be of benefit for anybody but that under practically equal circumstances the affiliation to a certain group must not decide who shall be the beneficiary of moral commitment. For practical reasons, the greatest part of our moral commitment falls to people who are close to us and not to those temporally and spatially far away. However, beneficiary universalism among other things excludes temporal discounting, that is a minor consideration of the fate of future generations.

A quite formal reason for beneficiary universalism is that actually it forms a condition for a global and intertemporal co-operation in order to realize moral goals. A reduced consideration of their own fate and the fate of persons close to them will not be accepted by potential partners of co-operation far away and thus won't contribute to the realization of this morality. A weak material argument for beneficiary universalism is that the decision for a specific group of beneficiaries is based on the fixing of ego-ideals, that is it depends on whether you see yourself for example primarily as an Englishman, as a member of a certain generation or as a cosmopolitan, and therefore support other members of your identification group. Consequently, the decision for beneficiary universalism arises from the decision for the most demanding ego-ideal. Finally, sympathy, too, is basically universal; its limitation originates only from the minor confrontation with the welfare of far away people (Lumer 1999a).

Alternatives to beneficiary universalism are present-centred ethics (like contractualism that demands that morality or legitimate institutions shall correspond to the content of fictive contracts between the contract parties (for example Gauthier 1986)), which only look at the interests of contemporary people; temporal discounting (Wenz 1988), according to which future welfare counts but less and less the further in the future it is – comparable to the diminished value of a monetary sum earned today due to inflation (negative interest); and parochialism (moderate version: for example Rawls 1999), which exclusively or at least to a high degree supports the interests of a determined, often locally defined group, for instance a nation. None of these positions is contradictory in itself; still they are based on only a few demanding ideals. An approach of generational justice is only possible by transcending the concentration on the present and true generational justice requires temporal universalism and rejecting temporal discounting. Once the temporal universalism has been accepted, the spatial limitation created by parochialism can hardly be justified any more.

Principle 3: Prioritarianism (or priority view)

The moral value of an action or a norm is roughly determined by the change in human welfare produced thereby (possibly animals as well). However more weight is given to changes in welfare for subjects in general (that is with respect to their complete life) worse off – though not infinitely more weight than to changes in the welfare of subjects better off. This weight gets the stronger the worse off somebody is.⁵

Hedonism determines *what* has intrinsic moral value, namely welfare, while prioritarianism says *how* this welfare should be assessed. Though increasing welfare is always valued positively and decreasing welfare negatively, this does not happen proportionally to the modification. Changes in the welfare of persons worse off are weighted stronger than those of persons better off. This is a principle of distributive justice. It matters whose welfare is improved, and worse-off people have precedence in this matter.

An intuitive argument for prioritarianism is that help should be given where it is needed the most. A motivating justification for this principle lies in the characteristics of the most important source of our morality: sympathy. Our sympathy is touched more deeply when it comes to people who are in great need (see explanation in detail in Lumer 2000, pp. 589–632).

Alternatives to prioritarianism are among others utilitarianism (Bentham 1780/1789; Harsanyi 1977; Mill 1861; Smart 1961, sec 4), which equates moral desirability with (anonymous) individual desirability and thus equalizes all improvements of welfare of the same degree without considering the initial level of the affected persons; the *maximin* (or leximin-) principle (for example Kolm 2002; van Parijs 1995, pp. 25-27; 30-33; Pfannkuche 2000, chapter 4; partly in Rawls 1971, p. 302 et seq.), according to which the welfare of the worst off people has to be maximum or as extensive as possible with the consequence of giving absolute priority to improvements of the situation of those worst off over any improvements for better-off persons; and, finally, egalitarianism (for example Temkin 1993; Trapp 1988, p. 308 et seg., 346 et seg., 356; Dworkin 1981; Pojman and Westmoreland 1997), according to which the individually good should be distributed as equally as possible (and, additionally, the sum of the individual good should be as high as possible). One problem with utilitarianism is that it disregards the interpersonal distribution of welfare so that it is blind with respect to distributional justice. In comparison to that, the maximin principle can be seen as an improvement. But with regard to the fact that it prefers tiny improvements for persons in the worst position to huge improvements for better-off ones, even if these are in the second-worst position, this principle is inefficient. Compared to this, prioritarianism forms a synthesis of utilitarianism and leximin and keeps the advantages of both approaches – efficiency and priority for worse-off people – without possessing their disadvantages. The main problem of egalitarianism is that it does not make clear at all why an equal distribution should be *intrinsically* good (Frankfurt 1997). (An equal distribution of *goods* leads to a maximization of welfare in several fields and is therefore partly *extrinsically* morally good, but there is no justification for an equal distribution of welfare itself, in particular if it is a low welfare.) Because of this lack in justification it remains arbitrary how various forms of inequality shall be assessed comparatively and how the extent of inequality shall be traded off against the grand total of utilities.

So far, the principles explained dealt with moral valuation. The last two principles centre on moral *acting*, that is on how moral values shall be put into practice by action.

Principle 4: Principle of limited commitment

Moral commitment should reach at least a bit beyond socially valid moral duties, that is moral duties supported by formal (legally sanctioned) or informal sanctions. A further increase of commitment (towards a maximum commitment) is not a moral duty.

The fourth principle looks at the individual effort made for morality: To what extent should we commit ourselves morally? It is necessary to limit our moral commitment, because otherwise beneficiary universalism would lead to moral duties that ask far too much of us. The principle of limited commitment does not demand spending all one's energies on morality; we would not even expect this of saints. Still, it is not content with the mere fulfilment of moral duties already supported by social sanctions. In other words, this principle demands two things: Already socially established and morally good norms have to be complied with, and moral commitment should go at least a bit beyond these achieved standards. The idea behind these two claims is to raise moral commitment more and more in the historically long term and to maintain achieved standards through sanctions. Very often we only have relatively weak autonomous motives to act morally, for instance sympathy, respect of others' (moral) sense of duty, indignation and vindictiveness (see Lumer 2002b). The motivation for moral acting is considerably increased by social norms protected by sanctions because now our desire to avoid sanctions forms another strong motive. This institutionalization releases (motivational) capacities to commit oneself voluntarily to keep up morally good norms socially already valid and to introduce additional good norms (Lumer 2002a, pp. 93–95). In this way and from a historical point of view, valid moral standards can be raised more and more in the long term, that is in the course of millennia.

The principle of limited commitment can be justified with the fact that it demands the maximum of what can just be demanded of rational subjects. Who demands less does not do enough for morality. Who demands more overstrains the rational and at the same time moral good will so that there is no rational reason for a person to comply with this demand.

Alternatives to the principle of limited commitment are the maximization principle (for example Smart 1961, p. 33; Trapp 1988, p. 208, 297, p. 299 et seg.), according to which one must do the morally best at any time; individualistic contractualism (for example Gauthier 1986), which postulates that moral duties arise from rationally profitable co-operation, and (transhistorically) fixed canons of duty, as they are represented for instance by liberalism (for example Nozick 1974, p. 10 et seq.) or Kantianism (Kant 1797a). The maximization principle overstrains moral subjects (it would for example demand of First World citizens to give all their income to Oxfam except a small part for subsistence and to get involved nearly completely in this issue in their spare time) and is rationally unacceptable. Individualistic contractualism is morally too weak, demands less than we think is morally necessary and does not consider the moral good will. Fixed canons, finally, are not flexible enough and do not adapt to social changes. Consequently, these principles demand either too much or too little – with the exception of periods of appropriateness by chance.

Principle 5: Efficiency or economy principle

Moral commitment should be efficient and employed where the ratio of cost to moral benefit is the most favourable.

The efficiency principle should determine the use of the freely disposable individual moral commitment (while complying with valid moral norms) as well as the kind of new moral norms to be implemented and the improvement of already valid moral norms. Among other things it demands the investment of available public finances in a morally efficient way and prohibits their waste, for example for campaign goodies.⁶

The justification for the efficiency principle is simply that one should preferably realize more than less morally good things with the available limited and fixed budget (see Principle 4).

The most important alternative of the efficiency principle is a certain form of *deontologism*, which demands that we should never ever violate moral norms justified in a different way (for example the prohibition of lying), even if by doing so an enormous moral benefit could be achieved or a huge moral loss could be avoided (for example Kant 1797b). But either the norm held up by deontologism is efficient in its existing form – then the efficiency principle, too, would forbid its violation; or it can be made more efficient by adding modifications and exceptions (that do not violate the

principle of limited commitment) – then insisting on maintaining and keeping to the inefficient norm would be fetishism.

According to the idea underlying the principle of limited commitment, socially valid (that is reinforced by sanctions) morally justified norms serve to put abstract moral principles into concrete terms, to stabilize moral commitment and to direct it towards an efficient deployment. A new norm of generational justice to be implemented that perhaps could be justified with these principles is for instance the command of a sustainable use of resources, which says in an original version: Each generation shall only use as many renewable resources as can be renewed within the period of usage and only as many non-renewable resources as it can provide equivalent substitutes for! At first glance, such a norm is morally efficient as it takes precautions against the waste of resources that could be used by future generations for a considerably higher improvement of their welfare. If this is really the case is an empirical question, though, that is not easy to answer (see pp. 48–49). Furthermore, keeping a particular stock of resources is not an end in itself but should serve to maximize moral desirability. That is why more highly developed norms of sustainability always contain restrictions and exception clauses that allow a flexible overspending of roughly determined contingents, for example: '. . . provided that the ratio of the benefit for the future generations to the costs for the present generation is adequate'. Vague formulas like this one can be specified in return with the help of the explained principles.

The positive intergenerational savings rate as a common practice and moral norm

Which demands for generational justice relevant to the current situation arise from the explained principles? To answer this question the common practice and the current valid moral norm concerning intergenerational justice has to be considered: the positive intergenerational savings rate.

According to hedonism, we have to look at the welfare of persons, which results from multiplying the mean well-being by life duration. Welfare in Western Europe presumably has quite constantly grown in the course of the last centuries. This is due to, among other things, economic and technological progress, which reduced destitution, shortened working hours, made work itself easier, and in the end provided more consumer goods; it is due to medical progress, which prolongs lifetime, and to political and social progress, which ensures human and civil rights as well as peace, extends equal opportunities as well as education and guarantees the redistribution of income from top to bottom. On the other, negative hand, there is the consumption of resources and nature and the pollution of the environment – facts that curtail the positive overall balance, but do not reduce it to zero nor even turn it into a loss.

This general improvement in the situation of future generations occurs naturally to a great deal. The present generations achieve progress in the first place for themselves, but because of the simultaneous existence of several generations, on a general social level it gets difficult to withhold the achieved progresses from the at present youngest generation. Still it is possible, especially on an individual level. For selfish reasons, parents can refuse their children an education that enables them to achieve a higher welfare, and they can squander the inheritance at the end of their lives. But normally they do not do so, and as far as that goes the improvement of the situation of future generations is deliberate. According to the criteria mentioned, this deliberate improvement is morally justified and just. Although the following generation, as a consequence of this improvement, will be better off than the currently dominant one – a fact that, according to prioritarianism, prima facie speaks against intergenerational saving – the gains in welfare by intergenerational saving in the long term are so high that it is the morally better alternative. That way, an informal moral norm of intergenerational saving (on a certain minimum level) became established, which can be summed up as follows: Each generation shall leave as many goods (especially capital, but also technologies, resources, education, knowledge and wisdom and so on) to the following generation so that this as well as subsequent generations can improve their welfare in comparison to each preceding generation! Who wastes the potential inheritance of his children in his last stage of life might not act legally wrongly but still is looked at askance (which shows that informal norms do ban such behaviour) and, additionally, acts immorally according to the principle of limited commitment, because this informal norm is also morally good.

The current development: a reduction of the intergenerational savings rate

Some current developments seem to lead to a reduction in the intergenerational savings rate. I only mention the prevailing pension policies of many industrial nations, the disproportionately high youth unemployment in OECD countries, the unrestrained consumption of non-renewable resources and the still hardly restrained emission of greenhouse gases. What makes the consumption of resources and the emission of greenhouse gases worse is that the costs are imposed almost exclusively on the future generations of the *Third World*. This holds because Third World countries have more difficulties in affording the expensive substitutes for used-up raw materials. Furthermore, the first of the two most serious influences of the greenhouse effect on the welfare of future generations is the increase of food prices due to food shortages, which raises the number of the absolutely poor and consequently the number of deaths due to poverty (with business as usual there will be about two million additional deaths in the second half

of the twenty-first century); the other one comes in the form of severe famines caused by droughts that will claim many lives, too (Lumer 2002a, pp. 23–26, 71, 73). These two effects will make themselves felt almost exclusively in Third World countries. This implies that the usual justification for the consumption of resources and nature, namely that future generations will profit most from the progress paid for with this consumption, is not valid in these cases.

It shall be emphasized once again that from the point of view of future ethics, the (moderate) consumption of non-renewable resources is not criticized as such and has to be counted among the costs of progress, which altogether will be advantageous in particular to future generations. In comparison to the level achieved up to now, the mentioned developments presumably amount to a reduction of the intergenerational savings rate even for the First World, though. I furthermore surmise that these developments will not lead to a *decrease* in welfare in the medium and long term but only to a deceleration of the growth in welfare. Yet, the assumed decrease of the intergenerational savings rate contradicts the principle of limited commitment. It infringes the informal moral duty to maintain the intergenerational savings rate existing so far and therefore it is a forbidden moral step back.

Much more serious though are the losses for future generations of the Third World. The mentioned developments lead to a considerable lowering of welfare for many members of this group. For instance, the unrestrained greenhouse effect will claim over one hundred million lives just in this century, for the most part in Third World countries (Lumer 2002a, pp. 23–26). So far and particularly for this development, the First World is the most responsible party. This is, of course, a grave violation of valid moral norms (for example the prohibition of killing, the polluter-pays principle that prohibits externalizations of damages and many more) and thus of the principle of limited commitment.

The most urgent problems and the next steps

The lowering of the intergenerational savings rate and the externalization of damages could be corrected through shifting today's investments from consumption to the lowering of resource consumption, the reduction of greenhouse gas emissions and so on. Once we begin to shift investments in a morally progressive way (and so return to complying with the principle of limited commitment) the direction of this commitment has to be reassessed. Both prioritarianism and the efficiency principle demand to make investments where they are needed most and where they are as efficient as possible. Beneficiary universalism, in addition, demands not limiting the field of possible investments, thus not excluding anybody as a potential beneficiary.

Which commitment is morally the most efficient and thus should be chosen from the point of view of justice can only be found out by detailed welfare-ethical investigations. Yet, several plausible conjectures can already be advanced.

- Even when continuing the current policies, first, the next future First World generations will still be better off than the currently dominant generation, and, second, the latter will be a great deal better off than future Third World generations. The first part of this hypothesis can be substantiated as follows. Factors that until now have contributed to raise welfare in the First World are: increases in income and consumption, a higher degree of liberality in everyday life, an improved education and a higher life expectancy. These developments will presumably persist, though in a moderated way. Counter tendencies are a worsening of the pension situation, growing national debts and increased youth unemployment. Nevertheless it is not very probable that the growing national debts and the aggravated pension situation will eat up the (inflation-adjusted) net income growths. And it is true that the well-being of the long-term unemployed falls alarmingly on average (according to a ratio-scale measurement from normally 0.1420 units to 0.0643 units, that is by 55 per cent (Lumer 2002a, pp. 29–31)). But if we include the duration (of ten years) and the share of the population (of about 10 per cent)⁷ affected by the presently increased youth unemployment in comparison to adult unemployment, the average total loss (of 0.55 years $(= 10 \text{ years} \cdot 10 \text{ per cent} \cdot 55 \text{ per cent}))$ is still minor than the prospective increase in life expectancy.8 The argument for the second part of the hypothesis: In contrast to some assumptions, which take happiness to be relative in the sense that for life satisfaction only the comparison with the level of the (mostly national) reference group is essential, so that historically and on an international scale there won't be any differences in average life satisfaction, comprehensive international and historical comparative studies found that there is a positive correlation between income and life satisfaction, where the latter is closely related to wellbeing (Veenhoven 1984, pp. 145-154). So as a matter of fact, average well-being in the Third World is lower than in the First World. With the additional reduction of welfare comes the significantly lower (as compared to First World people) life expectancy of Third World people.
- 2. Not only because of the greater poverty in large parts of the Third World but also because of the more easily attainable improvements in welfare, in the Third World the ratio of cost to moral benefit is the most favourable. Often quite small investments can lead to significant income increases.

- 3. In the Third World many damages provoked by the greenhouse effect only become social problems because of the widespread poverty. (For instance, the greenhouse effect will lead to a growth in food prices, which in its turn will claim many lives of the poor (see p. 46–47).) Therefore, direct investment in the Third World's development, apart from the direct positive consequences this would have, would probably be an efficient means to considerably reduce the damages due to the greenhouse effect.
- 4. All this could mean that direct investments in the Third World's development (including a limitation of the growth in population) perhaps are currently the most important contributions to generational justice. It goes without saying that this would not exclude policies of generational justice in First World countries.
- 5. The next important contributions (that is, according to the definition given above, morally highly efficient) are the abatement of the anthropogenous greenhouse effect and, on a national level, the containment of the current youth unemployment (see some comparisons of efficiency in: Lumer 2002a, pp. 80–83).
- 6. The anthropogenous greenhouse effect is caused to a great deal by the excessive consumption of certain resources in a wide sense, including excessive use of sinks (fossil fuels, wood clearing, methane emissions (from the cultivation of rice and livestock breeding) and nitrogen oxides (from fertilization and combustion)). How the use of *other resources* and a corresponding policy of austerity would influence the prioritarian moral desirability (see above, the norm of sustainability on p. 45) can hardly be estimated because of the influence of hardly predictable technological developments. So far, this influence has not been examined. Thus, concerning the efficiency of the corresponding measures of economizing relative to the measures already discussed, we cannot give a plausible estimation.

If these empirical hypotheses are right, according to the expounded principles, the morally most important and morally obligatory steps towards generational justice are:

- 1. considerable support for the development of the poorest countries;
- 2. the containment of the anthropogenous greenhouse effect; and
- 3. the reduction of youth unemployment.

It remains unclear how important the reduction of the consumption of resources is in proportion to these three measures.

Notes

- 1. Or a bit more precisely: Welfare is the integral of well-being over time. In a still more precise version of this principle the problem of a possible manipulation of welfare by an experience-machine has to be solved, that is a machine providing us with many pleasant feelings that do not correspond to reality, though (Nozick 1989, ch. 10). One suggested solution is corrected hedonism, that is to discount positive well-being that was created manipulatively (or via some other restriction of our mechanisms that lead to well-being) according to the degree of manipulation (or restriction) (Lumer 2000, pp. 495–519). Furthermore, the way of measuring well-being has to be specified (measurement on ratio-scale level: Lumer 2000, pp. 436–447; on rating-scale level: Wessman et al. 1960).
- 2. What is proposed here is neither value objectivism (for example Scanlon 1993) nor qualitative hedonism (Mill 1861, ch. 2, par. 5–8) but corrected hedonism (see above, Note 1). It is not objectivism because intrisic desirabilities are determined relying on subjective preferences (see below, Note 4), and only the relation to their causes shall be established objectively. It is not qualitative hedonism because the personal desirability of hedonic experiences is determined by the subject's preferences and not for example according to the majority vote of the experts. According to corrected hedonism, would it be better to be a fool satisfied than Socrates dissatisfied (cf. Mill 1861, ch. 2, par. 6)? In certain cases yes but clearly not generally, because foolishness in corrected hedonism leads to some discounting of positive hedonic experiences (see above, Note 1).
- 3. Defences of hedonism as the right theory of moral or personal desirability are for example: Brandt (1979), part I; Brandt (1989); Kahneman *et al.* (1997); Lumer (2000), 241–548; Sumner (1996).
- Rational hedonism can even be justified with the help of a critical preferentialism. Two
 different approaches to doing so are: Brandt (1979), Part 1; Lumer (2000), chapters 3–5.
- 5. The idea of prioritarianism is supported for example by Nagel (1977) and Parfit (1991; 1997). Justification and quantitative specification: Lumer (2000), pp. 589–632; Lumer (2007). Prioritarianism can be operationalized the simplest way with a concave moral desirability function: The x-axis shows the welfare of a whole life, the y-axis shows its moral desirability. The curve rises monotonously but to a more and more diminishing degree. Thus, the same growth in welfare for somebody better off means less growth in moral desirability than the same growth in welfare for somebody worse off.
- 6. Sometimes it is assumed that the efficiency principle allows the violation of several fundamental human rights as long as it is morally efficient. Situations in which only the calculated sacrifice of one person (who has no relatives or friends) could save the lives of several other persons would be exemplary cases (Hare 1981, sec 8.2). However, the efficiency principle first of all requires the compliance with valid and efficient moral norms, and fundamental human rights are quite efficient moral norms. In addition, massive violation of fundamental human rights like sacrificing a human being would be an infringement of the principle of limited commitment, because an unacceptably demanding commitment would be forced upon the affected person.
- 7. Youth (aged 15–24 years) unemployment in all 'developed regions' is higher than adult unemployment. In 2000 the ratios of youth unemployment rate to adult unemployment rate in 'developed regions' without the former East Bloc ranged from 1.1 (Germany) to 4.2 (Norway) (other countries with high population figures: France 2.3, Italy 3.7, Japan 2.2, United Kingdom 2.7, United States 3.1). The differences between youth unemployment rate and adult unemployment rate ranged from 0.8 per cent (Germany) to 21.7 per cent (Italy) (France 11.7 per cent, Japan 5.0 per cent, United Kingdom 7.4 per cent, United States 6.3 per cent) (ILO 2003, Code 48; differences: author's calculations on the same base). So the 10 per cent assumed above is a bit higher than the actual mean difference.
- Due to the unequal distribution of youth unemployment, the prioritarian calculation of moral losses again magnifies these losses, but probably by less than 20 per cent.

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3 The impossibility of a theory of intergenerational justice *Wilfred Beckerman*

Introduction

Whereas the problem of justice within any given society at any point in time has occupied philosophers for over 2000 years, its extension to intergenerational justice is relatively recent.¹ It has no doubt been provoked by the increasing concern, over the last three or four decades, with the possibility that we are seriously depleting the Earth's resources and damaging the environment. In this way, it is often believed, we are violating the 'rights' of future generations in a manner that violated some principles of distributive justice between generations

The general status of moral 'rights' is a central topic in ethics. Indeed, some philosophers see 'rights' as the foundation of political morality and possibly of morality in general (Dworkin 1984; Mackie 1984). It is not surprising, therefore, that all our moral obligations to future generations are often thought of as being simply the counterpart of their 'rights'. Nevertheless I shall argue here that any attempt to establish our moral obligations to future generations on the basis of their rights is a futile enterprise. It is argued that this is because future generations cannot be said to have any rights. And, as is then argued, this means that it is difficult to construct any coherent theory of intergenerational justice.

There are many different conceptions of 'rights' and of 'justice' as well as of the relationship between them. It would be beyond the scope of this chapter to try to present and appraise the arguments that have been put forward over the ages in favor of one conception of justice or rights rather than another. All we shall try to do here is to show that the conceptions of rights and justice that I adopt are widely accepted. The only contribution that I believe is original is to argue that, if these conceptions of rights and justice are adopted, then, taken together, they do seem to lead to the conclusion that there is no place for a theory of justice between generations. This is a somewhat surprising conclusion; indeed, John Dunn, Professor of Political Theory at Cambridge University, almost suggests that the opposite conclusion is 'obvious'!²

My argument is really very simple and can be summarized in the following syllogism:

(1) Future generations – of unborn people – cannot be said to have any rights.

(2) Any coherent theory of justice implies conferring rights on people. Therefore, (3) the interests of future generations cannot be protected or promoted within the framework of any theory of justice.

Of course, both of the two premises can be challenged, and we shall discuss them below. But if they are accepted then it follows that attempts to locate our obligations to future generations in some theory of intergenerational justice are doomed to fail. However, this would not necessarily mean that future generations have no 'moral standing' and that we have no moral obligations towards them. For we share the widely held view that rights and justice by no means exhaust the whole of morality. After setting out below my reasons for ruling out intergenerational justice as a guide to our obligations to future generations, I suggest that our main obligations are to extend respect for basic human rights.

Why future generations cannot have any rights

Unborn people cannot 'have' anything. They do not exist

The first premise in my basic syllogism is not new and may be thought by many people to be non-controversial, or even obvious, and to correspond to what is generally understood by most people to be implied by the concept of 'rights'. Nevertheless, some reputable philosophers do explicitly claim that future generations have rights, as do most environmentalists. I have attempted to refute their claims in the book I co-authored with Joanna Pasek, so here, after re-stating my argument, I shall only comment on one or two of the criticisms that have since appeared (Beckerman and Pasek 2001, pp. 19–23).

But first it should be made clear that I am talking about future generations of unborn people and am abstracting from the case of over-lapping generations. Thus, I am not concerned with what we may feel inclined to bequeath to our children or their descendants on account of bonds of affection, or what they may feel obliged to do for us for the same reason. This is because I am concerned here with identifying our moral obligations to future generations, not what we would like to do for them anyway. I adopt the Kantian view that what is morally right is a matter of duty and cannot be determined by one's sentiments or self-interest. Hence, crudely speaking, doing what you fancy is nothing to do with moral duty. Indeed, many of the things that most of us would like to do from time to time are probably quite immoral. Axel Gosseries, in a review of Beckerman and Pasek (2001), appears to reject this reason for concentrating on unborn generations, but he gives no reason for doing so (Gosseries 2003).

Second, I am talking about moral rights, not legal rights. And, third, I do not wish to enter into discussion of the general problem of how widely one

should draw the boundary around the 'rights', if any, that the present generation can be said to possess, or the particular problem of how far these rights include rights over the environment. The crux of my argument that future generations cannot have rights to anything is that properties, such as being green or wealthy or having rights, can be predicated only of some subject that exists. Propositions such as 'X is Y' or 'X has Z' or 'X prefers A to B' make sense only if there is an X. If there is no X then all such propositions are meaningless. If I were to say 'X has a fantastic collection of CDs' and you were to ask me who is X and I were to reply 'Well, actually there isn't any X', you would think I had taken leave of my senses. And you would be right. Thus the general proposition that future generations cannot have anything, including rights, follows from the meaning of the present tense of the verb 'to have'. Unborn people simply cannot have anything. They cannot have two legs or long hair or a taste for Mozart.

In connection with the more specific proposition, namely, that future generations have rights to specific assets, such as the existing environment and all its creatures, a second condition has to be satisfied. This is that even people who do exist cannot have rights to anything unless, in principle, the rights could be fulfilled (Parfit 1984, p. 365). In the case of rights to particular physical objects, for example, like a right to see a live Dodo, it is essential that the Dodo exist. In the same way that it does not seem to make sense to say 'X has Y' or 'X is Z' if X does not exist, it does not make sense even when X does exist to say 'X has a right to Y' if Y is not available or beyond the power of anybody to provide.

Thus for the proposition 'X has a right to Y' to be valid, where Y refers to some tangible object, two essential conditions have to be satisfied. First, X must exist, and second, it must be possible, in principle, to provide Y.

In the case of our right to see live Dodos, for example, one of these two conditions is not satisfied. We exist, but Dodos do not exist. And before the Dodos became extinct, the Dodos existed but we did not exist, so we could not have any rights to its preservation. Hence, insofar as it is implausible to say that we had the right to the preservation of live Dodos before we existed it must be implausible to say that non-existent unborn generations have any rights now to inherit any particular asset.

Thus, however widely society wishes to draw the boundary around the rights that future generations will have, they cannot have any rights now. Nor, when they come into existence, can the rights that they will have include rights to something that will no longer exist, such as an extinct species.

This conception of rights may appear clearer if we consider some examples. As regards the most important condition, namely that the rightsholder exists, we can agree that you have a right not to be killed, so that everybody has a counterpart obligation not to kill you. But suppose

somebody kills you nevertheless. Can we say next week, when you no longer exist, that your right not to be killed has been violated? Yes, why not? It will be perfectly true to say that, in the previous week, when you existed, somebody violated your right to life. The fact that you no longer exist is irrelevant. What is relevant is that at the time you were killed you did exist, as did your life, so your right to life could be violated. But this does not mean that it makes sense to say that you have a right to life a week later, when you no longer exist – and hence, by definition, nor does your life.

Consider now the more specific proposition, namely, that one cannot have a right that cannot be fulfilled. Consider, for example, the case where some naughty boy, Max, takes Moritz's toy Dodo and burns it. Most people, and courts of law, would accept that, in taking away and destroying Moritz's slightly battered but beloved toy Dodo, he did a wicked thing and should be punished. But they would not agree that Moritz has a right to get the very same toy Dodo back. One can imagine the scene if Moritz made such a claim. A kindly and sympathetic judge would lean over the bench and say, 'But Moritz, your Dodo has been burnt. Wicked little Max cannot give you back the same one. The best I can do is to order him or his mummy to buy you a new one.' And Moritz would say, tearfully, 'No, no! I want my own Dodo back. I have a right to it, don't I?'

The notion that unborn people can have rights is rather like thinking about unborn people as some special class of people waiting out in the wings for the cue for them to enter onto the stage and play their many parts. But there is no such class of people as unborn people. In his devastating critique of the notion of attributing rights to future generations Hillel Steiner (1983, p. 159) put it admirably in saying that 'In short, it seems mistaken to think of future persons as being already out there, anxiously awaiting either victimization by our self-indulgent prodigality or salvation through present self-denial'.

The relationships between rights and obligations

It is has invariably been agreed in the philosophical literature concerning rights, going back at least as far as Hohfeld's classic work on the subject, that rights imply counterpart obligations but that obligations do not necessarily imply rights (for example, Hohfeld 1923; Hart 1984, p. 80; Rawls 1972, p. 113; O'Neill 1996, ch.5).⁸ To deduce from the proposition that all rights imply obligations that all obligations imply rights would be like committing the elementary logical error of supposing that just because all cows are animals all animals must be cows.

Most rights – and certainly those that are relevant in the context of rights to specific environmental assets – are what are known, following Hohfeld, as 'claim rights'. They are the counterpart of valid claims, on legal or moral

grounds, to have or obtain something, or to act in a certain way. This implies that somebody or some institution is under an obligation to provide or permit whatever is claimed. If X has a universal right, such as a right to free speech, everybody has an obligation to allow him to say what he likes. If X has a right to a specific object or service, some person or institution has an obligation to ensure that X can exert his right. In other words, the existence of a right is a sufficient condition for the existence of an obligation.

But it is not a necessary condition. In the above example of the destruction of the toy Dodo, it may well be that Moritz has a moral right to compensation for the destruction of his toy Dodo and it may well be that somebody, such as Max's parents, had a moral obligation to provide the compensation. We do not dispute any of that. But since the right, if there is one, cannot be to the object that has been destroyed, the obligation cannot be to restore it.

What are the implications of this view of rights for certain long-range environmental problems? Suppose somebody had made preparations to set off a bomb in, say, two hundred years' time, or buried some radioactive nuclear waste in an unsafe location. This would harm a lot of people who do not yet exist. But it would be wrong to say that their rights not to be harmed had been violated. Since they did not exist when the delayed-action bomb was planted they could not be said to have any rights.

Similar examples have been put forward, in criticism of my view, by Gosseries (2004, p. 92) and Tremmel (in this volume). Tremmel suggests an example in which some terrorist plants a bomb that will explode in a nursery school 40 years later when it will harm children who were not born at the time the bomb was planted. He also gives the example of a manufacturer of a baby food who knowingly allows some technical defect in the production process to cause a potential damage to babies that are not yet born, and argues that, nevertheless, the manufacturer ought to be punished. A very similar example (also involving baby food!) is suggested by Gosseries, who introduces the concept of 'conditional rights', by which he means rights that are conditional on the existence of the people to whom the rights will then be attributed.

Now in all these examples those who were responsible for harming people who were not yet born were behaving in a very wicked manner even though the victims of their behavior were not yet born at the time their actions were carried out. One has a moral obligation not to behave in a way that might inflict grievous harm on people, however removed from us they may be in time or space. But violating this moral obligation does not necessarily imply violating somebody's rights. Gosseries and Tremmel (and others who share their view) seem to subscribe to the narrow view of rights according to which rights, and their counterpart obligations, exhaust the

whole of morality. By contrast, I believe that a rights-based morality is seriously deficient in many respects. One can think of innumerable situations in which one's behavior will be influenced by some conception of what our moral obligations are, without necessarily believing that somebody or other must have some corresponding rights.

To start with a trivial example, one may allow one's neighbor to use one's telephone or toilet if his own is out of order without believing that he has any 'right' to do so. We would do so out of simple benevolence and neighborly helpfulness and fraternity. At a more dramatic extreme, if I am walking along the beach and see somebody in danger of drowning in the sea I have a moral obligation to go to his assistance if I can, even though the person in danger may not have any 'right' to expect such assistance. Thus one may be justified in believing that the failure of past generations to take adequate account of the effect of their activities on our welfare was morally deplorable. But that is not the same as saying that all such past acts of commission or omission represented ancient violations of our rights. We may deplore somebody refusing to allow a neighbor to use his telephone to make an urgent call but this does not mean that we believe the neighbor had a right to do so. Whatever rights future generations may have in the future they have none now, and such rights as they will have to any asset or resources must be restricted to rights over what is available when they are alive. As indicated earlier, pace Parfit (1984) one can only have rights that, in principle, are feasible to implement. Like Moritz's right to have his old toy Dodo back, future generations cannot have a right to something – such as an extinct species – that no longer exists. Those who believe that future generations will have such a right are logically obliged to believe that we now have a right to see a live Dodo. But I think they would have difficulty finding a lawyer, even in the USA, to lodge a complaint about this violation of their rights.

And even if one abandons attributing rights to future generations and adopts the obligations standpoint, the moral obligations that any generation has towards future generations do not include an obligation to bequeath to them specific assets. Insofar as the Mauritians who were responsible, directly or indirectly, for the extinction of the Dodo had any moral obligations towards unborn generations it was an obligation not to behave in a way that condemned them to poverty or were likely to inflict serious harm on them. Depriving future generations of clean drinking water or breathable air or other primary resources for which no substitutes could conceivably become available would indeed be a violation of their moral obligations to posterity. But depriving them of the opportunity to see live Dodos would not. And even if it were thought that any generation had a moral obligation to bequeath specific assets to future generations this

could still not imply that the future generations have a right to these assets, for the reasons set out above.

It is true that there are borderline cases of beings who do exist but to whom the attribution of rights may be debatable. In a classic article on rights Herbert Hart (1984, p. 82) argued that '[...] we should not extend to animals and babies who it is wrong to ill-treat the notion of a right to proper treatment, for the moral situation can be simply and adequately described here by saying that it is wrong or that we ought not to ill-treat them [...]'. If common usage sanctions talk of the rights of animals or babies it makes an idle use of the expression 'a right', which will confuse the situation with other different moral situations where the expression 'a right' has a specific force and cannot be replaced by the other moral expressions which I have mentioned.

Thus, in the case of babies or animals or seriously handicapped people anywhere it may often be impossible for them to exercise any of the prerogatives that normally ought to accompany the possession of rights. Consequently there is legitimate room for debate as to whether handicapped people or babies or animals can be said to have rights or only interests that moral considerations require to be respected. But these borderline cases are cases where it is not feasible in practice for the entities in question to exercise any rights. In the case of unborn generations, however, it is not logically possible to consider that they can exercise any rights (see also Feinberg 1974/1981, p. 140). Indeed, insofar as ordinary adults can be said to have a moral right to something or other, it must presumably mean that they have a moral right to choose whether to exercise the right, or claim to exercise it, or complain if they are denied the exercise of that right, or authorize somebody else to exercise the right in their place, or even waive the right. But given the flow of time it is not logically possible for us to insist that inhabitants of Mauritius three centuries ago refrain from hunting the Dodo or from taking action to preserve it, on the grounds that its extinction around the end of the seventeenth century deprived us of our right to see it. Similarly, we could not, if we so wished, waive our right to see a live Dodo by saying 'OK. Go ahead. Hunt it if you like. We think it is a rather silly bird anyway' (this point was developed by Hillel Steiner 1983). Again, this is a logical impossibility, not a question of whether, in practice, one can exercise some right.

It is often argued that because future generations will have interests they must have rights now (see, in particular, Feinberg 1974/1981 and Elliot 1989). There are two flaws in this argument. First, having interests is, at best, merely a necessary condition for having rights contemporaneously, not a sufficient condition. Many people have an interest in seeing the horse they have backed to win a race winning it. But they have no right to such

an outcome and, indeed, it would be internally inconsistent to maintain that they did.

Second, the fact that future generations will have interests in the future, and may well have rights in the future, does not mean that they can have interests today, that is, before they are born. So even if it were true – which it obviously is not – that all interests imply rights, future generations do not at this point in time even have any interests.

And the weakness in the argument that future generations have 'rights' because they have interests cannot be dispelled by the assertion that their rights or interests can be represented today by environmentalist pressure groups and the like. It is logically impossible, as well as physically impossible, for future generations to delegate the protection of their rights to somebody alive today. Of course, anybody can claim to represent the interests of future generations, but that is another matter. Tremmel provides a useful list of countries in which some sort of Council or Assembly has been instituted and that is dedicated to representing the rights of future generations. But, unfortunately, future generations cannot play any part in selecting their alleged representatives or in determining what policies they adopt.

And, as it happens, I claim to represent the interests of future generations better than those pressure groups and interests who are so vociferous in proclaiming their concern for unborn generations. In particular, my view – which is spelt out in detail in a later section – of which policies would be in the best interests of future generations, differs considerably from the view advocated by environmental activists. My proposed priorities differ greatly from those usually stressed in environmental discourse. Roughly speaking, and recognizing that it makes little sense to rank broad aggregative objectives, I believe that, by and large, the most valuable bequest we can make to future generations would be decent societies characterized by just institutions and respect for the basic human rights enumerated in international conventions. But I do not claim that, in advocating such policies, I am representing the 'rights' of future generations, let alone that my mere advocacy demonstrates that future generations do have any rights today.

Indeed, one feature of having 'rights' is that they confer a degree of freedom and power to shape one's own life according to one's own view of what makes life worth living. In other words, they give one choice and freedom to act in pursuit of one's chosen goals. We should not, therefore, prejudge how future generations will want to exercise their choices. The policy that is most consistent, therefore, with respect for the rights that future people will have is one that concentrates on bequeathing institutions that give members of future generations as much freedom in their lives as is compatible with maximum freedom for others.¹⁰

The advantages of the 'obligations' approach

Even if one remained unconvinced by the theoretical arguments in favor of limiting the scope of rights, there are practical advantages in concentrating instead on obligations. The 'obligations' point of view focuses our attention on the question of whose obligations one is talking about. Indeed, the obligations approach is usually much more relevant to practical policy as well as to individual behavior. It applies, for example, to the alleged 'rights' of animals or children, where, as pointed out above, the vocabulary of moral obligation or natural duty is perfectly adequate for purposes of specifying the way we should treat them, as well as being more practically oriented. And in many such cases some of us have a special relationship with the people or animals concerned that imposes an additional moral obligation to be concerned with their welfare and protection.

Thus, although it may be more effective in political discourse to adopt the language of rights rather than obligations, there is a danger that it is too easy to do so without specifying who has the counterpart obligations. And if one is genuinely concerned with policies and action, rather than just with rousing rhetoric and noble gestures, there is not much point in talking about 'rights' unless the counterpart obligations of those people or institutions are clearly identified and spelt out. And as regards future generations, even if they could be said to have 'rights' today, they clearly cannot do anything about it now, so it is more productive to concentrate attention on the obligations of present generations. Only human beings alive today can have the capacity for action to discharge these obligations and to create the necessary institutions for doing so. 'Although the rhetoric of rights has become the most widely used way of talking about justice in the last fifty years, it is the discourse of obligations that addresses the practical question who ought to do what for whom?' (O'Neill 1997, p. 132).

The Conception of justice

Hume and Rawls on the circumstances of justice

The second premise in my basic syllogism reflects a commonly – if not universally – adopted conception of justice, which, following Rawls, is essentially that justice is a virtue of institutions and consists of defining the rights and duties of the members of the institutions in question, notably their rights over the way that the fruits of their cooperation ought to be shared out. Other conceptions of justice are certainly plausible. In particular, some philosophers subscribe to conceptions of 'natural justice' – and natural 'fairness' – according to which an injustice exists insofar as somebody is worse off than somebody else for no fault of her own, even if this state of affairs has not been imposed by anybody else

and does not reflect a failure of any institution to act according to principles of justice.

In his A Theory of Justice Rawls subscribes to the conditions set out by Hume and referred to by Rawls as the 'circumstances of justice'. The Humean circumstances of justice are described by Rawls as the '[...] normal conditions under which human cooperation is both possible and necessary [...]. Thus many individuals coexist together at the same time on a definite geographical territory' (Rawls 1972, p. 126; our italics). The objective circumstances of the Humean concept of justice also include rough equality of power between the parties to the cooperation. For otherwise cooperation would be minimal or non-existent; the stronger would simply dominate the weaker.

A further Humean condition of justice is that people pursue their own interests. Thus if, for example, conditions of inequality of power prevail but, nevertheless, the weaker are treated with decency and respect without any consideration of the advantages that the stronger will derive from their benevolent behavior, this does not mean that the situation is more 'just'. It merely means that the stronger people are behaving with decency and compassion according to some highly commendable instincts or sense of moral duty. Thus on Hume's conditions of justice if peoples' behavior towards future generations is motivated by considerations, such as love for their children, this may be morally admirable but is nothing to do with justice. If, for example, we bequeath assets to our children (or future generations in general) because we are motivated by ties of affection or benevolence we are not doing so on account of respect for some principles of justice.

On this conception of justices principles of justice constitute that part of morality that enables people with conflicting ends to co-exist, under conditions of some scarcity, in peace and harmony. It is not a way of removing their conflicting interests. It is a set of principles that will enable people to agree on the allocation of rights to whatever desirable assets or opportunities might be the source of conflict and be the subject of dispute. This enables people to settle this source of potential dispute peacefully, if not amicably. It enables them to reconcile their conflicting interests and different conceptions of the 'good' without violence or infringement of basic rights to life and liberty or other threats to their peace and security.

It is difficult to see how intergenerational justice could be brought within the scope of these Humean conditions. Abstracting from the case of overlapping generations, it is obvious that one cannot talk sensibly about the relative degrees of power that different generations have over each other. Future generations cannot harm (or benefit) us, so that there can be no question of our having to make any sort of concession or sacrifice in order to ensure their cooperation in any common endeavor. As Rawls puts it 'We

can do something for posterity but it can do nothing for us. This situation is unalterable, and so the question of justice does not arise' (Rawls 1972, p. 291). So it is not surprising that Rawls believed that the problem of intergenerational justice subjected ethical theory to 'severe if not impossible tests' (Rawls 1972, p. 284).

Justice and rights

A central feature of most – and possibly all – serious theories of justice is the attribution of moral 'rights'. Theories of justice differ with respect to the criteria by which these rights are allocated, or how far they can be allocated to groups of individuals, or institutions, rather than just to individuals. But the attribution of 'rights' is a crucial element in any theory of justice.

For example, Rawls's classic exposition of what a theory of justice consists of begins with several references to this relationship between justice and rights, as when, for example, he refers to 'the rights secured by justice' (Rawls 1972, p. 4), or to the conception of justice that motivates people to try to affirm '[. . .] a characteristic set of principles for assigning basic rights and duties [. . .]', and so on (*ibid.* p. 5), or 'For us the primary subject of justice is the way in which the major social institutions distribute fundamental rights and duties [. . .]' (*ibid.* p. 7), and so on. ¹¹

And even if explicit attribution of rights is not made, theories of justice implicitly attribute them according to some criteria or other. For example, in a well-known article Gregory Vlastos gave a list of 'well-known maxims of distributive justice' such as 'To each according to his *need*' or 'To each according to his *worth*' and so on (Vlastos 1984 [1962], p. 44). ¹² Indeed, Nozick has pointed out that the different theories of distributive justice can be seen as differences in the word (or expression) that is inserted at the end of statements such as 'to each according to his [. . .]' (Nozick 1974, p. 164).

It is obvious that all such principles of justice imply certain rights. Consider, for example, the first principle, 'To each according to his needs'. Once the 'needs' in question have been defined and agreed, anybody who could demonstrate that he or she had the requisite needs would have a moral 'right' to be accorded the corresponding amount of whatever was supposed to be given according to that need (for example freedom, income, medical care, and so on). Thus instead of specifying theories of justice in the form of the maxims indicated above, one could have equally have specified them in the form:

^{&#}x27;Everybody has a right to what he needs', or

^{&#}x27;Everybody has a right to what he merits', and so on.

The same applies to any of the other maxims on Vlastos's list, or, indeed, to any other coherent principle of distributive justice. Consider for example a contractarian theory of justice. There are various forms of such theories—'actual', 'hypothetical', 'ideal' contracts, and so on—but, with minor adjustments that are irrelevant to the argument here, they can all be represented in one of the maxims on Vlastos's, namely 'To everybody according to the *agreement* he has made' (Vlastos 1984 [1962], p. 44). This can then be converted into a proposition about rights in the same way as the other maxims specified above.

In short, a defining feature of any coherent and morally acceptable candidate for a theory of justice is that it attributes rights (and hence counterpart duties). But if, as has been argued in the last chapter, future generations do not have rights, any attempt to protect their interests within the framework of a theory of justice is doomed to fail.

Our main obligations to future generations

As I have emphasized above, my denial of 'rights' to future generations does not mean that I believe that we are under no moral obligation to be concerned with the consequences of our actions that may affect them. A clear and simple example suggested by Parfit is '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?' (Parfit 1984, pp. 356–357). Parfit's answer is that it does not, and I agree with him that we have a moral obligation to take account of our actions for future people.

Of course, the particular example Parfit gives is a very simple one in that the only conflict of interest involved is the trivial cost of taking the trouble to bury the broken glass. Unfortunately, one can easily conceive of cases where avoiding action that would harm future generations would call for major sacrifices by the present generation. In such cases it is arguable that in the same way that – other things being roughly equal – we would tend to give priority to family over friends, to friends over strangers, and so on, we should give priority to the present generation over future generations. We all give priority to the interests of our family over those of our friends and neighbors, in the same way that we give our friends and neighbors priority over those of other members of our community, or to other members of our community or country over distant peoples. Hence, to assert that we should give equal weight to the interests of distant generations is sheer hypocrisy. Human nature will always prevent us from being completely impartial, cosmopolitan beings, who will rank the interests of distant people or generations equally with those near and dear to us. But this does not mean that we should attach no weight at all to the interests of distant people or generations. The main implication of my denial of the 'rights' of future generations was only that their interests did not possess 'trumping value' over those of the present generations. Thus we can agree that the answer to Parfit's question 'Does it make a moral difference . . .?' is 'No', but only in the sense that future generations have 'moral standing' so that their interests have to be taken into account. It does not mean that their interests 'trump' those of people alive today.

The starting point then, for assessing our moral obligations to distant generations, has to be some prediction of what their most important interests are likely to be. This should be followed up with some assessment of what effects our policies will have on their interests and how far they conflict with the interests of the present generation. Of course one cannot draw up any 'lexicographic' ordering of priorities in general terms. It is impossible to rank the relative importance of objectives such as relief of poverty, or environmental preservation, or the extension of human rights, when they are expressed in broad, general terms. The concepts are incommensurate and each covers many dimensions and in each dimension the degree of gravity may vary.

For example, abuses of human rights can range from horrific behavior to minor restrictions on people's freedom of movement or freedom to dispose of their property. Poverty can range from mass starvation to isolated instances of temporary poverty in generally affluent communities as a result of some transient bad luck or other exceptional circumstances. Environmental problems can range from the elimination of atrocious urban air conditions that were found in major cities of the industrialized countries until relatively recently or the absence of clean drinking water today in most parts of the developing countries, at one extreme, to the reduction in noise levels from the occasional neighborhood street party, at the other.

The safest prediction that can be made for the long-term future is that there will always be potential conflicts between peoples for all sorts of different 'reasons' and that can all easily lead to horrific violations of basic human rights. At the same time one can predict with great confidence that people will always want life and security, and freedom from fear, discrimination and humiliation. And the best guarantee that these permanent needs, that are the essence of what constitutes a human being, will be satisfied is a society that protects basic human rights and provides the maximum liberty compatible with similar liberty for others.

Except in some Utopian scenarios human wants will always expand more or less in line with what is available, so that, whatever we do now about the future availability of resources and however much technical progress expands our potential for producing goods and services, there will always be conflicting interests in the way that potential output is shared out. Some people will want a larger share and others will be unwilling to provide it. Future generations may not have the institutions or traditions that ensure that, whatever level of output is available in the future, it is shared out peacefully, if not equitably.

Furthermore, conflicts of interest over material possessions are by no means the only causes of conflict, any more than are cultural differences. There is no shortage of other causes. Even within any given culture or civilization there are conflicts of various kinds between interests, objectives and values, which will divide members of any community. For example, in recent years most conflicts have been civil wars or internal conflicts between groups that share common cultures, such as in Cambodia, or Bosnia, or Rwanda, or Angola, where groups that appeared to be culturally homogeneous finish up slaughtering each other. In many countries today, as Appiah points out, 'It is not black culture that the racist disdains, but blacks. There is no conflict of visions between black and white cultures that is the source of racial discord [. . .] Culture is not the problem, and it is not the solution' (Appiah 1997).

I do not believe that vital interests of future generations will be permanently threatened by environmental degradation. My reasons for this have been set out in detail elsewhere (Beckerman 1974, 1995, and 2002; Beckerman and Pasek 2001) and it would be outside the scope of this chapter to even summarize them here. Furthermore, the best contribution that can be made to preventing excessive environmental pollution happens to be an extension of respect for basic human rights. Greater respect for basic human rights will not only help reduce poverty in many countries, it will also help protect the environment in many of them. If the existing international conventions and declarations of human rights - which usually include rights to association, political expression and participation, legal redress, and so on – were implemented everywhere, it would go a long way to enable weak groups in many countries to improve and protect their environments and hence their living conditions (see Anderson 1996, ch.1, esp. pp. 4–6). At present environmental interests – along with others – are too easily trampled on by despotic governments.

It is no accident, for example, that the countries of the ex-Soviet bloc experienced some of the worst environmental devastation that has ever been witnessed. And in more recent years there are many other examples of environmental protest being stifled by lack of basic human rights. For example, the much-publicized disregard of the environmental interests of the Ogoni tribe in Nigeria and the intolerable treatment of those who protested at this treatment could not have taken place in the context of a decent and just society. (It is striking that, until this case brought to light

the environmental aspects of the situation, it did not get much international and media attention. In some circles it seems that basic human rights can be trampled on without much outcry as long as the environment is not harmed!).¹⁵

The relationship between democratic participation in environmental policy and protection of the environment is also born out in cross-country statistical studies, as shown in various studies summarized recently by Barrett and Graddy (1997). Although the measurement of political 'freedom' is an even more subjective matter than the measurement of environmental conditions various studies using different measures seem to show that, on the whole, '[. . .] the observed levels of environmental quality will depend [. . .] also on citizens being able to express their preferences for environmental quality and on governments having an incentive to satisfy these preferences by changing policy. In short, they will depend on civil and political freedoms' (*ibid.*).

One particular environmental benefit that would flow from greater respect for human rights would be the voluntary reduction in the birth-rate in countries where this is highly desirable on environmental as well as on other grounds. Even in many countries where certain universal human rights such as freedom of assembly or of political representation are respected, some basic women's rights are still violated. If they were no longer subject to discrimination and their rights to equal education, social and economic status were respected this would significantly reduce the high birth rates that are a cause of poverty and environmental degradation in many parts of the world.

Thus there is no conflict between giving priority to the extension of human rights and concern with the environment. If anything the two objectives are complementary. There are many cases where 'poverty, fertility, and environmental degradation reinforce one another in an escalating spiral' (Dasgupta 1995, p. 1897). But there are serious dangers if the priorities are reversed. It is true that environmental degradation and deprivation often leads directly to the infringement of basic human rights to life, health and employment. In communities where few people have access to clean drinking water or elementary sanitation, mortality and sickness rates are inevitably very high (Beckerman 1992a, b). But an improved environment will obviously not remedy most other violations of basic human rights. Emphasis on the way that an improved environment permits the enjoyment of basic human rights '[. . .] sometimes serves as a moral comforter which temporarily cloaks the extremely difficult questions which must be faced' (Anderson 1996, p. 3). As Anderson points out 'For people vulnerable to torture or chronic hunger, the urgent problems of immediate survival are likely to displace concern for long-term ecological integrity' (ibid.).

Insofar as a decent society gives priority to institutions that ensure that people are treated with respect and compassion it is a useful antidote to the excessive concern with the natural world that characterizes some of the 'deep ecology' sections of the environmentalist movement. Most environmentalists are no doubt motivated chiefly by highly commendable compassion for animals, aesthetic appreciation of nature and altruistic concern for future generations. But there is a danger that, to some people, a love of nature is the counterpart of a disregard – if not worse – for human beings. And, unfortunately, some environmentalists distrust the priority that human rights activists accord to human beings relative to other species.

Conclusion

We have argued that future generations cannot be said to have rights, in spite of learned, if minority, opinions to the contrary. But rights do not exhaust the whole of morality. And insofar as our policies affect any other sentient beings, whether present or future, we ought to accord them 'moral standing' and take account of their interests. Thus, we have a moral obligation to take account of the interests of future generations in our policies, including those policies that affect the environment.

But while it may appear paradoxical since I have attempted to downgrade the importance attached to the rights of future generations my main conclusion is that it is in the interests of future generations as well as of ourselves to give top priority, in our policies, to extending basic human rights. Extending respect for human rights today means bequeathing better human rights to future generations. Consequently there is no intergenerational conflict of interest involved. And this means that there is no need for a theory of intergenerational justice to resolve such conflicts. In an inaugural lecture that I gave at University College London in 1972 (Beckerman 1972) I predicted that the main conflicts in the future would not be between Man and the Environment but between Man and Man. The terrible history of the subsequent 30 years amply confirmed my predictions. In my view the only development that is sustainable now is development that enables people to live together peacefully. The most important species that is in danger of extinction is not the bald eagle or some species of beetle of which there are millions: it is the human race.

Notes

1. According to Laslett and Fishkin (1992, p. 1), 'The revival of political theory over the past three decades has taken place within the grossly simplifying assumptions of a largely timeless world [...] [it] is limited, at most, to the horizons of a single generation who make binding choices, for all time, for all successor generations'. They go on to describe recent attempts to bring time into the picture as little more than 'gestures' in that direction. This is, perhaps, rather unfair on Rawls, who discussed intergenerational

- distributive justice at some length back in 1971, and others, such as Partha Dasgupta (1974), or the contributors to the volumes on the subject edited by Sikora and Barry (1978) or Partridge (1981).
- Dunn (1999, p. 77) writes that 'The reasons for supposing that an understanding of
 justice should drastically inhibit the harm which we knowingly inflict on the human
 future are simple and intuitively obvious'. But Dunn does not go as far as do Rawls and
 Barry in actually proposing explicit principles of intergenerational justice.
- Recent lucid reminders of this include, notably, Rawls (1972), Raz (1986, ch. 8), and particularly the recent extensive and lucid discussion of this topic in O'Neill (1996).
- 4. At one point Kant (1964, p. 99) explicitly says that the categorical imperatives 'did by the mere fact that they were represented as categorical, exclude from their sovereign authority every admixture of interest as a motive'.
- 5. There may, of course, be routes by which one can arrive at some sort of contract between overlapping generations that dispenses with bonds of affection, notably that followed by Gauthier (1986, p. 298 et seq.). But his proposal does not seem to be able to handle satisfactorily the problem of sharing out resources over distant generations, which is what the environmental debate seems to be mainly about. See Temkin's (1995, pp. 79–87) critique.
- 6. I am here using the term 'meaningless' to describe propositions such as 'X is Y' when there is no X, although such propositions could be transposed into longer and clumsy propositions that are meaningful, such as 'X exists and if there is an X it has Y', but are false if, in fact, there is no X.
- 7. This fundamental and in our opinion decisive point was made by De George (1981) and, if less forcibly, by Macklin (1981). But with some exceptions, notably de-Shalit (1995 and 2000, p. 137), it does not seem to have been given due weight in the literature on this subject. The same point is also set out very effectively in Merrills (1996, p. 31).
- Reference is sometimes made to the concept of 'manifesto rights' introduced by Feinberg in 1970, which need not be correlated with counterpart duties (see for example Baier 1981, p. 182 and Feinberg 1970/1998, p. 612).
- 9. As de-Shalit (2000, pp. 136–137) rightly points out, this is the weakness in the suggestion often made to appoint proxy representatives of future generations in the interests of ensuring that decisions affecting future generations are made on a more 'democratic' basis. For we believe that real future generations are more likely to prefer our view of what will be in their interests than those of the Green activists who claim to represent them.
- 10. This follows a point made by Steiner, who goes further than this and says that 'Thus it is self-contradictory to identify a present person's act as obligatory within a future person's domain, and then to remove it from that domain by denying that future person the choice as to whether or not it should be performed' (Steiner 1983, pp. 155–156).
- 11. In similar vein, Vlastos writes that 'Whenever the question of regard, or disregard, for substantially affected rights does not arise, the question of justice or injustice does not arise', or 'Again, whenever one is in no position to govern one's action by regard for rights, the question of justice or injustice does not arise', or 'A major feature of my definition of "just" is that it makes the answer to "is x just?" (where x is any action, decision, and so on) strictly dependent on the answer to another question: "what are the rights of those who are substantially affected by x?"' (1984, pp. 60–61).
- On account of avoiding possibly misleading attributions of chronological priority the year of first publication is indicated, but references are to the page in later and more accessible reprints.
- 13. To some extent this is a circular procedure, of course. One's prejudices, intuitions and predilections for certain priorities among obligations will naturally color one's prediction of what one perceives to be the most salient and relevant features of the future evolution of human society. But there is no way of breaking out of the circle by appealing to some external objective formula for ranking the obligations.
- 14. A well-known feature of Rawls's theory of justice is his 'serial' ranking (the term that he says he prefers to the clumsier term 'lexicographical') of his first principle of justice, which is concerned with liberty, over his second principle, which is concerned with

15. Other less spectacular examples of the relationship between human rights and environmental protection are, of course, less well known outside the countries concerned and a small circle of research workers in the field. One such example is the research carried out into the factors that have recently been bringing deforestation under control in the Philippines and Thailand. The progress made has been attributed to a growing expression of dissatisfaction with autocratic rule and the way that people concerned with the environment were able to have more influence on policy-makers as the countries became more democratic and pluralist. One of the chief authors of the research reported that 'The key lesson for other tropical countries is that while the spread of deforestation is linked with socio-economic development, controlling it may well depend on political development. So unless agricultural expansion is curbed by rising farm yields, deforestation may not be controlled until countries become sufficiently democratic and pluralist to allow internal pressure groups to affect government policy' (Grainger 1997).

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4 John Rawls on the rights of future generations

Claus Dierksmeier

This chapter examines whether Rawls' theory provides an argumentative basis for the rights of future generations. First, we ask what are the rational devices to conceive of justice between generations within the realm of Rawls' A Theory of Justice, and we explore whether the systematic foundation of these devices is convincing. Specifically, we investigate Rawls' attempt to derive the notion of rights out of a conception of reciprocal arrangements to enhance the individuals' self-interests. Second, the chapter portrays important modifications in Rawls' advocacy for sustainability in his later works, pointing out difficulties in harmonizing Rawls' antifoundational theoretical make-up in Political Liberalism with the notion of intertemporal justice. Third, as it becomes evident that Rawls' theory cannot provide a satisfactory foundation for the rights of future generations, we investigate how to establish the unconditional as well as asymmetrical obligations that correspond to such rights.

Future generations and Rawls' A Theory of Justice

The broader philosophical frame behind Rawls' A Theory of Justice heavily influenced its specific features. Although Rawls intended to maintain many results of deontological ethics, namely from the metaphysical theories of justice of Kant and Ross, he sought to replace their metaphysics with models of rational-choice theory. At the time, 1971, this endeavour was well in line with the general feeling that any metaphysics, including the critical philosophy of Kant, either proceeded by questionable methods - speculative deductions, unintelligible intuitions - or referred to objects outside the demonstrable realm. Metaphysical methods and metaphysical objects, it was widely believed, were unable to withstand modern scientific scrutiny. Thus to provide the argumentative basis for his political theory, Rawls drew on empirically oriented social sciences, on logical calculus, and on game theory. This quest for methods more palatable to the contemporary reader impinged heavily on his theory of the rights of future generations, since a future generation (that is, a generation of people yet unborn) is, by its very definition, nothing but a metaphysical subject.¹

Rawls' basic methodological idea in his *A Theory of Justice* was to combine traditional topics of legal philosophy with unsuspicious methods, such as rational-choice theory, so as to proceed from their basic assumptions (namely the individual as a rational maximizer of its interests) to conclusions about the optimal societal structure (Dierksmeier 2004, p. 1300). Along these lines, Rawls held that society was to be 'interpreted as a cooperative venture for mutual advantage'. For a well-ordered social system 'leads men to act together so as to produce a greater sum of benefits' than as if they pursued their personal interests separately (Rawls 1971, p. 74). Consequently, the rules necessary to establish order and security within society have to fit that mould. They shall enhance the net-balance of social utility and help distribute it in such a way that everyone finds the outcome to improve their lot.

Since no other, namely metaphysical, principles are admitted to assess affairs of social justice individual interest becomes the overall criterion of the respective arrangements. Then, the fundamental problem of justice presents itself therein that society must deal 'with conflicting claims upon the advantages won by social cooperation' (Rawls 1971, p. 15). Whatever the specific social arrangements, they must, in this theoretical setting, allow for an 'appropriate division of advantages [. . .] in accordance with principles acceptable to all parties' (Rawls 1971, p. 15). In other words, the principles of justice have for Rawls 'their justification in the fact that they would be chosen' by rational egoists (Rawls 1971, p. 37). In that case, the will to abide by such principles will be pervasive, and a social contract can be construed that transforms the aggregate amount of individual interests into well-organized societal structures (Gillroy 2000, p. 49).

To overcome the natural bias of people when judging affairs where their own interests are at stake, Rawls construes a device of impartial rationalization: the original position. One is to imagine all the representatives who formulate the social contract and decide about basic matters of welfare distribution behind a veil of ignorance that obfuscates their view so they cannot find out about their future role in society. It is likely, Rawls believes, that everyone desires to minimize the risk of losing out through schemes of too unequal a social distribution. He surmises further that people have a general interest in correcting the results of the 'natural lottery' that casts some into miserable life conditions and heaps unmerited fortunes on others. (Critics have contested both these premises, but that shall not be of concern here (D'Agostino 1996, pp. 40-44).) Consequently, the representatives of the people will assure a social minimum for everyone and then judge individual welfare differences from an initial 'benchmark' of equality in welfare (Rawls 1971, p. 55) in order to make sure that every deviation from this benchmark benefits not only some but any and all. As a result,

the deliberating parties design a social order according to the principle that welfare inequalities be arranged to benefit not only already well-situated persons but also to secure 'the greatest expected benefit of the least advantaged' (Rawls 1971, p. 74): Rawls's famous 'difference principle'.

To be precise, we have to mention that in the further course of his investigation Rawls reformulates the 'difference principle'. The pertinent sentence of its final formulation is: 'Social and economic inequalities are to be arranged so they are [...] to the greatest benefit of the least advantaged, consistent with a just savings principle' (Rawls 1971, p. 266). Obviously this ominous savings principle somehow 'constrains the difference principle' (Rawls 1971, p. 257); and the explanation of how and why brings us to our central topic. In order to employ the difference principle, that is in order to serve everyone's self-interest, it is imperative to maintain certain social institutions that can yield the respective distribution of goods required by the difference principle. Justice requests its own conditions of possibility, i.e. 'bringing about the full realization of just institutions' (Rawls 1971, p. 257). Hereto every generation must 'put aside in each period of time a suitable amount of real capital accumulation' for its successors (Rawls 1971, p. 252). Hence, what a society can distribute is limited by exactly the amount that it is to save for upcoming generations. In other words, trying to specify what society owes its present citizens requires one to first solve 'the problem of justice between generations' (Rawls 1971, p. 252).

It is worthwhile pondering for a moment the relevance of this finding, that is, how exactly the issue at hand becomes systematically relevant for Rawls. Although he indicates that there is more to the problem of the rights of future generations than quantitative regulations of the national savings rate, he does not dwell on subjects of a qualitative nature, such as preserving 'the gains of culture and civilization' (Rawls 1971, p. 252), or our stewardship for planet earth. Our conduct 'toward animals and the rest of nature', it turns out, cannot at all be thematized within Rawls's contractualistic approach, for it is strictly limited to 'our relations with other persons' (Rawls 1971, p. 15). One should clarify that, strictly speaking, Rawls's social contract theory actually is constrained to address nothing but the relations of physically existing persons. For in our context it is exactly 'the absence of the injured parties, the future generations' (Rawls 1971, p. 261) that makes the problem at hand so difficult to solve. Were 'they' here right now, representing their interests, they could weigh in on their own behalf and his contract theory would then readily accommodate their needs. That is why raising the 'question of justice between generation' subjects, as Rawls himself admits, his theory 'to severe if not impossible tests' (Rawls 1971, p. 251) precisely because it just may not be in the self-interest of present persons to curtail their expenditures and consumption in favor of non-present individuals.

How does Rawls try to deal with this problem? Right upfront he makes clear that the difference principle cannot be applied to different generations over time. This stance modifies his initial idea to place behind the veil of ignorance members of diverse – past, present, and future – generations. His reason for this change: 'There is no way for later generations to help the situation of the least fortunate earlier generations. Thus the difference principle does not hold for the question of justice between generations [. . .]' (Rawls 1971, p. 254). Rawls means that past generations would not benefit from any arrangement on savings made now, so they would (as rational maximizers of their self-interest) not approve of them. So, why not place the decision makers in a position where they do not know to which generation they belong? Would it not then be in their interest to optimise the lot of any and all generations?

Not necessarily. As long as the deliberating individuals know themselves to be contemporaries – which is imperative for them to deal effectively with every other aspect of their political lives – another problem remains. Pondering that, whatever their historic starting position, future (that is, yet unborn) generations cannot negatively affect them, they could come to the conclusion not to save at all, and so to maximize their interest. This, to be sure, is not the only possible outcome of such a deliberation amongst contemporaries. Economists have argued that in regard to wealth and capital building a certain care for the immediately subsequent generations is to be expected, for today's adults will later in their lives be dependent on today's children. Some argue, thence, that such a regard for a posterity already born could be stretched through a system of endlessly overlapping generations to each and every future generation so that the abstract interests of future generations would be cared for by the ever-concrete interest of the contiguous generations (Bayles 1980, p. 18; Parfit 1984, p. 363).

However, here a different but related version of the aforementioned argument becomes crucial. A strictly utilitarian calculus might advise present generations to go so far as to decree an end to any production of offspring. So they could share the full amount of all remaining resources solely between themselves, as contemporaries, while simultaneously avoiding the existence of anyone thereby disadvantaged whose interests could be brought up against such demeanour (Kavka 1978, pp. 193–194). This argument takes into consideration the so-called identity problem that for a utilitarian calculus only identifiable persons can count because only they can have identifiable interests (Bentham 1907, Introduction, ch. 1). Thus (identifiable) present interests win out against (the less identifiable) future interests. Still, some have argued, a large amount of likely future interests might nevertheless be brought up successfully against petty gains of pleasure now. Perhaps. If, however, and this is where the argument has its bite, our present

actions make sure that no future claimants come into existence at all, it does not work. Then – for obligations towards preserving humankind apart from duties to its physically identifiable members would, in this logic, be rejected as meaningless metaphysics – there is literally no counterweight to argue against any such, however ludicrous, conduct. The systematic advantage of the radicalized argument is patent; it reveals the fatal inner logic of a calculus that establishes rights and obligations based upon the sole notion of a symmetrical exchange, or barter, of measurable advantages: they who cannot return benefits or detriments are not taken into consideration.

To evade these troubled waters, Rawls temporarily assigned his decision makers an emotional interest in their 'immediate descendants', viewing themselves as 'heads of families'. He hoped that in this spirit each generation would not display such a cavalier attitude towards posterity but rather from 'ties of sentiment' take scrupulous care for at least the adjacent generation so that, through a series of successive steps, all future generations would finally be looked after (Rawls 1971, p. 256). Notwithstanding, certain tenets of the contemporary call for ecological and economic sustainability would thus perchance not be taken up. For example, a concern for the remote future may be beyond any such interests in close descendants. Consequently, human stewardship for planet earth that relies for its effectiveness on a perspective well beyond spatial-temporal propinguity could not adequately be captured within this conception (Jonas 1984, pp. 40–43). Nor would commitments of a fundamentally asymmetrical nature (that is, obligations without any, or significant, payoffs to neither the present generation, nor their progeny) be so established. Asymmetrical commitments are of necessity alien to a conception that incorporates the interests of posterity only because and only insofar as present generations are depending upon their successors for their welfare, or because they hinge on their progeny emotionally.

At any rate, Rawls ultimately does not follow through with the caring-parents-argument and finally reverts back to the initial idea that 'all generations are virtually represented in the original position' under 'the precept that what touches all concerns all' (Rawls 1971, p. 256). In the end, he simply proclaims it a perennial obligation of humankind to bring about just societal structures, within which each generation would be asked to appropriate the societal savings rate to its respective historic conditions (so as to allow different rates respectively for poor and affluent societies) with future humankind somehow on their mind. Without having clarified how exactly this precept is to be institutionalized (or to be harmonized with his aforementioned reflections), his final conclusion comes as quite a surprise, that is, when he claims that although 'at first a somewhat far-fetched application of the contract doctrine' his theory could quite well 'cover these matters without any change in its basic idea' (Rawls 1971, p. 258).

Let us not dwell too long on the manifest flaws of the options presented so far. It should be evident that changing the original position as one pleases is not a very convincing strategy. Even if Rawls generally wants to accommodate theoretical concepts to our ethical intuitions and considered judgements in pursuit of a reflective equilibrium, this is clearly not what he does here. For if it was, then Rawls would have to include all the modifications made in our context into a re-description of the original situation at large. What that would mean to his theory can easily be detected when one replaces the 'rational maximizer' with a 'caring father' as the pertinent single deliberative unit for Rawls's theoretical framework. The entire argumentative structure of A Theory of Justice would implode (Richards 1983, p. 137). Second, and more important, the initially posed problem has not even been addressed – that the logic of strictly symmetric exchanges of benefits fails when it comes to construing relations between persons whose lifetimes do not overlap. In the mind frame of a rational maximizer there will not be an incentive whatsoever to care for anything that does not somehow affect him or those he cares for (Hösle 1991, p. 132). The most rational decision for such an individual might actually be to bring about that notorious universal compact to produce no more offspring in order to allow the living an unrestricted use of the resources of the earth. Theoreticians have long tried to tackle this problem without succeeding to show why a rational egotist should not opt for extinguishing mankind to reap the benefits of the planet for those now present. As has been shown, neither can Rawls' method of construing normative social relations through a contract from mutual exchange of benefits solve this problem 'without a change in its basic idea' (Rawls 1971, p. 258).

Future generations and Rawls's later philosophy

In *Justice as Fairness. A Restatement* (2001) John Rawls lays down what changes he deems necessary to fit his original *Theory of Justice* into the framework of his later philosophy, professed namely in *Political Liberalism* (1993). As for the question, 'how far the present generation is bound to respect the claims of its successors' (Rawls 2001, p. 159), Rawls critically re-examines the position taken in his *A Theory of Justice* and acknowledges the aforementioned problem that if 'taking the parties to be mutually disinterested, nothing constrains them to make any savings at all' (Rawls 2001, p. 160). Rawls abandons his former attempts to temper this by introducing speculations about mutual care or regarding an intergenerational agreement. His solution is now the following:

To preserve the present-time-of-entry interpretation of the original position, the question of savings must be dealt with by constraints that hold between citizens

as contemporaries. [...] The correct principle, then, is one the members of any generation (and so all generations) would adopt as the principle they would want preceding generations to have followed. (Rawls 2001, p. 160)

Prima vista, this dissolves the dilemma. A party deciding based upon its interests will then be made to hand out to others what it wants for itself, and so it will protect others' interests as well as its own. However, the fact that this reformulation sounds very much like the Golden Rule calls for our attention. How is it, one has to ask, that any one rational maximizer would willingly impose upon himself restrictions that de facto make it impossible that he pursue his self-interest most efficiently? The savings of former days are his, no matter how he will decide regarding the interests of posterity. So, why reduce his welfare without a payback arrangement? Only actors already morally motivated will agree to such a limitation of their consumer wants (Dauenhauer 210, p. 208).

To be sure, the point raised here is of concern not only in this very context but one that generally holds. It comes to bear on whatever form of restrictions the deliberating parties call upon themselves once they design the specific features of the original position. As soon as they become aware that an unfettered egoism, albeit universalized and mutual, does not by itself bring about just social affairs, they have to face the fact that a merely technical rationality does not suffice to design an adequate social contract. Accordingly, they must agree upon additional regulations to curb the detrimental externalities of individual 'rent seeking'. Other than before, in *Political Liberalism* Rawls is ultimately ready to admit this. This is why he proposes a twofold concept of rationality that distinguishes between the 'reasonable' and the 'rational' (Rawls 1993, p. 48).

Therein the 'rational' represents the kind of maximizing logic we have been dealing with so far. This form of rationality, we learn, needs to be restricted by the 'reasonable' that epitomizes value judgements and moral wisdom. Specifically, by reasonable persons Rawls understands individuals who 'desire for its own sake a social world in which they, as free and equal, can co-operate with others on terms all can accept' (Rawls 1993, p. 50). Upon these premises, it is evident that people who want and value social cooperation between free and equal people will accept putting themselves under such constraints which render the pursuit of their self-interest beneficial (rather than detrimental) to others. Individuals so nobly motivated will certainly accept Rawls's new formulation of the savings principle.

However, this signals a major deviation from the initial Rawlsian project (Owen 2001, pp. 90–95). Now we are dealing with persons who are said to have a moral interest – in one another as well as in the presence of justice (in the form of fair co-operation). No longer do we insist that the only

motivation admissible to stimulate someone's contribution to social ethics is self-interest alone. Yet, as much as this change of premises helps us solve some problems of *A Theory of Justice*, it introduces new ones, albeit of a different kind.

The point of departure for Rawls's entire philosophical project had been his rejection of metaphysics. Although deeply influenced by Kant's practical philosophy, Rawls refused to build his philosophy based upon similar foundations such as a normative philosophy of freedom. Consequently, when critics charged Rawls that his *A Theory of Justice*, despite his intentions, rested to a considerable degree on Kantian metaphysics (especially, regarding the concept of personality and the principle of autonomy), Rawls took pains to dismiss whatever Kantian remainders there still were in his system (Yack 1993, pp. 224–226). His *Political Liberalism* represents this very intention to defend the politics of liberty without employing a metaphysic of freedom.

The problem is that Rawls's so-called 'a-foundational' project (under the mantra 'political, not metaphysical') makes it illegitimate to refer to a philosophical knowledge about the moral character of man. For instance, we cannot state that it expresses the essence of man to regard himself as obligated to abide by a specific ethical principle. We cannot take it as a matter of notional self-evidence – as Kant would have it – that the true conception of liberty is expressed by a notion of freedom that is internally bound to preserve and enable the freedom of everyone else (see below; section 3) (Macedo 2000, p. 183). Under Rawls's anti-metaphysical spell, we cannot defend categorical and unconditional norms, but are restrained to hypothetical and conditional arguments based upon (presumably given) factual premises (Neal 1994, p. 87). The only pathway to social norms is thence to reconstruct any such relations as reciprocal agreements between persons who 'can play the role of fully cooperative members' (Rawls 2001, p. 24) of a given society precisely because they can actually (that is, physically) affect one another. Thus, strictly speaking, we cannot even address the rights of unborn generations but must restrict our endeavours to fairness towards only the generations already born.

When however our considered ethical convictions cannot be reconstructed in terms of symmetrical exchanges of utility, we might as well find fault with our conceptual tools. Once we recognize that a certain ethical obligation which we unhesitatingly acknowledge is only to be fulfilled by asymmetrical burdens on our part, including services to persons who for whatever reason will never be able to reciprocate (such as future generations, or severely disabled people, or people well beyond our social life world such as the poor of foreign countries), we become aware that Rawls's philosophical programme simply does not meet many of our contemporary

requirements. Wherever there is need for unconditional commitments and duties, all that Rawls's system can offer are merely conditional agreements of people who give only under the condition that they receive, who contribute only insofar as they benefit, who help only as long as it furthers their interests. In other words, Rawls cannot conceive of ethical obligations where no reciprocity is to be expected.

It is therefore not by accident that Rawls has nothing to say about animal rights and the protection of nature beyond what is necessary to preserve economic welfare. The same inability to account for ethical obligations that break the mould of symmetrical barter over benefits also affects his view on global politics. Many readers have been disappointed that in his Law of the Peoples (1999) Rawls did not advocate global distributive justice (Rubio-Carracedo 2001, p. 438; Ingram 2003, p. 386), or a cosmopolitan protection of human rights (Kautz 1995, p. 179; Beitz 2000, pp. 669–671; Kuper 2000, pp. 640–647; Caney 2002, pp. 95–99). The reason is as before: Rawls refrains from arguments based upon the principles of human freedom, autonomy and human dignity, denouncing them as illegitimate metaphysics (Yack 1993, p. 230). It is, he admits, the context rather than the content that gives (relative) validity to his normative conceptions (Fraga 2002, p. 37). Certainly, Western democracies of today usually do champion many of the ethical tenets postulated here. If however a given societal context displays no proclivity towards the protection of rights of future generations (or the distant poor, or the severely disabled, for that matter) then Rawls' theory does not offer an independent stance whereby to criticize that. By confining himself to the calculus of reciprocity, Rawls deprived his theory of the necessary conceptual tools to provide for a convincing ethics that meets the contemporary needs of humankind.

Future generations and the philosophy of freedom

In view of recent philosophical developments we need not share Rawls' fear of the troubled waters of speculative thinking. Rawls' apprehension of undermining his philosophical architecture through references to a metaphysics of freedom is, I think, unsubstantiated. Today, both Anglo-American and continental philosophers try to overcome the analytic-synthetic divide. The old conflict is perceived as sterile. Continental philosophers employ analytical tools; analytical philosophers take pains to discern between different kinds of metaphysical thinking. The huge gap between, say, a 'metaphysical' belief in the afterlife on the one side, and, for example, Kant's critical metaphysics on the other, is by now broadly acknowledged. Kant's conviction that sensual experiences can only be understood through concepts that are themselves not of a sense origin, or his view that freedom, although empirically indemonstrable, is essential to any and all ethical considerations, are widely

accepted also among analytical philosophers. That each of these propositions implies (metaphysical) knowledge independent of empirical data is no longer sufficient reason to dismiss such ideas out of hand. That is why I believe it feasible to look for the solution to the dilemma of justice for future generations along the lines of a theory of freedom modelled after Kant and his successors, such as K.C. F. Krause (Dierksmeier 2002, pp. 158–160).

Certainly, there are other worthy values besides freedom, upon which many humans build their lives. Notwithstanding, whatever our ultimate ethical, or religious affiliation may be, few theoreticians dispute that any decisions upon such questions should be forced upon people. For disputing the right to freedom of spiritual orientation involves intellectual capacities that, as a rule, have been acquired under the very conditions so challenged. Hence the argument turns against itself. With what reason does one deny to others a right to intellectual and ethical autonomy if having been granted such autonomy over time prepared the ground for one's ultimate deliberations against rights to intellectual liberty? This implicit recursivity – that you need freedom even in order to reject it – makes freedom the *fundamentum inconcussum* to virtually every ethical deliberation.

Moreover, with Kant came into use a conception of freedom that establishes the necessary limits to liberty not as negations of freedom but as its manifestations. The rationale behind this notion is that limitless freedom is a *contradictio in adiecto*. Freedom, in order to be real, has to have a *gestalt*; it cannot be exempt from any structure, which is why Kant says freedom, not to be heteronomously orientated, must be autonomous. Freedom has to be a law unto itself. The fact that freedom has to be given some form and contour is, therefore, no reduction of liberty. The crucial question is not whether but rather what kind of limits personal liberty should have. The problem with freedom is, in a word, not of a quantitative but of a qualitative nature.

It is nonsensical to wish that freedom be not limited at all, as if there were an infinite amount of freedom to begin with, from which then we, unfortunately, have to slice off ever more pieces in order to allow peaceful life within society. We should instead understand freedom qualitatively, that is, as a demand to ourselves that we be governed rightly, that is, by rules to which we could reasonably consent. Such qualitative rules then will also give us the right measure also for the adequate quantity of individual liberty. More freedom, consequently, is not always better, since under the concept of qualitative freedom the increase in freedom to ruin the conditions of the possibility of free and reasonable decision-making is not recognized as a gain in liberty. In a word: qualitative freedom leads to a concept of qualified liberties (Dierksmeier 2006).

1991, p. 150; Saugstad 1993, p. 3).

Actions that defy the principle of automous freedom, for example by destroying the conditions of the human life form, are not to be undertaken even if we cannot make out any specific victims thereof. For it is not the perspective of the victim but of the perpetrator upon whom Kant focuses. We owe it to ourselves – to the 'humankind in our person', as Kant puts it – not to commit such acts, regardless of who is to suffer from said actions. Our obligations regarding the environment are therefore, strictly speaking, not duties to certain future persons but duties to ourselves, or better, to humankind – in view of a possible futurity. The moral community to which we are responsible reaches beyond the realm of those persons with whom we are, or will be, in relations of reciprocity. It extends to any person

whatsoever, regardless of his or her temporal and spatial position (Rakowski

Let us not be confused by the difference between the genesis and validity of norms. As a matter of course, restrictions of individual liberty in favour of the rights of others ordinarily come into existence (genesis) because other people make their interests known with sufficient force. Over time, then, we learn to accept their freedom as a limitation to our liberties. Systematically, though, restrictions of liberty are made legitimate (validity) not through those empirical proclamations of interests but by their content – that is, their quality to be 'right' in and out of themselves. Freedom understood as autonomy is regulating liberty so as to prevent the destruction of the conditions of possibility of freedom throughout. Irrespective of their consequences, certain acts can, therefore, never be perpetrated in the name of freedom.

Moreover, as this qualification of liberty co-originates with the notion of freedom there is, for the purpose of moral argumentation, no need to demonstrate that the resultant limitations of liberty are also in the best egotistic interest of the respective agents, or their immediate successors. The consideration of interests is secondary where rights of freedom are concerned. Applied to the question of the rights of future generations it follows that, even if one lived alone on earth, one would not be allowed to ruin the conditions of possibility of freedom, neither for oneself, nor for anybody else. For us to be obliged to assure the planet remains an intact bio-sphere, future generations and their interests need not be specified.²

The simple fact that certain actions destroy the enabling conditions of freedom in general separates those acts out of the realm of activities to which individual liberty can make any legitimate claim at all. The disapproval we envision on the part of future persons is, however real it may one day become, but a reflection of the impossibility to justify such acts in the name of freedom and humankind today. For though we cannot

foresee the specific features of future life on this planet we do know enough about the fundamental biological needs of persons to be able to discern what will likely be harmful to them. This estimate is analogous to looking ahead to our own old age: we do not know whether we will reach an old age, nor what, in that case, will then be our particular preferences and tastes, yet we do not therefore decline to make provisions (Kavka 1978, pp. 196–198).

The burden of proof to the contrary, that is, that nevertheless there is a right to destroy present or future conditions of freedom, lies with those who oppose the concept of qualitative freedom and qualified liberties. I doubt they can succeed. To reject autonomous restrictions on liberty, be it in the name of an unrestrained freedom, or with reference to any other principles, invokes a self-contradiction. Such a stance presupposes the (past and present) respect of others for our free deliberation and decision-making, and yet argues against the maintenance of the general conditions thereof.

Some may, however, feel that the notion of qualitative freedom is overly demanding, or too distant from ordinary thinking in order to regulate everyday practice. I do not subscribe to this point of view. Considering that we no longer establish rights with reference to the colour of our skin, our gender, or our being born into feudal ranks, and so on, we have to ask ourselves what then do we accept as the foundation for anybody's claim to dignity and freedom? We do not have certain rights because we are this or that particular individual, but because we are a person. Our personhood, the potential to live our lives according to our own designs, is that upon which our human rights rest. It is in the name of this potential for autonomous life, and especially in view of its factual fragility, that we protect individuals against harm, even against harm coming from themselves, when, for instance, they are suicidal, or misuse drugs. It is in the same name that we (ought to) try to grant all the conditions that empower them to autonomy, for example when we impose education on children. We undertake all this – without regard for reciprocity, and often against the explicit will of the persons involved - out of respect for the 'humankind' in their person. Why not also honour this obligation towards humankind when it comes to keeping the earth a place where freedom can thrive?

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Notes

- A distant future generation, other than one that overlaps with present generations, is an
 unspecified theoretical object. It is not given to us as are physically concrete entities (synthetically a posteriori), or conceptually defined entities (a priori). We do not know how,
 or not even whether, future generations will exist. Thus, future generations are (metaphysical) objects beyond our empirical reach, accessible only through (metaphysical)
 methods such as speculation.
- 2. 'The people who will live as a result of the reckless laissez-faire policy can complain even though they would not have existed had we chosen the responsible policy. Our moral duty is determined by what ideally rational agents would have done. Acting from respect for the humanity in all persons, they would surely have avoided endangering the conditions of a truly human life for *any* person future or present. By falling short of this moral ideal, we fail in our moral duty to future people, regardless of who they will be. Since these are moral duties of justice, our breach of them *now* infringes rights they will acquire *then*' (Saugstad 1993, p. 10).

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5 Justice between generations: the limits of procedural justice Michael Wallack

'In the long run, we are all dead.'

J. M. Keynes (emphasis added)

'A political system $[\ldots]$ is by definition a form of the past tense that aspires to impose itself upon the present $[\ldots]$ '

Joseph Brodsky (Uncommon Visage: Grief & Reason)

'The life of a people is conceived as a scheme of cooperation spread out in historical time. It is to be governed by the same conception of justice that regulates the cooperation of contemporaries.'

John Rawls

Introduction

The most difficult problem in extending liberal theories of justice to justice between generations arises because we expect the fairness of divisions of resources between contemporaries to be constrained by the pragmatic requirement that citizens must be in general agreement about crucial matters of public concern in order that liberal democratic institutions work tolerably well. In the case of justice between generations, those not present are those likely to be offended by purely self-regarding consequences of collective action. Thus, the discount of future consequences is apt to be very great and the democratic process is unlikely to limit the range of possible divisions to those which are fair to future generations of citizens. This is the most important reason that both utilitarian and liberal accounts of justice fail when applied to the problem of justice between generations. I shall try to explain how each approach has tried to meet this challenge and shall offer some suggestions for addressing it.

A utilitarian approach

Utilitarians suggest that the central issue of justice between generations is to determine the savings rate that maximizes the utility that is attached to the welfare of both present and future citizens, whether this welfare is taken as a whole or considered for each person as divided into heirs and others. Since what is saved (invested) cannot at the same time be consumed, and since consumption is assumed to be an unalloyed good by the Utilitarians,

a positive social savings rate that maximizes average utility of both present and future generations must undo the costs to present generations including:

- denied consumption (assumed as a negative utility for an individual);
- delayed consumption (pure time discount impatience); and
- Opportunity costs (lower productivity and efficiency).

These offsetting benefits are to be found by present day citizens in satisfaction derived in providing benefits to future generations (Peterson 1993).

John Mueller *et al.* (1974, p. 351) propose a utilitarian revision of Rawls' original position in which each individual selects a social discount rate which reflects with equal probability the risk proclivity of any future citizen. In this revised account of Rawls' original position, each citizen is assumed to know the distribution of tastes of all citizens but not individual data on these tastes (and not which generation she is in) and is expected to choose a distribution which maximizes average utility. This provides the basis, as in Rawls, for a unanimous choice of intergenerational savings rates. The Mueller proposal follows in the line of analysis begun by economists (Collard 1996) including Pigou, Baumol, Samuelson, Arrow, Tullock, Vickrey, Marglin, Lind, Sen, Dasgupta and others who have tried to discover whether the economic presuppositions of classical economics extended by game theory can provide a best choice for a social discount rate, that is, for a collective welfare function derived from the revealed preferences of individual welfare maximizers.

But there is nothing in Mueller's approach that addresses the central issue: the risk horizon of contemporaries cannot be assured to extend farther than their own lives except by auxiliary hypotheses that attach the utility of one citizen to that of others. This might take the form of parental affection or a more generalized altruism. This is the issue which convinced some early utilitarian liberals (Mill) of the need for a communitarian extension of individualistic utilitarianism. Higher natures would include the interests of mankind as part of their own. If enough of these higher types are present in the mix then, Mill supposed, the transgenerational distribution problems of classical utilitarianism would be solved.

By the same argument, citizens concerned about the welfare (however determined) of future generations might be supposed to discount the present cost of risks – whatever their risk-aversion level – to take into account any changes in the prospects of future generations: to adjust savings rate upwards if need be, by lowering their own consumption while accepting a lower near term expected return for any given level of risk. In concrete terms this implies a lower discount rate applied to the benefits of

environmental, medical, and security related or other public investments whose future benefits require currently lower consumption.

However, this modification of a 'utilitarianism of the present' depends upon there being enough of the future oriented altruistic citizens in today's mix of citizens to provide the discount on present consumption that would allow future average utility to fall into the same range as current average utility. Even the most optimistic Utilitarian would find it difficult to sustain such an assumption. Utilitarians, sober liberal Utilitarians, are typically averse to assumptions that require more from citizens than that their preferences be transitive and disinterested. The assumption that they have Millian's higher natures violates the latter assumption.

Contemporary economists have concluded that rational disinterested individual investors will save (invest) less than would be required to maximize average utility. Sen describes the effect as the result of a version of the 'prisoner's dilemma' (he calls it the isolation paradox) in which individual utility maximizers who are subject to joint conditions but who must decide how altruistic to be without assurance that others will act as they themselves do, produce a less than best outcome for themselves. Whether as investors (savers) or prisoners, the key feature is that benefits are produced by joint action but fall to individuals who may gain at the expense of others. So if one does not know that others will invest at an optimal rate to provide for highest net returns any individual may well stop somewhere short of the rate that is optimum, hoping someone else will not do the same. It will take an enforced social contract to add the savings (investment) necessary to reach an optimum level (Tullock 1964; Sen 1967).

What all this has to do with justice between generations is that the individualist utilitarian solution to an ideal joint savings rate – individual investment decisions aggregated by the market – is shown to be less than ideal and thus to require correction, in the same way that investment in public goods requires authoritative allocation to escape free riders. The market will not automatically produce the utilitarian version of a just savings rate, that is, one that reflects existing individual predilections towards investment in benefits for future generations.

Liberal beginnings to justice between generations

There are liberal, rights based responses to the problem of justice between generations which attempt to deal with the distribution question in ways that are similar to those I have just described.

Parallel to the utilitarian assumption of 'representative citizens' is the liberal assumption that the origin of rights, including the right to property, is freely given, rational individual consent. Building on this, liberals move to general principles of procedural justice that are, implicitly, timeless.

The progress from consent to timeless principles of distributive justice can be seen in Locke (Wolf 1995).

For Locke, once scarcity has ended the era of the labour theory of property and replaced it with contract based property, citizens are expected to tolerate whatever distribution unequal talents produce, within the bounds of the rule of the law of contracts and subject to the limitations imposed by the costs of common political institutions.

As new citizens and immigrants are added by generations and fate, contract based property retains its legitimacy because the underlying rationale for it is timeless: limited government and legally enforced claims to such property allow the maximum benefit to be extracted from nature, and repay the risks to capital and exertions of labour in the face of the uncivil and dangerous predators (our uncivil neighbours or self-aggrandizing rulers) who would make such risks and labour worthless.

But Locke assumed, as we cannot, that while there might not be as good and as much land locally to put the talents of successive citizens on an equal footing, migration would remove these limits for new generations. In Locke's day much of the world was still an 'America' waiting to be improved by the exertions of citizens who would create institutions of property and government by consent.

Without the assumptions of a limitless nature to absorb the surplus labour and talents of successive generations, without the promise of progress and increase as a repayment for work and risk, liberal rights to property lose their timeless rationality; economics becomes the dismal science, its justice a Malthusian reconciliation of the many poor to power.

Contemporary liberal theorists try to correct the optimistic assumptions of earlier liberals by adding an assumption of limited equality to the earlier account of rational consent. Whether as the principle of equal concern and respect in Ronald Dworkin's defence of the duty to provide the resources needed for taking rights seriously or in Rawls' difference principle, considerations of equality restrict the distribution of crucial resources so as to assure all citizens a fair opportunity to excise their talents and realize their aims. In this way, the interests of future generations will be taken into account by a savings rate that aims at (at least) a steady state of primary goods from each generation to the next into the future, whatever adjustment this may require in current consumption. Redistribution required by the difference principle moves the polity towards equality and fair equality of opportunity one generation at a time.

Rawls' account of the problem in *A Theory of Justice* is parallel to Mill's assumption in that it requires a relaxation of individualist disinterest in the welfare of others in favour of the altruistic requirement of concern for descendants.

As he says in *Political Liberalism*, disinterestedly rational citizens, ideally conceived, might choose to make no net generational savings at all if the next non overlapping generation is expected to be better off than the least well off of the present generations (Rawls 1993, n. 12) and so the pure individualist assumptions that operate throughout *A Theory of Justice* are augmented by a (stipulated) altruistic regard by one generation for the next. This position is dropped in *Political Liberalism* in favour of a stipulated Kantian attitude towards net generational saving: the Rawlsians 'must want all previous generations to have followed' whatever rule they themselves adopt and must want all future generations to follow it as well (Rawls 1993, p. 274).

The aim of A Theory of Justice was, after all, to show that the institutions of contemporary liberal democracies could be described as having emerged from such general principles of justice that ideally rational, disinterested people would choose given a set of premises that denied effect to selfish calculations and ill luck. Famously, this account is presented as a 'veil of ignorance' which blocks out date as well as place. We are to derive and evaluate principles of justice without knowing our place in society or place in contemporary generations. But when citizens emerge to construct, revise, or eliminate institutions according to the newly clarified principles, the world's particularity again floods in, time and place and identity are restored. If the clarification has had its proper effect the principles remain and the polity has moved closer to a just society. This is where, apparently, concern for our descendants and the sense of justice combine to provide a just savings rate and zero pure time discount as the basis for justice between generations. The unstated assumption here is that the process of politics will move the effective majority of citizens to reconcile the interests of the present poor with those of future generations, presumably at the behest of the future-oriented citizens who are already among us. Here again is the Millian assumption of benevolence now in the midst of a liberal rather than utilitarian framework.

Thus, in this variant of the liberal theory, procedural distributive justice and our concern for our descendants are expected to provide justice between generations. But there is nevertheless a difficulty. While the difference principle for present generations is maintained by the recognition that it provides the basis for the co-operation of the less well off in the face of the greater enjoyment on the better placed, no such support is available to reinforce the dictates of justice for future generations. Future citizens cannot decline to co-operate. They cannot appeal the sense of justice of the citizens in the republic of the here and now. If the present day representatives of future generations are not numerous, not well placed, not active, a Rawlsian liberal political process will not reflect their views as a part of the reasonable consensus that is supposed stabilize the society.

Convinced by comments by critics of this approach, Rawls greatly simplifies it in a few pages of comments in *Political Liberalism* in which he adopts a point of view suggested by Derek Parfit and Jane English. As he says, we may imagine a savings principle that is just because it is '[. . .] the one we would want preceding generations to have followed (and later generations to follow), no matter how far back (or forward) in time' (Rawls 1993, p. 274).

In this formulation, the requirement of affection between generations is replaced by an appeal to Kantian universality as a standard sufficient to produce a forward looking savings rate derived from the difference principle (although this is not stated by Rawls explicitly). The unwanted thickening of the original position produced by parental affection is gone, an aesthetic gain no doubt. But this new idea has problems of its own: it relies on a very general form of the Kantian principle within the original position and thereby breaks the Rawlsian effort to rely on limits on information (the veil of ignorance serving to enforce impartiality) as the sufficient condition required to delineate a 'reasonable' and rational outcome that all can accept. It is a special ad hoc feature of the Rawlsian theory designed to save it from the charge of over-optimistic altruism. In addition, there are other pragmatic difficulties with this revised account of just saving.

Difficulties with the account in Political Liberalism

The social discount rate cannot be proposed by those who will be affected by it in the future and adjusted against the appeals of those made worse off by it. Pragmatically adjusting policy – the hallmark of the liberal state in Rawls' and most other accounts will not work here. The rate selected in the process of adjusting competing claims in the light of generally accepted principles, what Rawls calls reflective equilibrium, will not work for non-existent future citizens whose welfare is at stake. I take this to be the greatest weakness in Rawls' account of intergenerational justice.

Rawls acknowledges this problem in *A Theory of Justice* but uses the assumption of inter-generational altruism to deal with it. In *Political Liberalism* there is nothing added to augment the appeal to Kantian principles and the social discount rate those principles might require. In *A Theory of Justice*, it is the representatives of the least well off who are to set the social discount rate which is to be used to modify the social transfers to the least well off. In effect we are to think of ourselves as the least well off in any generation to determine a social discount rate which will (we know) favour or constrain current consumption by contemporaries who are least well off (perhaps ourselves) in our present.

In *Political Liberalism*, the difference principle is said not to be a 'constitutional essential' – that is, an enforceable constraint on democratic

deliberation. Thus, the just savings rate and justice between generations cannot be claimed as a right on behalf of future citizens. But if a just savings rate cannot be claimed as a right and cannot be won as the basis of a *modus vivendi* by those that seek them on behalf of non-existent (because future) beneficiaries, how will these elements of the just liberal order ever be attained?

A savings rate equal to the one which produced the current stock of capital goods does not necessarily produce such a stock at maturity. Savings and investments do not have constant returns. I believe this rules out a steady state principle as a simple alternative to the difference principle. Investment to the point where marginal returns are zero does not guarantee that total return to all investment is as great as that in the previous time period. The average return to investment may be declining, for example. In such a circumstance, there would be zero net investment and declining average income – and presumably declining income for the (future) least well off.

Polities are not autonomous with respect to their savings and are not able to adjust the returns to investment. This rules out the claims that a market rate of interest provides the basis for a social discount rate, once the returns from public investment are accounted for.

And finally, a steady state of fair equality of opportunity across generations may not be possible given declining resources, increasing populations, and the shrinking of the age cohorts that contribute most to disposable income.

In conclusion, the difference principle might be chosen by Kantian contemporaries as the standard for justice between generations, but it could not add weight to an expectation that the future's least well off will have the wherewithal to make use of their share of basic liberties. Without that assurance, the structure of Rawls's theory, with its priority of liberty collapses and utilitarian alternatives – those that maximize average utilities and provide for a minimum – look like a better bet for the least well off. But of course, utilitarian theories rest upon an assumption of benevolence towards future generations and a social decision process that can turn that level of benevolence into investment that will benefit future generations. My proposed Minimum Irreversible Harm principle addresses these problems.

Back to hypothetical contract

Both utilitarian and contract theory seem to have come to the question of justice between generations with the expectation that it could be addressed by a simple extension of the principles used to address distributive justice for contemporaries, but have in the end required special assumptions (benevolence) to provide a plausible account. Rawls has dropped his assumption of benevolence (perhaps restating it in a more general way) in

Political Liberalism. Rather than being based on the reflection of a rational individual (as in A Theory of Justice), the latter Rawls assumes that individuals in the original position are 'rational representatives' of their fully informed selves. They are to devise a just savings principle according to the Kantian principle that it is to be the one that is to apply (retroactively as it were) to their generation and to every other generation. They are to assume it is to be fixed forever. Rawls implies, though does not actually state, that they would choose the difference principle and a zero pure time discount. (Jane English argues this way and Rawls endorses her argument.)

Of course if people could be assumed to be Kantian as well as rational and reasonable there would be no need for *A Theory of Justice* as a guide to deliberation. Deliberation, real not hypothetical, would produce the outcome that Rawls and many others (including myself) would choose. But the idea of the original position – the forced impartiality produced by reduced information relating to calculations of one's personal advantage – I thought, was to produce a reasonable set of principles, a set that all could voluntarily adopt as the basis of social co-operation, without any special assumptions. Taking the Kantian principle into the original position to produce a just saving rate violates the stricture that comprehensive theories of the good are not to be the ground for principles of justice. Political justice must be 'free standing' if it is to serve as the basis for fair co-operation in a pluralistic society – a society in which many reasonable comprehensive views provide justification for individual conceptions of the good.

If we set aside this issue – the seeming inconsistency of Rawls's new approach with the larger theory presented in *A Theory of Justice* – we are left with the question of whether the difference principle and zero pure time discount should be adopted as the starting point for justice between generations. The problems raised by its utilitarian critics – in particular its tendency towards zero net investment – suggest that it would not. Jane English defends it by suggesting that the trade-off between today's poor and tomorrow's poor may rise above zero – may provide an inter-generational transfer – when transfers to today's poor would make them even worse off – that is, by discouraging the better off from adding their share to the pool of social resources. I don't find this defence of the difference principle very convincing. Since the actual transfers to today's worst off are in practice always likely to be less than those called for by the difference principle, the interest of the future worst off are never likely to be addressed.

Revising Rawls to provide intergenerational justice

Perhaps we should think about why the difference principle suggested itself to Rawls in the first place as a rule for distributive justice. The original

position was conceived of as an extension of the rational choice model of social theory to the problem of liberal democracy. By suitably restricting the information available to the modelled decision maker, rational self interest could be made to simulate sociality.

The result, Rawls thought, would be to make it seem rational to choose a set of social institutions that unequally endowed citizens could accept without coercion. By making it impossible for us to know how we can gain at the expense of others from political institutions – given our own goals, talents and social positions – our self-interest leads us to choose a social framework acceptable to all. Rawls claims that equal political liberties and the difference principle would emerge as a result of this starting point since each citizen would view these principles as a necessary minimum return for social co-operation.

The difference principle for the goods it allocates is intended to assure the least well off a supply of primary goods that they (and everyone) regard as at least a minimum necessary to motivate unforced acceptance of the laws and institutions of society. Utilitarians sometimes lose sight of this feature of the difference principle – it is intended to provide at least a social minimum of primary goods – since the utilitarian view of the distribution problem takes the goods to be continuously defined as beneficial all the way to zero. They assume, for example, that it is rational to accept some risk of the worst outcome (whatever that is) provided the risk is low enough. From this point of view it is easy to show that the difference principle would not minimize risk to an individual in the information poor environment of the original position even for the most risk averse. The difference principle, after all, forbids a large benefit to the somewhat better off when that benefit has even the smallest cost to the least well off. A calculation of expected benefit that combines risk and benefit would not lead to such a choice even for the most risk averse. Only the assumption that the least well off cannot be reduced further and still be fully citizens leads to the selection of the difference principle by the risk averse citizen.

Rawls' oblique answer to this argument is to deny that he intends to model rational choice under uncertainty, but instead intends the difference principle for primary goods to be the rationally favoured rule to guide distributions away from equality for those who value equal distribution of primary goods as their ideal (but not feasible) distribution for primary goods. Because citizens deserve to be equally benefited by social co-operation yet cannot be because of differences in talents and social position, the least benefited should be reconciled to social co-operation by knowing that they will receive some benefit from any inequality that is permitted.

In contrast, Utilitarians start with an ideal distribution of a maximum of all goods for each and try to discover the principles that guide us toward

that ideal as a group. The Pareto optimum – the distribution that leaves benefit at its maximum for each under any possible exchange and the total at a maximum – becomes the utilitarian ideal.

On Rawls' account, only necessity – never preferences for more or less risk or benefits – may lead us away from the just standard of equality of primary goods. No individual is to be less valuable than another as a citizen and so no individual can be less deserving of an equal share of primary goods. This is the crucial and most basic assumption of Rawls' liberalism. We share a society to advance our individual conceptions of the good. Liberal society does not favour one such conception over another provided that each is compatible with all. To accept less than an equal share of primary goods would violate this central ground of institutions and law, and would in the end undermine the stability of the polity. By assuming that citizens are rational, by starting with a conception of society as a means to advance individual conceptions of the good, and by defining primary goods as all purpose means to individual ends, Rawls arrives at the conclusion that only necessity may divert the rational citizen from a less than equal share of primary goods.

Revised difference principle and its implications

The just saving principle for a revised Rawlsian contractualism requires us to save at a rate which provides an equal share of primary goods for each future person within a polity, reduced only by necessity. What this principle requires us here and now to save and invest to assure that citizens living deep in the future will be our equals is, of course, beyond our weak powers of understanding. We simply don't know and probably can't know given the imponderables that effect long term economic and social processes. Since 'ought implies can' and since we cannot say what we should save for long run eternal equality of primary goods, the Kantian imperative, should we feel its compulsion, would be reduced to an unfocused regret – not the raw material for public policy.

The implications of these observations are that the just saving principle we are looking for must be seen as a fair standard for the relations between existing citizens — children, parents, grandparents. With this limitation, arguments made about necessary inequalities can be judged for their implications for people with names and faces if not (for children) votes.

Equality and stability

While Rawls' concern for equality diminished between his two major works of political theory, his interest in stability increased. The basis for stability in *Political Liberalism* is the requirement that all reasonably comprehensive views move from a 'modus vivendi' – prudential consensus – to 'overlapping

consensus' – the condition in which the principles of justice are incorporated into the central doctrines of the different comprehensive theories. This matter is important because the difference principle was presented in *A Theory of Justice* as part of means by which the least well off could be reconciled to the permitted inequalities of the liberal society and polity. It was part of the answer to those who would ask, 'Why should I co-operate when others who obey the same laws get more of what it takes to realize their particular conception of the good?' It is also part of the answer to those who would ask, 'Why should I share the benefits of good luck and natural talents, why should I moderate the benevolence I would like to express for my children, friends and favourites?' The difference principle is argued to be the least deviation from equality that is compatible with an unequal distribution of talent. The difference principle is one important means to provide stability within the framework of *A Theory of Justice*.

In *Political Liberalism*, the issue that evokes concern for stability is not inequality in primary goods, it is the equality and impartiality of equal liberties in the face of comprehensive views of the good that would deny them – perhaps based on religion, race or gender and sexual orientation. In the United States religion, race and sexual conduct issues provide much of the raw material for constitutional dissensus on First Amendment rights. Rawls mentions abortion and discusses free speech cases in connection with his discussion of challenges to the stability of the overlapping consensus on constitutional matters in the United States. Clearly, the difference principle is not going to bring about a consensus in these disagreements.

Rawls hoped that on such questions a *modus vivendi* (for example as in *Roe v. Wade*) can be transformed into a constitutional consensus and from thence provide the basis for a modification of the various comprehensive views so that a true overlapping consensus may be formed. He suggested that this is the process that is to be expected (hoped for?) in liberal societies. It is the process he seeks to aid with his own work. It is thus within the scope of liberal justice to set the boundaries to comprehensive theories by providing the specifications, as it were, for pragmatic accommodation to be transformed into a deeper accommodation of principle within each comprehensive theory. (This is the basis for the slogan, carried from *A Theory of Justice* that the Right is prior to the Good.) Religionists and feminists are to find a way to modify their views to take account of the need for social co-operation governed by an overarching constitutional framework.

If we imagine a similar process applied to economic and social inequality we would find ideologically committed egalitarians finally softening their claims for redistribution of wealth to milder claims for 'fair equality of opportunity' and then softening it still further to 'fair value of political liberty'. We might also imagine the free market Darwinists coming around

to the need of some public goods (and non-voluntary taxes – the other kind being user fees) provided the economic burdens thus required do not dampen their animal spirits, as Adam Smith would say.

Those who support low impact economic growth (the Greens) would be enjoined to accept a slower rate of biological extinctions of endangered species in return for support for a sharing of the costs such (moderate) environmentalism by those who do not care for bugs and trees. All this is to be accomplished, as Rawls would say, at the 'legislative stage' with the various parties modifying their pure ideologies for the sake of the democratic process.

We are in this imagined account, very far from the arena (the mind of the idealist) in which principles of justice guide conduct. We are in the political arena where full information and partiality are checked by self interest and the art of the possible. This is the place where only the *modus vivendi* is to be expected. Can we imagine that the difference principle can inspire the divided and contesting ideologues to rescue the snail darter or some rare fungus which overlays a mother lode of molybdenum? Not likely.

Conclusions so far

Justice between generations is at least as divisive and politically charged as the first principle issues (that is, civil liberties) emphasized in *Political Liberalism*. But it differs in a crucial respect. Since the future citizens whose primary goods are at stake don't exist, we cannot use the process Rawls describes as moving society from pragmatic to principled agreement to establish a stable consensus. There can be no *modus vivendi* with people who don't exist. There can be no modification of reasonable comprehensive views under the realisation that such is necessary to create an overlapping consensus, no reflective equilibrium to modify the conditions of ideal justice. How, under these circumstances, can any just saving principle be incorporated into a Rawlsian account of liberal justice?

The Rawlsian advice to think Kantian when we think of the future does not lead to a convincing result by itself. Efforts to apply utilitarian criteria leave the matter to be resolved by some form of procedural justice but appear to beg the question of what standard should be applied by those procedures. Utilitarians rely on today's tastes, attitudes towards risk and today's distribution of benevolence toward future generations.

A proposal: minimum irreversible harm

My proposal is to modify the Rawlsian account of intergenerational equity in his *A Theory of Justice* (zero pure time discount plus an intergenerational difference principle) by augmenting it with what I call the 'Minimum Irreversible Harm Principle'. In my view this supplies the concrete content to the Kantian admonition which Rawls provided in *Political Liberalism* to

invest at a rate 'any generation would have wanted' in each generation. As I have argued this simply allows the indeterminacy of knowledge of the optimum rate of (dis)investment to eliminate long run considerations of trans-generational welfare. Even with zero pure time discount, opportunity cost discounting reduces the present value of a long run investment that only provides benefits to future citizens to zero.

The Minimum Irreversible Harm principle is:

Irreversible harm is to be minimized, and

- A. activities resulting in irreversible harm are to be limited in time to the shortest feasible time;
- B. activities resulting in irreversible harm are to be limited in space to the smallest feasible loci of application.

As a modification of Rawls' *A Theory of Justice*, it would modify the final statement of the two principles by being added to the Second Priority Rule. Along with the fair equality of opportunity, Minimun Irreversible Harm is to be prior to the difference principle (Rawls 1971, p. 266).

In my view the MIH principle incorporated into a constitutional framework would provide the best opportunity to protect a fair system of social co-operation from the unintended consequences of each generation's efforts to provide for its own welfare. In contrast to pure liberal theories, whether Rawlsian or utilitarian, a framework of rights that includes the MIH principle commits citizens to impartiality in respect to the future consequences of our activities. While Rawlsian liberals agree that one person's good cannot be the valid ground for the unequal right of another citizen, the two principles of justice in Rawls' *A Theory of Justice* assume that the existence of the conditions required for a just society to continue are not put in jeopardy by the operation of that society. We have ample grounds to suspect, however, that the unconsidered effort to extend the conditions of 'moderate scarcity' (to use Rawls' terms) to more and more people is causing unsustainable environmental degradation.

Utilitarians, for their part, assume that technological change provides the basis for the extension of welfare to future citizens. The rationality of a market driven succession of Pareto optima make possible the extension of the maximum possible benefits of social co-operation to new generations. As resources are exhausted and tastes change, the investments that make substitutions and new technologies possible are also those that receive the greatest rewards and are thus made available by market driven investors. But the dilemma of the non-priced natural capital, the underinvestment in social capital and the irreversible consequences of present activities calls into question these assumptions as well.

Economic models which assume that harms may be reversed or compensated for by higher marginal returns that they produce assume that all harms are reversible, which would be true in a purely thermodynamic universe but is not true in ours. Thus when we see in studies of climate change a proposal to accept a higher average temperature for several decades to allow for a technological response to be introduced with greatest economic efficiency, the silent assumption is that the consequences can be reversed once the fully developed technologies are put into place. These are the so-called 'no regrets' or convergence policies that some suggest. What is not admitted is that such policies include irreversible ecosystem changes. While average temperatures and CO₂ levels may change back toward current means, it cannot be assumed that the ecosystem changes will be similarly reversed (Norton 1995).

Minimum irreversible harm and rights

Wilfred Beckerman has energetically rejected any attempt to extend liberal rights based theories of justice to future generations (Beckerman, Chapter 3 in this handbook). He says that a theory of justice between generations is impossible. Do his objections rule out the Minimum Irreversible Harm Principle as a part of *A Theory of Justice*? I shall first consider Beckerman's argument and then say something about the implication of the MIHP for the questions of rights.

I agree with Beckerman and others that future people cannot have rights now. That is a terminological truth not a political one. But I contend that present people's rights, by including rights which support a just constitutional order and the conditions which are necessary for such just institutions, also provide the basis now for the rights of present generations and non-overlapping generations in the future.

Do future generations have rights?

Wilfred Beckerman's answer

Wilfred Beckerman puts a great deal of emphasis on the terminological truth that only entities that are said to exist can also be said to exist in a particular way. He uses this point to say that non-existent (because future) people cannot have rights or interests and then expands this claim to the conclusion that a theory of intergenerational justice is 'impossible'.

We must all be on our guard when it is claimed that important issues of politics or social life are to be settled by a discussion of what is possible or impossible according to the meanings ascribed to the terms we use.

Beckerman admits that we may want to do something and even feel obliged to do something for non-existing people (he gives the example of

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our children's descendants) but avers that these wants 'typically' flow from sentiment or self-interest rather than duty. Only obligations that flow from duty are properly moral or political. Beckerman says that he is interested not in what we feel obliged to do but what is morally right as a matter of duty – what we must do to satisfy our obligations to others. But he does not say what the distinction amounts to.

But his recognition that we act as if we are obliged when we feel obliged to do things for others weakens his argument. This appears to go unnoticed. For example I feel obliged to water my house plants from time to time. As a result I water them. The effect on them might be the same if I had promised someone to water them and watered them for that reason. Or it might be the same if I had only imagined that I had promised someone to water them. The actual differences for the plants as a result of these different states of affairs can only be investigated empirically not resolved by conceptual analysis.

Almost everyone takes the institution of promising to be the clearest example of a social institution that gives rise to obligation. We have an obligation to make good on our freely given promises, where possible, and our partner in the promise has a right to claim what has been promised. Of course, whether the right is effective depends upon the consequences that may be expected if it is broken. This is the familiar ground discussed and debated by political theorists in the contract tradition. So feeling obliged without having promised and feeling obliged having promised may be equivalently efficacious.

Beckerman apparently discounts feelings of obligation in favour of obligations pure and simple, although he never tells us why he thinks some variety of feelings of obligations (say those in accord with principles of justice) might not be exactly what we are after and all we need for any theory of justice including a theory that includes justice between generations. And he never tells us how he thinks duty or obligation can ever become effective as a motivation to act one way rather than another without some corresponding feeling or consideration of interest to give it effect.

Also overlooked in Beckerman's account is a long tradition in political theory which contends that self-interest together with consent gives rise to political obligation. This tradition starts with the sophists (Glaucon in the Republic) and continues with Hobbes and Locke. Beckerman's rejection of self-interest and sentiment also passes by in silence Rousseau who started with sentiment (natural sympathy) and joined it to consent as the basis for political justice. Rousseau's General Will is the starting point for theories of Kantian political obligation – a line of theorizing that includes Rawls.

But the upshot of his acknowledgement that we may have feelings of obligation for non-existent people and that we may even have grounds for

these feelings – grounds that arise from considered reflection on our most important values – is that a theory of justice between generations is not ruled out by the non-existence of future people. Perhaps there is something in moral obligations to future people that underlies a sense of justice. And perhaps this common starting point in human nature and social life also supports a theory of justice that includes concern for the future. This is something to ponder.

Consistency is said (by Emerson) to be the hobgoblin of little minds, but all sized minds need it from time to time. Beckerman argues that it is impossible (that is, a contradiction in terms) to predicate any quality to a non-existent thing, and yet he claims we are obliged morally not to harm people who are 'not even born'! It's not that I disagree with this conclusion; I simply suggest that Beckerman must remain silent about our moral duties to non-existent people or give up his terminological objection to rights for the non-existent future generations. People without qualities can't have moral qualities or injuries either. As Frank Ramsey remarked, that which can't be spoken, can't be whistled.

Beckerman's view of a future claim that we have acted wickedly by eliminating a species (the Dodo in his example) illustrates some of the difficulties he has gotten himself into. He says a younger generation of people can't claim to have rights violated by an older generation that has made a species extinct because ought implies can. He thinks one can't claim a right to something once it is gone. A species cannot be restored. The younger generation has a claim to compensation, not replacement. This is either a verbal quibble or confusion, I am not sure which. What would be claimed is a right to non-extinctions. Some rights when violated do not admit of restoration as is the case when a person is killed. What is claimed by the rest of us on behalf of the person who has been killed is the right of the dead person not to be killed, not resurrection.

Beckerman knows this. I suspect his argument is intended as support for the claim that the compensation for irreversible harm to the environment is economic progress. The higher GNP produced by the investment of extracted capital is compensation for extinctions. But if that is his intended argument it must be noted that it begs the question of whether there are rights violated by extinctions, whether they are necessary to produce a higher marginal return on investment or not.

Beckerman goes further than this in acknowledging obligations to non-existent people in his discussion of the relationship between obligations and rights. Rights create obligations to existing people. Moral duties create obligations to present and future people, he avers, 'however removed they be to us in time or space'.

Beckerman thinks his analysis of the necessary conditions for rights

leads inexorably to the conclusion that the people who will be harmed sometime in the distant future (ceterus paribus) can't claim (if they come into being) that their rights have been violated. He carefully avoids saying whether he thinks it is a violation of anyone's rights. ('But violating this moral obligation does not necessarily imply violating anyone's rights.') Yet he seems certain that temporally distant harm is, as he says, very wicked, and that we are under a moral obligation not to do it. His qualification is that the obligation to non-existent future people exists in the present only if the harm to be prevented is 'grievous': inflicts serious harm, condemns them to poverty or deprives them of 'primary resources' which could not 'conceivably' have substitutes. Extinct Dodos don't qualify, nor do any specific 'assets'. All the works of Kant, Shakespeare, Rembrandt, any species, any unique entity whatever – you name it – can be lost forever under this exception. If it has a specific name best to forget it.

I must say I am impressed by the very specific moral intuitions which Beckerman uses to grasp the difference between primary assets which are worth keeping and which we are now morally obliged to keep and those others which he supposes everyone can live without. But I am a bit worried about his feeling that he is not obliged to leave anything which could 'conceivably' have a substitute in the future. Some future oriented technologists suggest that humankind as a whole will eventually be superseded by a variety of intelligent and conscious machines that will have none of the limitations or needs of carbon based life forms, being themselves evolved out of other starting points in the periodic table. That may not leave much of an obligation on the present carbon based life forms to preserve 'primary resources' for other carbon based life forms. I really could not say though. As a matter of fact I don't think anyone can say what 'conceivably' might in future serve as a substitute for something we now think necessary for a life worth living. The 'conceivable' test, while popular in philosophical contexts, has no value as a guide to conduct. And we are not about to say that we have consensus on what is necessary for a life worth living, a social life in the midst of billions of people and thousands of cultures. As a result of allowing the elimination of anything in the present which could conceivably have a substitute in the future, Beckerman suggests we regard just about every present activity as morally right provided its current effects are acceptable. But this is to say that our moral obligations to the future are thin at best.

Thus while Beckerman claims to have shown that intergenerational theories of justice are impossible, he has in fact offered one. Let me summarize it. Present generations are obliged to avoid actions which threaten grave harms to future generations, harms including the destruction of 'primary resources' and economic impoverishment. But these obligations do not constitute rights because if they did they would 'trump' the claims of

existing people to decide for themselves what to do in the here and now. And this would violate the basic tendencies of human nature which include the desire to give priority to family, friends, neighbours, fellow citizens and the rest of mankind in the present, in that order. To require intergenerational impartiality is, he says, 'sheer hypocrisy'. Thus the present generation has the moral obligation not to do grave harm to the future generations provided that such constraint is cost free and willingly given by individuals as an act of benevolence. How this is consistent with his previously announced ethic of duty not based on interest or affection I cannot tell.

Rights and minimum irreversible harm

The Minimum Irreversible Harm Principle, included in a Rawlsian framework of rights, is intended as a part of a fair system of social co-operation that would be chosen under conditions of moderate scarcity by people who accepted the constraint of intergenerational impartiality. As a modification of the just saving principle it would serve to limit the intergenerational inequality of primary goods by being incorporated into a system of constitutional rights. By right any citizen could claim the protection of a constitutionalized version of the principle when activities of anyone threatened irreversible harm. The usual jurisprudential standards and processes would be the means for redress. In a fair system of social co-operation not all harms can be avoided, but under my proposal irreversible harms could not be upheld against a rights claim unless at a minimum feasible level and unless necessary to minimize the overall level of irreversible harm. Irreversible Harm is understood as requiring the same priority as a Rawlsian 'First Principle' right.

While, evidently, not yet living people can't appear in court, the MIHP relies upon the application of minimum harm in the present to protect the newly entering citizens from being at a disadvantage relative to preceding generations. By a chain connection future generations are protected within the limits of imperfect procedural justice.

What is the relationship between moral rights and legal rights?

In the Rawlsian liberal framework that I support, moral duties arise within comprehensive theories of the good that citizens may use to formulate their own life plans. Each comprehensive theory of the good provides or may provide an account of moral obligations. The two principles of justice provide the basis for institutions that define and implement political rights and obligations. Liberal justice accommodates a variety of reasonable comprehensive moral theories and is designed to do so. At the same time, an overlapping consensus among comprehensive theories of the good supports the principles of justice by including them and by supporting the

general inclinations that are necessary for democratic social life. The consequence of this is that there is a partial overlap between legal and moral rights. In the Rawlsian framework 'right is prior to good', which means that the shared commitment to a fair system of social co-operation sets limits to the moral claims that can be enforced within reasonable pluralism.

Does an obligation of A towards B imply that B has a right towards A? Political rights and obligations imply each other while moral rights and obligations may or may not do so depending upon the particular comprehensive theory of the good that is adopted.

What is the relationship between 'rights of succeeding/future generations' and 'intergenerational justice'?

A Rawlsian theory of justice needs no special modification to take account of the social cleavages that may emerge between older and younger people. Social differences of race, religion, gender, region, nationality, income or belief are all expected to require attention within democratic institutions which provide for fair equality of opportunity, effective citizenship, dignity and respect. Justice between non-overlapping generations, in my view, requires something more: a constitutionalized minimum irreversible harm principle.

How does the debate about rights change if we speak of 'succeeding generations' (future generations and today's youth) instead of 'future generations'?

The burden imposed by the implementation of the Minimum Irreversible Harm principle cannot be the responsibility of any one generation. Today's youth will decide whether intergenerational impartiality is to be incorporated into democratic institutions during their lifetimes. Standards of intergenerational impartiality are coming to be recognized as an important part of contemporary democratic politics. These standards are emerging in the reasoned public discourse that is underway in many regions of the world and are proving to be both a difficult but necessary step in the efforts to address trans-sovereign problems. The effort to resolve political conflicts through the appeal to principles that all contemporary generations can acknowledge as fair is the starting point for the equally difficult problem of identifying and implementing such standards for future generations.

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6 Rule change and intergenerational justice Axel Gosseries and Mathias Hungerbühler

Introduction

Constitutions have attracted the attention of intergenerational justice specialists for at least two reasons. Activists have defended the need for constitutionalizing the rights of future generations (see Tremmel in this volume). And theorists have stressed the problematic nature of constitutions insofar as their rigidity allows earlier generations to impose rules that later ones may otherwise not have chosen (see Jefferson 1789; Holmes 1995, ch. 5; Otsuka 2003, ch. 7). Examples include requirements of qualified majority to modify constitutional provisions or the introduction of restrictions such that provisions could only be revised by a legislature if they were included in a list by the previous legislature. Such mechanisms are at times a solution (for example for those who want it to be hard to question a concern for future generations that would already be embodied in a constitution) and at other times a problem (insofar as generations may disagree with each other on constitutional matters). Constitutional rigidity is thus a double-edged sword from the perspective of intergenerational justice.

In contrast to constitutional rigidity, rule change – including constitutional change – has not attracted much attention, be it from philosophers in general (see the following exceptions: Campbell 1973; Fried 2003; Murphy and Nagel 2002, pp. 128-129) or from those concerned with intergenerational justice in particular. People make choices on the basis of expectations regarding the degree of stability of legal rules (for example urban planning or tax regimes). In non-traditionalist societies, rules are changing constantly. Tax reforms affect our disposable incomes. Changes in environmental standards leave us with more or less freedom to proceed with polluting behaviours. Each time, either some lose and others gain, or some lose or gain more than others. The question then arises as to whether transition losers should be compensated (possibly through taxing transition winners) for such losses. When a natural disaster affects a region, it seems obvious to most people that some solidarity should operate. Why not when new rules are being imposed by a majority, to the detriment of at least some of us? From the losers' perspective, rule change can very well be regarded as one among other exogenous changes in the environment in which we live.

This chapter aims at identifying the extent to which rule change in general, and reforms with a marked intergenerational impact in particular,

do raise challenging questions that theories of justice should address. Mechanisms of 'grandfathering',¹ claims of 'droits acquis' ('vested rights')² or the prohibition on 'ex post facto' legislation all point in the same direction. Still, we lack a clear normative framework to address all general cases as well as the intergenerational ones, and more specifically those involving overlapping generations. We shall proceed in four steps. First, the general problem of justice and rule change will be identified. Second, a normative solution will be proposed. Third, we shall present three examples where rule change has a distinctively intergenerational impact. Finally, we will ask ourselves whether the general solution applies to such intergenerational cases.

Rule change and transition losses

If any reform were to be considered necessarily unjust all things considered, we would be forced to close down parliaments, freeze every existing social rule, and defend each of them as part of our tradition forever. This would be quite a radical (or rather radically traditionalist) posture. Yet, most of us accept the view that rule changes, albeit often necessary and just 'all things considered', can still generate specific injustices that could themselves be corrected. Let us consider climate change. Many of us find it critical to reduce our global CO2 emission level. Still, on the emission side, some of us will lose more than others from such reduction measures. This is especially the case with countries engaged in economic activities that are highly carbon-intensive, or with those who have developed consumption patterns associated with higher than average CO2 emission levels. Hence, the introduction of a (new) standard aiming at a reduction of greenhouse gas emissions changes the rules of the game. And some may then be tempted to consider the higher impact on those already engaged in a highly polluted way of life as unfairly heavy. One solution to this consists of exempting such actors for a while from the application of the new rule. This is referred to as grandfathering. More generally, there are two ways to smoothen the impact of rule change on its losers. Either we compensate them in cash (for example through taxing those who are the winners in the new regime). Or, we exempt them (in kind) from the scope of the new rule, be it 'forever' (for example 'droits acquis' in case of rights that end with a person's life rather than earlier) or for a limited period of time (some forms of grandfathering, for example with a gradually diminishing weight in the CO₂ emission rights allocation formula).

In every regime of rules, each person has a given opportunity set, that is, the set of possible behaviours that are within this person's reach, given the means she has to act and the constraints imposed on her by various social restrictions. Once rules change, some will benefit from a larger opportunity set than before and others from a smaller one. And in some

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cases, depending on the range of this opportunity set they were planning to use, people's expected utility will be affected. Hereinafter, we propose to define the problem of rule change as having to do with transition losses or transition gains only. In order to identify precisely the scope of the notion of 'transition loss', let us distinguish among six types of cases, depending on whether investments did or did not take place, and on whether, had the rule been different at a given time, such an investment would or would not have taken place. Notice as well that the four first cases deal with prechange investments whereas the two last ones are examples of post-change (future) investments. Here are the six situations:

- 1. Did-but-would-not-have-done: the agent would not have made such an investment had the new rule applied at the time of the investment (or had she known about its future entry into force). She would not have invested at all, or less, or differently. Pension reform is a typical example since it affects the return that people get at the end of their life, on an investment they made during their period of activity.
- Did-and-would-have-done: no matter whether the agent would had known about the rule change or not, she would still have stuck to the very same investment as the one she has actually made (even if the return would have turned out to be lower than under the present rule).
- 3. Did-not-but-would-have-done: no investment was made before the rule change entered into force. Still, had the new rule applied earlier (or had the person heard about its future entry into force), she would no doubt have decided to invest. A typical example is provided by unemployment benefits (or pension benefits) on which someone relies and that are suddenly cancelled. The person would certainly have organized herself differently had the unemployment benefits not existed or had she known they would get cancelled. And one thing she would have made are investments for example in broadening her range of skills. Another illustration is a situation in which speaking a *lingua franca* that one never learnt suddenly becomes a general requirement. Had we known that, many of us would have invested in learning such a language.
- 4. Did-not-and-would-not-have-done: a situation in which, be it under the existing rule or under the new rule, the investment would not have been made anyway.
- Did-not-yet-but-would-have-done: this is a case in which I could have invested in the future, and I would have done so, had the rule not changed.
- Did-not-yet-and-would-not-have-done: a case in which I could have invested in the future had the pre-existing regime remained but I would not have done so anyway.

As we shall see, not all transition losses should be compensated. But even prior to that, among the six types of situations listed above, we propose to include only type 1 and type 3 as belonging to the scope of 'transition losses'. Here are the reasons why.

First, the exclusion of type 5 rests on a normative argument according to which, if we had to compensate *ad infinitum* future investments that have been made uninteresting by the existence of a new rule, this would amount, as a matter of fact, to cancelling the rule. Hence, it is absurd for us both to claim that a new rule is a better one, and that all coming generations should be compensated for investments they were unable to make because of this new rule. The same argument holds for type 6 cases, with the additional fact that in such cases, there would not even be any 'expected utility' type of loss, since the agent would not have used the opportunity it would have had anyway.

This latter remark leads us to look at the reason why type 4 cases should also be excluded from the scope of our notion of 'transition losses'. We consider that in cases where, as a matter of fact, the behaviour of the agent would not have been modified by the change in rule, such a rule change cannot be said to reduce the expected utility of the agent. Admittedly, there might be some disutility associated with the mere fact of having a narrower range of opportunities than the one an agent actually could have had. But this is a specific type of loss that we propose to exclude from the examination below. We cannot exclude, however, that the twofold test proposed hereinafter could perfectly apply to this very special type of loss as well.

In type 2 cases, the investor would not have decided to modify the nature of her investments (its object, its size, and so on). The new rule clearly only allows for a lower return than the pre-existing rule. Still, this loss is not as such a transition loss. There is thus a clear loss in utility, but not one that is due to the change itself.

We are therefore left with two types of cases. Type 1 is clearly the paradigmatic example of a situation leading to transition losses. Moreover, there are no reasons of principle to exclude type 3 situations from the scope of transition losses. Are there practical reasons to exclude type 3 cases from the scope of possible compensation in actual legal regimes, which would not apply equally to type 1 situations? In fact, both types of cases involve counterfactual assumptions about what the agent would otherwise have done. In a real situation, we shall tend to rely on assumptions about the way in which representative and/or reasonable members of the public are likely to have behaved. The impossibility of observing people's counterfactual behaviour is thus not a definitive obstacle. We therefore propose to include both type 1 and type 3 situations within the scope of what we refer to as transition losses.

Transition losses can thus be defined as losses in the expected return on effective investment in type 1 cases or losses resulting from the opportunity cost of non-investment in type 3 cases due to rule change. Obviously as well, the scope of the problem excludes types of activities that merely involve negligible investment. For example, if we change the rules applying to domestic violence, there are definitely winners and losers, but probably no transition losers. Finally, let us add that compensation may also apply to transition gains, that is, gains resulting from a reduction in the costs one should in principle have incurred in return for a benefit that one already obtained. As we shall see, all active workers above 20 benefit from transition gains in the cancellation of age-based mandatory retirement example.

Actually, this focus on transition losses is closely connected with the idea of prohibiting ex post facto regulation. The pure case of an ex post facto legislation is the following. Imagine that someone envisages breaking the law as it applies to speed limits. At the time he wants to do so (T0), he knows for example that if he drives at 150 km/hour on the motorway he will not risk a licence confiscation. Imagine now that sometime later (T1), the law changes and is adopted in such a way that it is meant to apply back to T0. The new law strengthens the penalty by imposing driving licence confiscation for the same behaviour. This would be considered an unacceptable ex post facto legislation as a citizen is supposed to be able to know at the time he acts what the legal consequences of his/her action will be. This can be considered a matter of vertical justice, that is, of just relationships between the public power and the individual citizens (for developments on this matter in Belgian criminal law: Closset-Marchal 1983, pp. 23–31). Ceteris paribus, regulatory stability will of course tend to lead to greater vertical justice in this respect. Moreover, such 'legal security' requirement is also supposed to serve efficiency purposes under some circumstances.

Now, there are many situations in which some degree of 'retroactive' impact is either unavoidable or acceptable.³ This is especially the case whenever an activity involves an investment that requires time to get the expected return. In such cases, there is a sense in which the change in rule will necessarily violate the prohibition on *ex post facto* regulation, because it modifies the potential return that the investment was associated with in the past, at the time it was initiated. Hence, if breach of the above mentioned rule of vertical justice is somehow inevitable as well as justifiable on an all-things-considered basis in such cases, horizontal justice (that is, justice among citizens) should at least lead us to be concerned with the fact that some may lose whereas others will lose less or even gain from such rule change. Moreover, the fact that a change in rule would be decided by a majority in the most democratic way does not exonerate such a society from making sure that those who would unfairly lose from it be compensated.

This is clearly what we do for matters such as takings. Hence, democratically decided change in rules could very well be treated from the point of view of one of its victims, as equivalent to sudden changes in atmospheric or seismological conditions, taking the form of a hurricane or an earthquake. This leads us to the normative side of our question. It should help us assessing whether it is indeed right to assimilate transition losses from rule change to disadvantages flowing from brute bad luck arising from natural disasters.

Which transition losses should be compensated?

Now that a notion of transition loss has been defined, we have to ask ourselves: should all transitional losses (be they absolute or relative) be compensated for in case of rule change? We suggest the twofold test in Table 6.1.

Table 6.1 The compensation test

Predictability component	Should the citizen have reasonably expected that the previous rule would not be changed?
Legitimacy	Should the citizen not have considered the previous (social or
component	legal) rule as obviously insufficient from a moral point of view?

Let us illustrate this. As to the predictability component, *ceteris paribus*, the reason to compensate for transition losses will be greater if, for example:

- The rule was of a lower order (for example a ministerial decree as opposed to a constitutional provision).
- There was very little debate as to its acceptability (for example nothing in the press, no discussion in parliament, and so on) suggesting that such a non-problematic rule would remain in force. Of course, if there is on the contrary a large and lively debate, the issue is whether this should be seen as a factor of predictability of change, or whether only an early official announcement of rule change should be taken into consideration in assessing the predictability of the change. We would tend not to adopt the latter view.
- There was strong opposition to any change (for example an influential minority politically being able to block any change) or one lives in a super-traditionalist society in which rule change hardly ever takes place.

Of course, the cognitive abilities of the transition loser might be taken into account here, referring for example to those of an average individual placed in similar conditions. The intuition behind this predictability component of the test is a normative one. In the case of (risk of) harm

(for example in a car crash) it is reasonable for potential victims to adopt measures such that they would reduce the amount of harm done (for example to exit the car as soon as possible). If a legal change has been announced well in advance and an economic actor does not try to reduce the amount of transition loss resulting for him from this shift to a new rule, he should be considered partly responsible for the extent of such a loss. In short, one possible rule of justice considers that victims should make reasonable efforts to mitigate damages done to them by nature or other people. 5 In the case of rule change, predictability certainly affects the extent of anticipation efforts that people should reasonably be expected to make in order to mitigate transition losses. The significance of this component is that ceteris paribus, strong predictability will certainly constitute one reason to deny full compensation to victims of transition losses. In such cases, they would for example be expected to contract an insurance if it is available and if they can reasonably afford it. Redistribution will then require that differences in insurance premium resulting from circumstantial factors (rather than choices) be compensated (Fried 2003).

As to the legitimacy component, it assumes that it is not always morally sufficient to act in accordance with the law. In other words, it does not follow from the fact that a given behaviour is lawful that this behaviour should be considered morally acceptable. Compare two equally predictable reforms, the former consisting in a day-to-night shift from left-hand side driving to right-hand side driving, and the latter consisting in the introduction of measures aimed at reducing gender discrimination on the labour market. Ex hypothesi, the entry into force of each of these measures has been announced five years in advance. In each case, some will lose and others will gain. In the traffic rule case, exclusive pedestrians or those who are generally less dependent on a car will certainly have to support lower transition costs than others as a result of the measure.⁶ In the gender-justice-oriented labour market reform case, the male active population will certainly lose and the female one will win. Still, whereas in the hand side driving case, it is hard to see how departing from the pre-reform rule might be obviously morally better, the gender-justice-oriented reform illustrates a situation in which it is commonly acknowledged that some of the gender-based wage gap and other gender differences on the labour market are hard to justify, despite still being widely practised (relevant source in labour economics: Altonji and Blank 1999). Such considerations should lead us to the view that while compensating drivers by taxing pedestrians or less car dependent people might be an option (at least if we leave aside environmental concerns), taxing women to compensate men is certainly not an option.⁷

The idea is that it is illegitimate for a given actor to claim compensation for unfulfilled expectations each time such expectations had to do with the

permanency or the introduction of a morally illegitimate situation. In fact, there are two possible intuitions underlying the legitimacy component.8 The first one is that if a privilege is cancelled, compensation would go against the very goal of the reform. We believe however that this is not the best rationale to justify the legitimacy requirement for compensation. For there could be cases in which only those who were already actively involved in relying on an undue privilege could be compensated. In such a case, this would merely limit and/or delay the effect of the reform, not cancel it. Still, even in such a case in which the reform would clearly come into effect, one could object to compensation. This suggests a better rationale. The idea is not that such compensation would cancel the effect of the reform. Rather, it consists in claiming that one should not expect compensation for loss in undue privilege, at least not from those who were the victims of such privileges, or would have been such victims in the absence of rule change. Hence, changes in network standards (for example in telecom) that are not necessarily justice-oriented are not incompatible with taxing transition winners to compensate transition losers. They have to do with coordination concerns and fit with quality requirements rather than with removal of undue privileges. In contrast, in case of justice-oriented reforms, taxing the target group explicitly supposed to benefit from the reform would be not only in tension with the very idea of the reform (it would cancel or delay its effects), but more importantly unfair (because it implicitly considers as legitimate the fact for actors to base their existence on expectations of status quo re. unfair rules). 10 Hereinafter, we illustrate the possible use of our twofold test with some typical examples (see Table 6.2).

This twofold test is of course very general and will not automatically deliver an answer in all relevant circumstances. What is clear is that if the idea was to cancel a clearly undue privilege, there should be no room for compensation – at the very least not by the intended beneficiaries of the reform. Similarly, if the change in rule was clearly predictable for a long time, there should in principle be no room for compensation transition losers either. Intermediate cases involving high (non-nil) predictability and

Table 6.2 Illustrating the twofold test

Rule change	Co-ordination-oriented	Justice-oriented
Less likely	Price setting mechanism in a super-traditionalist society	2. Recognition of a set of fundamental human rights following a revolution
More likely	3. Pre-announced network standard shift	4. Pre-announced gender- justice-oriented reform

high illegitimacy of the status quo, or low predictability and low illegitimacy of the status quo are less straightforward to deal with. This is especially important as some reforms are hard to classify. For instance, change in planning status in the context of urban planning can both pursue co-ordination and justice-oriented goals. The goals (and/or effects) are more clearly mixed here than in other cases (for example shift from French to English as an official language where the co-ordination component will at least be dominant).¹¹

Of course, whether we are actually facing a 'clearly undue' privilege has to be decided on the basis of a given theory of justice. This calls for a clarification in two steps of the idea of legitimacy. In this chapter, we are only concerned about output legitimacy (as it is assessed by substantive theories of justice) as opposed to input legitimacy, that is, the fairness of the procedure that led to the adoption of a given pattern of rights and obligations. First, this means that when we consider a privilege to be undue, such a claim should be based on the assumption that it violates the requirements of the substantive theory of justice we find most compelling, rather than procedural constraints regarding the way the existing norm should have been adopted (for example follow a clearly democratic procedure). Second, it also means that the reform (as opposed to the pre-existing regime) could be procedurally fine and still lead to an output that may not be legitimate either overall, or due to a lack of compensation of transition losers, if required.

Thus, in the context of this chapter, a privilege will be undue, regardless of the fairness or unfairness of the decision procedure that led to its establishment. It is undue because it does not fit with the requirements of substantive theories of justice. The test will thus have to be applied from the perspective of a given theory of justice, each of which is likely to deliver different results. This is not a problem if we consider that it makes sense to claim that some theories of justice are better than others. The difficulty in practice is rather to determine the extent to which individual citizens can be expected to know about these different theories. This is the reason why only clear cases of pre-existing undue privileges (for example on which different theories of justice converge) will qualify as instantiations of justice-oriented reforms. In other words, compensation cannot be excluded, not only in clear co-ordination reform case, but also in justice-oriented reforms involving extremely technical reasoning that standard citizens cannot be expected to grasp without considerable time investment.

Moreover, the model does not tell us whether more weight should be ascribed to one of the test's two components. Each of them rests on a given moral intuition (the obligation for the victim to mitigate damage as much as possible; the illegitimacy of relying on the permanency of unfair situations). The examples above suggest however that the moral intuition

underlying the legitimacy component should probably dominate the one at work in the predictability component. Despite such difficulties, the test gives some idea of considerations that should be regarded as central in assessing whether transition losers should be compensated. It also allows in practice for what we could refer as intra-criterion comparisons in Table 6.2. Let us now turn to the intergenerational context.¹²

The intergenerational impact of rule change

Everything we said so far was meaningful even in a world in which a single generation would be at stake. Hereinafter, we illustrate with three examples the way in which some types of changes in rules can have a clearly intergenerational impact. In other words, transition losses and transition gains can be spread across different generations in such a way that we end up with winning and losing generations. Let us stress as well the fact that we do not assume here that the reforms we are dealing with lead to efficiency gains or losses benefiting current generations. Hence, losses and gains will be considered as relative rather than absolute ones. We only care about the intergenerational distributive dimension, leaving aside the intergenerational efficiency one. The introduction of overall efficiency changes would complicate the analysis without providing us with significant additional insights. No matter whether there are efficiency gains or not, there will always be some relative winners and losers. Dealing with winners and losers in absolute terms would make the examples more straightforward (although more complicated), but the same reasoning applies for relative winners and losers in cases when there are overall efficiency changes.

Cancelling mandatory retirement¹³

Let us consider our first example. Age-based mandatory retirement is supposed to reduce job-scarcity on the labour market. All of a sudden, however, it is being decided that age-based mandatory retirement amounts to unlawful age discrimination and that its mandatory nature should therefore be cancelled. What are the effects of this policy change? To keep the analysis simple, we assume that labour demand is fixed, that is, that no matter how many workers supply their labour on the market, the firms always hire the same amount of workers. Jobs are thus scarce. An increase in labour supply due to the cancellation of mandatory retirement does then not lead to efficiency gains. The policy change only has distributional effects. Who are the winners of this reform?

First, let us look at the generation that is already retired at the moment the policy change takes place. Once the mandatory retirement age is cancelled, they can return to work if they want. However, they first have to search for a job and compete for it with younger individuals. The probability that they really find a job is thus rather small. Consequently, the benefit they get from the policy reform is positive, but very limited. The old thus have already benefited from the return on 'investment' (limited job competition), while not being obliged anymore to pay the investment (mandatory retirement). Clearly, they are transition winners.

Focus next on the generation that is just below the mandatory retirement age when the policy reform takes place. The presence of a mandatory retirement age was beneficial for them during their working period, because this limited job competition. It was therefore easy for them to find a job when they were young. However, since the policy reform takes places at the time they reach the retirement age, they will not have to pay the cost of this reduced job competition that resulted in forced retirement. They can just keep working as long as they want. This generation thus benefits most from the policy change. Again, they get transition gains benefitting from a return on investment without being obliged to pay afterwards the investment costs.

Finally, consider the young generation that just entered the labour market at the time the policy reform entered into force. During the first period of their life, up to the age that was previously the retirement age, they are disadvantaged by the policy change. In fact, before the reform, the young people who entered the labour market could get the jobs that elderly workers had to give up because of mandatory retirement. However, once the reform has been enacted, the old do not have to retire any more, and some might in fact renounce doing so. There are thus fewer jobs available for the young people and job competition increases, leaving more young people unemployed. This is the cost of this reform that the young people have to pay. However, these young job seekers will also end up getting old themselves. And when they finally reach the age corresponding with what was previously the mandatory retirement age, they will also be able to continue working. Hence, they will benefit from the policy reform, transferring the costs to the new young generation. Since we assumed labour demand to be fixed, these people work the same amount during their life, but this working time is shared more equally, having unemployment spells when they are young and continuing to work when they are old. These people thus neither win nor lose as a consequence of the policy reform.¹⁴

The distribution of benefits of the policy reform as a function of the age at the time of the reform can thus be depicted as in Figure 6.1, where we assume that the mandatory retirement age was at 60 years.

Phasing out the right to early retirement

Next, consider the case in which the government has set up early retirement schemes to avoid job competition. Workers can voluntarily retire at the age of 50, in which case they will benefit from an early pension until they reach

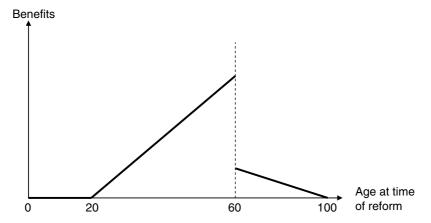


Figure 6.1 The generational impact of cancelling mandatory retirement

the normal pensionable age. The measure is financed through taxes on labour income. Suppose that, because of concern for, for example the viability of our pension system, the government wants to cancel this option. Workers would not be entitled to benefit from a pension until they reach the age of 60. Which generations will benefit or lose from this policy change? As in the previous example, we abstract from efficiency gains generated by the cancellation of early retirement schemes. We focus exclusively on the distributional effects, and more specifically from an intergenerational perspective. This amounts again to the assumption that labour demand is fixed: jobs are scarce and the policy reform does not increase the number of jobs to be filled.

First, let us assume that the workers who quitted the labour market for early retirement at the time of the policy reform are not obliged to go back to search for work, but can keep benefiting from their early retirement scheme. People above the age of 50 thus do not see their situation change as a result of this reform. They are neither affected by increased job competition, nor do they benefit from the decrease in taxes that were necessary to finance early retirement. Similarly, the people below the age of 20 who have not yet entered the labour market neither lose nor win. During their lifetime, the lower taxes on labour income will exactly outweigh the losses from increased job competition and longer working life. ¹⁶

What happens however to the generations that are between the age of 20 and 50 at the time the reform comes into effect? Those workers who were just about to reach the age of 50 at the time of the reform cannot get benefit from early retirement anymore. They have contributed up to that moment to finance the early retirement benefits of the older generations.

Still, once they reach that age themselves, they do not have this possibility anymore. They are obliged to remain on the labour market, while they might prefer to retire early. Therefore, they are clearly the transition losers. The younger generations lose less, because they have been contributing for a shorter time to the financing of the early retirement scheme. They thus profit more from the decrease in taxes on labour income than the generation that is just about to reach the age of 50. Figure 6.2 shows how we can represent the situation.

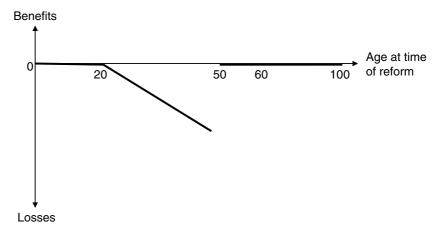


Figure 6.2 The generational impact of phasing out the right to early retirement

As in the previous case, the losses identified above are transition losses. The losers contributed through taxes to the early retirement of the old. Hence, they made the investment without getting a chance to benefit from the return on such an investment. In contrast with the previous case, there are two differences however. First, the active generation experiences loses rather than gains. Second, contrary to what happens in the mandatory retirement cancellation case, 60-plussers (as well as those who already opted for early retirement) remain unaffected by the change in rule.

Cancelling mandatory military service¹⁷

Let us now turn to our third and last intergenerational illustration. There are two common ways in which military service can be provided for. First, there is the possibility of a mandatory military service for young adults (limited in some cases to young adult males). In this case, the service is paid by each (male) citizen in kind. The second option consists in setting up a professional army, increasing taxes to finance such a professional body of

persons. The service is then paid in cash. What are the distributional consequences between generations resulting from a shift from a mandatory military service to a professional army?¹⁸

First, let us consider the case of those who already did their mandatory military service. They thus paid in kind. However, they will also be affected by the increase in taxes due to the shift towards a professional army. The amount they lose depends on their age at the time of reform. Very old people will die soon. Hence, they will only have to pay the additional taxes during a short period of time. At the other end, those who just made their mandatory military service in the year before the reform entered into force will have to pay the additional taxes during all their life. They will therefore lose the most from this policy reform. Again, such losses are transition losses because these people have to pay the investment twice (once in kind, and once more in cash).

What happens to those young people who had not yet reached the age of military service when the policy reform took place? Instead of contributing in kind, they will have to pay for the army in cash. The policy change thus only affects the way they pay the army, not the amount they pay. They are neither winner nor losers of this reform.¹⁹

The distribution of the losses as a function of age at the time of the policy reform is shown in Figure 6.3. Notice that in this simple model, we do not consider the impact of compulsory military service in terms of access to the job market.²⁰ The last draftees are especially disadvantaged in this respect as they are directly competing for jobs with the first generations of non-draftees.

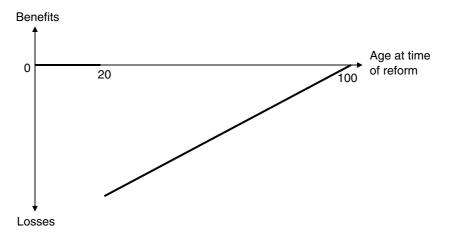


Figure 6.3 The generational impact of ending compulsory military service

What does the compensation test tell us in intergenerational cases?

Now that we have offered some illustration of the way in which rule change may have a clearly intergenerational impact, let us add a few considerations on how normative theories could deal with such findings. First, it is absolutely true that what matters once it comes to intergenerational justice is the overall intergenerational transfer taking place. Hence, if a given generation gains from one specific piece of reform, other intergenerational transfers might still be such that they more than compensate for such a gain. This should always be kept in mind. It does not mean however that a rule-specific way of dealing with intergenerational justice (as illustrated here) should be rejected. There are two reasons for that. Such partial analysis may be needed in order to get a clearer idea of the extent of macro transfers taking place between generations. And such partial analysis may be relevant as well in second-best contexts in which – for political or other reasons – there is room for intergenerational justice concerns only at such a specific (or 'micro') level.

Now, let us look at whether the compensation test applies. First, do our cases fall within the test's scope, that is, are we facing transition losses in the three examples above? The answer is positive, as in each of the three examples, some people have invested and their return on investment is being jeopardized. Actually, the investment dimension can be treated especially well in the perspective of a comparison between generations, comparing each of them in a longitudinal way, taking the whole life of their members into account. And at the same time, it is this very same investment dimension that potentially generates specific problems of justice insofar as rule change is concerned.

Second, were the three reforms likely (predictability component of the test)? The answer will of course depend on each domestic context. Nothing general can be said about the cancellation of age-based mandatory retirement in this respect. It has been cancelled in some European countries and hasn't in some others. About early retirement benefits, there has been an ongoing debate in Europe for a while (Kohli *et al.* 1991) and given the challenges we are facing with respect to the financing of our pension schemes, changes are a real option.

Regarding predictability, the most interesting of our three examples is the military service cancellation one. Let us imagine for a moment that in a country x, the shift to a professional army (hence, the cancellation of military service) had been decided for 20 years. It was thus predictable. Still, one factor should be borne in mind. Due to their early age, we cannot expect young future draftees to have the appropriate knowledge to act upon such predictability to mitigate the harm to them of military service cancellation. Between the moment they can reasonably be expected to have such

knowledge and the time they will be called, there is only a short lapse of time that would not allow for proper harm mitigation measures. In case of equivalent predictability, such a lapse of time would be much larger in the early retirement and mandatory retirement cases. Now, one could think that an extra feature should be stressed: the fact that whatever the mitigation measures they would have taken, the last draftees would still have been obliged to complete their military service. Yet, this is not specific to the military service case. Even with full predictability, those who were just above 60 at the time of rule change (the group equivalent to the last draftees) still had the obligation to retire, even if they could re-enter the labour market once the measure would enter into force. And all those who had not yet benefited from early retirement become excluded from such a right as soon as the measure comes into effect. In short, legal compulsion or loss of rights are present in all three cases. The important point here is that, in principle, the mandatory nature of the investment is not an obstacle to the adoption of harm mitigation measures.²¹ In case of mandatory contributions to pensions, those who know in advance that the right to a pension will be modified could still contribute what the law requires from them and contribute to a private pension benefit scheme. And if we look at mandatory retirement as an ex post (and in kind) type of investment, those just above 60 when the measure enters into force, knowing in advance that they will both have to retire and be able to return to the job market one or two years later, could make sure, for example, to keep their skills updated. What is specific to the military service case is that the lapse of time enabling the actors to act upon predictability and mitigate the effects of their relative disadvantage is too short. Hence, cancellation of mandatory military service offers us a clear case in which the predictability requirement is not met, not necessarily because of a lack of predictability as such, but rather because of the age at which the cognitive features needed to act upon such a predictability are present, as well as the length of time separating such an age and the entry into force of the measure.

As to the legitimacy component of the compensation test, none of these measures is cancelling a regime that could have been regarded as obviously unacceptable (as would have been the case, for example, with banning slavery). The two first cases have to do with the way in which we allocate access to employment across people's lifetime. By cancelling age-based mandatory retirement, we abandon this job-scarcity reduction mode and will probably replace it with other ones. Admittedly, it is correct to refer to age-based mandatory retirement as a 'discriminatory' measure. And age is certainly one of our characteristics that is most imposed on us, as is the colour of our skin, our sex or our mother tongue. It belongs to the sphere of circumstances rather than choice. Still, the fact that our age changes along our life makes it much more difficult to explain why exactly this form

of discrimination can be seen as morally problematic (Gosseries 2003, 2004). The same holds *mutatis mutandis* for whether cancelling the option of early retirement is a change for the better or for the worse in terms of justice. Both cases have to do with the way in which we collectively decide to organize the time structure of our lives. And the possibly problematic nature of such collective choices will have to do with whether such a mode of organization violates equality between people (once we consider the complete life of each of them) especially between different birth cohorts, given the need to preserve some degree of individual freedom to decide about the temporal pattern most adapted to the conception of the good life one considers most appropriate. But none of these two cases illustrate the abandonment of measures that are clearly unjust. Similarly, there is nothing obvious to the idea that shifting from a mandatory military service to a professional army is a change for the better in terms of justice.²² At least the way in which this could be shown certainly requires more than the standard knowledge we should expect from average moral agents. For example, conscription looks like a stronger restriction on basic freedoms than voluntary hiring. Still, the extent to which this could be nothing more than 'reluctant voluntariness' in many cases should not be underestimated (Fischer 1969, p. 239). Moreover, while compulsory contribution in kind (through military service) may seem to allow for less 'buying one's way out' than compulsory contribution in cash (when financing a professional army through taxation), we should not forget that, in practice, military service often affects only one fraction of potential draftees, often excluding, for example, women as well as specific categories of young men (Hansen and Weisbrod 1967, p. 397). Conscription may admittedly constitute an especially strong restriction on some of our most central basic liberties. Still, the extent to which deciding to enter the army as a professional can be seen as 'voluntary' is often doubtful. Hence, even at this level, there is room for extensive debate and certainly no obvious prima facie answer.

Hence, the test tells us that there is a strong case for compensating the losers in each of the three cases, especially in the military service one. Whether the predictability component is there will be a matter of context in the mandatory and early retirement cases. It will certainly not be satisfied in the military service example. As to the legitimacy component, none of the three changes discussed consist in ruling out practices that one should have considered already as obviously illegitimate.

Before proceeding to the conclusion of this chapter, let us mention one extra point.²³ There are other issues to which the same type of analysis could be applied. Is it the case for example with the passage from the absence of international regime regarding greenhouse gas emissions, to a Kyoto-type of legal regime setting up national caps on emissions? There

are definitely transition costs associated with such a shift from total freedom to a Kyoto regime. The idea of grandfathering for example can certainly be read as one attempt at addressing this problem, as we have indicated elsewhere (Gosseries 2005). However, such transition costs are more likely to be distributed in this case along an international axis, than along a markedly intergenerational one.

Conclusion

Analysing rule change from an intergenerational perspective is interesting in two respects. First, it forces us to be explicit about principles of justice applying to a specific case of disadvantage resulting from our circumstances: transition losses resulting from rule change. Second, it allows us to address some complex problems of justice between overlapping generations that are generally not addressed with the same care as others, such as whether we should preserve our oil reserves for future generations or whether we should accept transfering a large public debt to our descendants.

We began with the identification of a specific kind of loss, identified as transition loss, tightly connected with the idea of investment and its temporal dimension. We then proposed and illustrated a twofold test aimed at telling us whether and to what extent victims of transition losses should be compensated by society. This issue can arise both in a strictly monogenerational environment (for example an imaginary world with a single generation) and in an intergenerational environment. The two components of this test are the predictability and the legitimacy one. Albeit still relatively rudimentary, we believe that these two components translate two moral intuitions that should be present in addressing such issues. We mostly concentrated on whether and under which circumstances transition losers should get compensation. Further research should be done regarding who exactly should bear the burden of such compensation and more precisely whether it should simply burden transition winners.

We then moved on to the analysis of the generational impact of three measures, focusing strictly on the distribution of losses and gains across the different generations at stake. The simplified model used here aimed at being purely illustrative. Still, it allows us to see that rule changes such as those examined above can have a clearly generational impact once we consider those generations overlapping at the time of the reform. Contrary to what happens for the generations that do not exist and overlap at the time of the reform, some of these generations will certainly lose or gain more than others. Basing ourselves on such an analysis, we then illustrated the way in which the general twofold test can be applied to these specifically intergenerational cases. As our discussion shows, there is certainly room for legitimate generational claims for compensation – whatever the form it

takes – in situations such as the three discussed above. And this case is especially strong in the military cancellation example. Still, one should keep in mind that the assessment of such claims cannot be dissociated from a more general analysis of the extent to which one generation can be regarded as more disadvantaged than another. For at the end, intergenerational justice only makes sense if the whole set of intergenerational transfers is being taken into consideration. Hence, the fact that a generation would experience marked transition losses justifying compensation according to the twofold test could be offset by the fact that in other respects, this very same generation would be privileged compared to the other generations. This should not be overseen.

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Notes

- 1. See below for a definition.
- For a recent example from the Belgian debate on early retirement: 'Que fait-on de ceux qui sont actuellement en prépension? Il ne faut pas leur faire peur. C'est un droit acquis' (translates as 'What do we do with those currently benefiting from an early retirement regime? They should not be scared off. It is a vested right'). V. Rocour interviewing Federal MP B. Drèze on end of career issues (La Libre Belgique, 8 October 2004, p. 7). Such a notion of vested rights ('droits acquis') would need further theorization. At this stage, beyond the standard notion of vested rights in administrative law, there are at least two additional intuitions at play in the retirement benefits context. The first idea is that these rights have been 'bought' (the 'acquired' rather than the 'secured' meaning of 'acquis') by the beneficiaries, since either they funded them (funded pension schemes) or they financed the previous generations's pensions (pay-as-you-go pension schemes). There is a second intuition, captured for example in the 1993 Canadian Supreme Court decision Dayco (Canada) Ltd v. TCA-Canada (http://www.canlii.org/ca/cas/scc/1993/ 1993scc53.html), that is specific to contexts in which retirement benefits result (fully or in part) from collective bargaining exercises. In such cases, a right resulting from a collective agreement will be 'vested' if, once a person retires – leaving by this very fact the collective bargaining process – her right remains unaffected by the entry into force of collective agreements subsequent to the one in force when the person retired (see as well Vallée 1995, notes 53 and 65). This corresponds to a general principle of contract law (non-invocability against third parties), which has connections with the democratic idea that all those affected by political decisions should have the right to vote, entailing that decisions to which people had no chance to participate (directly or through representatives) should not bind them. This could entail – by analogy to the collective bargaining case – that if we were to add an upper age limit of, for example, 60 to the existing minimum age limits on voting rights, those above 60 could only

- be subject to legislation in force until the first elections to which they were not allowed to vote anymore. The 60-plussers would be exempt in this case from the scope of any subsequent reforms. See as well: Sack (1929, p. 136, note 1).
- 3. Similarly, when we deal with the prohibition on unilateralism in some cases in free trade zones, there is an extent to which extra-territorial impacts of domestic rules are unavoidable. In this case, international trade exchanges are the equivalent of the temporal dimension of investment here.
- 4. On the recognition of such a duty to mitigate damages in civil law systems: Kruithof (1989). Notice that a distinction is generally made between the duty to take reasonable preventive measures to mitigate future damage and the duty to mitigate damage once it has actually started to occur.
- An anonymous referee suggested that the 'unpredictability condition may be justified via a different route, namely the morally desirable tendency or even obligation of states to guarantee to its citizens some safety of planning'. The idea would entail that the unpredictability requirement refers not to an obligation of citizens towards other ones, but to an obligation of the State towards its citizens. The unpredictability of changes should lead to compensate transition losses, not because it rendered the losing citizens unable to act upon their obligation to mitigate harm, but because the State violated its obligation to stick to predictable changes as much as possible. Actually, the two accounts are not mutually exclusive. Yet, we believe that the 'obligation to mitigate harm' account is more general than the one in terms of 'State obligation of rule stability'. For in some cases, it is reasonable to claim that an abrupt reform is preferable to an unjust status quo. In such cases, the State did the right thing. If we were then to rely only on the State obligation account, there should be no room for compensation since, all-thing-considered, it would have done the right thing. If we believe that even in such cases, there could still be room for compensation among citizens (for example transfers from transition winners to transition losers) a reference to the 'obligation to mitigate' account should then be preferred.
- One difficulty in this case is to set up a compensation scheme that does not in turn generate injustices. For example, if those who do not have a car tend on average to be poorer than those who do.
- 7. Taxing less affected men to compensate more affected men could perhaps be one however.
- There are at least two extra arguments against compensation, both focusing on problems of incentives. Argument 1: if we hold the view that justice-oriented reforms should be encouraged, and if we believe that an obligation for the State to compensate transition losers constitutes a strong disincentive to such changes, then compensation could be denied in cases of justice-oriented reforms. For an analogous argument going rather in the opposite direction, based on the assumption that new rules tend not to go in the right direction and that rule change should therefore be discouraged: Epstein (2003). Argument 2: 'aggressive' rule change, that is, imposing a new law without any prior announcement and/or room for compensating losers, generates strong incentives for, for example, manufacturers to constantly look for potentially less harmful products in anticipation of possible rule change (For a very interesting discussion on this and other incentive problems: Levmore 1999). A related idea is that the advanced announcement of a reform aimed at cancelling undue privileges coupled with a promise to compensate transition losers generates an incentive for those heavily relying on such undue privilege to rely on it even more between the time of announcement and the entry into force of the reform. Doing so would increase the amounts they could be compensated for. This is a classic when establishing, for example, tradable permits schemes on a grandfathering basis. This second extra reason not to grant such compensation and/or not to announce the reform in advance thus refers to problems either of lack of incentives to anticipate, or of perverse incentives - not on the State's side this time, but on the side of those to whom the new law will apply.
- A difficult question is whether a decentralized market-driven change in standard (through an accumulation of consumption and production decisions) should be treated differently from a legally-driven change in standard.

- 10. Notice that we are talking here about taxation with the specific purpose of compensating for transition losses. Rejecting such particular taxation in some cases does not preclude the possibility in the very same cases of taxing the groups of people mentioned above with the view of compensating the victims of overall brute luck disadvantage.
- 11. Of course, the co-ordination dimension cannot be totally disconnected from the justice one. If shifting to a single language allows for efficiency gains in terms of communication costs, such efficiency gains may in turn benefit the least well off as well. Moreover, there may be more straightforward arguments of justice in favour of a shift towards a single language (for example English), such as the one discussed in Van Parijs (2004, p. 377) (negative correlation between cultural diversity and the strength of labour organizations). Thanks to Ph. Van Parijs for pointing out to me this twofold point.
- 12. To return briefly to our comparison between rule change and natural disasters, the predictability component could certainly be used in defining a fair way of dealing with such natural disasters. In both rule change and natural disaster cases, the extent of predictability of the event should give us an idea of the amount of preventive mitigation measures that could be expected from the potential victim. In contrast, the legitimacy component renders the context of rule change different from the one of natural disasters. Consider the following position: differences in natural endowments (be they of internal or external resources) are never unfair as such. It is only people's (in)action with regard to such differences in people's natural endowments that can be regarded as unfair (Rawls). For those holding such a view, the legitimacy requirement will not be relevant in the case of natural disasters in the same way as it is in the case of rule change.
- 13. Another problem that leads to a similar pattern as the one that will be illustrated here is the cancellation of so-called 'clauses orphelins' in labour law. See Volovitch (2000).
- 14. It might thus seem that there are no losers of this policy reform (since all present generations seem to win), contradicting thereby our assumption that the policy reform has no efficiency gains. However, the young always transfer the cost to the next generation, ad infinitum. It is thus the last generation (the 'end-of-the-world generation') that pays the final cost. This cost can however be transferred to earlier generations if the current generations agree to let a 'bequest' to the following generations and so forth. Notice that the losses affecting this last generation do not constitute transition losses.
- 15. Governments in fact often justify the cancellation of generous early retirement schemes by economic efficiency arguments. This however only complicates our analysis, without adding new insights on the intergenerational distribution of benefits and losses. That is why we prefer to keep the analysis as simple as possible.
- 16. This is mainly due to our assumptions of fixed labour demand. If the policy reform increased job creation, then these generations might win due to the efficiency gain, while the old generations are still not affected by the efficiency gains (except, of course, if pensions are increased, for example if they are indexed to total economic output).
- 17. On the 'sans nous' movement in France, that is, the last cohort of those draftees who had benefited from deferment and were eventually exempted from 1 August 2001 onwards: Chambon (2000), Isnard (2001). On the German debate: Marion (2004).
- 18. Once more, we assume that there are no efficiency gains or costs attached to this policy reform. A shift from mandatory military service to a professional army is in fact difficult to assess in economic terms. One would have to attribute a value to the public good of security, and to determine in which way this is best secured. Furthermore, one has to quantify the opportunity cost of mandatory military service, that is, one has to estimate what the young adults would have earned if they had not done the military service. For articles assessing the relative costs of relying on volunteers versus conscription: Hansen and Weisbrod (1967), Fischer (1969), Ross (1994).
- 19. It thus looks as if there were no winners of the policy reform, such that this reform might look undesirable. However, it is again the last generations (the 'end-of-the-world generations') that benefit from the reform. They do have to pay the taxes only up to the end of the world and not up to the age of 100, while before the reform, they had to pay immediately in kind at the age of 20.

- For a discussion on the effect on unemployment of ending compulsory military service in France: Baudet (2000).
- This is a reply to the anonymous referee's claim that 'in cases of forced investment (like mandatory contributions to pension funds or conscription) predictability is irrelevant'.
- Which mode of payment should prevail is of course an important matter. Let us just note that the technological progress in military equipment might call for a smaller but more highly qualified army. Moreover, the tastes of each generation might differ: while the strong patriotic feelings of older generations may have let them prefer an in-kind payment, younger generations might live their patriotism differently, preferring the incash payment. The latter hypothesis is supported by some Swiss evidence. In their recent study, Haltiner and Wenger (2004, pp. 162-164) show that while across the whole Swiss population, 43 per cent would prefer a professional army to a conscription system, this proportion rises up to 61 per cent for the age-group 19-29. Leaving strict efficiency concerns aside, there are two angles under which the issue can be looked at from the perspective of political philosophy. First, the question of the limits of political obligation is at stake in both cases. See for example Klosko et al. (2003). Second, there are concerns as to the distributive impact of choosing a voluntary rather than a draft-based army, a matter that has been mostly looked at by economists. See for example Hansen and Weisbrod (1967). The former angle has to do with justifiable state authority on citizens, the latter with justice between citizens, both being interconnected through for example a rejection of 'free-riding' justifying compulsoriness. See Klosko *et al.* (2003).
- 23. This point is in reply to the request of a referee.

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7 The Economic Sustainability Indicator Peer Ederer, Philipp Schuller, Stephan Willms

Political motivation

Despite general prosperity and peace, anxiety about the future prevails in Europe. Unlike generations before them, today's citizens no longer believe that tomorrow will be better than today. There are many external and internal reasons for this but one of them is the vanishing trust in public institutions and the belief that these will not be able to cope with, in particular, an unfavourable demography that is predicted for nearly all of Europe.

And it is true, the welfare institutions in the broadest sense, that is, public pension systems, disability insurance, alimentation of the poor health care but also public education, are products of the nineteenth and twentieth centuries. They have not been fundamentally changed since their inception and fit today's social reality about as well as a horseshoe on a tiger's paw. The most important risks that need social insurance today are no longer poor old age, ill health or accident; they are different: outdated skills, relocation requirements, lack of competitiveness. Nevertheless, rather than adapt, the welfare state has attempted to cover today's risks with the old remedies. Under-skilled or uncompetitive labour has been removed from the labour force and relegated into any one of the social security systems. The result has been the opposite of what most proponents of strong welfare institutions would have hoped for: rather than strengthen human capital in its competition with financial capital, they have weakened it.

This has been very costly. Thus, unless discontinuous assumptions are applied, the fiscal patterns in most advanced economies are not sustainable. The political process – parliamentary budgeting, elections and re-elections, use of fiscal policy as a general policy instrument – is systematically blind to long-range developments that impact the fiscal and indeed the economic health of an economy. Three examples:

- 1. Demographic change will be putting the social security systems in most advanced economies under a strain that will lead to their destruction and to considerable disturbance of public and private finances if they remain as they are today. This applies to old age pensions, health care and other state benefits that are financed in a pay-as-you-go fashion.
- 2. Rather than react, politicians find themselves constrained by short-term political demands. For example, even faithful adherence to the

EU's Stability and Growth Pact would fall well short of preparing member states fort fiscal challenges of demographic change. Nevertheless, and during a period not of recession but of growth, a number of signatories have repeatedly violated the Pact. Germany, having once provided the original inspiration for the Pact, appeared likely to do so again for the fifth time running in 2006 and to continue to do so for the foreseeable future.

3. Where austerity measures are applied, they often extend to public investment rather than public consumption, aggravating the difficulties in the future which would otherwise have benefited from returns on current investments. The most notable under-investment in many economies is in human capital, as legacy systems are down-sized without regard to the shift of demand for education from changed demographic groups (Dieter Lenzen, VBW Prognos 2005). The challenge is on: to fill the buzz word of 'lifelong learning' with a meaning suitable to the needs of the twenty-first century (Ederer *et al.* 2004a, pp. 138–148).

The short-sightedness of politics today is not the result of poor political leadership, at least not if we accept political leadership of the kind that is otherwise rewarded by existing structures. It is also not the case that the necessary reforms are unknown or even that nothing is being done, though not at the necessary speed. Political short-termism with respect to demographic change is not accidental but structural in three ways:

- Perception. Most citizens are relatively prosperous and do not see demography impacting their individual situation. They believe they have more to lose than to gain from the reform of social security systems, at least in the short term. In planning their individual future, most people implicitly assume stability of the public (fiscal, monetary, social security) environment.
- 2. Strategy. Reform is usually seen in 'big bang' imagery and evolutionary changes of the existing system do not satisfy the need for catharsis. But they are the only realistic solution in democratic systems governed by checks and balances. What is missing is a clear road-map of how piecemeal change will lead to a different future and the time frame that is required.
- 3. Ideology. In view of the complexity of the questions even well informed people require the help of ideological reductions. Changes in the social security institutions are typically framed in terms of 'liberty and individual responsibility' on the one hand and 'solidarity and justice' on the other hand. This sort of debate typically overrides pragmatic concerns about efficiency and sustainability.

These three structural reasons against long-termism point to a problem of communication. For something fundamental to happen in a democracy not a few but a majority of the voters must recognize the need for it to happen. Expert knowledge must inform not just the policy process but also the political process. The Economic Sustainability Indicator attempts to do just that: connect expert knowledge to political communication.

The simple information whether a political decision contributes or detracts from the long-term prosperity of society would allow much more effective and relevant communication on social, tax and budgetary policy or constitutional politics. The Indicator makes long-term interests transparent for the citizens; it postulates the long-term goal of economic sustainability and shows the impact of any given policy on this goal; and finally it can differentiate between large and small steps towards economic sustainability.

The mechanics of the Economic Sustainability Indicator

The methodology of the Economic Sustainability Indicator measures how much net capital is being handed down from the current generations to future generations as a percentage of how much net capital these current generations have inherited. If the ratio is above 100 per cent, then the current generations have increased the stock of capital for future generations and thus increased sustainability, and if it is below 100 per cent, then the reverse has occurred. For that purpose the Indicator defines and measures five sets of capital: real capital, human capital, natural capital, structural capital and intergenerational debt:

- Real capital comprises the cost of the complete set of production machinery and commercially used real estate buildings that are being employed in a society.
- 2. Human capital is defined as the number of all people who are employed in the workforce of a society multiplied with the cost of their formal and informal education.
- 3. Natural capital comprises all natural resources that are being used for the production process.
- 4. Structural capital arises from all the formal and informal rules and institutions which a society has created for itself in order to organize itself.
- 5. Intergenerational debt comprises all future promises of payments that current generations expect from future generations, netted with the implicit cash flow embedded in private capital inheritance. In other words, net debt or surplus that the future generations have towards the current generation.

A simplified version of the Sustainability Indicator focusing only on real and human capital as well as state-generated intergenerational cash flows has already been introduced (Ederer *et al.* 2004b, pp. 179–192). The more comprehensive version presented here in outline form is the subject of a current interdisciplinary research project involving a multi-national European team of scholars and institutions.

The abstract function of the Economic Sustainability Indicator is:

Net Capital inherited:

 $+\Sigma$ (Real C + Human C + Natural C + Structural C - Debt C) per year alive

Net Capital handed down:

 $-\Sigma$ (Real C + Human C + Natural C + Structural C - Debt C) per year alive

Net Capital created or destroyed per generation:

Net Capital handed down | Net capital inherited = Economic Sustainability
Index in %

Measuring the five types of capital

Long-term real capital measurement

All machinery and buildings, private and public, are valued at cost less depreciation. Aggregated nationwide figures for these types of real capital are available through the standard accounting by governmental statistical offices. It is assumed that all available machinery is actually utilized in the production process and thus contributes to the creation of economic welfare. These investment goods experience depreciation, as they wear out or lose their usefulness over time. It is assumed that the officially applied depreciation rates reflect the actual economic value of the assets on average. Thus without replacement investments, the real capital stock would decline towards zero over the years allowing for depreciation.

However, economies are adding to this dwindling capital stock both replacement and new investments, such that the real capital stock has historically been growing. These investments can be financed either through borrowing (= debt), or through savings (= equity). Since over the medium to long-term, the amount of new debt available in an economy is tied to the amount of equity, and since total new equity is tied to the total aggregate of savings, it can be said that long-term investment is determined by the long-term savings rate of the domestic population. Thus future aggregate investments are determined by future aggregate savings, provided there are no changes in the foreign direct investment levels, no changes in

the debt to equity ratios, and no changes in the savings patterns of the population. In this way, with the help of the economic theory of life cycle savings, a forecast can be undertaken whether over the long run real capital investments will be higher, equal to or lower than depreciation. If investment levels will be lower than the depreciation, then this means that the real capital stock will be depleted over time, and vice versa.

Changes in foreign savings in/outflow and debt/equity ratios may represent one way in which current generations impact the welfare of the future generations and should therefore also be considered as one of the variables to be measured, for instance if the current generation accepts foreign capital inflows today, and expects future generations to pay them back either in the form of loan repayment or dividends.

Thus, the long-term stock of real capital is defined as:

Cost of capital installed – depreciation + rate of expected reinvestment

Whereas the rate of expected reinvestment is defined as:

Domestic savings ratio \times debtlequity ratio + foreign savings in outflow

Long-term human capital measurement

The research field in Human Capital has generated by now around 40 to 50 different methods of human capital measurement (Scholz *et al.* 2004). Broadly speaking these can be separated into the following categories: market value measurements, costing based measurements, indicator based measurements, value added measurements, and investment return based measurements. The Human Capital measurement methodology utilized for the Economic Sustainability Indicator follows closely the logic of the real capital measurement. It measures the cost of all human capital created, deducts from it its various forms of depreciation, and adds to its expected reinvestments under status quo conditions.

Thus the human capital stock is defined as:

Cost of human capital creation – depreciation + rate of expected human capital reinvestment

The above equation is conducted with the methodology developed by the think tank Deutschland Denken! eV (Ederer *et al.* 2002). It assumes that there exist four types of human capital that are economically relevant:

- 1. the cost of formal education received during schooling years;
- 2. the cost of formal education received during tertiary, professional or vocational training at universities, professional and vocational schools;

- 3. the cost of informal education received from parents (measured implicitly by their opportunity cost of time); and
- 4. the cost of informal education generated during adulthood (again measured implicitly by the opportunity cost of time).

The human capital stock thus aggregated needs to be depreciated to accurately reflect its economic earning power. There are three types of depreciation that need to be accounted for:

- 1. education received, but over time forgotten;
- education received, but over time rendered useless (for example, a secretary's education for stenographic writing);
- 3. education received, but not utilized in the work place (a lawyer who works as a taxi driver).

Finally, the rates of reinvestment must be forecasted. In case of human capital this is determined by four factors:

- 1. the birth rate, which determines how many people can be invested into;
- the education rate, which determines how much education each person receives:
- 3. the immigration rate, which determines the net in/outflow of human capital; and
- 4. the cost of repairs invested in maintaining human capital healthy and productive, in other words spending for health aimed at increasing the amount of human capital available to the labour market.

Long-term structural capital measurement

Besides real and human capital, over time societies develop institutions that govern the interaction between real and human capital. Most explicitly these institutions are in the form of laws, rules and regulations, which are being enforced by direct or indirect government actions. Implicitly, these institutions also manifest themselves as informal rules: cultural habits and social norms. All taken together, they form the institutional environment in which economic activity takes place. The more net capital is invested in these institutions, the higher the economic output can be expected to be. The field of 'New Institutional Economics' is beginning to be able to quantify the contribution of the institutional environment to economic output.

One way to measure long-term structural capital would be to apply the same logic as with real and human capital. Thus one would accumulate the

costs of all public investments in building up institutions, which is mostly financed through taxes, add all the privately motivated institution building, and attempt to quantify the costs of cultural investments, both formal and informal (the latter to be measured by opportunity costs of time). From this total one would then deduct the depreciation of structural capital, measured as the rate at which institutions become inadequate over time, the degree to which they contradict and therefore neutralize each other, and the degree to which they are being ignored. However, there is to date little consensus on how to measure these aspects of structural capital.

Therefore, pending further progress in the research of New Institutional Economics, the Economic Sustainability Indicator will instead measure structural capital in an indirect fashion, that is, as the risk factor that is applied to expected returns on investment achieved on human and real capital. The higher this risk factor, the lower is the net structural capital that is available in that society. From this equation it can be traced backwards how much structural capital is implicitly available.

This risk factor, while qualitative, will be calibrated so that it does not subsume the differentiation of the other capitals. In practical application, the values for structural capital turn out to be far lower than the real and human capital items of the equation. A material differentiation of intergenerational transfer of capital will therefore hardly be the result of changes in the structural capital account.

Long-term natural capital measurement

A society can improve its current well being by selling or using up nonrenewable natural resources that are available in its territory. An obvious example is oil-producing nations, where every barrel of oil sold today is one barrel less available to future generations. In this way, selling these barrels of oil implies running down a stock of capital, which cannot be replenished or only at enormous costs. Trying to evaluate this stock of natural capital requires putting a price on it reflecting what it would be worth to future generations. This valuation methodology is fraught with numerous methodological issues, primarily around how to estimate future value. If Saudi Arabia today has twice as much oil available as it will have tomorrow, then this decrease would not matter to tomorrow's generations, if the price for that oil would double in the meantime. The value of the remaining stock would then stay the same as it is today. Theoretically that same calculation could be continued into the future forever, until the last drop of future oil has the same value as all the oil available today. In reality, at some point in the future a substitute product would appear, thus capping the value of the dwindling stock of oil, and

thus ultimately depriving future Saudi generations of that source of income.

Applying the same concept to European countries, we must acknowledge that most industrial European countries barely utilize, much less deplete domestic non-renewable resources, though some may have been depleted by previous generations. In Germany, it is practically only coal that is being depleted as a natural resource, and even that only at negative returns. With so little depletion or even economic utilization of domestic non-renewables occurring, natural capital will have only a marginal impact on economic sustainability.

It is necessary to point out that in this instance, that it is the purely the economic sustainability of natural resource consumption that is being captured. Therefore, only to the degree that the natural resource consumption has a discernable and measurable economic impact, will it be incorporated in the calculations. It may very well be that depletion of such resources has cultural or moral implications that represent other types of losses to society, potentially even to a catastrophic extent, however, the measurement of these types of losses remain outside the scope of the Economic Sustainability Indicator.

For instance, in recent years, questions have arisen in terms of whether the current level of CO_2 emissions is depleting the atmospheric resource of climate stability, on which in turn much economic activity depends. To the extent that this economic impact can be measured and calculated, such a resource depletion would have to be captured by the Economic Sustainability Indicator. In such a case, the depletion of the natural capital of 'climate stability' could be put in comparison to a potential build-up or depletion of other types of capital, human capital for instance, and thus the relative importance be established. The same applies as well to other resources such as biodiversity or water supply. The depletion of these natural resources is only relevant to the Economic Sustainability Indicator if they have an economic impact.

Likewise, the impact of environmental conditions on human health is not being captured with the measurement of natural capitals. In so far as such deterioration or improvements are taking place, these are measured in terms of availability of human capital to the employment markets, and the cost it requires to maintain that human capital. Thus this factor is captured under the heading of human capital.

Intergenerational debt measurement

In addition to these above four types of capital which are handed down from one generation to the next, debts that are being incurred for future generations must also be measured. Conceivably the current generation might be handing down an increased capital stock, but only with the attached promise to be paid certain amounts of money in the future, implying that future generations also inherit debts to the current generations. In a typical advanced economy, this type of debt would normally come in three varieties: governmentally guaranteed or quasi-guaranteed retirement benefits, governmentally guaranteed or quasi-guaranteed health benefits beyond working life, or privately guaranteed retirement and health benefits (for example from life insurances or through private company retirement schemes, and so on).

The governmental guaranteed or quasi-guaranteed pension and health care benefits can be measured with the generational accounting methodology developed by Auerbach and Kotlikoff in the USA (Auerbach *et al.* 1991, 1992, 1994; Auerbach and Kotlikoff 1987), and Raffelhüschen in Germany and Europe (Raffelhüschen 1998, 1999). The result of these generational accounts are so-called implicit generational debts (or surpluses) if current intergenerational transfer practices are maintained into the future. For most of the advanced economies, these intergenerational transfers turn out to be debt caused by a combination of unfunded overgenerous public benefit schemes on the one side and declining populations on the other side.

A similar accounting will also be undertaken for the privately guaranteed future benefits, if they are not already netted with real capital invested. This is particularly so for unfunded pension schemes. It can currently be observed in the United States in cases such as United Airlines, General Motors or Ford, that company guaranteed future payment promises are also a liability on future generations, even if it is not primarily conducted through the government. In the case of United Airlines, its pension scheme had to be taken over by the quasi-governmental 'Pension Benefit Guaranty Corporation', when the company went into bankruptcy. PBGC estimates that around \$450 billion worth of the 80 000 different company pension schemes it insures are unfunded and therefore ultimately a risk to the American tax payer.¹

Even if these private pension guarantees do not fall on the American tax payer, they are still a debt to the future generations. At the car companies GM and Ford, retirement benefits already cost the equivalent of \$1500 per car, which is due to rise to \$5000 over time per car if current conditions and agreements prevail. That means that a today's generation car purchaser has to pay \$1500 per car in order to pay the debt that the car company has to previous generations of workers. If these \$1500s would not have to be paid to the previous workers, then they would instead be available to either the current purchaser in the form of a lower purchase price, or the current workers in the form of higher wages, or the current stock owners in terms

of higher investment returns. Thus either one of these ways, the private car company pension benefit promise, is a debt that is being placed on a future generation.

The same logic applies also to private life insurance companies who collect savings today in return for promises tomorrow. These savings today are being invested in real capital and therefore increase the capital stock being handed down to future generations (and are accounted for in the Indicator's real capital account). However, at some point in the future, these savers will demand their money back — and this demand needs to be accounted for as future debt. Finally the same logic also applies to health insurers, if they do not apply age-adjusted premiums, but instead subsidize older members' payouts from younger members' premiums. If the latter is the case, then there would be an implicit promise towards today's younger members to subsidize them in the same way once they get older, and thus another implicit intergenerational debt transfer will be concluded.

There are intergenerational capital transfers in the other direction that must be similarly taken into account: inheritance or other gifts of private capital for the consumption of future generations, the most typical of which are private homes that represent an implicit cash flow stream for the inheriting generation. These private inheritances are not captured by the Indicator's real capital account which only measures productive assets.

It is important to point out that it is only intergenerational debt transfers which are relevant. Intragenerational debt payments are from an economic point of view merely one form of an exchange of proceeds from the capital stock. Intergenerational transfers however may or may not be tied to an intergenerational transfer of corresponding capital stock, and can therefore either diminish or increase the resultant value of an existing capital stock to any given generation.

Thus the sum of intergenerational debt is:

Explicit Government Debt + Implicit Government Debt + Life Insurance assets + Intergenerational Health Insurance promises + Intergenerational unfunded private company pension benefits — intergenerational private wealth inheritances and gifts

How the Economic Sustainability Indicator measures economic sustainability

The basic assumption of the methodology is that total economic output is a linear function of the input of the four types of capital specified, real, human, structural and natural capital. The more of these types of capital are being employed, the more economic output can and will be created. So, if the future availability of each type of capital can be forecast, then this will also be an indicator of future economic output. If there will be less capital available in the future than today, then economic output will be reduced and not sustained at today's levels. If there will be more capital available in the future, then economic output will be higher, growing beyond today's levels. In this way the measurement and forecast of each type of capital can provide an indication about the long-term economic sustainability of a society. Thus, if the inherited capital surpasses the debts that future generations are to pay back, then positive value has been created for the future generations, and vice versa.

The economic background of this methodology rests on the logic of the Cobb-Douglas production function developed in 1928, which in itself was based on work by Alfred Marshall in 1881, Johann Heinrich von Thünen in 1863 and David Ricardo in 1817. Since then the Cobb-Douglas production functions have been continuously refined and proven to explain economic output beyond any reasonable doubt: any economic output necessitates a set of capital inputs with which to create the production. These inputs have typically been defined as financial capital, labour input and land (Humphrey 1997).

The key insight from the definition of the production function in the early twentieth century had been that it can explain how the marginal units of these principal inputs determine both volume and price of total economic output. On the other hand, one of the main frustrations with these production functions since the early twentieth century has been that they fail to adequately explain economic growth. If the last marginal input explains the total output created, then economic growth could only be created with additional inputs. However, empirically, economic growth has nearly always been faster than the growth of inputs. The higher growth is due to the productivity growth, which is not adequately captured by the production functions typically in use.

This weakness of the production function is also a weakness of the Economic Sustainability Indicator. However, with the advances in structural capital and human capital measurement, the gap between theoretically explainable (and therefore foreseeable) growth and observed economic growth is closing.

The issue of per capita economic sustainability

The Economic Sustainability Indicator measures whether an economy is sustainable for given periods into the future. For any typical European country, the Indicator could measure what levels of productivity growth, saving rates, foreign investments rates, population growths, or structural capital improvements would be necessary to balance the impact of the typically declining reproduction rates of the population. If current conditions

concerning these factors would not change in the future, then the total capital stock in the economy would be declining, and with it the possible economic output. If the current rate of decline would continue in most European societies, then this would mean that their economic output will have disappeared in about 12 generations (that is, sometime around the twenty-fourth century). However, by this time, the indigenous population of countries such as Germany, Italy, Spain, Scandinavia, and so on would also have disappeared.

Economic sustainability is therefore most appropriately measured on a per capita basis. As long as every living individual has the same or an increasing amount of capital available, then his personal economic output (and commensurate possible consumption) could stay the same or even grow. In that case there would be personal economic sustainability. That individual may experience the gradual disappearance of the society around him as a cultural loss, but at least he or she would not be economically impaired by it.

However, this scenario is unlikely. Human beings are less productive in old age than when younger, and furthermore, even while the population might be shrinking overall, people live longer. A shrinking society combined with ever longer lives, mean that the ratio of working to non-working population continues to shrink as well. Therefore, not only is the total amount of capital shrinking, but also the per capita available pool of capital. Personal welfare will be impaired. It is therefore possible to arrive at different conclusions concerning economic sustainability for the economy as a whole and personal economic sustainability. The primary concern of the Economic Sustainability Indicator is to measure overall sustainability; however it can also be used to measure individual economic sustainability.

Particularities for calculating the Economic Sustainability Indicator

Typically, economic forecasts of cash flows into the future require the application of a discount rate to those future cash flows. The application of the discount rate represents the time value of money, and indicates that even adjusted for inflation; future cash flows are less valuable tomorrow than they are today.

However, the calculations for the Economic Sustainability Indicator do not rely on discounting future cash-flows. There are several reasons for this, economic, legal-political, mathematical and conceptual.

Economic considerations

In the context of the ecological sustainability debate as well as economics more generally, the question of a suitable 'social' discount rate has been raised. Hampicke supplies a good systematic overview on this subject (Hampicke 1991, pp. 127–150). Also, students of economic growth such as Solow, Ramsey, Harrod, E. F. Schumacher, Arrow or Sen, all make clear that there are considerable doubts around the methodology of discounting (Schwarz 2003).

In principle there is a production-oriented and consumption-oriented explanation for why discounting is necessary. The production-oriented theory maintains the concept of a 'rich future'. According to this theory there is a constant advance of progress and with it an accompanying growth of consumption potential. If in absolute terms, a payment in the future is regarded as equally valuable to today, then in relative terms it will be regarded less worthy due to the generally higher prosperity in the future. In order to account for this relative equivalence, a payment occurring in the future should be discounted. For instance, in absolute, inflation-adjusted terms, an automobile cost about the same in the year 1910 as today. If one adds the inferior quality of the car of the past, a car was less valuable than it is today. Nevertheless the owner of this car in 1910 was considerably richer than the typical car owner today, because car ownership today is much more wide-spread. A given amount of inflation-adjusted, absolute wealth today would have been more valuable yesterday, and will be less valuable tomorrow – that is, the concept of the rich future – and hence the need to discount future wealth. The consumption-oriented theory of discounting is based on the individual and collectively observed preference for consumption today versus risks of tomorrow. This social time preference creates impatience towards the future. The most frequently observed expression of this impatience is the fact that people generally charge interest for money lent, because it forces them to postpone their own consumption into the future. Since the future has not happened yet, this incurs risks to the possibility of this consumption, for which the lender wants to be reimbursed. Likewise, the borrower appears to be willing for the same reason to consume today instead of tomorrow and pay a higher price for that. Thus a market rate for lending money develops.²

However at closer inspection, neither the production nor the consumption oriented explanation of 'time value' holds up. Even if some scholars find that the production-oriented theory of discounting provides the 'deepest economic justification, quasi its intuitive argument', the scientific literature has not yet reached consensus on the actual nature of 'time value', leaving open a vast field for further research.

Most of the open questions concerning the time value concept revolve around the fact that people apply different discount rates to different circumstances. Famously, the field of behavioural finances has uncovered that people apply widely diverging values of riskiness to probabilities that are technically identical, but emotionally different. The classical example of this is to give people a choice between 500 euros of immediate payment and a 50 per cent chance of 1000 euros later. A large majority of the people will prefer the 500 euros. However, given a choice between an immediate punishment of 500 euros and a 50 per cent a chance of a 1000 Euro punishment later, a large majority of the people will opt for the latter (overview to experiments in Behavioural Finance in: McGraw Hill, 'Behavioural Finance and Technical Analysis', ch. 19, pp. 650–655). Although in both cases the mathematical values are the same, people behave drastically differently. The picture becomes even more complicated because the behaviour also depends on the absolute size of the amounts involved. The same experiment leads to divergent results, if the amount is 50 cents, 50 euros or 5000 euros in play. There are also the so-called lotteries or gaming effects that change the behaviour drastically with different

In addition, actually observed market rates for interest are impacted by more such 'behavioural' effects, such as the herd effect, the panic tendency, the winner's curse, the status quo bias, and many others. Under these circumstances, it is a bit of a folly to claim that there is an observed 'objective' rate of interest that can be used to discount future cash-flows. Robert Shiller, a sobered empirical economist therefore concludes:

likelihoods applied to these calculations. Most times, people are willing to accept even negative discount values on the future potential payment, if

only the potential is large enough (even if very unlikely).

in the 1990's, a lot of focus of academic discussion shifted away from these econometric analyses of time series on prices, dividends and earnings toward developing models of human psychology as it relates to financial markets. The field of behavioural finance developed. Researchers had seen too many anomalies, too little inspiration that our theoretical models captured important fluctuations. (Shiller, 2003, pp. 90–91)

Legal-political considerations

The majority of economic flows between generations are passed through the state. Discounting these economic flows that are conducted via the state (for example, public pension systems) assumes that the state is an economic actor to whom economic 'laws' apply.

Legally speaking that is not the case. The state is subject to a set of politically created laws, of which the constitution of any given state has the highest validity. It is typically the constitution, which grants the other political institutions their power. Any conduct of the state must ultimately be in agreement with the provisions of the constitution. Looking at a constitution it is necessary to analyse whether it recognizes the 'time value' of money, or in fact whether it even recognizes the concept of 'time periods',

and thereby legitimizes the practice of discounting of future payments made or received by the state.

Most modern constitutions recognize the protection of property as a basic human right. This stems from a constitutional legal tradition reaching as far back as the Athenian polis, where only a person with property could be a free person, that is, have democratic rights. Vice versa, by protecting that property, a modern state guarantees its citizens the ability to be free. Hence, an analysis of the 'protection of property' clauses in such modern constitutions should provide a view whether there is a constitutional protection or recognition of 'time value of money (property)'.

A summary of such an analysis and in particular of Article 14 in the German constitution is provided briefly below and it shows that there is only very little direct evidence for the recognition of time value of public cash flows (for a more detailed analysis see Ederer 2003, pp. 65–91).

One of very few explicit statements on this subject had been made by the constitutional scholar and current justice of the Constitutional Court, Hans-Jürgen Papier, who argues that a negative net yield on contributions to the public pension system would be legally seen as disproportionate (Papier 1999, p. 741).

The issue centres on the nature of property according to the German constitution (and in fact most modern democratic constitutions). Article 14 clearly mandates the protection of property. If protection were understood as economic protection of value, then a relatively easy argument could be derived from the constitution that the value of an economic good included not only current value but also future value, and that therefore the state has an obligation to protect both current and future value – hence has to recognize the time value of future payments.

Alas, the historical origin – and current interpretation by Germany's Federal Constitutional Court – of Art. 14 is not economical but political: the protection of property must be seen as a specific case of protecting individual freedoms against an activist state. Article 14 follows the constitutional tradition of assuming a strong interdependence between liberty and property (Papier 1993, p. 92). As long as the individual exercise of freedom is not impaired by the state's impacting the individual's property, then the state has neither obligation nor constitutional basis for redressing this damage. This interpretation applies even to current alteration of economic value, such as when the state builds a road that reduces the value of adjacent properties (Maunz and Duerig 1994, par. 164) – and it most certainly applies also to payments that the state promises to generations in the future. So the state has no obligation to adjust the economic value of these cash flows to the time period of when they will be paid. To quote Papier again, 'the complementarities of liberty and property, as seen correctly in the German constitution,

may not be misunderstood as a simple warranty of the material-economic basis of the free individual development' (Papier 1993, p. 99).

This constitutional interpretation has been challenged several times in the context of the public pension system. In various rulings since 1980, the Constitutional Court's response amounted to a protection of the pension as such, but neither of its economic current value, nor its future value (Papier 1999, p. 723).

Most German citizens, who base their financial retirement plans at least in part on the German public pension system, would probably be surprised to find out how little legal protection the German constitution affords them. A similar investigation studying the constitution across a broader spectrum of intergenerational transfers of value (including for instance ecological values) also reaches the conclusion that such intergenerational transfers are essentially not protected by the German constitution (Lux-Wesener 2003, pp. 405–441). The political discourse of recent years, both among experts and among citizens, has assumed far greater legal and constitutional security of the pension systems. In the medium to long term this requires either a change in the constitution or a change to the political debate.

Mathematical considerations

Its ubiquity notwithstanding, it is often overlooked that the mathematics of discounting works only under three conditions that must be fulfilled for the result to be mathematically correct:

- 1. all future payments are discounted to the same reference date, which usually is today, but could also be any other day of the past or in the future;
- 2. all future payments are discounted at the same rate; and
- 3. all future payments are fungible with each other (meaning that these cash flows are describing interchangeable circumstances).

Mathematically speaking, stating that any given cash flow in the future has a net present value of 1 euro, is not complete unless it also specifies which discount rate has been used. Using a different discount rate would lead to a different present value. It is therefore essentially impossible to reflect the fact that discount rates might be changing over time, or that different recipients of the cash flows may have different discount rates. Since both of these facts are usually true in connection with intergenerational capital and debt transfers, however, the discounting indirectly violates condition number two.

More specifically to comparing future generational cash flows, the cashflows apply to different stages in the life-cycle of the generations compared, so they are not fungible with each other. In 2030, the 1960 cohort is 70 years old, while the 1961 cohort is only 69 years old. This difference in life-cycle makes their cash flows not fungible if discounted to today, for instance. The two sets of cash-flows would only be fungible if they referred to the same stages in their individuals' life-cycle, for instance at their respective births, or their respectively being 20 years old, and so on. This is a violation of condition number three.

However, if in order to maintain fungibility, the cash flows are discounted to the same stages in life, then the discounting would be violating the requirement to discount to the same reference date, that is, condition number one. It is therefore mathematically impossible to apply discounting when comparing life cycle sensitive cash flows of different generations (for a more detailed explanation and simulation of the mathematical effects: Ederer 2003, pp. 65–91).

Conceptual considerations

Finally as a last consideration, the value of the Economic Sustainability Indicator is expressed in terms of a ratio. The methodology calculates for every given generation in any given year the ratio between how much capital it is inheriting and how much it is handing down. This ratio is then weighted with the amount of capital transferred per year and can thus be aggregated into a lifetime ratio. If at all, a discount value would have to be applied to the weightings assigned in each year, before averaging the ratios, however in this application, the effect of discounting would be much diminished.

Conclusion

Intergenerational flows of economic value are a growing concern of policy makers in Germany and elsewhere, triggered by foreseeable changes of the demographic composition of the population and a deepening crisis of the current welfare state that is increasingly unable to live up to the public's expectations of economic security.

In order to provide economic policies that address these concerns, policy makers as well as citizens require instruments that can communicate the impact of policies on their own economic position as well as on their own future economic position and that of their descendants. No such tool exists so far.

The Economic Sustainability Indicator developed by Deutschland Denken! e.V. provides the outline of such a tool, by measuring the long-term impact of policies on all types of capital that are utilized in the process for creating economic wealth. It can therefore make this long-term impact transparent and aid the policy creation process.

The Economic Sustainability Indicator measures how much capital any given generation is handing down to future generations, in terms of how much capital it has inherited from its parent generation. This tool goes beyond similar tools available today and encompasses all spheres of economic activity. It can furthermore not only be applied to generational cohorts but also to shorter time frames, such as election cycles. It is applicable not only to the economy as a whole but also to individuals or individual interest groups within it.

Whether a generation is therefore creating value and contributing to the sustainability of all kinds of economic activity, especially including the distributive mechanisms of the welfare state, or whether it is destroying value and making economic activity unsustainable is apparent at a single glance.

Notes

- Various studies conducted and published by the US Pension Benefit Guaranty Corporation.
- Overview on discounting theories provided by Dr Reimund Schwarze, scientific researcher at the DIW Berlin.
- 3. Ibid.

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8 Protecting future generations: intergenerational buck-passing, theoretical ineptitude and a brief for a global core precautionary principle *Stephen M. Gardiner*

Introduction

In this chapter, I consider the question of why future generations need protecting, and how we might go about providing such protection. I begin by claiming that our basic position with respect to the further future can be characterized by what I call the problem of intergenerational buck-passing. This problem implies that our temporal position allows us to visit costs on future people that they ought not to bear, and to deprive them of benefits that they ought to have. Next, I claim that it is plausible to think that this problem is manifest in the case of two serious intergenerational issues: climate change and nuclear protection. Third, I suggest that the problem is exacerbated by a problem of theoretical inadequacy: at present, we lack the basic conceptual tools with which to deal with problems involving the further future. I illustrate this problem through a discussion of the dominant theoretical approach in public policy, cost-benefit analysis. Finally, I consider what is to be done. Here I make two basic proposals. The first is that we should investigate a promising form of the precautionary approach, which I call 'the Global Core Precautionary Principle'. The second is that we should not lose sight of the fact that the problems of intergenerational buck passing and theoretical inadequacy create an atmosphere in which we are extremely vulnerable to moral corruption.

The problems

It is worth beginning by asking what the problem is. Why do future generations need protection? I suggest that there are three important reasons.

The first rests on the vulnerability of future generations to their predecessors. This problem can be illustrated by imagining a hypothetical case. Suppose that there is a sequence of nonoverlapping generations, each of which has preferences that are predominantly (and perhaps exclusively) generation-relative in their scope: they concern things that happen within the timeframe of its own existence. Suppose then that there are goods that are

temporally dispersed. Consider two types of such goods. Goods of the first type are such that their benefits accrue to the generation that produces them, but their costs are substantially deferred and fall on later generations. Call these 'front-loaded goods'. Goods of the second type are such that their costs accrue to the generation that produces them, but their benefits are substantially deferred and arise to later generations. Call these 'back-loaded goods'.

In such a scenario, we might expect each generation to *oversupply* frontloaded goods and *undersupply* back-loaded goods. That is, we might expect each generation to engage in what we might call 'buck passing behavior': each generation secures benefits for itself by imposing costs on its successors, and avoids costs to itself by failing to benefit its successors. Moreover, since this is an iterated phenomenon – each generation faces the same incentive structure when it has the power to act – we might expect that it has cumulative effects. That is, we might anticipate that the impact of buck passing is worse for more distant than for temporally closer generations. Let us call this, 'The Problem of Intergenerational Buck Passing' (PIBP; for an earlier analysis of the problem, see Gardiner 2003).

Now, here I want to make only two general points about intergenerational buck passing. First, other things being equal, it seems to pose a moral problem. This is clearest in the case of front-loaded goods, because it seems unethical for an earlier generation to foist costs on a later generation without any compensation and without its consent. But it is also relevant for back-loaded goods. On the (modest) assumption that, other things being equal, any given current generation has an obligation to engage in at least some back-loaded projects (for example, some with extremely low present costs and extremely high future benefits), then each generation will fail in its duties to the future if it fails to invest in such projects.

Second, under some circumstances, the problem may become very serious. For one thing, the impacts imposed on future generations may be very large. Sometimes this will be because the impact of a single generation's behavior is great; more often, perhaps, it will be because of the substantial cumulative effects of the behavior of many generations. For another, the impacts passed on may be of an especially pernicious kind. For example, they may undermine fundamental aspects of the conditions of human life and society in ways that might easily have been avoided.

Most people would, I think, accept both that the problem of intergenerational buck passing is a genuine moral problem, and that sometimes it may be very serious. Moreover, given this, they would maintain that we have a moral reason to limit the impact of our generation-relative preferences.² The question then becomes how and to what extent such a limitation is to be achieved. To answer this question, we need a theory of intergenerational justice.

Unfortunately, this leads us to our second problem, which is that we are not currently well placed to offer a theory of intergenerational justice. In general, the intergenerational context brings together a number of extremely difficult theoretical issues: for example, scientific uncertainty, contingent preferences, contingent persons, nonhuman animals, and nature. More specifically, the dominant theory in the world of public policy – cost–benefit analysis – faces major challenges in dealing with the long-term future.

The third problem is that when the buck passing and theoretical problems are taken together, they constitute a recipe for moral corruption. The existence of temporally dispersed goods creates an incentive for cheating future generations, and there are ways in which our theoretical ineptitude creates good cover for this. The absence of good theory for dealing with questions involving future generations leaves open a convenient space for many mechanisms of moral corruption.

In this chapter, I shall try to illustrate the relevance of these points through a discussion of two specific topics in intergenerational ethics: climate change and nuclear protection. Two questions naturally arise. First, does our current behavior suggest that the three problems I have identified are manifest? And, second, if so, what can be done about it? The bulk of this chapter will be taken up offering an affirmative answer to the first question. Climate change and nuclear protection, I shall argue, are subject to problems of intergenerational buck passing, theoretical inadequacy and moral corruption. But in the last section I shall offer some brief and sketchy remarks about the second question – what to do – focusing on the prospects for a precautionary approach to each problem.

Buck passing and climate change

Let us begin with climate change. It is by now fairly uncontroversial that human activity is altering the Earth's climate. It is also reasonably clear that climate change involves temporally dispersed goods. For one thing, carbon dioxide is the most important greenhouse gas produced by human beings; and once emitted, molecules of carbon dioxide remain in the upper atmosphere contributing to warming for a surprisingly long time, of the order of hundreds, and perhaps thousands, of years.³ For another, many of the basic climate processes set in motion by an increase in the greenhouse effect manifest themselves over very long timescales. Sea level rises, for example, may occur over a millennium.⁴

These facts have two salient implications. The first is that the climate change that the earth is currently experiencing is primarily the result of emissions from some time in the past, rather than current emissions. As an illustration, one reputable estimate suggests that by 2000 we had already

committed ourselves to a rise of one degree Kelvin over the observed rise of 0.6 degrees Kelvin, and that this implies a lag of 20 years (Wetherald *et al.* 2001). The second is that the full, cumulative effects of our current emissions will not be realized for some time in the future. So, climate change is a substantially deferred phenomenon.

These facts suggest that intra-generational motivation for acting on climate change may be low. For, on the one hand, the Earth may already be committed to many of the effects that the current generation is likely to experience; and, on the other, the impacts of its own emissions will fall on other (future) generations. The circumstances are thus ripe for intergenerational buck passing.

There is also reason to believe that the problem of intergenerational buck passing is already manifest. In 1988 the United Nations Environment Program and the World Meteorological Association established the Intergovernmental Panel on Climate Change to provide member governments with state of the art assessments of 'the science, the impacts, and the economics of – and the options for mitigating and/or adapting to – climate change' (IPCC 2001a, p. vii). The IPCC published its first comprehensive report in 1990. This has been followed by updated reports in 1995 and 2001. Moreover, the US National Academy of Science reviewed the issue in 2001, at the request of the Bush Administration, and found itself in general agreement with the IPCC (US National Research Council 2002). The main scientific and policy conclusions have remained consistent across all of these reports: climate change is a real problem and it must be addressed.

Since 1990, then, the countries of the world have known that they should deal with climate change. Given this, in the absence of the PIBP, we might have expected action on two fronts. First, the current generation ought to have attempted to limit the magnitude of future climate change by reducing its emissions. In the jargon of the IPCC, it ought to have engaged in *mitigation*. Second, the current generation ought to have begun to make serious preparations in order to limit the impacts of climate change to which the Earth is already committed. That is, in the terms of the IPCC, it ought to have invested in *adaptation*.

But notice that both of these activities involve temporally dispersed goods. Mitigation involves the present generations' forgoing front-loaded goods. It must resist taking benefits now because of the later costs to future generations. Adaptation involves the present generation's taking on backloaded goods. It must incur costs now in order to provide benefits to future generations later. Hence, given the PIBP, there is every reason to suspect that the current generation will fail to engage in mitigation or adaptation to a reasonable level.

There is strong evidence that this is the case. So far the world's reaction to the climate change problem has been weak on both fronts. There is much to be said about this. But here let me make just three quick points about mitigation. First, there has been little substantive progress on mitigation. For one thing, global emissions have risen sharply since 1990 – of the order of 30 percent – and show no signs of slowing down. For another, in those places where gains have been made – such as Germany and the United Kingdom – these are largely for unrelated intragenerational reasons, not because of climate change policy. Moreover, at least in the UK, these gains are under threat and seem likely to be undone in the coming decades.

Against this, it might be claimed that at least some progress has been made procedurally, with the development and ratification of the Kyoto Protocol. There is something to this claim, but we should be careful not to overstate it. For one thing (this is the second point) the Kyoto Protocol posits targets for only the period 2008–2012, and these targets are widely thought to be extremely weak, perhaps comparable to those emissions that would be expected under business as usual. Given that we eventually need much deeper cuts, and need to start making them in the next few decades, the hard work remains to be done. For another (the third point), the history of agreements about climate change is not promising. In the early 1990s, a number of countries made voluntary commitments to stabilize emissions by 2000, but none achieved this. This resulted in the negotiation of the Kyoto agreement. Since then we have seen withdrawals and renegotiations. and now there are worries that many of those committed to cuts may not make their targets. Can we really be so sure then that Kyoto does constitute progress, rather than just another stalling process? In many ways, the answer to this question depends on how we build on Kyoto, not on Kyoto itself (Gardiner 2004a and Desombre 2004).

There are then good theoretical, historical and political reasons for thinking that the problem of intergenerational buck passing is manifest in the climate change problem. I shall now argue for a similar result for nuclear protection.

Buck passing and nuclear protection

The relevance of the PIBP to nuclear protection can be illustrated by focusing on two prominent dangers posed by ionizing radiation. The first involves the storage and disposal of nuclear waste. Such waste appears to be a front-loaded good. On the one hand, its benefits – the energy created by the processes that produce it – accrue predominantly to the present generation; on the other hand, the costs of storage and disposal are spread out over many generations. The second involves the possible long-

term genetic effects of radiation. This appears to be a backloaded good. The costs of avoiding such effects fall on current people; but the benefits arise in the future, to those who do not suffer the effects. The circumstances, then, are ripe for a PIBP arising over nuclear waste and genetic effects. But is there any reason to think that it is manifest?

Let us begin with the issue of waste. The International Atomic Energy Authority speaks directly to the issue of protecting future generations its Safety Fundamentals. Its Principle 4 says:

4) Radioactive waste shall be managed in such a way as to assure that predicted impacts on the health of future generations will not be greater than relevant levels of impact that are acceptable today. (IAEA 1995, 6)

And Principle 5 adds:

5) Radioactive waste shall be managed in such a way that will not impose undue burdens on future generations. (IAEA 1995, 7)

At first glance, these principles seem to block the PIBP. Principle 4 appears to demand that the health of future people be treated in accordance with the same standards as the health of current people; and Principle 5 seems to restrict the more general burdens that may be passed on to the future.

But we should be a little careful here. First, notice that Principle 4 does allow a form of intergenerational buck passing. For much depends on how and why the health standards for current people are established. Historically, these have been set in accordance with the idea of the amount of health risk that it is worth taking on *in order to realize some economic benefit*. But then the situation for current and future people is asymmetric. For the current generation, the question is how much of a health risk are they willing to accept for the sake of a given economic benefit that accrues *to them*? Hence, the underlying rationale is one of *compensation*: current people take on a risk in the expectation of receiving some benefit. But for future generations, the question is different. They are probably being asked to accept a given level of health risk for the sake of benefits that accrue largely to current people. So, the rationale of compensation does not apply.

Consider the following parallel. Suppose I am away on a business trip. You call me on the phone to say that my office building is on fire. I scream, 'No! The signed photograph of me with David Beckham is in there'; and I beseech you to run into the building in order to save it. But you refuse. In response, I retort, 'You are being unreasonable – if I were there, I would be willing to take the risk of dying from the rampaging fire in order to save my

precious photograph'. How good a response would this be? Not a very good one, I would suggest. Perhaps you should be willing to take some risks on my behalf; but this is not one of them, and the fact that I would be willing to take such a risk on my own behalf does little to change this.

A second problem with Principle 4 also involves an asymmetry. The principle specifies the conditions under which future people can be called upon to assume costs for the sake of the current generation, but not *vice versa*. In other words, it is concerned only with the conditions under which the production of frontloaded goods may be permissible; not with those under which backloaded goods ought to be produced. But, given the PIBP, this is entirely predictable.

The situation with Principle 5 – 'radioactive waste shall be managed in such a way that will not impose undue burdens on future generations' – is more complex. As stated, the principle is ambiguous: 'undue' might mean either 'excessive' or 'inappropriate'. If it means 'excessive', then there is still room to pass on some kinds of burden to future generations without compensation, so long as one does not surpass the threshold of excessiveness. This might be avoided if 'undue' means 'inappropriate'. But then we need some account of what this means, and this requires rather than indicates some principle of intergenerational ethics.

Fortunately, the IAEA offers some guidance on this issue, since it both states that Principle 5 'is based on the ethical consideration that the generations that receive the benefits of a practice should bear the responsibility to manage the resulting waste' and offers an account of how this responsibility should be understood:

The responsibility of the present generation includes developing the technology, constructing and operating facilities, and providing a funding system, sufficient controls and plans for the management of radioactive waste.

And:

The management of radioactive waste should, to the extent possible, not rely on long term institutional arrangements or actions as a necessary safety feature . . . (IAEA 1995, 7)

These statements signal awareness of the compensation issue, and also try to resolve it. But it remains unclear whether they are adequate to the task. There are three issues.

First, and most obviously, there are problems with application. It is all very well to say that the current generation should take responsibility for the waste. But it is very difficult, if not impossible, for that generation to do so over periods of hundreds of years. Inevitably, some responsibility will

fall to future people. Given this, the IAEA advice seems liable to mislead, and in such a way as to underestimate the burden that ought to be assumed by the current generation.

Second, there are problems concerning the IAEA's inference of its interpretation of Principle 5 from the ethical consideration. Presumably, it is possible for future people to benefit from the present generation's investment in nuclear energy – for example, this may reduce the magnitude of harmful future climate change – and in this case, perhaps the present generation ought not to be responsible for all of the associated costs. Failing to recognize this may lead to an underinvestment in nuclear technology on the part of the present generation, and so aversely affect future people.

Third, there are problems with the ethical consideration itself. Why assume that the costs must always be borne by the beneficiaries? For example, if future generations are likely to be much worse off than we are – perhaps because of an abrupt climate change – then it may be necessary for us to absorb some costs in order to benefit them.

We can conclude, then, that though the IAEA principles initially appear to avoid the PIBP, this appearance is deceptive. At best, the principles simply impose some upper limits on the amount of intergenerational buck passing that can occur. This might be valuable, but it does not suffice to eliminate the phenomenon altogether.

Let us turn now to genetic effects.⁶ In its draft recommendations of 2004, the International Commission on Radiological Protection (ICRP) introduces a new, sharply reduced (Belgian Federal Agency for Nuclear Control 2005, p. 2) estimate of genetic risk that 'takes only into account the risk up to the second generation', and so '[restricts] the evaluation period to only two generations' (Belgian Society for Radiological Protection, December 2004, p. 5). But critics judge this restriction to be scientifically unacceptable. There are three basic reasons.

First, it is the two-generation model that drives the reduction in the estimate of genetic risk, rather than any other scientific rationale. The critics say that no deep change in the science is reflected in other, comparable reports, and that 'the sharp decrease of the genetic risk coefficient recommended by the ICRP in its new draft is based only on its choice to take now the effect on the generations farther than the second as being zero' (Belgian Federal Agency for Nuclear Control, 2005, p. 2).

Second, there are good scientific reasons for concern about longer term effects. For example, 'it is known from animal experiments that manifestation of most genetic effects requires integration over a larger number of generations' (Belgian Society for Radiological Protection, December 2004, p. 5).

Third, the science with respect to human beings is still underdeveloped, and historically there has been a tendency to underestimate the dangers.

Hence, the critics say: 'on scientific grounds it is plausible that the genetic risk coefficient could be higher than the new ICRP estimation and even higher than its own estimate' (Belgian Federal Agency for Nuclear Control, 2005, p. 2). Thus, there is an inductive argument from the trajectory of the science to suggest that we should be modest about current ability to predict health impacts, and so adopt an attitude of precaution. But, as the critics point out:

the ICRP takes a position exactly opposite to the application of the principle of precaution (understood here as recommending measures of precaution or prevention to avoid plausible but uncertain serious detrimental effects). (Belgian Federal Agency for Nuclear Control, 2005, p. 2)

These comments suggest that the two generation restriction is not just scientifically, but also morally unacceptable. Nevertheless, (alas) it makes perfect sense in light of the PIBP.

Cost-benefit analysis

It seems likely then both that climate change and nuclear protection provide a good setting for the PIBP, and that the problem is actually manifest in the real world. However, no doubt by this point some people will be thinking that I have neglected an obvious rejoinder to my concerns. Outside of philosophy, they will say, we do have a theory to deal with intergenerational problems. In the real world, policy analysis is dominated by cost—benefit analysis (CBA), and this has standard mechanisms for dealing with the future. Moreover, these mechanisms are employed in both climate change and nuclear protection. What more, it will be asked, do we need? My response to this objection is almost as obvious as the question itself. Contemporary CBA, I want to argue, is not a solution – it is part of the problem. This brings us to the second of our three main problems, that of theoretical inadequacy.

The relevance of CBA to actual climate change and nuclear protection policy is very evident. Given our increasing confidence in the science surrounding climate change, economic arguments have become the main refuge of those opposed to action; and mainstream economics – in the form of standard cost–benefit analysis – has been suitably obliging. The benefits of combating climate change, we are told, are not worth the costs. So, Bjorn Lomborg, for example, says that 'economic analyses clearly show that it will be far more expensive to cut CO_2 emissions radically than to pay the costs of adaptation to the increased temperatures' (Lomborg 2001, p. 318).

On the issue of nuclear protection, the influence of CBA is even more evident. The standard international reference point for policy on nuclear issues is the work of the ICRP, and in particular its three principles for

radiological protection. But for much of the recent past, these principles have been understood through traditional CBA.⁷

Describing the 1977 recommendations, Roger Clarke states that the first two principles, justification and optimization, were explicitly conceived of by the ICRP in cost–benefit terms, and as requiring a 'classical use of cost-benefit analysis' (Clarke 2003, p. 42) for their implementation. For example, Clarke says:

The principles of justification and optimisation aim at doing more good than harm and at maximizing the margin of good over harm for society as a whole. They therefore satisfy the *utilitarian principle of ethics*, whereby actions are judged by their overall consequences, usually by comparing in monetary terms the relevant benefits (e.g., statistical estimates of lives saved) obtained by a particular protective measure with the net cost of introducing that measure. (Clarke 2003, p. 41)

Similarly, the third principle, of dose limits, was regarded as both a secondary concern, and as ultimately something to be derived from the dictates of CBA:

In 1977, the establishment of the dose limits was of secondary concern to the CBA and use of collective dose. This can be seen in the wording used by ICRP in setting its dose limit for members of the public. Publication 26 states: 'The assumption of a total risk of the order of 10–2 Sv-1 would imply restriction of the lifetime dose to the individual member of the public to 1mSv per year. The Commission's recommended limit of 5 mSv in a year, as applied to critical groups, has been found to give this degree of safety and the Commission recommends its continued use'. In a similar manner the dose limit for workers was argued on a comparison of average doses and therefore risk in the workforce with average risks in industries that would be recognized as being 'safe', and not on maximum risks to be accepted. (Clarke 2003, p. 42)

Now, there are many things that might be said in criticism of CBA even in normal contexts. Consider, for example, the following objections from the literature. The first is that the initial appeal of CBA is largely superficial. CBA is easily confused with cost effectiveness. Everyone is in favor of cost effective policies – that is, those that take the least costly means to independently justified ends. But CBA aims to tell us which ends we ought to have; and this is much more controversial.

The second is that CBA is too narrow. It is usually limited in the kinds of costs it can take into account to those whose value can be expressed in economic terms and that arise in the near term. It thus tends to focus on short-term consumption goods and ignore wider and longer-term values, such as community, aesthetic, spiritual, environmental and nonhuman values.

The third is that it is confused. In a classic work, Mark Sagoff chastises CBA for confusing preferences, whose strength may be measured in terms of their intensity, and values, whose importance must be understood in terms of the reasons that underlie them. In attempting to reduce all matters of value to matters of preferences as measured by market prices, Sagoff argues that CBA is not only guilty of a category mistake, but also reveals itself as an essentially undemocratic decision procedure (Sagoff 1988).

The final objection is that CBA is partisan. It is, it is said, a manifestation of a particular and controversial moral philosophy, utilitarianism. Moreover, it shares the standard defects of that philosophy. In particular, it ignores the question of how benefits and costs are distributed and so fails to respect the importance of the individual.

In theory, most enthusiasts for CBA accept the spirit of these criticisms, but argue that CBA can be modified so as to avoid them. First, they propose that CBA should seek to be more thorough in its capturing of relevant costs and benefits, and more explicit about what it excludes. Second, they claim that CBA should be more modest in its ambitions. It ought not present itself as the exclusive method of practical decision-making, but rather as only one essential ingredient to a broader political process (Schmidtz 2001).

It is an open question to what extent these concessions are manifest in the real world of policy. But I do not want to pursue such matters here. Instead, I want to focus on a separate set of objections to CBA that apply specifically to its use in the intergenerational context.⁸ Consider, for example, what John Broome, White's Professor of Moral Philosophy at Oxford, and formerly a Professor of Economics at the University of Bristol, has to say about CBA and the long-term future. Broome is a defender of CBA in normal contexts.⁹ But about climate change he says:

Cost-benefit analysis, when faced with uncertainties as big as these, would simply be self-deception. And in any case, it could not be a successful exercise, because the issue of our responsibility to future generations is too poorly understood, and too little accommodated in the current economic theory. (Broome 1992, p. 19)

Why would CBA be 'self-deception' in the case of the long-term future? Broome emphasizes uncertainty. In the further future, 'society is bound to be radically transformed in ways which are utterly unpredictable to us now' (Broome 1992, p. 10). Moreover, in the case of climate change, these changes are not exogenous to the problem at hand. For example, Dale Jamieson points out that the regional effects of climate change are varied and uncertain; predicting human behavior is difficult since climate impacts affect a wide range of social, economic, and political activities; we have limited understanding of the global economy; and there will be

complex feedbacks between different economic sectors (Jamieson 1992, pp. 288–289). Under such circumstances, a reliable fine-grained cost–benefit analysis is simply not possible.

The uncertainty problem poses a very serious challenge to CBA for the further future. But notice that Broome says that even if this problem could be resolved, CBA 'could not be a successful exercise because the issue of our responsibility to future generations is too poorly understood, and too little accommodated in the current economic theory'. There is, then, an even more basic problem for CBA. What does he have in mind? This emerges later in the book, when he says:

It is people who are now children and people who are not yet born who will reap most of the benefits of any project that mitigates the effects of global warming. Most of the benefits of such a project will therefore be ignored by the consumer-price method of project evaluation. It follows that this method is *quite useless* for assessing such long-term projects. This is my main reason for rejecting it [for climate change]. (Broome 1992, p. 72; emphasis added)

The 'main reason', then, that Broome invokes for the failure of conventional economic analysis is that it ignores most of the benefits of climate change mitigation because these are deferred to later generations. In essence, the problem is that mitigation constitutes what I have called a backloaded good – a good with costs for the current generation but whose benefits accrue to later generations. Thus, Broome's point is that since conventional CBA ignores such goods, it must be rejected. To this we might add that the neglect of such goods suggests a manifestation of the PIBP.

Why does Broome think that conventional economic analysis ignores backloaded goods? The answer is that it is because it employs a positive discount rate. As another economist, David Pearce, puts it: 'the problem that arises with discounting is that it *discriminates against future generations*' (Pearce 1993, 54, italics in original). 11

Discounting is 'a method used by economists to determine the dollar value today of costs and benefits in the future. Future monetary values are weighted by a value <1, or "discounted" (Toman 2001, p. 267). The SDR is the rate of discounting: 'Typically, any benefit (or cost), B (or C), accruing in T years' time is recorded as having a "present" value, PV of: PV(B) = $B_T/(1+r)^T$ (Pearce 1993, p. 54.). In public policy in general, the rates used vary, but are usually in the range of 2–10 percent. In climate change in particular, the standard economic models employ rates of around 5 percent: for example, Bjorn Lomborg uses 5 percent; William Nordhaus 3–6 percent.

What are the problems with using a positive SDR for issues involving the long-term future, such as climate change? There are many; but here I shall list just four general issues.

The first is practical. Under positive discount rates, all but the most catastrophic costs disappear after a number of decades, and even these become minimal over very long time periods. As an approach to intergenerational equity, this seems to reduce cost—benefit analysis to absurdity. Consider the following example, from Columbia University economist Graciela Chichilnisky:

... at the standard 5% discount rate, the present value of the earth's aggregate output discounted 200 years from now is a few hundred thousand dollars. A simple computation shows that if one tried to decide how much it is worth investing in preventing the destruction of the earth 200 years from now on the basis of measuring the value of foregone output, the answer would be no more than one is willing to invest in an apartment. (Chichilnisky 1996, p. 235)¹²

Thus, the charge of absurdity.

The second problem is theoretical. The SDR lacks a clear, consistent and general rationale. In a classic article, Tyler Cowen and Derek Parfit argue that in practice the SDR is actually given several distinct rationales, but none of them ultimately succeeds:

At most, these arguments might justify using such a rate as a crude rule of thumb. But this rule would often go astray. It may often be morally permissible to be less concerned about the more remote effects of our social policies. But this would never be because these effects are more remote. Rather it would be because they are less likely to occur, or would be effects on people who are better off than we are, or because it would be cheaper now to ensure compensation, or it would be for one of the other reasons we have given. All of these different reasons need to be stated and judged separately, on their merits. If we bundle them together in a social discount rate, we make ourselves morally blind. (Cowen and Parfit 1992, pp. 158–159; emphasis added)

The third problem is the dominance of the SDR. The result of a CBA in a case such as climate change is essentially determined by whatever SDR is chosen. For example, critics claim that the choice of SDR in Lomborg's favored economic analysis – that of Nordhaus – effectively swamps the contribution of the climate change model, rendering it irrelevant (Schultz and Kasting 1997, cited by Gundermann 2002, p. 147).

The fourth general problem is that of indeterminacy. In a recent article in the *American Economic Review*, Harvard economist Martin Weitzman tells us that 'no consensus now exists, or for that matter has ever existed, about what actual rate of interest to use', and that the results of a CBA on long-term projects are 'notoriously hypersensitive' to the rate chosen (Weitzman 2001, pp. 260–261). These issues are problematic both in themselves and because they exacerbate the third problem.

There is much more that might be said about CBA. But for present purposes we can draw two important conclusions. First, even many of those who are enthusiastic about CBA in normal contexts are deeply suspicious when it comes to cases which involve the long term future – such as climate change and nuclear waste. Second, they have good reason to be so. The Problem of Theoretical Inadequacy is thus very much with us.

A global core precautionary principle

So, what is to be done? In the remainder of the chapter, I want to suggest two projects, one positive and one negative.

The first (positive) project involves overcoming the problem of theoretical inadequacy. We must find better ways of understanding our responsibilities to the future; and we must do so without succumbing to the buck-passing problem. This project is, of course, already underway. We can see its manifestation in the political world through the prevalence of new buzzwords, such as 'sustainable development' and 'precaution'. Still, by themselves warm and fuzzy buzzwords are not enough. For one thing, they are easily accused of vacuity; for another, we must beware of simply naming the problem to be solved rather than actually solving it. Both sustainability and precaution have been subject to objections of this form (Jamieson 2002; Jordan and O'Riordan 1999). Below I try to give some idea of how the precautionary approach might be developed so as to avoid some of these objections and address the PIBP.

The second, less obvious and more negative project emerges from the observation that the circumstances of the PIBP and the Problem of Theoretical Inadequacy are such that we, the current generation, are open to many forms of moral corruption. Thus, we should be on our guard. This advice is not simply a matter of practical exhortation. For one way in which we might prevent corruption is to make ourselves aware of the various forms that it may take, and how these might become manifest in theory and in practice. And this is a substantive project in its own right.

Let us begin with the precautionary principle. Elsewhere I have argued that the precautionary principle is theoretically underdeveloped, and that this leaves it vulnerable to standard objections – such that it is extreme, myopic, vacuous, and irrational (Gardiner 2006). But I have also claimed that such objections can be overcome if we adopt a criterial approach, and try to specify a set of parameters for the application of the principle. Moreover, I have put forward one example of such an approach, modeled on John Rawls' criteria for the application of the maximin principle. It I call this example, 'the Rawlsian Core Precautionary Principle' (RCPP).

Now, this is not the place to try to explain the nature and rationale of the RCPP in any detail (for a fuller discussion, see Gardiner 2006). So, here I will simply state it – hoping that it has some intuitive appeal at least – and then say something about how it might help us overcome the PIBP. These remarks will necessarily be very brief and sketchy. But I hope at least that they may suggest that the criterial approach is worthy of further exploration.

The RCPP is modeled on a Maximin Principle (MP). Maximin principles assess the possible outcomes of various courses of action, and then decide what to do by focusing on the worst possible outcome of each course of action and choosing that action which has the least worst of the worst outcomes. Under certain kinds of circumstances, maximin principles have some appeal. But it is well known that it would not be rational always to act so as to avoid any possibility of the worst available outcome. (Consider, for example, situations where there is a good chance of a very large gain, and a very small chance of a small loss.) Hence, Rawls proposes restricting the application of maximin thinking to those cases where three general conditions hold.

First, decision-makers either lack, or have reason to sharply discount, information about the probabilities of the relevant outcomes of their actions.¹⁵ Rawls says:

Thus it must be, for example, that the situation is one in which a knowledge of likelihoods is impossible, or at best extremely insecure. In this case it is unreasonable not to be skeptical of probabilistic calculations unless there is no other way out, particularly if the decision is a fundamental one that needs to be justified to others. (Rawls 1999, p. 134)

Second, the decision-makers care relatively little for potential gains that might be made above the minimum that can be guaranteed by the maximin approach. Rawls says:

The person choosing has a conception of the good such that he cares very little, if anything, for what he might gain above the minimum stipend that he can, in fact, be sure of by following the maximin rule. It is not worthwhile for him to take a chance for the sake of a further advantage, especially when it may turn out that he loses much that is important to him. (Rawls 1999, p. 134)

Third, the decision-makers face unacceptable alternatives. Rawls says: 'rejected alternatives have outcomes that one can hardly accept. The situation involves grave risks' (Rawls 1999, p. 134).

Elsewhere, I argue that these criteria should be supplemented with a further constraint. The maximin principle ought only to be invoked in those cases where the outcomes under consideration all pass a test of scientific respectability. It is not enough for a certain outcome to be merely logically possible. To ground decision-making, it must be scientifically realistic, in the sense that a reasonable case can be made for its actually arising. And this test applies to both good and bad projected outcomes.

The basic idea of the criterial approach is as follows. If we can specify a set of criteria for the application of maximin (such as the four Rawlsian conditions) and then use them as constraints on the application of the precautionary principle, then we may be able to isolate some central cases where precautionary action seems reasonable, and so identify a core form of the precautionary principle. This might allow us to overcome the usual objections to the principle. Moreover, it may provide a basis on which the precautionary approach may be extended more generally, beyond the core cases of maximin. The Rawlsian conditions present one possible conception of the criteria. Hence, they allow us to generate one possible form of core precautionary principle, the RCPP.

In addition to the various ways in which the criteria might be understood, one's conception of a core precautionary principle (CPP) might vary in a number of other different respects. One such respect concerns how one understands the role of the principle. Here there is an obvious and interesting candidate position: we might conceive of a CPP as a foundational principle, which functions as an important side-constraint on other principles. Understood in this way, a CPP ought first to be applied at the global and intergenerational level, as representing some kind of minimal principle for humanity's stewardship of the planet. Such an understanding would explain why, in practice, the precautionary principle has been most readily applied to global environmental issues such as climate change and the protection of the ozone layer, and also why many people say it has some affinity to the principle 'Do No Harm', which they see as a foundational principle in ethics.

Now, since the foundational character of the CPP is not essential to the description that I have offered of it above – and in fact such an assertion is not explicit in my earlier work – it would be possible to accept everything that I said about the CPP above, but yet reject the claim that it should be seen as a global and intergenerational side constraint. Given this, and because one might want to highlight the foundational interpretation of the CPP, it will be best to distinguish the global version of the CPP from the CPP as such by giving it a distinct name. So, let us call this principle, 'The Global Core Precautionary Principle' (GCPP).

Now, these initial statements of the CPP and GCPP are, no doubt, open to improvement. Even with my addition, the Rawlsian criteria presumably remain too simplistic in certain respects and underdeveloped in others. But I hope that they serve the purpose at hand, which is to illustrate the possibility and promise of the criterial approach. To see in a very limited

way why this might be the case, let us return now to the Problem of Intergenerational Buck Passing.

How might a core precautionary principle help with the PIBP? It will be useful to begin by noting its limitations. First, it is not explicitly intergenerational; indeed, it shares a major defect of CBA in that in conceiving of the choice to be made as if it were one facing a single person or unified agent, it obscures the interpersonal distributive aspects of that choice. Second, like CBA, it relies on phrases – such as 'lack of reliability probability information', 'care little for gains' and 'unacceptable outcomes' – that require further interpretation and elaboration, and so leave it vulnerable to corruption in practice. Third, the CPP has a very limited purview. It focuses on only one kind of case, and so cannot serve as a general principle for dealing with all kinds of tradeoffs between generations.

Despite these limitations, the CPP may be an important starting point for dealing with problems involving the long-term future. First, the limitations are not crippling. For one thing, despite its limited purview, its coverage does include some of the worst things we could do to future generations. For another, its reliance on terms that require further interpretation is hardly unusual, and may be an essential feature of practical principles – consider, for example, legal principles involving 'the balance of evidence', 'innocent until proven guilty', and so on.

Second, the CPP has other virtues. Here let me highlight just three. The first is that it is not as informationally demanding as CBA. CBA requires precise measures of costs and benefits in order to have concrete application, and this leaves it extremely vulnerable to the problem of historical uncertainty. But the CPP can make do with less specific information about the future. Thus, for example, Broome says that, although the specific effects of climate change 'are very uncertain', these effects 'will certainly be long lived, almost certainly large, probably bad, and possibly disastrous' (Broome 1992, p. 12). This is not very helpful information for traditional CBA, but, so long as it passes the relevant threshold for scientific credibility, it is enough to ground an application of the CPP (For more discussion, see Gardiner 2006).

The second virtue of the CPP is that it does not have the same methodological bias towards the short-term and the narrowly economic as CBA. For one thing, traditional CBA is embedded in the market price of goods to consumers, and so in a *marginal* evaluation of the worth of things that is deeply dependent on and reflects the current status quo. We might put this in an overly simplistic way by saying that CBA stressed the *immediate*, *marginal and local* value of things. But the CPP does not make these assumptions, and so is more open to broader understandings of value that are less context dependent. We might put this in an overly simplistic way by

saying that the CPP (especially when interpreted as the GCPP) makes room for the *holistic, total and global* value of things.¹⁶

The third virtue of the CPP is that it is not a partisan principle. For example, though strategically it stands in opposition to CBA, the opposition is not theoretically deep. Indeed, elsewhere I argue that utilitarian proponents of CBA might have good reason to endorse the CPP (See Gardiner, unpublished). One basic argument for this goes as follows:

- 1. Utilitarians want policies that maximize utility.
- 2. They generally support CBA because they believe that this is a good method for achieving this end.
- 3. But if it were to emerge that CBA does not actually promote utility in some contexts, then they ought to reject it in favor of some alternative policy or set of policies.

Now, (1) and (2) seem incontrovertible. The real issue concerns (3). But here notice two things. First, this is exactly the kind of general argument offered by environmental opponents of CBA, and in particular those who support the precautionary principle. They claim that existing environmental policy – based on CBA – is ineffective in protecting human and nonhuman interests. Second, (3) seems perfectly amenable to those, such as Broome, who are enthusiasts of the CBA approach in normal contexts, but believe that its effectiveness is undermined when one considers issues involving the long term future.

Moral corruption

Now, obviously discussion of the CPP is in its early days, and there is much work to do to see if its promise can be fulfilled. But before closing I would like to note one more problem we must be aware of as we take on that task, both as theoreticians and practitioners. This is the problem of moral corruption.

The mechanisms of moral corruption are many and varied. Here, in the interests of brevity, I will just list some of the more salient:

- Distraction
- Complacency
- Unreasonable doubt
- Selective attention
- Delusion
- Pandering
- False witness
- Hypocrisy.

In my opinion, we are especially vulnerable to such forces in matters concerning the long-term future. Moreover, it is plausible to say that they are manifest in the real world. For example, in the climate change debate it is probably not too difficult to find examples of each of them.

If what I have argued in this chapter is correct, it is easy to explain this special vulnerability. The problem of moral corruption is particularly salient in intergenerational ethics because the PIBP provides the motivation for corruption, and the problem of Theoretical Inadequacy obscures the nature of what is being done. But we need not be overly pessimistic. This may be one case in which, as the expression goes, 'sunlight is the best antiseptic'; in other words, where much of the solution to the problem comes in exposing its nature. After all, the mechanisms of moral corruption are as varied, sophisticated and indirect as they are for a reason. If we were really simply comfortable in our exploitation of our temporal position with respect to future generations, then there would be no need for such covert instruments. But clearly we are not comfortable – we know that we do wrong – and perhaps most of the time all that we really need to do is to point out that we are really deceiving ourselves if we hide behind theoretical devices that speak as if we are not.

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Notes

- 1. One way to secure this is by definition. So, for example, one might say that the current generation consists of all those currently alive and all the people whom they will live to meet. See De-Shalit (1995).
- Such a limitation might take a number of different forms. For example, perhaps we should subject our generation-relative preferences to certain direct constraints. Alternatively, perhaps we should seek to engage other intergenerational preferences that we either already have or ought to develop.
- 3. For instance, in a recent paper, David Archer says: [. . .] we expect that 17–33 percent of the fossil fuel carbon will still reside in the atmosphere 1 kyr from now, decreasing to

10–15 percent at 10 kyr, and 7 percent at 100 kyr. The mean lifetime of fossil fuel CO_2 is about 30–35 kyr.' (Archer 2005). Archer concedes that the usual 300 year estimate may be appropriate for some purposes, because it captures the behaviour of the majority of the carbon. But his reason for conceding this appears to be that 'one could sensibly argue that public discussion should focus on a time frame within which we live our lives, rather than concern ourselves with climate impacts tens of thousands of years in the future'. I am not sure how to understand this argument. For one thing, it appears to manifest the PIBP. For another, it seems to rule out the 300 year figure as well. In the end, I see the merit of Archer's own suggested simplification, which is to say 'a better approximation of the lifetime of fossil fuel CO_2 for public discussion might be 300 years, plus 25 percent that lasts forever'. See Archer (2005).

- For more on both claims, see IPCC (2001), pp. 16–17, especially the graph on 17. Recent
 work on sea level suggests that changes there can be more abrupt and have been so in
 the past.
- 5. Grubb et al. suggest that Non-Annex I emissions will grow by 114 percent during the period, and (even if the US had adopted Kyoto) this would have led to a global emissions rise of 31 percent above 1990 levels (see Grubb et al. 1999, p. 156). A recent United Nations Report anticipates that developed country emissions will increase by 8 percent from 2000 to 2010 (http://usinfo.state.gov/topical/climate/03060501.htm, 3 June 2003).
- 6. These remarks are based on comments on the regulations made by respected scientific experts. As I am not a scientist myself, I am not in a position to assess the soundness of such comments. So, here I simply assume that they have status.
- 7. At least, this is how Clarke describes matters. Scientists and regulators familiar with French and Belgian practices have suggested to me that it has not been the case in those countries.
- 8. The material in this section builds on several paragraphs from the section on economics in Gardiner (2004b).
- 9. 'In principle I favor conventional decision theory (that is, "expected utility theory" [p. 18]). Nevertheless, when it comes to global warming, I do not think the decision-making process can be simply a matter of calculating expected utilities and then going ahead. The problem is too big for that and the uncertainties particularly the historical uncertainties too extreme' (Broome 1992, p. 19).
- 10. That the SDR is a central aspect of the problem is already apparent from the text immediately preceding my original quotation. There Broome says:
 - Since governments must act, research on intergenerational relations must be aimed ultimately at providing guidance on how to act. Nevertheless, I believe it would be wrong to adopt the narrow aim of developing some formula for cost-benefit analysis, which governments could simply apply. I shall not confine myself to deriving a discount rate from current economic theory. The uncertainties of the problem are enough to make that exercise pointless. (Broome 1992, p. 19)
- 11. In his remarks quoted earlier, Broome refers only to the consumer-price method of generating such a rate. But elsewhere in the book he makes clear that he wishes to reject positive discount rates as such, and that he favors a rate of zero.
- 12. She uses the example to illustrate the point that that discounting future utility 'can produce outcomes which seem patently unjust to future generations' since 'under any positive discount rate, the long-run future is deemed irrelevant'. She concludes that it is 'generally inconsistent with sustainable development'; and, immediately afterwards, she invokes the issue of climate change, and cites Broome with approval. Alex Dubgaard employs a similar example against Lomborg (Dubgaard 2002, pp. 200–201).
- 13. This section offers a brief summary of one aspect of the earlier article, but also extends the discussion.
- 14. The Rawlsian approach is not the only available approach to decision-making under uncertainty, so there are other possibilities. However, I happen to think that the Rawlsian approach is not in conflict with the most popular, that of Expected Utility Theory. See Gardiner (unpublished).

- In the technical jargon of economics, this makes the situation one of genuine uncertainty, not mere risk.
- 16. An anonymous reviewer objects to this claim, saying that the 'GCPP only focuses on possible disasters and neglects benefits'. This seems to me a misreading of the GCPP. The GCPP has a number of conditions. Only one of these focuses on unacceptable outcomes; and one of the others is explicitly concerned with benefits.

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9 Institutional determinants of public debt: a political economy perspective

Bernd Süssmuth and Robert K. von Weizsäcker

Introduction

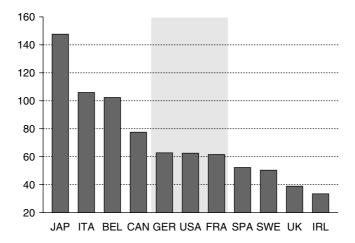
What militates in favor of public debt? 'Hardly anything' we would answer from an economist's point of view. 'A lot' might be the straight answer of a politician. In Germany, for example contemporary conservative politicians frequently claim that every German newborn is burdened with an amount of public debt equalling some (hundred) thousand Euro. A likewise frequently raised argument by their opponents is the necessity of public debt as a means to finance prospective investment in education, infrastructure, and so on, that is, as a means of ensuring intergenerational equity. The aim of this chapter is to scrutinize this antagonism and its institutional determinants in representative democracies.

The rise of the problem

The dramatic increase of public indebtedness in recent years is an international phenomenon observed for many industrialized economies. Figure 9.1 makes the point. Presently, public debt in Germany has reached its post-World War II all time high. In real terms and, certainly, not solely due to German Reunification indebtedness is of an enormous dimension. Table 9.1 summarizes the recent development of public debt and interest payments. Interest payments of issued public securities have become the third largest item of total public expenditures. In a dynamic context, public net borrowing to interest payment on average equalled 90 percent for the period 1990–2004 according to calculations based on figures given in the annual report of the German Federal Court of Auditors (Bundesrechnungshof 2004).

Additionally, today it seems more difficult than ever to get an overview of the full extent of public debt. Besides a myriad of classification problems, a multitude of special assets (*Sondervermögen*), side-budgets and sub-budgets at the state and local level emerged. These phenomena, though already observable before Reunification, particularly proliferated thereafter.

Redemption and amortization payments of public debt make about 70 to 80 percent of total gross borrowing since the 1990s. In certain circumstances follow-up financing officially allows the German government the amortization of outstanding debt by issuing new public debt, that is, debt rescheduling. However, such debt rescheduling is officially only possible for



Source: German Federal Ministry of Finance (Finanzbericht 2004).

Figure 9.1 Debt to GDP ratio (percent): an international comparison, 2003

Sondervermögen, that is, special assets of the German Federal Government. Those are exempt from the broadly worded constitutional constraint (Artikel 115, Abs. 2, Grundgesetz). According to the assessment by the German Federal Court of Auditors, the *Bundesrechnungshof*, the exceptional role of these assets represents an 'invitation to excessively issue public debt' (Bundesrechnungshof 2004, pp. 85–86). Indeed, their share constituted on average one fifth of total debt during the years from 1990 to 2004. Ultimately, this development led to a complex side by side of scattered public liabilities which facilitates window dressing practices. For a recent overview of creative accounting in the European Union (EU), that is, shifts of fiscal expenditures off the respective national budget and hiding fiscal policies in less visible positions see von Hagen and Wolff (2004).

Is it possibly justified on economic grounds?

Given the immediately tightening financial scope, the serious consequences on aggregate capital, and the implied considerable problems of intergenerational equity,¹ is there any economic justification for the accumulation of public debt? Basically three arguments are quoted in this context – none of which being really satisfactory to our view: The strategic countercyclical use of deficits to combat recessions, public debt as a means of tax smoothing, and governmental indebtedness as a side-effect of creating intergenerational equity by ensuring intertemporal shifts of the financial burden of public investment.

Table 9.1 The development of public debt and interest payments in Germany

Year	Total public debt				Interest pa	ayment	S
	Nominal (bn. Euro)	Real (bn. Euro)	GDP (%)	Nominal (bn. Euro)	Real (bn. Euro)	GDP (%)	Public spending (%)
1950	10.55		21.09	0.32		0.63	1.66
1960	26.98	86.05	17.43	0.98	3.13	0.63	1.95
1970	64.37	142.02	18.64	3.47	7.66	1.01	2.42
1980	239.60	317.02	31.85	15.01	19.86	1.99	3.99
1990	538.64	538.64	43.33	0.22	0.22	2.66	5.66
2000	1211.44	967.04	59.68	67.70	54.04	3.34	7.07
2002	1357.77	1053.20	64.34a	66.24	51.83	3.14	5.46

Note: ^a Comparable historical figures for accumulated public debt as a percent of German GDP can be found in Ritschl (1996): 1913: 63%, 1920 (excluding reparations): 72%, 1932: 55.2%, 1938: 67%, and 1944: 217%. As the current values are close to the 1913 and Weimar Republic levels, we should not fail to mention that historical experience teaches us that there has never been a 'soft landing' following an indebtedness of this dimension.

Sources: Federal Statistics Office, Bundesbank (monthly reports), Eurostat, own calculations; note: real figures are in 1990 prices.

The first argument is ultimately of Keynesian origin and thought. Accordingly, in a contractive phase credit backed deficits ought to be used strategically in order to mitigate a supposed lack of demand. The idea is to trigger an expansionary multiplier effect on national income and employment. This form of public 'deficit spending', however, is usually accompanied by some crowding-out of private activity that might counteract or ultimately offset the expansionary effect. Whether a temporary increase of public debt actually stimulates aggregate demand is neither empirically nor theoretically clear. And even if we agree with the sketched Keynesian position, the application of such policies implies numerous practical problems. For example, consider the troublesome process from the detection of a cyclical downturn (a complex task on its own) to the parliamentary decision to take action. Obviously, we would expect an unforeseeable delay that could make a discretionary fiscal policy in order to stabilize cyclical fluctuations nearly impossible. In the case of a less active policy, that is, no real action apart from keeping up spending taken by the government in recessions, the concept of so-called 'automatic stabilizers' recently attracted some attention. The basic idea is that in a recession tax revenues decrease along with aggregate income. The lowered aggregate tax burden, however, has a positive effect on the multiplier. This positive effect may bear an upswing and is, so to say, self-induced. Again, the empirical evidence is weak or mixed. For example, in Fatas and Mihov (2001) the historical existence of automatic stabilizers for the European G7 economies is confirmed, while in Süssmuth (2002) it is clearly rejected.

A justification based on the tax smoothing hypothesis aims at preventing the setting of distortionary incentives that negatively influence the behavior of economic agents. It ultimately seeks to minimize the implied welfare losses of such a behavior. The idea is that if the state were not to borrow on the capital market, transitory fluctuations of public revenues and expenditures would raise the need of a respective adjustment of the tax rate. In particular for public projects and in situations requiring large amounts of financial means, a volatile tax rate would imply considerable efficiency costs. The argument continues in proposing a straightforward way of bridging the temporary budgetary gap by means of public debt. This way the government might achieve an optimal, 'smoothed' temporal allocation of the tax burden and contribute to a social cost minimizing financing of public spending. Support of this view is both theoretically as well as empirically rather weak and mixed (among others Fatas and Mihov 2001; Süssmuth 2002). Therefore, in our opinion welfare losses induced by a distorted behavior of economic agents do not represent an essential fiscal cause of the creeping development of public indebtedness (see also Chen 2003; Grilli et al. 1991).

It remains to discuss the final common justification of the accumulation of public debt: the idea of a temporal displacement of taxes raised in order to finance public investment. Essentially, an investment represents a reduction in today's consumption at the gain of an additionally augmented consumption in the future. Therefore, it seems reasonable to burden the actual beneficiaries of a public investment with the respective costs of this investment. However, as strong as this argument might sound, it did not really find its application in reality. The enormous increase in public indebtedness in the last twenty years was definitely not accompanied by a respectively raised public investing activity.

If we cannot make a good case for credit based policy, why is it then that we observe such a persistent and excessive indebtedness in so many industrialized economies? Is it really a rationally used instrument of fiscal policy that we are analyzing here? We doubt it. To our view these excessive public deficits are driven rather by political than strictly economic factors. From a political economy perspective, the contradiction between myopic incentives in representative democracies and long-term needs of public finance triggers a strategic dilemma which has raised public debt to an enormous dimension.

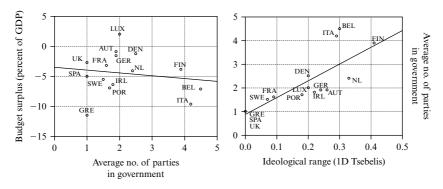
The political economy perspective

Protection of power and multi-party coalitions

A relatively free access to the credit market represents a direct instrument of a government to relax its budget constraint. Usually, this process is more or less intransparent to the voters. In this context it is noteworthy that two quantities steadily increased in contemporary democracies: discernible public spendings (subsidies to firms and direct transfers to the private sector) and indiscernible revenues (indirect taxation and public debt). Therefore, a first and straightforward hypothesis is that discernible expenditures are raised to gain votes shortly before elections, and the ruling government finances these spendings by indiscernible revenues, preferably debt, in order not to lose voters. Misused in this way, public borrowing would represent a special case of indiscernible taxation for the sake of securing political power. By this behavior, the respective government exploits not only the fact of incomplete and asymmetric information but, in particular, also one of the central aspects of public debt. This aspect is the intertemporal displacement of the tax burden. Public borrowing allows the rise of public expenditures today, while its costs are burdened on tomorrow's taxpayers who do not play a pivotal role in the re-election calculus of the current government. Those future taxpayers, amortizing interest and redemption payments of today's debt policies, do not even need to be born today. Of course, such practices of misusing intertemporal displacement for strategic reasons have nothing to do with the intention of a fair generational cost sharing of prospective public investment.

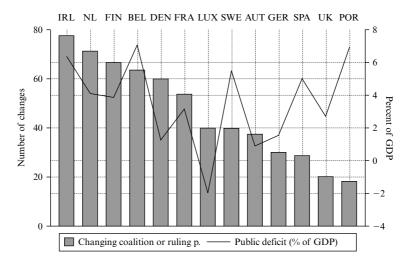
Furthermore, institutional factors and political determinants of economic policy like, for example, governmental party constellations impact on public debt. A democratic constitutional framework takes care of parties being free and independent in their decision-making. However, it seems that especially in multi-party coalitions this principle is a strain on public debt. As can be seen from Figure 9.2 based on average data for the EU-15 economies during the period from 1980 to 2000, public surpluses (deficits) as a percentage of GDP significantly fall (increase) with the average number of parties in government. Not surprisingly, this average number of ruling parties is positively related to the ideological range of parties; see the second scatter diagram of Figure 9.2. As a measure of ideological dispersion we use the one-dimensional Tsebelis-Index reported in Hallerberg *et al.* (2004a).

Figure 9.3 shows that the more frequently coalitions or ruling parties change, the higher the propensity of a government to accumulate debt (see Roubini and Sachs 1989; Alesina *et al.* 1993; Poterba 1994; Kontopoulos and Perotti 1999; Hallerberg and Strauch 2002; Hallerberg *et al.* 2004b). It also suggests that this relationship is nonlinear, that is, convex, in nature.



Sources: International Monetary Fund (Government Financial Statistics), Hallerberg et al. (2004a).

Figure 9.2 Public deficits, number of ruling parties and ideological range: EU-15 1980–2000



Note: Italy and Greece excluded due to shortfall in data.

Sources: International Monetary Fund (Government Financial Statistics), Hallerberg et al. (2004a).

Figure 9.3 Public deficits and governmental periods of office: EU-15 1980–2000

This means that there is a lower turning point in the figures on average public deficits after which they increase with a decreasing number of changes in coalitions and ruling parties.²

How may these observations be explained? In the following we will highlight a potential line of intuitive reasoning which is underpinned with empirical evidence in the proceeding paragraphs. Suppose that all parties in a coalition jointly opt for cutting the budget instead of continuously running large deficits. Nevertheless, every single party of the coalition will seek to preserve its respective budget share, in the form of, for example, administered ministerial offices, from any cuts. This situation represents a fundamental prisoner's dilemma. If there aren't any incentives or mechanisms in favor of a cooperative solution, the non-cooperative solution, consisting in simply giving up plans to cut down budgets at all, becomes most probable. This will be all the more the case, the more difficult the agreement process in budgetary decision-making.

Obviously, this process is the more complex, the stronger the degree of ideological polarization, the lower the re-election probability, and the larger the number of ruling parties of a coalition. Therefore, budget deficits and the increasing accumulation of public debt represent to some extent the result of difficulties in politically managing coalition governments.

Electoral system and strategic behavior

The above reasoning suggests that the electoral system of a country plays a decisive role with regard to the development of its public debt issuance. For example, a strictly proportional representation system tends to generate a large number of ruling parties, while a plurality system tends to keep small parties off parliament. Additionally, as illustrated above, the frequency of changing coalition governments as well as the number of parties participating in these coalitions positively impact on a state's propensity to accumulate debt. In fact, we find countries with a proportional electoral system running large deficits and showing high levels of indebtedness. See the first entry in Table 9.2.

A related indicator, reflecting a central characteristic of the electoral system of a country, is given by its district magnitude. It measures the number of representatives from each electoral district. In other words, district magnitude relates the ratio of the number of representatives elected from one district to the total number of districts. For example, the district magnitude of the German two-tiered proportional representation system with an adjustment of seats in parliament is 1/630, while it equals just one for the plurality system of the UK and 23 for the strictly proportional system in Belgium. In general, plurality systems elect only one representative per district. They encourage a two-party system and are most likely to

	Proportional system	District magnitude < 5
Deficit (% of GDP)	+ 6.26%	- 19.45%
District magnitude < 5	- 47.78%	_

Table 9.2 Deficits and electoral systems: correlations, EU-15 1980–2000

Sources: International Monetary Fund, Hallerberg et al. (2004a), own calculations.

have a one-party majority government, while proportional systems show more variation in their district magnitudes and potential governments (multi-party majority/minority or one-party minority). Several studies indicate that the number of effective parties in a system is strongly and positively correlated with its district magnitude (for a recent survey see Hallerberg *et al.* 2004a). Following our argumentation above, this implies tighter debt policies in countries with smaller district magnitudes. Indeed, we find countries with district magnitudes of less than five in value to run smaller deficits and to be less likely to coincide with a proportional system; see Table 9.2.

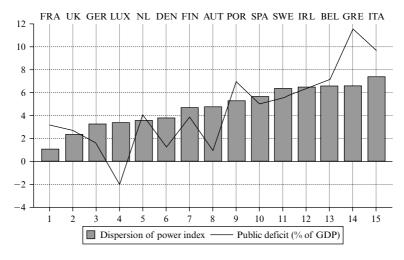
To generalize further, we claim the following: the higher the dispersion of power in the conduct of the budget process, the higher the probability of an intertemporally inefficient budget policy. For Germany the former concerns, for example, the distribution of power among *Bundestag* (German Parliament) and *Bundesrat* (Federal Council); among the federal government, the *Länder* (federal states), and communities; among ruling parties in a coalition, and among parties alternating in power as a consequence of intertemporal changes in the constitution of democratic governments.

In a series of papers Jürgen von Hagen and his co-authors and associates construct an index aimed at capturing the most salient features of the budget process in European governments (see, for example, von Hagen *et al.* 2002). In the construction of this index the following institutional aspects are considered:

- 1. the structure of negotiations within parliament (determined, for example, by a general constraint on the budget and the degree of agenda-setting power of the finance minister in government);
- 2. the structure of the parliamentary process (mainly capturing characteristics of parliamentary amendments);
- 3. the transparency of the budget draft;
- 4. the flexibility of budget execution (mainly reflecting the potential to *ex post* change a budget passed by parliament);
- long-term planning constraints (an index composed by data on the existence and features of multi-annual targets and governmental commitment to them); and

the relationship between national and sub-national governments (covering, for example, balanced budget requirements at the local level as recently introduced in Sweden).

All these institutional items are operationalized by coding them according to their capacity to reduce the common pool resource problem inherent in public budgeting. This problem denotes the externality which results from the fact that government spending is commonly targeted at specific groups in society while being financed from a general tax fund to which all taxpayers, possibly including future ones, contribute. As outlined above, the common pool resource problem of modern democracies is aggravated by an institutional fragmentation of decision-making. In this sense, the Von Hagen Structural Index can be interpreted as an index of centralization of the budget process (von Hagen et al. 2002). Using latest data on the normalized Von Hagen Structural Index which were recently made available in Hallerberg et al. (2004b), we compute an index of the dispersion of power in the conduct of the budgetary process. Technically, this is done by respectively subtracting the structural index value from one. Figure 9.4 plots the resulting figures against the 1980-2000 average values of public deficits for the EU-15 economies. The resulting pattern of coherence is striking and confirms our argument.



Sources: International Monetary Fund (Government Financial Statistics), Hallerberg et al. (2004b), own calculations.

Figure 9.4 Public deficits and centralization of budget process: EU-15 1980–2000

What to do? Proposals of institutional reform

In our opinion, the detrimental trend in indebtedness may only be stopped by re-arranging the incentive mechanism in democratic market economies. This intervention can take several forms: it may be a re-arrangement at the constitutional level: it may concern the budget process, the electoral system, or take the form of an (intertemporal) balanced budget rule. Alternatively, it could imply the obligation to use tax revenues to serve interest and redemption payments. A final action may be taken by the partial delegation of the budgetary process to an independent institution at the national and/or supranational level.

In the following, we shall briefly discuss central aspects of these institutional reform proposals.

Constitutional barriers

A fundamental prerequisite for a prospectively successful fiscal policy in a democracy is a strengthening of the popular awareness of the costs of public goods and services. Today, no one seems to know exactly about the amount of public benefits consumed and about what is actually paid for at the individual level. At the heart of any institutional system concerned with the simultaneous consideration of costs and benefits lies the call for a balanced budget in the short or medium run. A respective restriction should be manifested in the constitution.

Note that this measure does not necessarily require an annually balanced budget. Other recently developed and sophisticated concepts of budgeting are worth considering. Instead of the annual restriction an intertemporal one may form the base of budgeting. Such an intertemporal rule takes discounted future income and expenditure flows into account. Ideally, this would be tantamount to a full internalization of the costs of public debt. A straightforward step in this direction could be made by applying the promising concept of Generational Accounting (Auerbach *et al.* 1991, 1994, 1999). In the period of transition a debt criterion and/or a restriction on the interest-to-GDP ratio seems reasonable.

As a further proposal consider a sort of 'debt tax': the obligation to finally balance the budget would imply to explicitly couple the fiscal burden of public debt and taxation. A renewed issue of net debt would then have to be paralleled by an elaborated tax scheme of interest and redemption payments.

From a fiscal policy perspective, the constitutional barrier of public debt in Germany (in particular, Art. 115, Abs. 2, Grundgesetz) has proven to be irrelevant for several reasons; see our argumentation in the first section. Discussing them in detail is beyond the scope of the present chapter. In this context, however, it should be noted that it is again neither a specifically nor an exclusively German problem. Also for the US, constitutional barriers

have not proven to be a particularly promising and efficient instrument to cut back public indebtedness.

However, this previous experience should not lead us to reject the concept of constitutional barriers as a whole. A first step to remedy the situation would, for example, be given by the thorough identification of potential ways of avoidance and by adapting the legal basis accordingly. This implies taking shadow budgets, side financing, as well as potential loopholes in the federal system into account. Additionally, a positive example from a Pan-European perspective is given by Switzerland. At the cantonal level the possibility to directly vote on public revenue exists. Up to the present, this possibility has led to a remarkable discipline in public spending. Obviously, it represents an efficient control mechanism of the total Swiss budget.

Budget process

Recent extensive studies of budgetary processes suggest the reform of the budget process itself as a promising track to follow. A higher propensity to accumulate debt particularly thrives on two fields of potential conflict of interests. First, there is the notoriously conflicting relationship between myopic and long-term targets of budgetary policy. Rules that put a stronger weight on long-term aspects of fiscal policy seem fairly well-suited to lower the propensity to credit back public expenditures. Second, as discussed above in the context of the common pool resource problem, an important role is played by the conflict between common and special interests. Typically, the group of beneficiaries of public spending programs is smaller than the one made up by all taxpayers. Politicians in their role as voted representatives of specific interest groups tend to overestimate the net benefit for society of the spendings they accept responsibility for. From these observations, we infer that an institutional restriction of the impact on the budget by specific interest groups is desirable as it would ultimately lead to more fiscal discipline. In this way it can help in reducing deficits and the accumulation of debt.

Electoral system

The call for an institutional reform can also be justified on completely different grounds. As emphasized above, an increase in public spending ultimately needs to be financed by raising taxes. Therefore, the choice between a credit and tax backing of expenditures corresponds to a choice in timing taxes and not to a choice between higher taxes and their complete avoidance. In general, the temporal scope of this 'timing' is wider than the one determined by the probability of re-election maximizing strategic behavior of democratically elected governments. This time inconsistency encourages ruling parties primarily interested in securing power as well as voters with

a strong preference for present consumption to irreversibly redistribute wealth at the expense of future generations.

Therefore, the planning horizon of voters, obviously, plays a decisive role. From a political economy perspective, a fairly neglected factor becomes important: the age structure of the population. Voters whose interests lie with current developments prefer credit as opposed to tax financing of public goods and services. In particular, they do so in expectation of the phase of interest and redemption payments lying outside their own economically relevant period of working life. The aging of the population, which is particularly observed in the Federal Republic of Germany, biologically shortens the average time left and increases the general interest for a further accumulation of public debt. Are there ways to prevent such behavior? And who would be interested in it after all?

Voters affected in the future are not able to articulate their interests today. The majority concerned is not even born yet. An indirect participation in today's political process seems only conceivable by constitutionally limiting public debt. However, if it requires constitutional restrictions to protect future citizens, how can these possibly be introduced today? It decisively depends on the attitude of contemporary voters. They decide upon the political process of feedback, that is, whether the mechanism design of representative democracies ultimately leads to an exploitation of future taxpayers or not. Of course, a pressure to consolidate will only develop and be of real fiscal political dimension if an individual commitment to the future exists. A natural bridge to the future is altruism, as given, for example, by children. The larger the share of persons among the population without offspring, the lower the average interest in distant matters of public finance. Medical progress, enhanced material prosperity, and altered standards of value have indeed led to a drastic decline in birth rates. An ongoing of this demographic development will undermine even the most sophisticated concepts of intergenerational altruism. It renders the implementation of constitutional restrictions to public indebtedness an all the more urgent step.

An alternative corrective measure is noteworthy and may be given by adjusting the electoral system itself. This rather radical measure would require a constitutional reform and consists in assigning a higher weight to votes of persons raising children.

However, which majority will ultimately engage and opt for a constitutional balanced budget rule or a reform of the electoral system? This dilemma manifests a worrying future weakness of competitive democracies.

Delegation

A drastic constitutional reform would be to separate the instrument of public debt issue out of the political process. This partial outsourcing could

take the following general form: the elaboration of public expenditures and tax revenues remains the responsibility of the respective government. With regard to the total budget, however, exogenous limits are set in the form of credit constraints. The control of these limits – taking, for example, the form of a debt criterion or a balanced budget in the medium run – is delegated to an independent institution. In the case of Germany adequate institutions of sufficient reputation are, for example, given by the *Bundesrechnungshof* or the German Central Bank (the *Bundesbank*). For further discussion and theoretical underpinning of this proposal see von Weizsäcker (1992), Süssmuth and von Weizsäcker (2006).

European Economic and Monetary Union

One could also think of a delegation at the supranational level. Possibly, at this level the problem of the actual realization of a constitutional reform would be facilitated. From a political economy perspective, the national or intrastate bias makes the lion's share with regard to the growth of public indebtedness. Whatever the suggestion of ways to reform, the political realization remains a serious problem. How can we credibly alter the incentive mechanisms of representative democracies in the presence of contemporary incumbents whose interests conflict with any reform targeted towards an increase in budgetary discipline?

A straightforward idea to overcome this dilemma of credibility at the national level is delegation (of any kind) to an independent international institution. Binding external rules like the Maastricht debt and deficit criteria could represent a corrective measure of the national political bias and, in the broadest sense, increase welfare. The idea is that contemporary incumbents let their hands be tied by a third party. This is done in order to render their re-election chances untouched by the implied, though externally 'enforced', cuts and the overall increase in taxes. However, this promising result presumes effective sanctioning mechanisms. These are not given in the current setting of the Stability and Growth Pact or, in fact, have an idiosyncratic efficiency in deterrence (for a detailed discussion see Süssmuth and von Weizsäcker 2006). Besides this argument, external rules as well as delegation, in general, require finding a compromise between credibility and flexibility of fiscal policy. The stipulated price in both circumstances is that these measures may prevent a nationally required deficit spending in the course of tax smoothing or combating recession strategies. In this sense the issue of public debt always represents an elementary conflict between a behavioral regulation and a free disposition.

With regard to the pressing realization of a reform, we suggest delegation of the budget process to an independent entity being the most promising proposal out of the set of recently discussed alternatives. It can be justified on a comparatively established theoretical foundation and a rich and positive experience in the field of monetary policy.

Outlook and concluding remarks

Our survey and discussion of institutional determinants of public debt revealed a fundamental dilemma of self-interests of economic and political agents on the one hand and social welfare on the other. This conflict is and will be further aggravated by the ongoing demographic change. Against the background of existing institutions, the shift in the age structure, and the latest generational accounts, only little hope for a trend reversal exists from a political economy perspective.

The necessary self-commitment of central governmental institutions in order to implement an efficient incentive mechanism going beyond their own best interests seems – not solely for the Federal Republic of Germany – impossible.

It remains a future challenge to elaborate in detail how a government may be bound by constitutional barriers and social norms, and how a representative democracy may be able to endogenously create the respective political institutions. It clearly represents the paramount fiscal policy problem of our society.

Notes

- To assess a potential trade-off between intragenerational and intergenerational equity is beyond the scope of this chapter. For fixed subnational units such as federal states (*Länder*) in Germany, Amann et al. (2006) offer evidence for public indebtedness to have a significant negative impact on student achievements and therefore on both intergenerational (different cohort/same state) and intragenerational (same cohort/different state) equity.
- Note, we excluded Italy and Greece from the analysis. This is due to the fact that data on changes in coalitions and ruling parties for the Italian economy are only available until 1995. Corresponding data for the Greek economy are subject to shortfall during three caretaker governments from 1989 to 1990.

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PART II

INSTITUTIONALIZATION OF GENERATIONAL JUSTICE

10 Establishing intergenerational justice in national constitutions

Joerg Chet Tremmel

Introduction

Today's generation has the capacity to affect the future more than ever before in the history of mankind. This chapter justifies the need to institutionalize intergenerational justice, focusing on changes in national constitutions. In this context, a 'matrix of the institutionalization of intergenerational justice' is developed. In dealing with the wording, Beckerman's argument that we cannot attribute 'rights' to future generations is rejected. Afterwards, some concrete proposals to institutionalize ecological and financial generation protection clauses are drafted. Finally, current initiatives by young members of parliament are portrayed although their proposals are not bold enough.

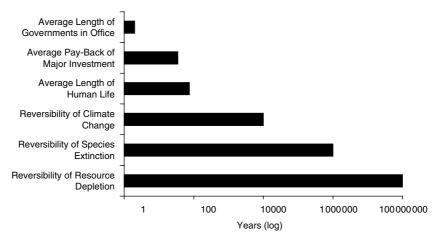
The structural problem of democracy: future individuals have no votes

The principle of democracy, in its traditional and narrow form, can conflict with the maxim of intergenerational justice. The need to appease the electorate every four or five years means that politicians direct their actions towards satisfying the needs and desires of present citizens – their electorate. The interests, therefore, of future generations are all too often neglected.

Due to his limited time in office, a politician will not have to take responsibility for the consequences of his actions and also cannot be made liable for them. Today's technological advancements mean that the consequences of our present undertakings, such as the instalment of nuclear energy plants, will have far reaching effects and a potentially deeply negative influence on the quality of life for numerous future generations.

Nuclear power stations in a country like Germany have produced 118 tonnes of plutonium waste products (PU-239) up until 31st December 2005. Plutonium has a half-life period of 24110 years, meaning that there will still be one gram of today's plutonium remaining in 310608 years. Yet, even one single gram threatens human health.

If one considers that the history of mankind only began to be recorded 10 000 years ago, it becomes clear how long the impact of our current actions will be felt by future generations. Relevant time scales for human



Source: Own source.

Figure 10.1 Relevant time scales for human and environmental development

and environmental development differ widely (see Figure 10.1). Today's generation thus has the power to shape the future like never before. Yet, unfortunately, increases in technological possibilities have not gone hand in hand with an increase in the morality and far-sightedness of today's decision makers.¹

In the words of the former German president, Richard von Weizsäcker,

Every democracy is, generally speaking, founded on a structural problem, namely the glorification of the present and a neglect of the future. It is an indisputable fact that we cannot and do not want to be ruled differently than by representatives elected for a fixed amount of time — with no more leeway at their disposal than precisely their legislative terms of office for what they offer as solutions to our problems. I am not saying that the all politicians are unconcerned with the future. They are only faced with the problem of having to acquire a majority. (Friedrich *et al.* 1998, p. 53)

In today's elections those individuals who will be born in the future cannot participate. They are not taken into account for the calculations of a politician, whilst he is organizing his re-election. If they could make their interests in the political decision-making process heard, majority conditions for important political decisions would be different. Policy on energy may serve as an example here: at present, the form of power production, based on fossil fuels, as utilized by today's generation, facilitates a uniquely high standard of living, but today's generation is thereby creating serious

disadvantages for itself and future generations in the medium-term between the next 50 to 100 years. We already know today – and having this knowledge is the crucial point – that such an energy policy leads to increased levels of carbon dioxide in the atmosphere. As a consequence, the natural greenhouse effect is strengthened and temperatures rise worldwide. More and stronger hurricanes, inundations, streams of refugees and new conflicts will be the future results of this short-sighted policy. If only these future individuals, who are born in the next 200 years, could vote on energy policies, this would create a huge majority which would facilitate a quick shift to renewable sources of energy. If only these future individuals could vote on financial policy, public debt would be significantly lower than today.

This fundamental dilemma of democracy leads to a preference for the present and to oblivion with regard to the future. Hence, succeeding generations are confronted with a structural disadvantage if democracy is not improved (Tremmel 1996). Generational justice affects the distribution of resources and life opportunities between generations. In view of the voice-lessness of future generations it is not surprising that there will be insufficient resources remaining for them due to the competition for resources between present individuals and groups. Even if nature and mankind are not endangered as a whole, but 'only' parts of mankind and determined elements of nature (Renn and Knaus 1998, p. 18), the right of future generations to spend their life on an ecologically intact, biologically diverse planet, is nevertheless threatened like never before in the history of mankind. The 'futurization' of ecological problems means an existential danger for future generations.

In the face of present and future problems we cannot afford to ignore these problems any longer: we first need new future ethics. This significant change of consciousness must then be codified in written law. The first step has been done, but the new future ethics is, as yet, not sufficiently reflected in positive law. It is precisely this that is necessary. The term 'institutionalization' of intergenerational justice describes measures to safeguard the interests of future generations through institutions or written law. It is naive to hope that politicians will act in the interests of future generations in the same way that they do for those citizens who are alive today. The reason is not pure self-interest of today's politicians, it rather lies in the political framework of every democracy. Every party tries to obtain votes, and therefore must concentrate on the short term perspective, that is, the preferences of the present electorate and the present interests of influential groups, insofar as politicians of all parties, who want to look further ahead than at the next election (or even the next 30 years), are disadvantaged in the competition with their short-term thinking political rivals. Hence, ambitious politicians who strive for many terms cannot act in favour of future generations if there is a trade-off between the interests of the present and future generations.

Therefore the framework of political action and responsibility needs to be changed. Of course this must happen in such a way that the core principles of democracy remain intact. It is absurd to believe that doing away with liberal democracy is the solution to resolve the structural problem of democracy, as described above. Democracy is one of the most important social institutions that we can pass on to future generations; for this and many other reasons its abolishment is inconceivable. Such an abolishment would cause irreparable damage in relation to the maxim of generational justice for generations to come. If the influence of the electorate in politics, which is the very essence of liberal democracy, is to be maintained, terms of political office must be short, with frequent elections.

Three types of clauses for intergenerational justice in national constitutions

In order to solve the structural problem of democracy, different countries have chosen different approaches. Discussions revolved first around whether the protection of posterity should be ensured in substantive law by enshrining it in the constitution itself, or by establishing a new institution; and second which policy fields the protection of posterity should concern.

Clauses in national constitutions

Let us first collect examples for clauses in constitutions. The increasing acceptance of future ethics has resulted in the fact that constitutions and constitutional drafts, worldwide, especially the ones which were adopted in the last few decades, refer to generations to come. These clauses can be grouped into three categories: general clauses for intergenerational justice, ecological generational justice clauses and financial generational justice clauses (Figure 10.2). Obviously, the fields of ecology and finances were deemed by many states so prone to intergenerational misconduct that they wanted to mention them explicitly.²

Table 10.1 shows a few examples for constitutions that include general clauses for the protection of future generations, usually in the preambles. Other constitutions explicitly mention the environment or sustainable development, either solely or cumulatively by a general clause (Table 10.2).

Clauses for financial intergenerational justice are found in a smaller number of constitutions and often they are more 'hidden'. Mostly, the word 'generation' is not even mentioned but only 'financial policy' 'balanced budget' and so on. Normally, these clauses come cumulatively with a general clause or a clause for ecological intergenerational justice (Table 10.3).

Of these examples, we will explore article 115 of the German constitution in more detail later. Another interesting example is the ongoing fight

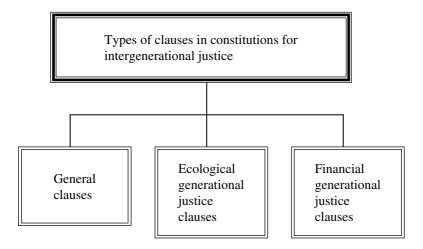


Figure 10.2 Typology of clauses in constitutions

for a 'Balanced Budget Amendment' in the USA. The Constitution of the United States does not require the Congress to pass a budget which equals the projected income to the government and the proposed expenditure. As a reaction to increasing deficits, more than a dozen attempts have been started to include a provision that stops deficit spending. Public support has ebbed and flowed, however, it seems to have been constantly over 50 per cent. Nevertheless, it never became strong enough to change the US constitution. To win passage, the amendment would have to clear both the House and Senate by two-thirds margins and then be ratified by three-quarters of the state legislatures. The latest attempt (but for sure not the last one) took place in February 2003 when a group of Republican house members introduced a balanced budget amendment to the US Constitution, arguing that recent deficits demonstrate that Congress does not have the discipline to balance the budget on its own. Like most proposals before, it included exceptions for the case of war.

Institutions

Other countries like Israel, Hungary, or Finland have set up or currently discuss new institutions for the protection of future generations instead of enshrining clauses for the protection of future generations into their Constitutions (see the articles of Shoham and Lamay, van Opstaal and Timmerhuis, Jávor, Agius in this volume). The new institutions are designated 'Ombudsman for Future Generations', 'Committee for Future Generations', 'Ecological Council', 'Future Council,' or 'Third Chamber'.

Table 10.1 General clauses in constitutions for intergenerational justice

Country	Lieu	Wording	Year of adoption
Estonia	Preamble	'Unwavering in their faith and with an unswerving will to safeguard and develop a state; [] which shall serve to protect internal and external peace and provide security for the social progress and general benefit of present and future generations; [] the Estonian people adopted [] the following Constitution.'	June 1992
Czech Republic	Preamble	'resolved to jointly protect and develop the inherited natural and cultural, material and spiritual wealth, resolved to abide by all time-tried principles of a law-observing state.'	16 December 1992
Czech Republic	Charter of Fundamental Rights and Freedoms Preamble	'The Federal Assembly, [] recalling its share of responsibility towards future generations for the fate of life on this Earth, [] has enacted this Charter of Fundamental Rights and Freedoms.'	16 December 1992
Poland	Preamble	'recalling the best traditions of the First and the Second Republic, obliged to bequeath to future generations all that is valuable from our over one thousand years' heritage.'	April 1997
Switzerland (federal constitution)	Preamble	'In the name of God Almighty! Whereas, we are mindful of our responsibility towards creation; [] are conscious of our common achievements and our responsibility towards future generations; [].'	18 April 1999 amended 15 October 2002
Ukraine	Preamble	'Aware of our responsibility before God, our own conscience, past, present and future generations.'	June 1996

Table 10.2 Clauses in constitutions for ecological generational justice

Country	Lieu	Wording	Year of adoption
Argentina	Article 41, clause 1	'All inhabitants are entitled to the right to a healthy and balanced environment fit for human development in order that productive activities shall meet present needs without endangering those of future generations; and shall have the duty to preserve it. As a first priority, environmental damage shall bring about the obligation to repair it according to law.'	1994
Brazil	Article 225, clause 1	'All persons are entitled to an ecologically balanced environment, which is an asset for the people's common use and is essential to healthy life, it being the duty of the Government and of the community to defend and preserve it for present and future generations.'	1988
Czech Republic	Article 7	'The State shall attend to a prudent utilization of natural resources and to protection of national wealth.'	16 December 1992
Finland	Article 20	'Nature and its biodiversity, the environment and the national heritage are everybody's responsibility. The public authorities shall endeavour to guarantee for everyone the right to a healthy environment and for everyone the possibility to influence the decisions that concern their own living environment.'	11 June 1999
Germany	Article 20a	'Mindful also of its responsibility toward future generations, the State shall protect the natural bases of life by legislation and, in accordance with law and justice, by executive and judicial action, all within the framework of the constitutional order.'	27 October 1994
France	Charter for the environment 2004	'Considering that, [] In order to ensure sustainable development, choices designed to meet the needs of the present generation should not jeopardise the ability of future generations and other peoples to meet their own needs.'	2004
	Article 6 of the charter for the environment	'Public policies shall promote sustainable development. To this end they shall reconcile the protection and enhancement of the environment with economic development and social progress.'	
Greece	Article 24, Clause 1	'The protection of the natural and cultural environment constitutes a duty of the State.	9 June 1975

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Table 10.2 (continued)

Country	Lieu	Wording	Year of adoption
		The State is bound to adopt special preventive or repressive measures for the preservation of the environment.'	
Hungary	Article 15	'The Republic of Hungary recognizes and shall implement the individual's right to a healthy environment.'	1989
Italy	Article 9	'The republic promotes cultural development and scientific and technical research. It safeguards natural beauty and the historical and artistic heritage of the nation.'	27 December 1947
Netherlands	Article 21	'It shall be the concern of the authorities to keep the country habitable and to protect and improve the environment.'	1987
Latvia	Article 115	'The State shall protect the right of everyone to live in a benevolent environment by providing information about environmental conditions and by promoting the preservation and improvement of the environment.'	15 October 1998
Lithuania	Article 54, Clause 1	'The State shall look after the protection of the natural environment, its fauna and flora, individual objects of natural resources be used moderately and that they be restored and augmented.'	25 October 1992
Poland	Article 74, Clause 1	'Public authorities shall pursue policies ensuring the ecological security of current and future generations.'	April 1997
Portugal	Article 66, Clause 1 and 2	'Everyone has the right to a healthy and ecologically balanced human environment and the duty to defend it. It is the duty of the State, acting through appropriate bodies and having recourse to or taking support on popular initiatives, to: [] d) Promote the rational use of natural	2 April 1976
		resources, safeguarding their capacity for renewal and ecological stability. [] h) Ensuring that fiscal policy renders development compatible to the protection of the environment and the quality of life.'	
Slovakia	Article 44, Clauses 2 and 4	'Every person shall have a duty to protect and improve the environment and foster cultural heritage.'	1 September 1992

Table 10.2 (continued)

Country	Lieu	Wording	Year of adoption
		'The State shall be responsible for the economical use of natural resources, ecological balance and an effective environmental policy.'	
Slovenia	Article 72, sentence 1–3	'Everyone has the right in accordance with the law to a healthy living environment. The state shall promote a healthy living environment. To this end, the conditions and manner in which economic and other activities are pursued shall be established by law.'	23 December 1991
South Africa	Article 24	'Everyone has the right a) to an environment that is not harmful to their health or well-being; and b) to have the environment protected, for the benefit of present and future generations, through reasonable legislature and other measures that prevent pollution and ecological degradation promote conservation; and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.'	1994
Spain	Article 45, clause 2	'The public authorities shall concern themselves with the rational use of all natural resources of protecting and improving the quality of life and protecting and restoring the environment, supporting themselves on an indispensable collective solidarity.'	29 December 1978
Sweden	Chapter I Article 2, sentence 4	'The public institutions shall promote sustainable development leading to a good environment for present and future generations.'	1 January 1975, amended 1976
Switzerland	Article 73	'The Confederation and the Cantons shall strive to establish a durable equilibrium between nature, in particular its capacity to renew itself, and its use by man.'	April 1999
Uruguay	Article 47	'Environmental protection is in the interest of all. Water is a natural resource essential for living. 1) Water and drainage/cleaning up national policies shall be based upon:	amended 31 October 2004

Table 10.2 (continued)

Country	Lieu	Wording	Year of adoption
		b) sustainable management of water resources and protection of the hydrological cycle; those are issues of general interest and will be run in support of future generations. Civil society and single consumers will participate in every step of the organization, management and monitoring of water resources, after declaring every water basin a basic unit.'	

But what can maintain the protection of future generations more effectively, changes to the constitution or the creation of new institutions? In the solution provided by written law, the Constitutional Court becomes the institution which watches over a balance of the interests of present and future generations. In case of a new institution, the institution itself becomes the watch-dog.

These kinds of new institutions make sense if they really have the competencies to protect future generations. This means, for instance, that these institutions can veto or at least freeze laws or that they can propose laws themselves. Without this responsibility the advisory system is merely extended. In Germany, for instance, there are already four institutions: the German Advisory Council on the Environment (Sachverständigenrat für Umweltfragen, www.umweltrat.de), the German Advisory Council on Global Change (Wissenschaftlicher Beirat der Umweltregierung für Globale Umweltveränderungen, www.wbgu.de), the German Council for Sustainable Development (Rat für Nachhaltige Entwicklung, www.nachhaltigkeitsrat.de) and the Parliamentary Advisory Council on Sustainable Development (Parlamentarischer Beirat für nachhaltige Entwicklung, www.bundestag.de/parlament/parl_beirat/) which was appointed in 2004. They all do not have the necessary power to stop laws which threaten the well-being of future generations.

The question of how an institution with real power would be staffed also requires special attention. One could imagine that the members are nominated by parliament, are provided by associations and NGOs or that they are elected by the people. These proposals – apart from the latter one – are democratically problematic. Just consider the House of Lords in Great Britain, which is under heavy criticism for having too much power for an

Table 10.3 Clauses in constitutions for financial generational justice

Country	Lieu	Wording	Year of adoption
Estonia	Article 116	'Proposed amendments to the national budget or to its draft, which require a decrease in income, an increase of expenditures, or a redistribution of expenditures, as prescribed in the draft national budget, must be accompanied by the necessary financial calculations, prepared by the initiators, which indicate the sources of income to cover the proposed expenditures.'	28 June 1992
Finland	Article 84	'[] The revenue forecasts in the budget shall cover the appropriations included in it. []'	11 June 1999
Germany	Article 109, clause 2	'In managing their respective budgets, the Federation and the Länder shall take due account of the requirements of the overall economic equilibrium.'	23 May 1949
	Article 115	'Revenue obtained by borrowing shall not exceed the total of investment expenditures provided for in the budget; exceptions shall be permissible only to avert a disturbance of the overall economic equilibrium. Details shall be regulated by a federal law.'	adopted 12 May 1969
Poland	Article 216, clause 5	'It shall be neither permissible to contract loans nor provide guarantees and financial sureties which would engender a national public debt exceeding three-fifths of the value of the annual gross domestic product. The method for calculating the value of the annual gross domestic product and national public debt shall be specified by statute.'	2 April 1997

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unelected body. For similar reasons, the Senate in Bavaria was abolished (Tremmel and Viehöver 2001, p. 21). It could start legislative initiatives as a so-called 'Second Chamber' and was a place of refuge for association lobbyists. On the other hand, very mighty institutions like the European Central Bank are also not staffed by democratic elections and still enjoy a high level of public support.

The matrix of the institutionalization of intergenerational justice

If the first question is 'written law versus new institution', a second fundamental decision is 'range of coverage'. Both clauses in constitutions and new institutions can be conceived to deal with either ecological questions and financial questions or posterity in general. In the latter case the Constitutional Court or the new institution would have to decide case by case which needs of future generations should be prioritized.

The possible combinations are shown in the matrix below with examples in the fields (see Table 10.4).

<i>Table 10.4</i>	The matrix of the institutionalization of intergenerational
	justice

	Only ecological generational justice	Only financial generational justice	General protection of posterity
Written Law Solution	Art. 24 of the Constitution of South Africa	Art. 115 German Constitution	Preamble of the Swiss Constitution
Institution	Ombudsman for Future Generations in Hungary	Audit courts	Commission for Future Generations in Israel

Source: own source.

The wording: do future humans have 'rights'?

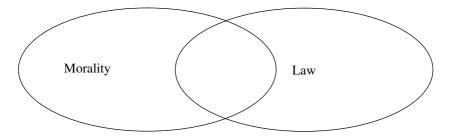
When it comes to changes of the constitution, wording is crucial. Hence, it is necessary to assess whether one can rightfully write: 'Future generations have rights'.³ At the beginning of the debate about future generations it was frequently argued that future generations had no rights, but instead that present generations were merely morally obliged to them (Brown-Weiss 1989, p. 96; Beckerman 2004). Because of Edith Brown-Weiss's intervention, the UNESCO resolution which was originally entitled 'Declaration for the Rights of Future Generations' was renamed into 'Declaration on the Responsibilities of Present Generations towards Future Generations'.

Moral and codified rights

What is the relationship between moral and codified ('written') rights? An obligation according to written law and a moral obligation are factually connected but not identical. In general, the relationship of morality and law can be characterized as follows. First, there are moral commandments, or respectively obligations, that are not codified; second, there is an intersection between both fields; and third, legal norms may exist that are not moral (Figure 10.3).

For instance, many obligations towards animals and plants as well as towards future generations belong to the first category, since they are not vet codified within legal order. Particularly during the past few decades, the growing acceptance of ethics concerning the future led to the circumstance that worldwide constitutions that have been adopted and draft constitutions verbatim refer to future generations. Conceptually, the idea of rights of future generations is preceded by another thought which arose much earlier. Namely, we are talking about the development of the idea of human- and civil rights. Important documents were the 'Magna Charta' (1215), the British 'Bill of Rights' (1689), the 'Declaration of Independence of the United States of America' (1776) and the 'Declaration of Human and Civil Rights' in the course of the French Revolution (1789) and finally the UN 'General Declaration on Human Rights' (1948) where human rights, which at first only applied at the national level, then found their way into public international law. But who would agree with the statement that men and women had no human rights before 1215?

If the obligation of today's generation towards the future was, for example, already anchored in the Dutch constitution, but not yet in the Belgian constitution before the following year, then one could hardly claim that in this year the Belgians would not yet have moral obligations towards posterity. That would repeat the mistake some people



Source: own source.

Figure 10.3 Morality and written law

made when they claimed that people in a specific state have no human rights just because their government has never ratified the Charter of Human Rights.

Moral norms that are at the same time legal norms and vice versa belong to the second category. Most legal norms in democratic, liberally organized states are also moral norms (for example 'Thou shall not kill').

Last but not least, there is a third category: those laws of dictatorial states that are deemed unjust everywhere else, for example the Nuremberg Racial Laws of Hitler's Third Reich.

Hence, it can be stated that it is enough to justify that future people have moral rights. Taking a bird's eye view, the written law is always adjusted according to the changes in the moral convictions within a society.

Semantic investigation of the term 'to have (moral) rights'

The position of the fathered but still unborn child is acknowledged in certain fundamental rights. It has the legal capacity to hold rights, for instance the right not to be killed if the conditions for a legal abortion are not fulfilled. But below we will exclusively deal with non fathered, 'potential' individuals. According to Beckerman, the general proposition that future generations cannot have anything, including rights, follows from the meaning of the present tense of the verb 'to have'. 'Unborn people simply cannot have anything. They cannot have two legs or long hair or a taste for Mozart', Beckerman writes in the Intergenerational Justice Review (Beckerman 2004; see also Beckerman 1994; 1999). Beckerman's argument is correct, but of minor importance. It reminds us to use the future tense instead of the present tense, that is, to say: 'Future Generations will have rights' instead of 'Future Generations have rights'. It is important to understand that Beckerman's argument cannot be used to denounce the term 'rights' and to replace it by 'needs', 'interests', 'wishes' and the like. If future generations cannot have 'rights', they cannot have 'interests' and so on, either. They will have interests, just as they will have rights. If we want to favour the term 'interests' over 'rights', we must find other arguments. The hint to using the future tense instead of the present tense in the wording of constitutional amendments is just a minor aspect. It is more important which nouns, verbs or adjectives are chosen. Beckerman claims that his argument denounces the term 'rights of future generations' (Beckerman 1999; 2004), but he is incorrect.

Having rejected Beckerman's claim does not mean that we have proven that it is more appropriate to use 'rights' instead of another noun in constitutional amendments.

The figure of 'conditioned' rights

Some scholars admit that future generations have rights, but they still differentiate. Callahan argues that our obligations towards future generations are weaker than our obligations towards present generations, because the claims of future individuals are conditioned claims. 'The claim of future generations against us is a conditional claim, in the sense that it depends upon their existing to make the claim [. . .] over against that situation are presently living human beings, whose claims are actualised claims, whose rights are in no sense conditional' (Callahan 1980, p. 82)

Birnbacher holds the opinion that rights always imply obligations: 'A right can only exist when someone else has an obligation towards the legal subject' (Birnbacher 1988, p. 100). The reversed conclusion is as follows: anywhere where a party A has an obligation in relation to another party B, B has a right in relation to A. But according to Birnbacher, for this statement to be true, the following condition must be fulfilled: the obligation will be demanded in the name of A. If a presently living, malnourished person has the right not to die of hunger, he does not have to wait for others to remember that they ought to not let him starve. He himself can demand that others not let him starve. But if the starving person is so weak that he cannot express himself anymore, he has by no means forfeited his right. Thus, if someone cannot assert a right himself, assigning a right to him means demanding from others to fulfil the corresponding obligation (Birnbacher 1995, p. 100).

Sometimes it is argued that a substantial characteristic of the term 'right' is attributed to the possibility to renounce them. According to this argument, one can indeed claim that future generations cannot have rights because they are not able to renounce them. However, this understanding of the term 'right' is problematic because neither animals, nor children, nor mentally handicapped persons would then have rights. 'The situation in which future subjects are prevented from asserting their rights against those alive today due to logical reasons, and where present subjects do not assert their rights because of contingent reasons cannot be a conclusive reason to withhold moral rights from one group and not the other' (Birnbacher 1988, p. 98).

Who can decide on definitions?

The resulting question that concludes from the formulation 'future humans will have rights', is about the *definition* of the term 'rights'. Winfred Beckerman *defines* the term 'rights' in a way that from the proposition that all rights imply obligations it is not possible to deduce that all obligations imply rights. Many philosophers (for example Birnbacher or Dierksmeier) *define* rights in a way that all obligations imply some kind of rights. For them, 'rights' and 'obligations' are just two sides of a coin. Other philosophers even

denounce that a right does not necessarily imply an obligation. Gosepath (2004) uses the example of an orphan who has a right to be raised in a family. But that does not imply the obligation for a concrete family (or any family) to adopt him.

By which criteria can the dispute about the definitions of 'rights' and 'obligations' be decided? Words can and often do change their meanings over time. Despite or just because of the terrific career of the term 'rights', an agreement regarding its meaning could not yet be reached. Scarcely any scientist denies that scientific terms must be well-defined and precise. The possibility to criticize theories in a constructive way becomes more difficult, if theories contain terms that stay permanently imprecise and plurivalent. Notwithstanding, the community of scientists should not regard a definition on which they agreed as being definite. Every definition is preliminary, so that the definition process regarding future scientific criteria has to be started again occasionally. Max Weber expresses it the following way:

The history of social sciences is a constant change and remains a constant change between efforts to arrange facts in proper order by composing definitions, [...] and the regeneration of definitions on a modified basis. [...] The terms are not aims but means to the end of cognition regarding the important coherences from individual standpoints: due to the fact that the content of historical definitions could change necessarily, it is important to formulate them exactly. (Weber 1904, p. 207)

To find out if the meaning ascribed to a word by a specific user at a given moment in time is correct, we have to apply different criteria, among them:

- 1. the term's utilization by scientists;
- 2. meaning at first usage;
- 3. fertility:
- 4. necessity (for an extensive study see Tremmel 2003a).

The most important criterion is the term's utilization by the majority of scientists. A great deal of philosophers and law scholars have become convinced that potential humans receive something for which the expression 'rights' is appropriate. This example is illustrative to show how convictions about the appropriate attribution of the word 'rights' are reached: during the construction work of a nursery school a terrorist hides a bomb. We assume that the bomb is configurated in such a way that it will explode exactly 40 years later. We also assume that at this time only teachers under 30 and children are in the building. If the terrorist's plan was revealed today, would he have to be punished? Whatever the answer, he can only be punished if he has violated

the rights of others. Whoever feels that this terrorist has committed a crime also must logically also hold the opinion that future individuals will have rights (Birnbacher 1988, p. 59; Unnerstall 1999, p. 98). A further example is as follows: imagine a manufacturer who manufactures porridge for up to twomonth-old babies and has a technical defect at his production centre. The result of this is that the products which will be on the market in three months are contaminated with fragments of glass. Almost everybody would consider him worthy of punishment even though the victims are not yet born. But in tort law this is only possible if someone has been harmed, that is, her rights are infringed upon. It is from a moral perspective that in this sense we believe that future generations will have moral rights.⁴ For an autonomous rational human being there is no transcendental authority who decides if such attributions are correct or incorrect. If by now a majority of scientists attribute rights to animals – which was considered as inconceivable in earlier epochs – animals have 'received' these rights. Materially nothing has changed. Nevertheless, in the collective consciousness of mankind these 'rights' now exist. According to Kant, man can and must decide by himself what is morally correct and rightful. Thence the attribution of (moral) rights is only a semantic step and not a step that regards content. Therefore I will continue to speak of 'rights of future people'. 5 But at the same time I think that there are more important features in the field of intergenerational justice than the question whether future people will have 'rights' or mere 'needs'. 6 Imagine a freshly married couple who are talking about ending the use of contraceptives to conceive a child. The wife says: 'But remember that you must not work too long hours in your office. Our baby child has a right that you spend time with him.' Is it worth the effort to argue here whether or not the woman should have used 'need' instead of 'right' (or 'will have' instead of 'has') in her phrase? Not likely. It rather makes sense to discuss how much time for work and hobbies the father should give up in favour of the interests of his child. For the establishment of intergenerational justice the situation is just the same. Now, as some questions of wording have been decided we can go on to the more important questions of the scope of generation protection clauses.

The establishment of ecological intergenerational justice into national constitutions

Some states have already taken action and implemented some clauses for the protection of the ecological interests of future generations. However, Poland, Germany, France, Switzerland, South Africa, the Czech Republic and all the other countries named in Tables 10.1 and 10.2 have not become ecologically sustainable states. In fact, all academic disciplines which are concerned with this subject agree that these states, albeit to a differing extent, are still breaching the fiats of ecological sustainability. How come?

The clauses which were mentioned in Tables 10.1 and 10.2 share several weaknesses: first, most of them do not lay down a public right for each individual citizen. Instead they formulate a state objective which is legally something different than a public right.⁷ Second, they are too vague.

A state objective, unlike an individual right, obliges above all the legislature but also the executive power, the administration and the jurisdiction to consider it in executing each state activity. Admittedly, the individual citizen has no right to prosecute a claim for certain adjudications of environmental protection if the legislature, executive power and jurisdiction are not acting. That does not mean that lawsuits are impossible, they can occur if a state organ becomes the litigator in a complicated procedure. In Germany, for instance, the Federal Constitutional Court (FCC) can be occupied with Article 20a by way of a judicial review of the constitutionality of laws. That can be for example a litigation between the federal republic and a state (Art. 93 I No. 3 Constitution associated with par. 13 No. 7 and 68 et seq. FCC) and the litigation between public bodies (Art. 93 I No. 1 No. 3 Constitution associated with par. 13 No. 5 and 63 et seq. FCC). However, so far Art. 20a has not been the subject of a lawsuit before the Federal Constitutional Court.

There is a second and more important problem with Article 73 of the Swiss, Article 74 of the Polish, Article 24 of the South African, Article 20a of the German Constitution and the other clauses listed in Table 10.2. It is not included what the concrete responsibility is that present generations have towards future generations in terms of ecological sustainability. Art. 24 of the Greek Constitution or Art. 54 of the Lithuanian one just stipulate the 'protection of the natural environment'. But what level of protection? At the moment, these articles only contain an undetermined demand. Their legal character would be radically different if it demanded that concrete rules of management for ecological sustainability were applied to it.

Law Courts can only amend the legislature and executive authorities when they transgress their obligations. The norms raise hope for an ecological, sustainable policy that the state does not want, or has, to fulfil. In their current version they conceal the fact that the principle of ecological sustainability has not, as yet, been incorporated in the constitutions and therefore that people will carry on living at the expense of future generations.

Proposal for a general clause on ecological intergenerational justice Drawing lessons from this example, what can we say about an effective clause in general, be it in the constitution of South Africa or Germany. The following proposal would establish ecological sustainability and therewith generational justice into constitutions.

Article: Protection of the Ecologic Rights⁸ of Succeeding Generations

- (1) The state protects the rights and interests of succeeding generations within the bounds of the constitutional order through the legislative and according to law through the executive and the jurisdiction.
- (2) It guarantees that harmful substances will pollute nature, soil, air, water and the atmosphere only to the extent to which they can decompose due to their natural regenerative capabilities in the respective time period.
- (3) It guarantees that renewable resources are not exploited to a greater extent than they are capable of renewing themselves. Non-renewable raw materials and energy resources must be used as economically as possible by a justifiable expenditure.
- (4) It guarantees that no sources of danger are constructed which could lead to harm that cannot be undone or only undone by unjustifiable expenditure.
- (5) It guarantees that the existing variety of fauna and flora as well as ecological systems is not diminished by human activity.
- (6) Offences against paragraphs 2 and 5 are allowed when they are compensated for by a quantitatively and qualitatively comparable compensation abroad.

Explanation of this proposed article

Clauses 2 to 5 are based on criteria which were developed at the beginning of the 1990s to operationalization ecological sustainability (Pearce and Turner 1990; Daly 1991). The criteria received worldwide approval and are used in slightly modified formats in almost all papers up to this day. It is therefore only important to further explain the point on compensation which is expressed in clause 6. This clause considers the fact that environmental pollution is often, but not always, a global phenomenon regardless of national borders. However, the scope of each national Constitution ends at the national borders. Finally, ecological sustainability on a global rather than national level is the ultimate aim. But this does not mean that each country should not carry on striving for it at the national level. Even though it would be highly desirable for concrete sustainability aims to be determined on a continental or worldwide level, few signs can be observed that suggest that such agreements will be accomplished in the near future.

Clause 6 arranges the proposed norm of a constitution in such a flexible manner that, for instance, a worldwide solution for the trade of carbon dioxide emission rights or a prior European solution would remain an option.

'Succeeding' instead of 'future' generations

It does not make any difference for a transgenerational theory of a just distribution of resources and life chances if a child was born yesterday or will be born tomorrow. In both cases, it has still a life to live and should be protected against intergenerational injustice. Close future generations and today's infants and adolescents are materially on an equal level, thus one should talk about 'succeeding' instead of 'future' generations. In contrast to

the term 'future', the term 'succeeding' generations comprises not only unborn generations but also present children and adolescents. By this new wording children and adolescents or their parents would have the right to sue. The clause would then have a level of protection that is concrete and therefore judicially guaranteed. Then the achievement of the Filipino lawyer Antonio Oposa could be repeated who successfully sued the government because of the inactiveness towards the destruction of the rain forest in the Philippines. Forty-three children appeared (as representatives of succeeding generations) as petitioners. The Federal Constitutional Court of the Philippines admitted the claim of the petitioners on the 30 July 1993:

We find no difficulty in ruling that they (petitioners-children) can, for themselves, for others, in their generation and for succeeding generations, file a class suit. Their personality to sue in behalf of succeeding generations can only be cased on the concept of inter-generational responsibility [...] [to make the natural resources] equitably accessible to the present as well as to future generations. (Oposa 2002, p. 7)

Which counter-arguments can be brought forward against the proposed clause for ecological intergenerational justice?

At first glance, numerous objections against the proposed clause can be asserted. In the following the most important ones will be discussed.

The protection of the natural basis of life is less an affair of constitutional execution but rather a matter of political, arbitrary decision making The aim of the proposed clause is the protection of the rights and interests of succeeding generations. The article cannot be left to the discretion of politicians because of the structural problem of democracy. The everyday competition of government and opposition parties averts – as is seen in practice – the effective protection of posterity because of structural reasons.

The constitution always must remain open to development

A constitution must remain flexible enough to adjust to changes in reality. But a more open formulation would not ensure ecological sustainability anymore. Moreover, the clause would formulate the aim in relatively concrete terms, yet, concerning the way these aims are implemented, the jurisdiction, the legislature and the executive power would all be left with imaginable freedom.

The proposed clause is too long and would overload the text of law with moral demands

On the one hand, it is right that not all which is morally demanded can or may be implemented through the constitution. But on the other hand the following is also the case: laws are necessary when central moral demands are greatly counteracted without court intervention due to political and economic pressures. It is not 'a matter of overloading' if a constitution tries to achieve what politics evidently does not.

The new clause protects the ecological rights of succeeding generations and therefore can hardly be underestimated. It is an enlargement of the range of human rights in the future. In spite of its importance, in comparison to other similar declarations, it only requires six clauses and a small number of words. If we create a new institution with real competences – as an alternative to the establishment of the protection of posterity – the constitutions would have to be modified in many more passages.

Such a large modification of the constitution cannot be dogmatically derived from the norms of codified and applicable law

Positive law must adjust to the prevailing concepts of morality in a society. Human history testifies to a slow and by no means continuous approach of positive law towards moral norms. A step in this direction was the Declaration of Human Rights of the United Nations (1948) which was a pioneering document at the time. Today we are in a comparable situation. The idea of generational responsibility, after all, has already found its way into the law books in recent times. It is necessary to establish the idea of protecting the rights of succeeding generations more effectively in constitutions to make it a political reality.

The constitutional judges are also trapped in today's line of thinking Of course constitutional judges are also members of today's generations. However, they are not under the compulsion to be re-elected in most countries. Therefore, more future-orientated actions can be expected.

The establishment of financial intergenerational justice into national constitutions

Next to the ecological question, protection of future generations from excessive public debt is the most salient problem. The dilemma of financial short-termism within our democracy has already been realized by some peoples (see Table 10.3). The strictest proposal, brought forward by some US congressmen, provides no exception clause from a balanced budget but war. But it has few chances to pass, also because it is not in line with economic wisdom. If the state finances goods that will benefit future generations as well (for example expensive bridges), it then makes perfect sense that they should pay their share of the burden, too. The devil is in the detail, however (for an extensive study see Boettcher and Tremmel 2005). The German constitution, for instance, enunciates the problem by article

115 Basic Law (BL) ('Revenue obtained by borrowing shall not exceed the total of investment expenditures provided for in the budget [...]'). However, during the heyday of Keynesianism in 1969, also an exception clause was included in article 115: '[...], exceptions shall be permissible only to avert a disturbance of the overall economic equilibrium'. But also here, even if the idea of Intergenerational Justice has some tradition within financial constitutional law, then it has not yet been satisfyingly standardized. 'The current wording in article 115 paragraph 1 of the constitution has proved to be insufficient to stop the growing debt of the state budget', writes the German Federal Court of Auditors. Therefore, it is necessary to re-adjust the problem of generationally acceptable state debt by a change of the constitution in this respect. I will focus on Germany, but I guess most of the reasoning and the argumentation applies to other cases, too. There are several possibilities.

Suing the Government at the Federal Constitutional Court

Using the present article 115, suing the government is not promising when it comes to a generationally unfair budget. The German Conservative Party (CDU) and the Liberals (FDP) together went to the Federal Constitutional Court in November 2004 to take legal action against an infringement of Art. 115 by the then-government of Social Democrats (SPD) and Greens. The case is still pending. The Federal Constitutional Court had already been called once before. It had to decide whether the exceeding of the capital investment in 1981 by the credit income of about one billion Euros (1869 billion DM) was in accordance with article 115 BL. The trial took its time, thus the judgment was not made before 18 April 1989! If the Federal Constitutional Court declares a budget to be unconstitutional, then there are no immediate consequences. The budget year has then long been over. An unconstitutional budget is not subject to sanctions; at best, it is politically embarrassing. A re-adjustment of the financial constitution should thus be formulated in a way that it does not leave any room for interpretation whether the budget is still constitutional or not.

Exceptions for recessions?

A crucial but difficult question is whether or not a balanced budget clause should include an exception for recessions. In a recession, the revenue of a state (through fees, fines, but mostly taxes) declines. Now, cutting back expenditure would completely stall the engine of the economy. On the other hand, a generation protection clause with too many exceptions becomes a real softie.

The exception clause of article 115 BL in Germany is particularly problematic, as it facilitates a rising of credit to *unlimited* height. In paragraph 1 sentence 2 Stability and Growth Law, a macroeconomic equilibrium is defined by four economic objectives: stability of the price level, high rate of employment, import/export balance, as well as constant and adequate economic growth. For the state budgets of 2002 until 2006, the German Parliament asserted a disturbance of the macroeconomic balance and significantly increased the public debt at the expense of future generations. The problem about the German clause is that up to now the budgetary legislator itself asserts a disturbance of the macroeconomic balance after the respective draft by the government – often when 1.5 or 2 per cent of economic growth are reached. This is an absurd situation. The German government claims that the high unemployment rate of the last years justifies a disturbance of the macroeconomic balance. In its decision of 1989, the Federal Constitutional Court pointed out that for a macroeconomic balance the complete accomplishment of all four objectives is not necessary. That means that we cannot automatically speak of a disturbance if only one objective is not met. Thus, the application of the exception clause for the budgets 2002-2006 was illegitimate. For a decision whether the macroeconomic balance is disturbed, an independent institution would be the right addressee. A promising approach would be to transfer the competence to assert such a disturbance to the German Federal Court of Auditors, or to the German Central Bank.

A possibility would thus be the following amendment of balanced budget proposals regarding the inclusion for recession exceptions: 'The identification of a disturbance of the macroeconomic equilibrium is incumbent upon the Central Bank'.

The question relates to other exception clauses also: should they be eliminated or narrowed down? In my opinion, a debt that exceeds the sum of investment would only be tolerable in the following cases: (a) in case of defence; (b) in case of tensions between states; and (c) in case of serious natural disasters or particularly severe accidents.

Discount on the sum of investment

Due to bitter experiences, it is well-known that not every public investment leads to the yield that was hoped for. The list of investment ruins is too long to be ignored.

The debt permission tied to investment fixed in article 115 assumes up to now that every investment is profitable. The measures to encourage investment are especially insecure in their effect on private investment behaviour. Within every economically acceptable proceeding, they may not be completely counted to the investment sum. Ultimately, an exact measurement of the macroeconomic investment effects that result from the measures to encourage investment is not possible, so that a flat discount becomes

suitable. In order not to impose on future generations the share of unsuccessful investment projects, a flat discount of, for example, 33 per cent on the investment sum could be calculated. New debts of at most 66 per cent would then only be permissible. Wording in articles for financial intergenerational justice could be amended, so that it reads: 'The amount of public investment may not exceed the value of two thirds of the new debt as fixed in the budget plan'.

There are different alternatives for a concrete constitution change, thus each country may have its own preferences here. All variations that were discussed here would render a budget policy that is harmful for future generations more difficult.

To walk the talk: campaigns of young members of parliaments

Even in a scenario in which everybody maximizes his own self-interest there is an important difference between young and old MPs: the younger generation stands to inherit the debt and the ecological degradation. Therefore one can assume that the chances for a change of the constitution are high, where the percentage of young MPs soars. Table 10.5 shows the average age of members of the parliament, the share of MPs below 30 in per cent, and the share of MPs below 40 in per cent (of November 2005).

Scientists like those from the Foundation for the Rights of Future Generations may have a lot of ideas, but in the end it matters what the politicians are willing to do. Usually, the 'pure' concepts are watered down; maybe this is an unavoidable process to gain majorities. After unsuccessfully pursuing its own campaign, the Foundation for the Rights of Future Generations took a new role as a moderator of MPs. Encouraged by the fact that the number of young MPs was higher in the parliamentary term 2002–2005 than ever before in German parliamentary history (Tremmel 2005), it sent a letter to all MPs under the age of 40 and managed to find some supporters in all of the political parties. This was the kick-off for the 'initiative of young MPs' in summer 2003. The feeling that intergenerational justice and sustainability should be institutionalised was widespread among them. In total, 14 workshops took place until spring 2005. Numerous experts in constitutional law were involved and helped to formulate a concrete bill in order to change the German constitution. Two delegates of all four factions (the socialist party, SPD; the conservatives, CDU / CSU; the Greens; the liberal party, FDP) soon built a core group that interlinked the results to their respective faction. Eight young delegates of each party should be within the record of proceedings before the judgment of the proposal itself, so that the public would perceive it as a project of the young generation (of parliamentarians). Various suggestions were discussed and often rejected. The FRFG had all suggestions revised by renowned experts in con-

Table 10.5 Share of young member of parliament/laverage age in the parliaments of OECD countries

Country	no. MPs	Share u30 in %	Share u40 in %	Average age/ average birth year
Austria	183	1.1	9.8	50 Years/ 1955
Belgium	229	3.9	17.9	48 Years/ 1957
Canada				
(House)	307	1.6	12.1	52/ 1953
(Senate)	105	0	0	62/ 1943
Denmark	123	5.7	24.4	49 Years/ 1956
Finland	200	3	16.5	50 Years/ 1955
France	572	0.1	3.1	57 Years/ 1948
Germany	601	2.5	10.1	52 Years/ 1953
Great Britain	644	0.6	13.2	51 Years/ 1954
Italy	618	0	5.2	54 Years/ 1951
Japan	241	0	6.6	57/ 1948
Luxemburg	60	0	11.7	53 Years/ 1952
Netherlands	224	0.8	18.75	50 Years/ 1955
Portugal	229	5.2	22.3	47 Years/ 1958
Spain	349	2.3	14	44 Years/ 1961
Sweden	349	1.7	16.6	51 Years/ 1954
United States of America				
(House)	437	0	3.4	61 Years/ 1944
(Senate)	100	0	0	61 Years/ 1944

Source: Websites and national parliaments.

stitutional law, for instance Prof. Dr Eckard Rehbinder (Frankfurt), Prof. Dr Michael Ronellenfitsch (Tübingen) and Prof. Dr Peter Häberle (Bayreuth). The MPs finally agreed on the following. A new paragraph 20b should be added to the German constitution, reading:

The state must observe the principle of sustainability and safeguard the interests of future generations.

Moreover, the existing paragraph 109 of the German Constitution shall be sharpened to constrain public debt making (changes italicized).

When making decisions with regard to the budget, the Federal Republic of Germany and its states must pay attention to the macroeconomic balance, to the principle of sustainability and the interests of future generations.

The proposal for a change to the constitution in favour of future generations has found 50 supporters from different parties. It was very important for successful negotiations that the idea of this change to the constitution was first kept withheld from the public. At some point, the public were informed of this amendment and many notable press articles were written about it, following a report of the weekly *Der Spiegel*. Even more journalists had to be rebuffed because of the premature elections. The premature elections in 2005 forced the group to postpone the release of this campaign until 2006.

But such campaigns pop up somewhere else, too. In the European Parliament a new initiative had their first meeting just when this chapter had to be submitted. To be continued.

Notes

- This is not contradictory to the fact that Birnbacher describes the growing range of moral demands regarding time in this volume. Rather it signifies that the present actions of policy-makers become more and more immoral concerning generations to come.
- 2. There are, of course, more types of clauses conceivable, for instance those that pertain to education or to the social security system. But those are rarely found.
- 3. In the debate which has been going on since the 1970s, academics have spoken almost exclusively about the 'rights of future generations' (compare Callahan 1980, p. 82; Birnbacher 1988, pp. 96–100; Posner 1990; Saladin/Zenger 1988; Beckerman 1944; Hösle 1997, p. 808; Unnerstall 1999, p. 63ff, p. 117ff; Acher-Widmaier 1999, p. 53; Beckerman 1999; Tremmel 2003b, pp. 353–357). But we actually have to think about replacing the term 'future generations' by 'future humans' because only few theoreticians explicitly regard generations as legal entities (Unnerstall 1999, p. 63ff and p. 117ff). Future generations are composed of future humans. Each of them possibly has individual rights. Can this justify the use of the term 'rights of future generations'? Since we cannot go into greater detail here, both terminologies will be used.
- 4. Most people would, for instance, also talk about the rights of extraterrestrials (although it is unclear if they exist). If one imagines that such a 'potential living being' would come down to earth most people would argue that they have the right not to be arbitrarily slaughtered if they behave peacefully. One can point out that a creature like Steven Spielberg's E.T. made millions of people cry.
- Like many others. In our company there are for instance the French presidents who appointed a Council for the Rights of Future Generations (Conseil pour les Droits des Générations Futures) and last not least, Germany's former minister of justice, Mrs Prof. Dr Däubler-Gmelin (2000, p. 27).
- 6. Beckerman's second premise ('any coherent theory of justice implies conferring rights on people') is obviously subject to the same definition quarrels. But to apply the above mentioned criteria to the term 'justice' is beyond the scope of this chapter.
- General opinion, compare BverwG, NVwZ 1998, p. 1080; Schink DÖV 1997, pp. 221–222; Badura 1996, Rdnr. D 44.
- 8. It does not change the scope of the following six paragraphs if 'rights' is replaced by 'interests' or 'needs' here.
- 9. For instance the latest proposal for a balanced budget amendment in the US Congress:

Section 1. Total outlays for any fiscal year shall not exceed total receipts for that fiscal year, unless three-fifths of the whole number of each House of Congress shall provide by law for a specific excess of outlays over receipts by a roll call vote.

Section 2. The limit on the debt of the United States held by the public shall not be

increased, unless three-fifths of the whole number of each House shall provide by law for such an increase by a roll call vote.

Section 3. Prior to each fiscal year, the President shall transmit to the Congress a proposed budget for the United States Government for that fiscal year in which total outlays do not exceed total receipts.

Section 4. No bill to increase revenue shall become law unless approved by a majority of the whole number of each House by a roll call vote.

Section 5. The Congress may waive the provisions of this article for any fiscal year in which a declaration of war is in effect. The provisions of this article may be waived for any fiscal year in which the United States is engaged in military conflict which causes an imminent and serious military threat to national security and is so declared by a joint resolution, adopted by a majority of the whole number of each House, which becomes law.

Section 6. The Congress shall enforce and implement this article by appropriate legislation, which may rely on estimates of outlays and receipts. The appropriate committees of the House of Representatives and the Senate shall report to their respective Houses implementing legislation to achieve a balanced budget without increasing the receipts or reducing the disbursements of the Federal Old-Age and Survivors Insurance Trust Fund and the Federal Disability Insurance Trust Fund to achieve that goal.

Section 7. Total receipts shall include all receipts of the United States Government except those derived from borrowing. Total outlays shall include all outlays of the United States Government except for those for repayment of debt principal.

Section 8. This article shall take effect beginning with the later of the second fiscal year beginning after its ratification or the first fiscal year beginning after 31 December, 2009.

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11 A constitutional law for future generations – the 'other' form of the social contract: the generation contract

Peter Häberle

Problem and relevance of the topic

The central issue of the generation contract as 'another form' of the social contract must be examined in the context of the depth of constitution theory and within the scope of the problem of 'time'. By 1983 national debt and disposal of radioactive waste were already indicated in the horizon of the generations as problem areas of time and constitution culture (Häberle 1983a, p. 289, 1983b, p. 382; Hofmann 1981, p. 258 et seq.). Switzerland followed the predominant draft of P. Saladin and A. Zenger: 'Rechte künftiger Generationen' [Rights for future generations] (1988), and since then the topic has gained relevance in many fields (Pernthaler 1996, p. 271 et seq.; Haverkate 1992, pp. 249–252). An essay about 'Gerechtigkeit zwischen Generationen' [Justice between generations] (Kleger 1986, p. 147 et seq., see also Buchholz 1984) was published in 1989. Later a minister of the French government, A. Juppé (1995), supported 'solidarity between the generations'; in the same year a book was released concerning 'Gerechtigkeit zwischen den Generationen' [Justice between generations] (Brumlik 1995, see also Lawrence 1989). In contrast, we also read, 'Droht ein Krieg der Generationen?' [Will there be a war of generations?] (Stephan 1995). Furthermore, one should remember the discussion in the USA on a (failed) amendment to limit the national debt (1995); or the global environmental controversy. The struggle over the demographic future of 'the German people' has intensified (Wingen 1995; Schmid 1994; Adam 1995, 1996; Birg 1996) as well as the question of whether pensions are 'safe' only for today's pension generation.

Elements of a survey

The question about a constitutional law for future generations can be answered in a first step with the help of constitutional texts. A comparative text stage analysis enables us to clarify lines of development.

Explicit generation protection in recent constitutions and draft constitutions. The constitution authors react and act in their new texts on important basic questions of the time. This is most striking with regards to generation

protection. The respective sample texts increase and they systematically appear at different 'places of discovery': from the preamble via the constitutional right of environmental protection up to other 'passages', for example education goals. It becomes evident that in the 'workshop of the federal state' innovations at the regional level are absorbed at the state level at a later stage. A relatively early declaration can be found in Article 141 paragraph 1 Constitution of Bavaria which was changed in 1984: 'The protection of the natural bases is entrusted to the care of each citizen and to the state community, bearing in mind the responsibility for future generations'. The prototype of the preamble setting of the Bavarian constitution of 1946 had already preceded, '... in the firm decision to constantly secure the blessings of peace, humanity, and law for the future German genera...'.

The new article 20a of the German Constitution from the year 1994 is devoted to generation protection in the form of the new state aim 'environmental protection': 'The state protects the natural living conditions also in responsibility for future generations [. . .]'.

Since the creative departure phases in Switzerland, environmental protection clauses could already be found in the preambles of the Cantons' constitutions of the 1980s. However, first the private outline for a new federal constitution by Kölz and Müller (1983), ventured the preamble passage: '[. . .] in the consciousness of the responsibility to keep the environment healthy and worth living also for the future generations'. This has set a precedent.²

A new growth- or text-stage of generation protection can be found in the constitutions of the new German federal states. Thus, the following sentence is found in Article 39 paragraph 1 Constitution of Brandenburg (1992): 'The protection of the nature, the environment and the grown cultural landscape land as a basis of present and future life is the duty of the state and of all people'. With this, instead of the notion 'generation', the new 'life' formula is created. Thus, article 40 applies the old concept of generation protection in a new context: 'The use of the ground and the waters is to a great extent committed to the interests of the general public and of future generations.' Article 10 paragraph 1 sentence 1 Constitution of Saxony (1992) standardizes: 'The protection of the environment as part of the basic living conditions is the duty of the state and obligatory for all that live in the country; also in responsibility for future generations'. Opposing this, the constitution of Saxony-Anhalt sweeps back to the formula of protection of the 'natural bases of present and future life' (Article 35). Unlike the anthropological generation formula, the ecological life clause can also be found in Article 12 Constitution of Mecklenburg-Western Pomerania (1993). The Constitution of Thuringia (1993) even mentions in the preamble the 'responsibility for future generations'. Setting an example, the preamble of the Polish Constitution finally formulates explicitly (1997): 'Obliged to bequeath to future generations all that is valuable from our over one thousand years' heritage.' Moreover, Article 59 paragraph 1 Constitution of Albania (1998) standardizes the state aim as 'a healthy and ecologically adequate environment for today's and for future generations' (see also Article 37 paragraph 4 Constitution of Georgia (1995): 'Interests of the present and future generations'); beforehand, preamble Constitution of Estonia (1992): 'social success and common benefit for future generations'; Preamble Constitution of Moldova (1994): 'Responsibility [. . .] regarding the past, present and future generations'; the preamble to the Constitution of Ukraine (1996): 'Responsibility towards God, the own conscience, the former, today's and future generations'; the preamble to the Constitution of Russia (1993): 'Responsibility for our native country for today's generation and for the future generations'.

Appearing generally in preambles, especially in the form of environmental constitutional law, generation protection also starts to get a new status, namely concerning the constitutional law of education aims. This is just consequent: What the mature citizen has to account for legally, must begin for children pedagogically in school.³ Article 15 paragraph 4 Constitution of Mecklenburg-Western Pomerania can serve as an example. The educational aim 'responsibility for the community with other people and nations as well as towards future generations' (similar to this Article 2 paragraph 1 Constitution of Saxony-Anhalt). The Constitution of Saxony orders in article 101 paragraph 1 the educational aim 'deep respect towards every living creature': a remarkable reception of the classic text by A. Schweitzer. Finally, article 24 Constitution of South Africa (1996) should be mentioned: 'to have the environment protected, for the benefit of present and future generations [...]'.4

'Immanent' generation protection clauses

In the following, constitution texts are systematized that unveil the generation perspective only in the light of the interpretation.

More precisely, norms for nature and culture protection are meant, particularly clauses regarding cultural heritage. For this category, which has already been topical for years in comparative constitution teachings, some examples should be listed (Häberle 1992, p. 241 et seq., 633 et seq., and 836 et seq.): Article 9 paragraph 2 Constitution of Italy (1947) says: 'It (the republic) protects the landscape and the historical and artistic inheritance of the nation'.

Article 66 paragraph 2 Constitution of Portugal (1976) demands in the context of environmental protection 'to guarantee the preservation of the nature and the protection of cultural values inhering historical or artistic interest'.

In Eastern Europe after 1989, the idea of the cultural heritage protection develops new text forms. Thus, it says in Article 5 Constitution of Slovenia (1991)⁵ that the state 'takes care of the preservation of natural assets and of cultural heritage', and Article 73 confirms this with the words:

Everyone has the duty to protect natural monuments and rarities as well as cultural monuments in harmony with the law.

The state and the local communities take care of the preservation of the natural and cultural heritage.

The temporal as well as the generational dimension is already touched upon in the preamble of the Constitution of Estonia (1992): 'a state which shall guarantee the preservation of the Estonian nation and its culture throughout the ages'. The Constitution of the Czech Republic (1992) already pledges in the preamble to be 'faithful to all good traditions of the historical statehood of the countries under the Bohemian Crown [...]'. The Constitution of the Slovak Republic (1992) refers to the topic at two particular points: in the preamble ('bearing in mind the political and cultural heritage of our ancestors') and in the context of environmental protection (Article 44 paragraph 2: 'Everybody is obliged to protect and to nurture the environment and the cultural heritage').

It should be referred to further examples, primarily within Latin American constitutions (proofs in Häberle 1996, p. 91; 95 et seq.).⁸ The more recent state constitutional clauses on cultural heritage and nature protection clauses may have experienced growing impulses from the text ensembles, which the two international Conventions of 1954 and 1972 have created ('protection of cultural and natural world heritage', 'damage of cultural assets' as a damage of the 'cultural heritage of the whole human race', protection of the 'cultural and natural heritage').

Having a closer look, the above mentioned clauses prove to inhere generation protection immanently. At first sight, they seem to aim at nature or non-human 'heritage' merely in retrospect. With respect to the result, however, they also protect the basis for the generations living now and in the future. Concerning the content, the nature-/heritage-clauses are more effective than the generation-protection-clauses because they refer to all life. With 'generations' normally only human generations are meant. The research question of this chapter expands further: It is also necessary to broaden the perspective towards indirect generation protection, which is accomplished by nature and culture. The human generations are not conceivable without the protection of the 'nature' surrounding them and the 'culture' created by them; both nature as well as culture constitute their 'life

world'. Generation protection is simultaneously always protection of nature and culture. It conditions the further existence of the human race. And the often quoted natural living conditions immanently refer to the cultural ones because the human being is dependent on nature as well as culture.

Generation dimension and environmental protection in the nascent European constitutional law – text stages

The gradual intensification and expansion of the two topics, their 'Europeanization', should be presented separately, applying the instrument of a text stage analysis. The more recent European texts trigger the developments in constitutional reality towards – new – concepts and texts. Thus, also subconstitutional judicial acts, especially those adopted by the ECJ, are capable of influencing the development of the later constitution texts. This text step paradigm (in addition to Häberle 1989) can also be applied and respectively illustrated regarding European constitutional law. Developments or respectively constitution texts of the national member states of the EU may influence (not only the ten new) member states (keywords: mutual production- and reception-processes, culture transfer).

In the contracts of Maastricht (1992) and Amsterdam (1997) the great topic of 'generations' has not yet developed into a constitutional text. Nevertheless, statements to environmental protection are to be found: for example in article 2 EUV ('sustainable development'), in article 2 EGV ('high degree of environmental protection and improvement of the environment quality') and in title XIX 'Environment' with a detailed goal catalogue (for example 'prudent use of natural resources').

The later EU-texts nearly resemble a 'quantum leap'. It begins with the EU-Charter of Fundamental Rights of 1999/2000 ('Nice treaty'), which was, rightly, praised a lot. In the preamble it says in the last but one paragraph: 'Responsibilities and obligations both towards the fellow men and towards the human community and future generations'. In Article 37 environmental protection appears ('sustainable development'). This text impulse is taken up by the draft constitutional treaty for Europe of June/October 2004, whereby it adopts Part II of the EU-Charter of Fundamental Rights: in the preamble, which is only partly a 'text event' of classical preamble art, it says 'in the consciousness of its responsibility towards future generations and the earth'. In Part I Article 3 paragraph 3 the Union's goal is mentioned, among other things a 'high extent of environmental protection and improvement of the environment quality'. In Part III Article 129, the environmental policy of the Union is roughly outlined. Further statements can be found in Article 193 paragraph 2 lit. d and f.

This text comparison would remain incomplete, if some of the drafts written in the run-up to the EU-constitution were not included. They are more than sheer 'materials'.

Their historical successiveness (after 'Nice' and before 'Brussels') and respectively their occasional simultaneousness cannot be reconstructed in this chapter in detail. However, once such constitution texts are drafted, they influence from the background, they form a part of the 'humus' on which the official text of the constitutional convention of the EU could prosper and now they are little more than bare 'workpieces' in the process workshop of the constitution creation in Europe. Some concise texts should be selected. ¹⁰ The early text by convention member J. Leinen (October 2002) postulates 'sustainable development' in the preamble. Further relevant passages can be found in Articles 37, 54 and 65 paragraph 1. The 'layout' of J. Voggenhuber (January 2003) formulates in the preamble: 'responsible towards the world and future generations'. Under V, he also speaks of 'Europe as space of the sustainable development'. The later draft by the convention's presidency (February 2003) demands in Article 3 paragraph 2 sentence 3: 'The Union promotes solidarity between generations'. The so-called 'Giscard-draft' (June 2003) mentions in the preamble the 'responsibility towards future generations and the earth'; moreover, it designates the goal of a 'high degree of environmental protection and improvement of life quality' in Article I. 3 paragraph 3. The draft constitution of R. Badinter (September 2002) already incorporated environmental protection as well (preamble). The same applies to the Schaeuble-Bocklet draft (November 2001), under Figure 1 f. It remains to be hoped that these texts influence coming constitutional changes (for instance in Germany). One may be curious about possible creative continuations of the generation topic within the common European future. Moreover, it remains to be observed in which context generation protection will be located, meaning to which basic values it refers: to patriotism, to an open civil society, to environmental and nature protection, to fundamental rights and so on. Finally it must be distinguished which forum should frame responsibility or, in other words, who/what has to be adressed: God, nature, history or respectively the past, present or future generation.

Obligations or exemptions for future generations

Generation protection and nature-/culture protection clauses in constitutional law are obligations on a constitutional stage and addressed to all three state functions. There are, however, accentuations. 'Eternity clauses' or identity guarantees are included which protect the core of the constitution or certain basic principles regarding the constitution changing legislator. Historically seen, these clauses were probably 'invented' with the Constitution of Norway (1814, section 112, 1, 3) and conquered the entire world, last but not least via the German Grundgesetz from 1949 (article 79, paragraph 3) (a systematization in Häberle 1992, p. 597; 599 et seq.). Concerning constitutional theory, there is the problem whether the generation of today is at all able or legitimized to bind the future generation in that way. The pioneer text of constitutional state development, mentioning the generation problem explicitly and, simultaneously, exempting the future generations, comes from France. Article 28 Constitution of 1793 says: 'Un peuple a toujours le droit de revoir, de réformer et de changer sa Constitution. Une génération ne peut pas assujettir a ses lois les générations futures' ['People of a nation always have the right of examining, reviewing and amending their constitution. A generation cannot force the forthcoming ones to follow its rules'] (Godechot 1984). 12

This exemption of future generations from the obligations imposed by their predecessors may be justified by referring to the fundamental right of freedom for everyone, by the democracy principle, or/and due to the change underlying every human sphere. It is certain that with Article 28 of 1793 a classical text was created, focusing on an aporia of human, state-constitutional, and universal existence of mankind. A classical counterpart to all forms of eternity clauses according to the pattern of article 79 paragraph 3 GG is the 'both-and-solution': freeing and binding the generations. The survey should be concluded here, even if it is of a mere fragmentary nature. The text ensembles of newer and older constitutions and their inherent material to solve the problem are in any case prepared enough for an attempt to set a theoretical frame.

The theoretical frame

A nature-/culture- science approach for constitutional generation protection. The term 'generation' is to be understood anthropologically and is also meant in that way by the legislators. It refers to human beings (not only to their own 'citizens'). To protect animal or other kind of life, the legislator uses other terms, for instance: 'Animals and plants are respected as living creatures. Different species and an appropriate environment for the species are to be sustained and protected' (article 39 paragraph 3 Constitution of Brandenburg). The statement 'Animals are respected as living and fellow creatures' (article 32 paragraph 1 sentence 1 Constitution of Thuringia) builds a remarkable bridge between man and animal (Loeper 1996, p. 143 et seq.; Händel 1996, p. 137 et seq.; Kloepfer and Rossi 1998, p. 369 et seq.).

Applying a context-sensitive comparative constitution interpretation, it becomes evident that the legislator conceptualizes generation protection already in advance in the context of nature and culture protection:¹³

because humankind can only survive due to the basic living conditions, and every generation can only find its 'upright course', that is, to become human, by the force of a 'cultural heritage'. This 'nature' or culture science approach to grasp the notion of 'generation' should be explained briefly. It may be questioned (and surely affirmed), whether nature can also exist without mankind and its generations; it is, however, certain that man can only exist as part of the living and inanimate nature. He is 'human' via the (national and world-) culture which was created by him in an effort lasting for generations, for example, as Rousseau's 'Back to nature' is to be connected with A. Gehlen's 'Back to culture' (see also Häberle 1998). These two texts of 'opposing classics' form a synthesis. Applying the distinctions of the scientific disciplines: nature science and culture science are today bound to the same aim regarding generational protection. In a poetic way Goethe's dictum 'Nature and art, they seem to escape from each other, and, before you think about it, they have found each other', formulates a wisdom which the constitutional state today can and must acknowledge. Moreover, the comprehensive unity of man, culture, and nature can only be explained globally. Just as the 'world community of culture states' becomes apparent in the national and international protection of cultural assets (see also Häberle 1996), in terms of nature protection there has existed for a long time a community of solidarity including all people and states. The inner state protection clauses embrace the conservation of 'natural living conditions' (still) relating to human needs (for example Article 31 paragraph 1 Constitution of Thuringia) and they move mankind clearly into the context of nature and environment (compare for instance Article 10 Constitution of Saxony); however, 'life' in general is sometimes mentioned (thus Article 12 Constitution of Mecklenburg Western Pomerania: 'the natural basics of present and future life'). The aforementioned UNESCO agreement of 1972 for the protection of cultural and (!) natural world heritage does not mention both notions in the same breath accidentally. In any case, the concept 'culture state' was introduced in Germany long ago. In contrast, the concepts 'environment state' or 'nature state' still struggle for acknowledgement (Kloepfer 1989; Serres 1994; Wahl 1995; Berg 1997). What seems to be certain is that the protection of future generations can only be assured by a constitutional state which safeguards culture as well as nature. In short, the daily 'contextuality of culture and nature' is an anthropological constant with many variations and it forms a part of the protection of future 'generations'. This, too, is a proof for the inalienability of the paradigmatic concept of generation with regards to constitutional theory.

The challenge, however, is the global ethics by H. Jonas and respectively his new imperative: 'Act so that the effects of your action are compatible

with the permanence of genuine human life, that is, with the claim of mankind to survive for an indefinite time period' (Jonas 1979). 14 As is generally known, he modifies the Categorical Imperative by I. Kant relating to the temporal dimension and is thus ultimately bound to the 'Golden Rule'. Today, such classical texts by philosophers conduct in the depth of texts under constitutional law concerning the topic 'generation protection'. Up to now, the scientific indexing of the concept of 'generation(s)' under constitutional law has hardly begun. Classical texts are to be found in the works of T. Jefferson¹⁵ and of T. Paine (1791). In 1953, H. Ehmke partly tied up to these works and he fixed a limit within the constitutional state. Beyond this limit, the burden for future generations would be an infringement of the constitutional order as well as a self-abandonment of the living generations for the 'fortune of all that will come after them'. The 'sense' of the constitution should be that a free political life must be guaranteed also for coming generations (Ehmke 1953, p. 129 et seq., p. 137). The time is ripe to illuminate indepth the dimension of the concept 'generation' in terms of constitution theory. The chance should be taken to develop new layers of sense for the constitutional state with the help of the constitutional concept 'generation(s)'.

Time and constitutional culture -a dimension of the generation sequence of citizens in the constitutional state

Within the concept of 'generation(s)', the dimension of 'time' is already included. As this dimension was already understood through the notion of culture in the previous section (A nature-/culture- science approach for constitutional generation protection), now 'time' must be specified in terms of the constitutional state, that is, 'constitutional culture' must be rendered more precise. The development processes of a people's constitutional culture are 'located' or 'subdivided' on the time line through coarser and finer instruments and methods. The span ranges from the total or part revision of a constitution via legislative amendments or experimental clauses up to the judiciary concretization of general clauses or indefinite legal notions. The constitutional judiciary special vote which gains standardizing force in 'the course of the time', for instance by becoming the majority, is also relevant (example: BVerfGE 53, 257 [pp. 289]). Within all these time processes or time periods not only the people living in the highly selective present are involved; rather the 'people' is included in advance as the 'sum of generations' – integrating present and past. In other words, the respective national people (founded by culture) is the beginning, subdivided into generations, which is fixed in the constitutional state. This beginning 'repeats' and renews this constituting process consistently in different ways and with different intensity. Thus, a constitution is normally drafted and

enforced not only according to the demand of the generations living today but also for future ones. In order to enable the people and their representatives to participate in order to handle the 'social change' 'over and over again', also within shorter time units of 15 or 30 years (henceforth probably more), the model of the constitutional state has developed and differentiated appropriate procedures; for example the experimentation law (in Häberle 1974, p. 111; 1978/1998; Horn 1989) in the 1970s in Germany, or the constitutional judiciary law special vote originating in the USA. The highly complex notion of 'constitution culture' (Häberle 1979, p. 449; 1983b, p. 325) is thus conceptualized in advance as being generation-grasping and generation-encroaching.

The constitution of the people by the 'generation contract'

Taking into account the dimension of time, the 'social contract' presents itself as a 'generation contract'. Political science treated it in a classical way and political practice dealt with it in the form of the 'round table' of 1989 in Walesa's Poland as well as in Ukraine (2004/2005), or within the argumentation scheme of the 1970s 'basic consensus' in Germany. In today's daily politics it also recurs time and again under various names ('solidarity pact', 'alliance for labour', 'pact with America', 'pact for Germany' and the like). Up to now, the very idea of a generation contract is certainly not yet remotely comparable with the social contract and the effort for explaining its 'topic and variations'. One should only think of J. Rawls. However, some keywords in this discussion can also be applied for the generation contract. In the sense of I. Kant's contract philosophy ('a trying stone of reason'), it is partly conceivable in a fictitious way; also real activities partly underlie the generation contract ('basic consensus', 'bargaining', 'pension consensus'). The 'people' per se is a cooperation, a coexistence, and a succession of several generations. The constitutional state builds the 'body' and millions of smaller and larger contract conclusions in private business as well as in public politics create a part of the real basis for 'generational' or respectively 'intergenerational' 'harmonious' behaviour at the macro level (also seizable at the micro level: in the family).

Admittedly, the 'regulative principle' of the generation contract as a dynamic version of the social contract is rather abstract. Concretions according to spheres of the constitutional state are indispensable. Thus, in the Germany of the 1990s, the pension as an old-age safety device was the struggle's focal point. The constriction by the chancellor of that time, H. Kohl, designates the problem: 'The pension is safe – for the present generation' (Kohl 1996). The generation which is active today must neither be overstrained ('compulsory service for pensions'), nor must it be exempted

from its obligation (it was involved as a 'taker' via education and formation costs); it must struggle for a fair compensation within the 'chain of three generations'. In other words: The question about which people are concerned¹⁷ as well as the distribution of rights and obligations has to be solved in the light of the classical and newer teachings of justice from Aristotle up to Rawls (1992, p. 61 et seq.; Haverkate 1992, p. 323). 18 Facing the age 'pyramid' and respectively an active generation, which is overstrained as it is shrinking numerically, an appropriate immigration policy becomes topical for the social or 'generation contract'. Another circle of problems has to be solved by the generation contract, which is enhanced by justice teachings. We encounter this problem circle when it comes to nature (keyword: final storage of atomic waste (Häberle 1983b, p. 289, p. 335 et seq.), in general: environmental protection), but also when it comes to the continuation of life which is not genetically manipulated (for more details about biological engineering, gene therapy: Hofmann 1995, p. 386 et seq.). In terms of economy, the generation contract marks off the limits of national debt (see Häberle 1983b, p. 339 et seq.; Henseler 1983, p. 489, p. 497 et seq.; Schuppert 1995, p. 23, p. 47; Wendt and Elicker 2001, p. 497 et seq.) and demands alliances for labour where, in order to represent all citizens, also the unemployed (virtually) participate, besides from the trade unions, the employees, the employers and the state; the integration of 'foreigners of the Second Generation' belongs to this too (Häberle 1984, p. 345, p. 354 et seq.). In terms of culture, the generation contract is ultimately alive in the form of millions of 'small alliances' within the family succession.

Outlook in terms of constitutional politics

The culture scientific interpretation of constitutional law in the present level of development of the type 'constitutional state' has led to many evident as well as disguised forms of 'generational constitution law': from the preambles that hint at generation protection via education aims and clauses for environmental protection up to texts concerning the safeguard of natural and cultural assets or respectively cultural heritage, as well as clauses for old-age and youth protection. A dosed degree of differentiated 'generational constitution law' is a normal expression of the growth phase of today's constitutional state. In this context it seeks a middle course between the freedom of today's generation(s) and the obligations tied to the interests of future generation(s). 'Generation protection' proves to be a truly material constitution problem — also for those preferring the temporally stretched social contract instead of the fictitious/real generation contract. Origin, preservation, transmission and further development of culture is always a generational problem. It is solved by ever-renewed

contract-like processes, unless it is broken (for instance by cultural revolutions as in China).

In terms of constitutional politics, it is necessary to apply the generation aspect in text ensembles in a measured way. A middle course between too little and too much needs to be aspired to – however, the 'basic tone' should well be set in the preamble. Too much would endanger the freedom to design today's civil society by constraining it, these liberties should well be fulfilled in the present. Too little 'generational constitution law' would be a threat in the way that the present would be rendered the absolute instance. Thus, the responsibility for young and unborn generations would be disregarded. Despite the great diversity of possible designs for generational constitution law according to the traditions and temperament of the single national constitutional states, the generation problem should still be considered as one layer of the constitution as a legal 'basic order' of state and society.

Furthermore there should be a productive competition for the relatively best implementation of intergenerational justice in constitutions beyond Europe's boarders. Whether the overlap of the outlined time-scale should be supplemented by an extensive territorial expense beyond the single constitutional states remains to be seen. Such a territorial expense would present a 'contract between generations worldwide', linking all peoples and citizens of our blue planet. Such a contract could come into being step by step. The worldwide demands for the protection of the environment, nature and culture and several inter-nation legislations point in this direction (see for example Weber and Rath-Kathrein 1996, p. 92 et seq.). This would also make clear the intertemporal connection between the generations of mankind. Kant's 'world citizen intention' would gain the dimension of dept in time, 'parallel' to that of space.

Notes

- 1. For example preamble Constitution Aargau (1980), 'Responsibility in front of God in opposite to be aware of community and environment'; also preamble Constitution Basel-landscape (1984), quoted. *JöR* 34 (1985), p. 437 and respectively p. 451; as well as preamble Constitution Tessin (1997), 'Responsibility in front of the next generations'.
- 2. Compare Art. 31 par. 1 p. 1 KV Bern (1993), 'Die natürliche Umwelt ist für die gegenwärtigen und künftigen Generationen gesund zu erhalten' [The natural environment has to be healthily for the present and future generations]; also Art. 29 par.1 S. 1 KV Appenzell A. Rh. (1995). The youngest Swiss canton constitutions use themselves up throughout the generation protection. Compare also preamble nBV (1998): 'Responsibility regarding the creation', 'Responsibility regarding the next generation'.
- 3. To these connections approximately Häberle 1981, especially p. 65 et seq.
- 4. The constitutions of *Africa* contain relatively little on this issue, nevertheless see: preamble constitution Burkina Faso: 'absolute necessity to protect the environment' as well as preamble constitution Burundi (1992): 'responsibility before history and before the future generations'.
- 5. Quotation after *JöR* 42 (1994), p. 88 et seq.

- 6. Quotation after JöR 43 (1995), p. 306.
- 7. (Quoted according to B. Dennewitz 1948, p. 123). See also preamble constitution Guatemala (1985), quoted after JöR 36 (1987), p. 555: '[...] we are living by the ideals of our ancestors and recognize our traditions and our cultural inheritance on'. Quotation after JöR 44 (1996), p. 458. A tradition-oriented, generation-spreading clause is also in the preamble constitution, Bathe (1947): 'das badische Volk, als Treuhänder der alten badischen Überlieferung [...]' ['the people of Baden, as trustees of the old Baden tradition...']
- 8. The parallelism of the hedge clauses is meaningful in the constitution of Guatemala (1985). Under the title 'culture' becomes the 'cultural inheritance' (Art. 60 to 62) just as protected as the 'natural inheritance' (art. 64). Article 73 constitution Slovenia (1991) speaks later in a breath of 'preservation of nature and cultural heritage'. Similarly the basic obligation for everyone in Art. 44 par. 2 constitution Slowakei (1992).
- 9. Protection of generation also includes in the protection of the unborn life (for example Art. 3 constitution Guatemala 1985) and the guarantee of the right of all persons to determine their number of children freely (Article 47 ibid.).
- 10. In part printed in *JöR* 53 (2005), p. 517 et seq.
- 11. Latest examples: Art. 157 constitution Ukraine (1996); Art. 159 constitution Angola (1997).
- 12. Previous was the *Bill of Rights* von Virginia (1776). The generation perspective can be identified in the passage of Art. I: '[...] to go certain innate rights, whose they can rob or force their descendants with the reason of a political community by no agreements, their [...]' Q.v. the preamble of the constitution from the USA (1787) being reminiscent of generation responsibility: '[...] and secure the Blessings of Liberty to ourselves and our Posterity [...]'.
- 13. For example Art. 10 constitution Saxony: environment protection; Art. 11 ibid.: protection of culture and cultural assets; Art. 35 constitution Saxony-Anhalt: protection of the natural bases of current and future life; Art. 36 ibid.: and protection and care of art, culture as well as sport.
- 14. Ibid. 1992, p. 128: future ethics as 'jetzige Ethik, die sich um die Zukunft kümmert, sie für unsere Nachkommen vor Folgen unseres jetzigen Handelns schützen will' ['current ethics, which worries about the future, for our descendants against the consequences of our current acting to protect wants'].
- 15. 'Funding I consider as limited, rightfully, to a redemption of the debt within the lives of a majority of the generation contracting it' (quoted by Ehmke 1953, p. 129); Let us not 'weakly believe that one generation is not as capable as another of taking care of itself, and of ordering its own affairs' (quoted by Saladin and Zenger 1988, p. 61 notes 49).
- 16. 'By virtue of the rule, according to which, each individual and his contemporaries have equal rights, each generation must be granted the same rights as its predecessors.' (quoted in the edition 1973, p. 79); The now and future perspective can also be found elsewhere (ibid. p. 87 et seq).
- 17. With the pensions: contribution payer, pensioner and the public of the taxpayers or in Germany the federation.
- 18. Under the keywords 'rearrangement between the generations of the old age pension insurance': securing the 'mutual balance' of the achievements of the generations.

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12 The French Constitutional Charter for the environment: an effective instrument? *Dominique Bourg*

Introduction

France is in no way the first country to have introduced the environment or sustainable development into its Constitution. Article 37 of the Charter of Fundamental Rights of the European Union, proclaimed in Nice in December 2000 and which could have gained (or may still gain) constitutional status with the adoption of the Treaty. Establishing a Constitution for Europe provides for 'a high level of environmental protection [to be] ensured in accordance with the principle of sustainable development.' People's right to the environment is also recognized within the framework of the Council of Europe. Article 20a of the German Constitution mentions the state's responsibility toward future generations. Article 41 of the Argentine Constitution proclaims the 'right to a healthy, balanced environment fit for human development'. Brazil's Constitution provides a detailed list of the government's duties in order to ensure the effectiveness to the 'right to an ecologically balanced environment' (Art. 225). The Constitutions of Spain (Art. 45 and 53), Ecuador (Art. 19) and Greece (Art. 24) also aim to guarantee environmental protection. Article 66 of the Portuguese Constitution asserts the right to a 'healthy and ecologically balanced' environment, while the Dutch Constitution (Art. 21) only mentions the authorities' concern to 'protect and improve the environment'. On the other hand, the Swedish Constitution mentions promoting 'a good living environment'. Last, with no claim to exhaustivity, I might also mention the Federal Constitution of the Swiss Confederation which devotes Section 4 to the environment and zoning; Article 73 provides that 'the Confederation and the Cantons shall strive to establish a durable equilibrium between nature, in particular and its capacity to renew itself and its use by man'.

The relative originality of the French approach is in not inserting the mention of a right to the environment into the body of the 4 October 1958 Constitution. Instead, it modifies the preamble so as to include along with the mention of the Declaration of the Rights of Man and the Citizen of 1789 and that of the Preamble to the Constitution of 1946, reference to the new Charter (see appendix). In so doing, the idea is to affirm a third generation of human rights – rights and responsibilities pertaining to the environment – in

the wake of the previous two generations of first, political, and then economic and social rights. It should be recalled that for a French constitutional judge, these texts form the constitutional block and have the same force as those of the Constitution itself. Consequently, the Charter not only affirms the right to the environment, but elevates to the highest level of norms a set of principles that are specific to contemporary environmental law, these being the principles of prevention and precaution, information, participation and the polluter-pays principle, replaced in the Charter with a responsibility principle instituting a duty to make ecological reparations. As a last feature, the Charter associates the environment, or more specifically the environment in a certain state, with the condition of human development as such; it thus associates the continued existence of humanity with the protection and preservation of environmental balances, even those that are in flux. The perspective adopted is thus a universalistic one, indirectly covering the right of other peoples and more generally the universal right of future generations to a healthy and balanced environment, and, a fortiori, to their very existence.

This universalistic perspective constitutes a constitutional objective, in other words an objective that the legislative and executive powers – the latter on the European and international scene, not bound by any performance criteria – must strive to achieve. I will examine the presumed effectiveness of such a declarative mechanism. But first I will retrace the genesis of this Charter, highlight its connections with the overall theme of future generations, and end with an analysis of its strengths and weaknesses with regard to its three key articles: articles one, four and five.

Origin

Enshrining the right to the environment in the Constitution is not a new idea in France. It was already one of the 'One Hundred Measures for the Environment' contained in the Louis Armand report which resulted in the creation of the Ministry of the Environment in October 1971. The idea had constantly cropped up since then. In a re-election campaign speech delivered in Orleans on 3 May 2001, President Jacques Chirac revived the idea in a decisive and definitive manner:

In the name of this ideal, ecology, the right to a protected and preserved environment, should be considered on a par with public liberties. It is the duty of the state to affirm this principle and ensure that it is upheld. And I intend for this public and solemn commitment to be enshrined in a charter for the environment appended to the Constitution and which consecrates the fundamental principles of it.

In another speech given in Avranches on 18 March 2002, the head of state spelled out his intention: 'I will ask the French people to enshrine the right to

the environment in a charter appended to the Constitution, alongside human rights and economic and social rights. [. . .] Environmental protection will become a higher interest that will impose itself on ordinary laws'.

Shortly after J. Chirac's reelection, the draft constitutional charter was brought before the Council of Ministers on 5 June 2002. In keeping with a well-entrenched practice in France since the nineteenth century, the decision was made to entrust the preparation of this project to a 'commission of sages'. This same Council, on 5 June appointed paleontologist Yves Coppens to preside over such a commission. The nomination of a figure known for his reckless stances in favor of a technological headlong rush to the future (Bourg and Boy 2005, pp. 17–19)¹ surprised many, but in the end Yves Coppens' role as head of the commission was generally esteemed.

The thus-named Coppens Commission was made up of 18 members: two members of parliament, two industrialists, an insurance company representative, a farming representative, two voluntary association representatives (environmental and consumers), a trade union representative, a legal expert, a councilor of state, a representative of the National Medical Academy, an economist, an ecologist, a paleontologist, a physicist, an engineering scientist and a philosopher.² Four of its members came to the commission with transdisciplinary knowledge and a relatively deep understanding of ecological issues and sustainable development, which is not very many. It was of course legitimate for the commission not to be exclusively made up of environmentalists; on the contrary it displayed a certain diversity of cultures, opinions, sensitivities and interests. However, of its members there was a single ecologist, no climatologist, no specialist of biodiversity, despite overrepresentation of the scientific world; another imbalance: only three of its members were women. The members were appointed by the Minister of Ecology and Sustainable Development, Madame Roselvne Bachelot-Narquin, Yves Coppens and the state administration; senior government officials made effective contributions to the work of the Commission until it issued its final report.

During the Commission's period of activity a broad public consultation process was organized. A questionnaire was addressed to 55000 actors including 700 opinion leaders. A dedicated website enabled it to collect 1500 additional questionnaires and 400 spontaneous contributions. Fourteen regional meetings provided an opportunity for another 8000 people to participate more fully. Commission members systematically took part in these meetings and each was reported on in a plenary session; the questionnaires and the forum also produced a report. The exact weight of this participatory accompaniment to the Commission's work is nevertheless impossible to gauge. What's more, this body was organized into several sub-commissions, the main one being the sub-commission of legal experts,

which enabled it to enlarge the circle of internal competences; a colloquium was organized on 11 March 2003. Finally, beginning in early 2003, a drafting commission, with a few outside participants mandated by internal members, was put in charge of drafting the bill. All external activity, particularly that of the drafting committee, were in any event discussed and voted upon by the Commission in a plenary session.

The head of state stepped in at two different times during the Commission's work. The first occasion was in the Fall of 2002, before a delegation from the Commission, when it came time to decide between three different scenarios drawn up by the sub-commission of legal experts. These were Scenario A, with a modification of the Preamble to the Constitution referring to a Charter having constitutional value; Scenario B with a modification of the Preamble concisely stating the right to a healthy environment and introducing an organic law³ supporting the Charter, thus making it devoid of constitutional value; and Scenario C with an identical modification of the Preamble to the preceding scenario, without a Charter in the form of an organic law but instead designed as a mere exposition of the motives for modifying the Preamble. The head of state asked the Commission to come up with a solution combining Scenarios A and B; this recommendation was followed by the Commission, which proposed a Charter having constitutional value, since it would be mentioned in the Preamble, and a modification of article 34 of the Constitution.⁴

The second intervention, on 23 April, took place once the Commission had completed its work on 8 April. The various viewpoints that had been debated within the Commission were presented to the French President. He was asked to decided between two versions of the Commission's Final Report. The constitutional bill proposed by the Commission contained three articles: the first had to do with the modification to the Preamble, the second spelled out the Charter and the third suggested two variants for modifying article 34 of the Constitution leading to either an organic law specifying the conditions in which the Charter applied or an extension of the rule of law to the environment, hence requiring legislation rather than mere regulations. The other variant involved the last two lines of the Charter: a weak version affirmed the notions of precaution, prevention and reparation, but avoided the use of the word 'principle' and referred back to the conditions defined by law; the second, stronger, clearly affirmed the principles of prevention, precaution and the polluter-pays, without referring to the law, thus transforming them into directly enforceable principles. It also asserted the Charter's role in guiding France's international commitments. In the outcome of this meeting the head of state decided in favor of the strong version.

Debates both within the Commission and on the outside were fairly heated. Inside, the atmosphere grew tense when drafting of the Charter

began, at which time divergent viewpoints naturally rose to the surface. The most intense debates were over the precautionary principle, as many members were against elevating it to the status of a constitutional principle. These seemed to stem more from differences of appreciation as to the power of science and technology, more than specifically economic issues. The same concerns and fault lines have also crossed public opinion, with marked recourse to hyperbole and exaggeration. The opinion handed down by the Academy of Science on 18 March, the very day before the final Commission session was supposed to be held, is worth mentioning:

The French Academy of Sciences recommends that the principle of precaution should not be written into texts of constitutional importance or into an organic law since it might give rise to perverse effects which could have disastrous consequences for the future progress of our wellbeing, our health and our environment.

Two of the Commission's members then undertook to collect as many as 500 signatures from scientists over a dedicated website, gathering many prestigious names, to show that this opinion did not reflect the majority opinion of the scientific community. More generally speaking, the debate orchestrated by the press rather did service to the Charter, since the criticisms directed at it seemed to cancel each other out. A fraction of them claimed the text did not go far enough, whereas others feared an increased judicialization of public affairs that would sideline research, even the French economy. Such was the position defended by the MEDEF, the main French business organization.⁶ Another characteristic of this debate, no segment of the social body seemed to come out entirely against the project: this as we have seen was the case of the scientific community, but it is also true for corporate managers, the president of the Centre des Jeunes Dirigeants d'Entreprises (Center for Young Corporate Managers) having spoken out in favor of it. Environmental associations, NGOs and the Greens, after having proffered, rather minoritarily, criticisms and reservations, ended up rallying almost unanimously in support of the bill just before it was adopted by the Congress. I will finish by reviewing the various stages of the process. The government's bill, slightly different from the one handed in by the Commission though with no adulteration of its meaning, was adopted by the council of ministers on 25 June 2003. Yet it was not put to the Assembly for a vote until 1 June 2004, after having been removed several times from the parliamentary agenda.⁷ This indicates a patent lack of enthusiasm on behalf of the Parliament, which in general display little sensitivity toward environmental issues (see Boy 2003). Articles one, three, five and six of the adopted text were amended. They can even be said to have been improved; on some points they are closer to the initial text. Parliament also decided to modify article 34 of the Constitution, thereby including the environment in the domain necessarily under the rule of law, in accordance with one of the Commission's recommendations. The Senate adopted the text as amended by the Assembly on 24 June 2004 without altering it. In both cases, the text was passed by simple, not complete, majority. It was finally adopted on 28 February 2005 by the Parliament convened in Congress, in other words a meeting of the two houses in Versailles, by a three-fifths majority as required by the procedure of constitutional amendment: out of 665 possible voters, 554 were cast, 531 for and 23 against; the socialist and communist groups decided not to take part in the vote, for reasons either having to do with certain aspects of the text, or for purely political reasons, but they explicitly indicated they would neither formally adopt the text nor prevent it from being adopted (see the official Congress analytical report of 28 February).

The Charter and future generations

What aspects of the Charter most specifically concern the theme of generations? In this regard, the considerations in the preamble of the text of the Charter are fundamental: They immediately place the text in a universal perspective and on a global level as regards environmental matters; it evokes 'the very existence of humanity' and 'the common heritage of human beings'; it also talks about 'living conditions' and 'evolution'. The last paragraph in the preamble refers to the Brundtland definition of sustainable development. The object of this preamble is thus clearly the future of humanity, conditioned by the pressure we exert on a global scale, and not only the deterioration of natural environment on French soil. It should be noted finally that the threats linked to overall environmental degradation – at the top of the list global warming and the potential deterioration of ecological services due to an increased rate of erosion of biodiversity – do not so much affect the French of today as those of tomorrow, and a fortiori future generations in general.

Of all the principles that follow, it is the precautionary principle that best characterizes the spirit of this preamble, as it aims to prevent inasmuch as possible the irreversible deterioration of the environment, starting with degradation of the biosphere.

Almost all the other articles are forward-looking. Such is the case of prevention at the source (Art. 3), of the responsibility to 'contribute to repairing the damage' to the environment (Art. 4), the obligation of 'public policies' to 'promote sustainable development' (Art. 6), the obligation for the authorities to educate and train citizens in environmental matters (Art. 8), of making research contribute to 'the preservation' and 'proper use

of the environment' (Art. 9), and finally the role the public authorities should play on the European and international scene (Art. 10).

The contrast between Article 1, which lays down the right of individuals 'to live in an environment that is balanced and favorable to good health' and which concerns the French of today, and the abovementioned articles is obvious. There is even a sort of tacit reciprocity between the right laid out in article 1 and the set of personal duties and government obligations inherent in the following articles, which applies to the French people's contribution to a universal cause and a reduction in the impact on the environment they have and will have in the future.

Strengths and weaknesses of the Charter

I would now like to comment on three of the Charter's key articles. The paragraph corresponding in the Coppens Commission Report to article 1 reads as follows: 'Every person has the right to live and develop in a healthy and balanced environment that respects his dignity and favors his wellbeing'. The government version retained the affirmation of a new subjective right, but deleted the idea of dignity and substituted health for well-being: 'Everyone has the right to live in an environment that is balanced and favorable to his health'. Oddly enough, by getting rid of the notion of respect for dignity, the official version reduces the text to the mere biological dimension, whereas the Commission's intention was to take into consideration, over and above consideration of ecosystem balances, the role of human activity and a moral, disembodied and abstract value: dignity. Substituting health for well-being is distinctly awkward: the notion of well-being is also more incorporeal and refers in particular to the qualitative aspects of landscapes, whereas the notion of health is biological and make the adjective 'favorable' absurd: it in fact boils down to ascribing a therapeutic virtue to the environment. And last, the possessive adjective 'his' leaves the article wide open to all subjective interpretations, including the most fanciful. The version amended by the Parliament corrected these defects: 'Everyone has the right to live in an environment that is balanced and respectful of health'. Then it becomes a notion of public health, which can be objectified and controlled. This constitutes a guarantee of effectiveness for an otherwise general text, which might never relinquish the ethereal ideal of natural law. And in fact this connection is at the heart of contemporary sensibility. Furthermore, it broadens the scope of application of the following articles to the interface of health and environment.

The second main article is Article 4, which the Parliament left intact: 'Every person must contribute to repairing the damage he or she causes to the environment, under conditions defined by law'. The corresponding line in the Coppens Commission draft (strong version) was: 'The preservation

and utilization of the environment are based on the following principles: [. . .] – the polluter-pays principle, by which everyone is expected to help cover the costs of preventing and repairing damage to the environment resulting from his activity or behavior'. The Commission had settled for reiterating the polluter-pays principle and recalling its reparative and preventive functions, the purpose of this principle being to finance the costs of cleaning up pollution. Article 4 thus seeks to cap the polluter-pays principle with a broader principle establishing ecological responsibility, requiring reparation of the environment in addition to any harm done to property and persons, inasmuch as possible. It is thus a principle of ecological responsibility. The word 'contribute', however, remains as problematic as ever. It rests on two fundamentals: first of all, there are damages for which reparation, stricto sensu, makes no sense, as for global warming; second, the government's intention was to be able to protect specific categories, such as farmers, who could in the future be held responsible for ecological damage for practices encouraged by others and from which everyone at a certain time had benefited from. The fact remains that the word 'contribute' sanctions minimal participation in the reparation effort, as is the case with the oil pollution compensation fund. This text thus makes minimalist laws constitutional. It would have been enough to add an adverbial phrase such as 'contribute significantly', to produce a sort of semantic ratchet and prohibit such laws. That was obviously not the authorities' intentions.

The third crucial article, the one that provoked the most debate, is Article 5:

In the event that a damage caused, although uncertain given the state of scientific knowledge, might affect the environment in a serious and irreversible manner, the public authorities shall ensure, by application of the precautionary principle and in their areas of responsibility, that risk assessment procedures are undertaken and provisional and proportionate measures are adopted to prevent the damage.

First remark, this article is not a general, but a detailed definition of the precautionary principle, with respect to the environment and the health-environment interface induced by article one: it in fact refers to a principle that exists elsewhere ('by application of [...]'), a principle defined by the Treaty of Nice and European Court of Justice case law.

Second remark, this article is the only one in the Charter that is directly applicable: It defines no constitutional objective to be achieved by future legislation, and it is applicable as is, not under 'conditions defined by law'. It differs clearly from article L 110–1 of the Code français de l'environnment, which is less precise and of which two aspects are open to criticism: with regard to uncertainty, it mentioned 'the state of scientific and technical

knowledge', which boiled down to unduly extending the area of the principle's application to technical uncertainties;⁸ it contained the clause 'at an economically acceptable cost' which could have, for instance, justified not taking action with regard to asbestos, given the industrial cost of banning this material.

Third, the article clearly identifies the two aspects implied in implementing the principle: first of all, assessment of the current state of knowledge; second, the adoption of measures aimed at reducing the risk. In this respect the difference between the various versions is interesting. Where the government and parliament texts talk about 'risk assessment procedures', the Coppens Commission preferred to discuss launching 'research programs'. The point was to avoid an overly administrative approach, especially when the precautionary rationale cannot be dissociated from an effort to reduce the lack of knowledge that affects a potential risk. Another difference, this time between the government's and the Parliament's versions: the government had placed the adoption of measures before risk assessment, whereas the Parliament inverted the order, placing risk assessment as an indispensable preliminary. The government version suffered from another drawback: with the expression 'avoid damage from being done', it entertained the widespread confusion between precautionary principle and demand for zero risk. Given the particular inertia characteristic of global environmental problems, and the generally delayed awareness of such problems, the risk factor cannot be reduced to naught. Another parliamentary amendment was the addition of the expression 'in their areas of responsibility': here the members of parliament were addressing the fear of those among them who also hold local office – particularly mayors – of being attacked for not implementing the principle, a legally groundless apprehension.

Let us return to one of the conditions for implementing the principle: the qualification of damage to the environment as 'serious and irreversible'. Much discussion took place over the choice of 'and' instead of 'or'. I do not believe the criticism directed at this choice is grounded. The disappearance of a species is an irreversible phenomenon, but not necessarily serious, unlike the acceleration in the natural rate at which species vanish, which is. On the other hand, a risk tainted with uncertainty until we have rapid palliative techniques, cannot rouse the same mobilization of preventive means as a risk that confronts us with the following alternative: either action is taken despite uncertainty, or we face the possibility of lasting help-lessness in the face of serious and possibly global damage.

A last remark with regard to the adjective 'provisional' that qualified the prevented measures to be adopted. Take the case of the climate: we can hope to reduce and later stabilize our greenhouse gas emissions in order to avoid the highest scenarios of average temperature increases. And yet, once

such goal is achieved, it would be wise to maintain indefinitely a required level of atmospheric concentration of greenhouse gases close to the level prior to the crisis. The word 'provisional' in such a case loses its relevance. Another reason to prefer the adjective 'revisable', suggested by economist Olivier Godard, is the dynamic nature of precaution itself, which requires preventive measures to be revised as knowledge evolves.

Last, let us recall the importance of the precautionary principle with respect to future generations. It is the principle par excellence of contemporary environmental law, and even more that which should guide public policy in this area. For the moment we are not suffering from global warming or the deterioration of most ecosystems and the consequences in terms of the weakening of the vital services they provide (see the UN Millennium Ecosystem Assessment). It is impossible today to know the exact consequences that flow from these two phenomena and yet, given the inertia of natural systems and the irreversibility of their deterioration, the time to act is now. We do not know how to cool the oceans or repair the damage to biocenoses. The precautionary principle, a principle of action and anticipation, has no other purpose than to incite us to act without delay. Now, the interest of future generations is directly dependent on how we address these global challenges, as quickly as possible.

Conclusion

How effective will this Charter be? That is a hard question to answer, given that the effectiveness of a constitutional amendment is generally measured over the long term. Such was the case for the Declaration of the Rights of Man and the Citizen in 1789, the effects of which have been felt only at a secular pace (Gauchet 1989). Despite the mention of these two texts side by side in the Preamble to the Constitution, they have little in common. The members of the Constituent Assembly of 1789 frequently referred to philosophical works, mainly Locke and to a lesser extent Rousseau. Such was not the case of the members of the Coppens Commission. True, their divergences had to do with different philosophical options, particularly with respect to the power of technology, but these were neither made explicit not discussed. Second, the Charter will either be effective rapidly or not effective at all, given the relative urgency of addressing our ecological impasses. Last, it is hard to tackle this question without also examining that of the procedures in France for referring a matter to the Constitutional Council. A law can only be submitted to it before it is passed and referral requires the signature of at least 60 members of parliament, which makes it a very restrictive procedure. The potentially remedial role of a text such as the Charter under such conditions is virtually inexistent, unless one counts on the ecological vigilance of 60 parliamentarians, which for the moment is nonexistent. This is in fact why some of the Commission members had recommended an expansion of the procedure for controlling the constitutionality of laws, for instance by a jurisdiction when a dispute arises. The Charter could then play a real role in correcting laws.

The bill recently passed by the Senate (14 April 2005) on water and aquatic environments, a bill supposedly in accordance with the goal set by the European water framework directive of achieving 'good ecological potential' by the year 2015, is terribly revealing: the Charter changes nothing. It should first be noted that the bill submitted by the government does away with the tax on nitrate fertilizers, which is not even in keeping with the faint-hearted 'contribute' in article 4 of the Charter. Nor does the Senate-approved bill establish a better balance in the distribution of the amount of taxes collected in keeping with the polluter-pays principle for water pollution treatment, because farmers would only bear 4 percent of the cost, instead of the prior 1 percent it is true, industrials 14 percent and taxpayers 82 percent, which in no way corresponds to their respective responsibilities.⁹

Decidedly, things have hardly changed since Henri Frederic Amiel: the French still prefer words to deeds.

Notes

- 1. 'The future is fabulous', Y. Coppens declared. 'The next generation is going to learn to comb its genetic map, increase the performance of its nervous system, give birth to the children it dreams of, control plate tectonics, program climates, wander about the stars and colonize the planets it wants to. It will learn to move the Earth to put it in orbit around a younger Sun. It will understand the process of biological evolution and understand also that it is education that makes people tolerant', Le Monde, 3 September 1996.
- 2. The author of the present chapter.
- 3. In other words a higher level of law than ordinary law but that does not affect the organization of powers as does the Constitution, and thus easier to modify.
- 4. Present at this meeting were the president of the Commission, the physicist, the legal expert and the philosopher, the latter being the only one to have endorsed Scenario A.
- 5. They were Christian Brodhag and the author, on a site called 'pourlacharte.org'.
- 6. MEDEF press conference on 13 January 2004.
- 7. Debates of 25-26 May.
- 8. Scientific uncertainty refers to a lack of knowledge of the effects of one or more technical devices on one or more natural mechanisms, those which are universal and spontaneous; technical uncertainty refers on the other hand to a lack of knowledge with respect to a single event connected with the functioning of a specific system.
- 9. See Rousseau B., l'Editorial p. 2 and 'La petite loi sur l'eau adoptée par le Sénat', La Lettre eau no. 31, France Nature Environnement, pp. 7–11; Bernard Rousseau, at the time president of France Nature Environnement, was a member of the Coppens Commission.

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Appendix: Constitutional Amendment on the Environment Charter



Law passed on 28 February 2005 by the Parliament convened in Congress and promulgated on 1 March 2005 by Jacques Chirac, President of the Republic.

Article 1

The following words are added to the first paragraph of the Preamble to the Constitution:

'as well as the rights and responsibilities defined in the Environment Charter of 2004'.

Article 2

The Environment Charter of 2004 shall read as follows:

'The French people,

'Considering,

'That natural resources and equilibriums have conditioned the emergence of humanity;

'That the future and very existence of humanity cannot be dissociated from its natural environment:

'That the environment is the common heritage of human beings;

'That man is exerting an increasing influence on living conditions and his own evolution;

'That biological diversity, individual fulfillment and the progress of human societies are affected by certain modes of consumption and production and by the excessive exploitation of natural resources;

'That environmental preservation should be a goal pursued on a par with other basic interests of the Nation;

'That in order to ensure sustainable development, the choices made to meet the needs of the present should not jeopardize the ability of future generations and other peoples to meet their own needs;

'Proclaim:

- 'Art.1. Every person has the right to live in an environment that is balanced and favorable to good health.
- 'Art.2. Every person has a duty to take part in preserving and improving the environment.
- 'Art.3. Every person must, under conditions defined by law, prevent any harm he or she may cause to the environment or otherwise limit the consequences thereof.
- 'Art.4. Every person must contribute to repairing the damage he or she causes to the environment, under conditions defined by law.
- 'Art.5. In the event that a damage caused, although uncertain given the state of scientific knowledge, might affect the environment in a serious and irreversible manner, the public authorities shall ensure, by application of the precautionary principle and in their areas of responsibility, that risk assessment procedures are undertaken and provisional and proportionate measures are adopted to prevent the damage.

- 'Art. 6. Public policies shall promote sustainable development. To this end, they reconcile protection and utilization of the environment, economic development and social progress.
- 'Art. 7. Every person has the right, under conditions and within limits defined by law, to have access to information regarding the environment the public authorities have in their possession and to participate in developing public decisions having an effect on the environment.
- 'Art.8. Education and training in environmental matters should contribute to the exercise of the rights and responsibilities defined by the present Charter.
- 'Art. 9. Research and innovation should provide support for the preservation and proper use of the environment.
- 'Art. 10. The present Charter shall serve as a source of inspiration for France's European and international initiatives.'

Article 3

After paragraph 15 of article 34 of the Constitution, the following paragraph shall be inserted, to read as follows:

'- preservation of the environment';

13 Commission for Future Generations in the Knesset: lessons learnt

Shlomo Shoham and Nira Lamay

Commission for Future Generations of the Knesset, the Israeli parliament (Commission for Future Generations 2001) constitutes the only establishment in the world designed to protect, by definition, the rights of future generations at the parliamentary and governmental level.

Introduction: A top-down process

It is not surprising that the 'rights of future generations' narrative has developed over the past 20 years mainly around the environmental orientation, introducing ideas deriving from a worrying situation of vanishing resources.

Thus, most documents relating to the subject derived from the 1987 report titled 'Our Common Future' that introduced the concept of sustainability and that led to the Rio declaration and the international process of networking that followed.

On another level, narratives have developed in the field of moral disciplines and academic research such as those of the University of Malta Cathedral for Future Generations. At this level, ideas have expanded to religious and ethical aspects of the concern for future generations and for the abstract, beyond immediate communities (Bonnici 1998). Caring for future generations as an issue of morality was also dealt with from the theological aspect. Thus, it is suggested that men and women who believe in God, the creator, should feel called upon to address the problem. This is based on the conviction that God created the Earth for the benefit of all generations and, therefore, no generation enjoys an exclusive right to the resources of the Earth (Merieca 1998). The establishment of the Israeli Commission was not preceded by a public campaign or even a public discussion arising from outside the parliament. It was not a result of a bottom-up process, but a totally top-down process imposed directly from the parliament. The Commission was established at the initiative of a politician in the center of the political arena. It was the result of a personal revelation by the then leader of the middle-class liberal party, 'Shinui' (literally: change) – MK Joseph (Tommy) Lapid. From the explanatory notes of the bill proposing the establishment of a Commission for future generations:

Every legislative act is overshadowed by the risk of unforeseen consequences, that is, the legislator may intend to achieve a specific goal, while in fact the result is some other outcome, sometimes negative, that was not taken into account.

It is sometimes difficult to calculate the effect of a particular legislative act in a few years time, not to mention its effect in a generation or two. This is infinitely more likely in such a dynamic society as our own, where the fast technological developments accelerate processes of change.

Furthermore, politicians have a tendency to seek resolution to problems that are currently of concern to their electors, in the hope that in the long term, the matters will resolve themselves and in any event will become the problem of a different government and a different Knesset.

In light of all this, the need has arisen for the appointment of an ombudsman to represent in the legislature the generations yet unborn – a 'Commissioner for Future Generations'. He will be given the opportunity to examine each legislative act and to appear before the relevant Knesset committee wherever there is suspicion of possible prejudice against future generations. This may take the form of soil or air pollution, harm caused to pension funds, the implications of genetic biology or the results of a technological development.

A recent example, even though not from the world of legislation, may be found in the problem of the millennium bug, that would have been prevented if the process had at the time been examined in relation to the future.

The explanatory notes reveal that behind the establishment of the Israeli Commission for Future Generations, there was indeed a concept of amending of a repetitive flaw, a blind spot, in the parliamentary decision-making process. This flaw manifested mainly in the parliamentary legislative process, which the initiator of the bill appreciated, on becoming a member of the parliament just a year and a half earlier.

The fact that the initiative to set up the Commission originated with the Establishment itself, was probably what made it possible to formalize the protection of the rights of future generations. It is not at all clear that had the initiative come from an NGO – as was the case in Hungary where the NGO 'Protect the Future!' initiated a bill about an ombudsman for future generations – this would have been a realistic option.

Yet, some amendments made to the original bill show that even a strongly-positioned politician like Tommy Lapid could not create an institution that would have authority over both parliament and government. The maximum that the Coalition Government at that time, and probably a coalition of any time, would agree to was to permit the Knesset to have its own internal body, that would advise it regarding the legislation process and would be funded from the Knesset's own budget.

As a result of the amendments to the original bill (see annexes), the future Commission will be confronted with some fundamental difficulties of definition and efficacy in fulfilling its role of defending the rights of future generations.

Table 13.1 The original bill and current law

	Original bill	Current law
Status of the establishing law	A new, separate and specific law	A chapter within the Knesset Law
Legal definition	Statutory corporation (sec 5)	A unit within the parliament
Main function	To represent the special interests of future generations in the parliament and government 1. Express opinion regard the implication of laws interests of future gene 2. Advise the members of on issues of particular relevance to future gene	
Election of the Commissioner	By the majority of members of parliament in a secret vote By a public committee part professional and part political. Final decision by the Speaker	
Fields of authority	Open list of any subject that is of special interest for future generations. Examples of areas included are: economy, environment, demography, science, quality of life	A closed list of 12 fields including nearly all subjects, but excluding defense and foreign affairs
Status vis-à-vis the government	Authority to demand relevant information of any minister. Obligation upon every minister to consult with the Commissioner prior to any issuing of regulations, according to the authority invested in him, that relate to a law that was found by the Commissioner to have special interest to future generations	Authority to demand information of any controlled establishment under the State Comptroller Act
Commission's budget	To be determined by the Knesset Finance Committee, according to the Commissioner's suggestion. To be published with the State budget.	Part of the Knesset budget, determined by the Knesset administration
Definition of 'future generations'	Those who will become part of the state's population at any time, and that have not yet been born	Not defined
Intervention in the legislation process	General instructions regarding appearance by the Commissioner in different committees, after informing chairman Detailed instructions of the process	

Comparing the versions of the original bill with that of the law that was actually enacted shows us that the Commission was originally planned to be a more independent body with a broader range of responsibilities and authorities. The two versions are compared in Table 13.1.

The differences between the original bill and the enacted law had considerable impact on the Commission-to-be, as will be reviewed here. This is mainly in regard to the relationship with the Executive Branch, the Government. With the new law, the Commission would act mainly within the Knesset legislative process, however, it was still necessary to develop content and values under this law.

Moreover, the scope of the Commission's roles as an establishment within the parliament also had to be determined. Should the Commission only relate to the legislative work of the parliament, acting within a parliamentary democracy? How was the role of the parliament as a monitor of the government and as a house of representatives supposed to be reflected in the Commission's work?

Indeed, one of the first questions raised was whether the Commission should focus on the legal aspects of the legislative process, namely reacting to bills and giving opinions, or also deal with policy issues.

Prof. Naomi Hazan, then member of the Knesset, who was appointed to chair the Knesset sub-committee on the Commission for Future Generations, could not see any option other than to choose one of the two paths. She explained this in view of the poor budget the Commission received from the Knesset, which did not allow it to employ more than four professionals (Knesset Protocol 2002, p. 3). This issue, that turned out to be a cardinal one in the life of this establishment, will be discussed later in this chapter.

Starting off with special authorities

The Commission has been given two major authorities that made its work and action more significant:

- 1. the authority to demand information from any controlled establishment under the State Comptroller Act; and
- 2. the authority to request a parliamentary committee that discusses a bill, for reasonable time to prepare an opinionated position by the Commissioner.

The authority to demand information from all governmental entities, such as ministries, public companies, state institutions or government corporations and so on, is similar to the authorities of the State Comptroller.

This authority grants the Commissioner an advantage over members of parliament and government ministries, which are often left in the dark

regarding their colleagues' work. The Commissioner often uses this authority to get information that is not otherwise available or that the authority has no interest or obligation to publish. That was the case with data regarding water resources pollution monitoring results demanded from the Water Commissioner functioning within the Ministry of Infrastructure. Another one had to do with internal protocols of the Helsinki Committee deciding on whether to approve experiments made on humans that involve genetic interventions. A recent demand was for information regarding medical files of employees of the governmental plant of Electrochemical Industry. The plant, that closed down in 2004, was discovered to contain hazardous materials that have been contaminating its surroundings and its employees, the majority of whom turned out to be sick with related diseases for many years. Along with the medical files, the Commissioner requested to see the safety regulations for employees used by management since the establishment of the plant in the 1970s. The details of the doctors that attended the employees and the environmental inspection reports made throughout the years, by the Ministry of Environment, were demanded as well. Since the subject was not attended by the government, the commissioner presented the information to the media and through them he brought about a public campaign and eventually legal attention to the matter.

The right to be given enough time to prepare an opinion is an implied authority to create a delay in the legislative process. Such a delay may be crucial for the parliamentary work when it comes to bills discussed within the framework of the state's budget. In that case, the time factor is vital since the implication of not voting on the state's budget for the next year by March of that year, is that the parliament must dissolve itself and go to elections. Yet, by using that authority the Commissioner risks creating antagonism towards him from both coalition and opposition parties. Neither of the sides of the house desires to dissolve the parliament. Therefore, this authority is scarcely used and when it had been used – it was done implicitly, behind the scene, rather than in a formal manner. The Commissioner used this authority in the case of the law concerning the integration of children with special needs in the formal education system. The government wanted to postpone the enacting of the law for a few years in order to maintain the planned budget frame for the coming year. This meant thousands of children with special needs losing the chance to be integrated in society as 'normal', in the future. The Commissioner confronted the ministry of finance for the lack of long-term thinking and mis-calculation of externalities, in favour of current 'saving' on the expense of these children. This minor saving of less than 1 percent of the budget was calculated to cost society much more in the future. Denying these children the chance to be part of society and rather, sentencing them to becoming a burden on it as adults with special needs can hardly be considered economically effective. Along with the open confrontation held in the committee, the commissioner clarified to the government officials that if necessary, he will come forward and demand from the chairman a reasonable time to give a more elaborated opinion, which meant a delay of the law. Scheduled just a few days before voting on the 2003 state budget – the government drew back from its position and allowed the enacting of the law of integration.

Thematic milestones of the journey

The Commission has struggled along its public and parliamentary path, with several issues to be dealt with:

- 1. Creating a status for the Commission both in the parliament and in public opinion.
- 2. Defining 'future generations'.
- 3. Defining and determining 'special interest to future generations' and relating this to specific legislation.
- 4. The implications of acting in a political environment.
- 5. Determining the scope of action with related establishments government and non-governmental entities.

Creating a public status

Naturally, for an establishment with no precedent, designed to act for the public, although with a slightly different meaning – a public that does not yet exist – creating a public status was one of the first issues and a fascinating one. The fact that the Commission's authority is mainly advisory means that its status in parliament and with the public is vital for its success. Not having been elected – the Commissioner cannot stop legislation created through a democratic process. It can only raise awareness in a way that puts pressure on the committee discussing the legislation and on the voting parliamentarian. For this purpose, it must have the authority to participate in all discussions, receive all information, and accompany the legislation all the way to the final voting in the plenum. This is done in the Knesset by attaching the Commissioner's opinion to the bill about to be voted.

Coming up with a title that symbolizes hope, an optimistic view of the future and, above all – removing the spotlight from the dimension of survival where Israel exists – led to a fair amount of cynicism. Appointing the Commissioner on the edge of the new controversial budget-year (2002) was another issue that added to the bad atmosphere at the start. The parliamentarians, somewhat surprised at the public protest regarding the increase in the parliamentary budget and the cutting down of expenditures on

welfare, did not manage to defend the new, unknown Commission, established by the vote of the majority of the Knesset.

The media, looking for a 'headline of the day' and not familiar with the new body with the abstract title, joined the chorus of criticism against the Knesset and the 'luxury' it affords itself by taking care of future generations.

The rather 'bad publicity' the Commission started with indicated more profound difficulties – the need to justify its existence in terms of economic utility and the need to justify the priority given to future generations rather than the existing ones (in a country where environment is not a high priority).

The Commission was then at risk of having public opinion go against it. At such an early stage this could have marked the end of what had not yet begun. This was strengthened by two legislative initiatives, one proposing the reduction of the authority of the Commission, and the other to eliminate it altogether. Responses from the public followed. Surprisingly enough the public was not drawn into the circle of criticism, but rather showed interest in the promising title and its various possible applications.

The ones who seemed to be drawn to the criticism were, in fact, the parliamentarians, the potential customers of the Commission. Thus, there was a need to re-position the Commission in the media, in order to regain recognition inside the parliament itself. Since the media has a major task in determining the public agenda of the country, it could be used as a platform to promote the concept of future generations.

Exposing the Commission to the media brought about four main results:

- Parliamentarians started to appreciate the Commission as an establishment that creates public interest, and thus, a body to be recognized and taken into consideration within the parliamentary work.
- 2. The public started to show interest and to relate to the concept, mainly in terms of suggesting input. The focus was on environment and education issues. Apparently people in Israel were disturbed about the future and found the new, still unknown, Commission a support to lean on. This was the opportunity to define terms and conditions and to introduce to the public the Commission's main prerogatives in the Knesset.
- 3. Information started reaching the Commission, mainly from academia, introducing to the Commission researches relating to future generations.
- 4. The mere existence of the concept of future generations that had not been introduced before to the public started a trend of relating to it in public life. It has since been used often in parliamentary debates and in decisions of the Supreme Court.

To conclude, the media that introduced the Commission as a controversial establishment and was the first to question its necessity – soon became a crucial tool in positioning the Commission and the concept of future generations.

Who are the 'future generations'?

As the identity of the 'protégés' was not defined in the enacted law, one of the main issues faced by the newly born Commission was the scope of the protected group under the term 'future generations'. The preliminary question was that of the protection of children's rights.

It was undisputed that one of the first issues the Commission should handle was the establishment of a Committee for National Infrastructures, that was designed by the government as a quick by-pass legislative process. The committee was supposed to approve large-scale national infrastructure projects, by-passing the regulative process of constructing and planning and particularly the discussion on the environmental and ecological implications of the projects. Environment is the first of the Commissioner's field of authority mentioned; it involves the issue of future resources and was therefore a natural immediate issue to be dealt with. Nevertheless, dealing with the rights of children raised a more difficult question of how immediate should be the interests to be protected. In March 2002 the Commissioner was called upon by the then chairperson of the Knesset Committee on the Rights of the Child, MK Tamar Gozansky, to support a bill ordering that all legislation discussed in the parliament, regardless of whether it is initiated by a private Member or by the Government, should specify the effect of the proposed law on children, under certain guidelines.

Although the role of the Commission had not yet been defined or published within the Knesset, MK Gozansky considered it imperative for the Commission to act on behalf of children.

Turning the spotlight onto issues concerning children raised some other questions that the newly born Commission had to confront:

- What is the range of intervention in issues concerning children? Since children constitute a cardinal part of the population, issues of almost any kind will concern them.
- 2. What is the role of the Commission in protecting and promoting children's interests, within the existing organizational framework protecting children?

Due to an awareness that children do not have the power to represent themselves, their interests are often protected by various rules and establishments designed for that purpose. The court in Israel, for example, is considered the 'guardian of minors' whenever issues concerning minors are discussed. Also, the Commission was not designed, in terms of resources, to supply constant support to children issues. It was therefore important not to attempt to try to replace the existing governmental, semi-governmental and non-governmental organizations that act solely for that purpose.

Taking the path of children's interests

The Commission for future generations chose to participate in and promote the bill regarding the effect of legislation on children. It participated in the different discussions and supported the bill when it was brought to vote in the plenum. Moreover, after the law was enacted, the Commissioner supervised its application in the Knesset, which involved an amendment to the Knesset Rules of Procedure.

This act paved the way for a future role of the Commission as protector of the current generation of children. The Commission preferred to consider future generations as the next baby to be born tomorrow morning, a definition that relates to the immediate future generation, consisting of currently existing children.

This particular legislation made it an easy case to deal with for two reasons:

- 1. It could have been characterized as framework legislation, and therefore suitable. Not engaging a particular issue concerning children, but setting procedural guidelines to protect the interests of children as a whole.
- 2. The legislation involved was about to assimilate a whole new concept of relating to human rights in the very preliminary and high levels of parliamentary work by the state legislator. Being a new inhabitant of the parliament and a new chain in the legislative process, the Commission was obliged to state its position.

Over the following years, the Commission has related to various acts of legislation concerning children, at different levels of intervention. Resources were usually directed to legislation and executive actions that are characterized by policy frameworks, such as a national task force for a reform and re-definition of the education system. Children's issues became a platform for co-operation with parliamentarians and government and were welcomed by the media. The fact that other public initiatives were also set up to deal with some of the issues was no problem. Apparently, children's rights are far from receiving adequate protection by government and the Commission is obliged to participate in this effort.

What really interests future generation?

The concept of 'special interest to future generations' that appears in the Knesset Law is not defined. The areas of interest the Commission is supposed to relate to are specified and include: environmental resources, natural resources, science, development and technology, education, health, national economy, demography, planning and construction, quality of life, law, and any other matter that the Constitution, Law and Justice Committee determines to have a considerable influence on future generations. The Commission started gathering information and receiving advice from individuals and academic organizations dealing with the concept of future generations.

Academic research regarding this has been conducted in Israel in the area of Political Science. The researches focused on the political-institutional problem of the blind spot in the democratic process that does not enable representation of those who are not born yet. This was studied mainly from the political aspect of strategic planning by governments under populist pressure, the demographic implication of current politics and the costs of a lack of long-term policies (Dror 2001). Prof. Yehezkel Dror advised the Commission to respond to issues such as pension funds. Prof. Dror considered the institutional location in the parliament as an advantage, being as close as possible to the political quagmire.

True to the original intention of the legislator, the Commission did start to look into issues such as the deficiencies in the national pension funds and the need to re-structure the whole system from the management and actuarial aspects. This is a problem recognized world-wide, where the future generations are being forced, in advance, to carry the burden of current generations' pensions, thus making this a classic issue for the Commission to deal with.

However, the Commission was still searching for a systematic definition for 'special interests of future generations' in order to choose and justify the issues it chose to deal with.

At this point, the assistance of an expert of futurology who introduced us to four methodological trends in forecasting of the future was an eye-opener. The futurology expert, Dr David Passig (Passig 2005), helped enable the Commission to justify its moves scientifically.

Apparently, the most acceptable methodology used is that of backcasting. This means outlining the goals that we wish to reach in the future, or in other words: making a sketch of how we wish our future to be, and then derive from that what actions need to be undertaken in the present time, in order to reach those goals.

That is a reliable way of justifying the work of an establishment dealing with future interests, that is, not attempting to predict the future, even with

methodological means of extrapolation, but rather assisting in creating it and giving advice regarding the paths to reach there. Moreover, this could give the Commission an effective definition of action in the present time, in order to forge the shape of the desired future. However, such a methodology could still not provide the Commission with the value content of interests of future generations that it wishes to protect.

The most massive input came from the direction of the environmental field. Apparently, the concept 'future generations' was already being used by activists in that area – operating at both governmental and non-governmental levels.

It was only when it was introduced to the concept of sustainable development – that the Commission found a systematic definition that embodied values and specific areas of reference: 'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (World Commission on Environment and Development 1987).

'Sustainable Development' was adopted by the Commission as a conceptual platform, delivering a number of advantages:

- 1. It relates directly to future generations, thus creating a very relevant link. Examining it thoroughly makes us understand that it is really a means of planning the future.
- 2. Although the concept originated in environmental issues, it stands on two additional pillars society and the economy thus giving comprehensive attention to nearly all issues. This also enabled the Commission to relate to all the areas of authority vested in it by law. Almost all these areas can be included either in environment (environmental resources, natural resources, planning and construction), economy (national economy) and society (health, education, demography, quality of life). Science, development and technology, as well as law, would be general areas that have a cross-effect on all other areas. Certain institutional frameworks that must exist in order to fulfill its defined goals (according to the international commitments articulated (Rio Declaration 1992 and Johannesburg Summit Plan of Implementation 2002)) also derive from the concept. These frameworks are designed to constantly take into consideration the interests and narratives of future generations.
- 3. Since the orientation is development, it is easier to approach politicians and other interested stakeholders that are opposed to the environmental aspect. Since environment is often grasped as a concept that annuls development, presenting a concept that takes into consideration development as an inherent part of its definition makes it much more powerful, holistic and easy to assimilate.

- 4. The concept provides a systematic rule, or measurement of action that needs to be carried out in the present time in order to do justice to future generations leaving them the space for choice.
- 5. Principles such as good governance and accountability that were added to the concept apply to the basic level of public administration and, are very easy to disseminate, so as to reach the public and the media.
- The concept has already been recognized worldwide as the new rule for action at all levels - international, national and local. The rights of future generations have become one of the top priorities declared by the UN and most countries of the world are now committed to protecting them. This concept was already adopted in 1992 and became especially central towards the UN Earth Summit in Johannesburg. Research centres and institutional frameworks were set up - for example the UN Commission on Sustainable Development - and guidelines were set for putting words into actions. Even the OECD (Organization for Economic Co-operation and Development) initiated a resource book aimed to assist in building national strategies for Sustainable Development (Dalla et al. 2002). Moreover, the State of Israel reported to the UN before the Johannesburg Summit in August 2002 regarding the establishment of the Commission for Future Generations as part of Israel's actions to create institutions and frameworks to promote sustainable development according to Agenda 21.

Sustainable development, was, then, a perfect fit for action in protecting future generations' interests.

And indeed, one of the Commission's first activities on returning from the Johannesburg Summit was to initiate legislation that will set sustainable development as a constitutional right to be protected (see annexes).

The bill was originally designed as a Basic Law – meaning that the rights protected within the law are constitutional, that is, they are accorded higher protection in the event they may be in conflict with other rights. A Basic Law can be amended only by a large majority of the members of parliament, thus creating long-term legislation.

Since Israel has no formal constitution, mainly due to ideological differences, the Basic Laws serve as a substitute for a constitution. Thus, the bill that was submitted by two parliamentarians as a private initiative could not make it through the parliamentary coalition, which insisted on converting the law from a Basic Law into a regular one. The bill has been resubmitted and is now being discussed with the government in order to reach a consensual version.

There is no doubt that incorporating sustainable development into legislation will set a whole new standard for the rights of future generations and

of the state's commitment to it. Governments will have to consider the rights of future generations, and court will have to respond to appeals against infringements of those rights. This is a situation from which there is no return, especially when it has been assimilated into public awareness as have other human rights over the years.

It is crucial to take advantage of the momentum thus created in the world, validating the concept at all levels and creating political pressure.

The OECD, for example, by setting sustainable development as an imperative for national economic growth, exerts considerable political pressure on countries that seek the prestigious membership in that organization. This is indeed the situation in Israel, where Minister of Finance Binyamin Netanyahu set Israel's joining the organization as one of its main goals.

Nevertheless, some characteristics of the concept and the evolving of its scope create negative correlations with the rights of future generation and their protection.

On the one hand, the concept of the rights of future generations is much more fundamental, thus much wider than sustainable development. Thinking about the future and designing it is more than a human instinct and a moral imperative – it is a value in itself.

Sustainable development may be the closest applicable concept for guidance in efforts to protect future interests, but it is just not enough, no matter how comprehensive it may seem to be.

Certain issues that have a direct effect on the future simply cannot be dealt with through sustainable development, nor should they be. An example is the implications of technological development on society and ethics, in a way that may effect future generations. One issue of that kind is human reproductive cloning, a technology that has the potential to change the face of the world we live in. The ethical and social debates to be conducted today are crucial to what will eventually happen with the development of such technologies. The issue ceases to be a scientific or even a merely moral one – in such a rapidly changing world it becomes a political issue.

On the other hand, it seems that the concept is applicable to nearly every development issue. Sustainable development is a leading and central concept in virtually all development plans. This widespread agreement stems from the generality of the concept, the flowery language used to describe it, and the lack of clear and detailed statements defining the properties of sustainable development. More specifically, the question is, what distinguishes sustainable development from something which is not sustainable? Amongst planners, for example, there is a sense of bewilderment in regard to this distinction (Kaplan 2004).

Besides the bewilderment it might create, there are two dangers that derive from that situation. One is that the concept will be abused and misused to validate non-sustainable development. The second is that the concept will be torn apart by the wide range of issues it is being stretched to cover. The concept is directed at governing entities, but also at their satellite establishments, such as corporations and the World Bank. Poverty eradication for instance, is indeed a noble value in itself and something that all of humanity should strive for. However, setting poverty eradication as a cross-cutting principle of development, takes the concept of sustainable development beyond its expected boundaries. It should be expected, then, that some establishments will develop antagonism to the concept and start paying it lip-service instead of creating a genuine reform regarding the earth's vanishing resources.

Enabling mechanisms – an interest for future generations

In view of all this, it seems that a governmental institution designed to protect future generations' interests should look into every government activity separately, in order to decide upon its position regarding each issue.

In the framework of protecting future generations' options for choice, the Commission cannot inspect each of the many decisions made and executed by the authorities that might influence future generations and be motivated by short-term interests.

One of the Commission's main goals, therefore, is to install mechanisms that are designed to consider long-term interests and ensure that they are protected by law. The main rule in this regard is keeping the decision-making mechanisms set by law away from the political establishment or the direct influence of political interests. In the reality of strong government coalitions and an administrative culture of appointing familiars, that means also avoiding homogeneous governmental representation in decision-making mechanisms.

The Law for the Protection of the Coastal Environment, 2004, aims to protect the coastal environment and its natural and heritage assets and to prevent and/or reduce damage to them; to preserve the coastal environment and the coastal sand for the benefit and enjoyment of the public in present and future generations; and to establish principles and limitations for the sustainable management, development and use of the coastal environment.

Yet, most of the rights protected in the law were given to the consideration of a designated committee composed of relevant ministry representatives and other professionals. The Commission for Future Generations advised the Knesset Internal Affairs and Environment Committee about the crucial need to create a balanced committee, whereas the natural tendency of nearly all government ministries, excepting the Ministry of

Environment, will be to ease restrictions on coastal construction. The same goes for representatives of local authorities that usually benefit from the coast. It was thus crucial to have professional planners, marine biologists, environmental NGOs and public representatives in a balanced number.

Another aspect of enabling mechanisms is the existence of professional/ academic slots in policy-making frameworks, in order to scientifically emphasize future trends.

For example, the research committee that allocates money to private sector industrial R&D under the Industrial Research and Development Act, 1984, has a major part in steering future technological developments to be conducted in Israel over the next few decades. This committee was composed of government and some business sector representation. It was, thus, crucial that the committee also included a scientist, an academic expert on future scientific technological trends, who will make sure that the money is allocated to companies that are headed in the right direction in regard to future technologies.

Another enabling principle is the political and financial independence of executive units that by definition have long-term influence.

Defining these bodies as authorities that are not subordinate to or budgeted within a certain ministry's budget, but are budgeted directly and independently of the state's budget, is vital. This reduces the chance that the authority will be influenced by the political agenda of a transitory minister, but will rather be able to make rational, professional decisions.

Implications and costs of acting in a political environment

Situating an institution that is supposed to protect future generations in the core of the political establishment of a country, for example the parliament – carries with it some inherent difficulties along with some advantages.

The parliament is indeed at the cutting edge of political determinations in every country. Also, it is where public debate is conducted regarding the national agenda. Being located in the same premises as the parliament, gives the advantage of proximity and access to information and to the main players – the politicians. (Access to information should be endorsed by law.)

Information regarding parliamentary work means not just what debates are being held in the committees and in the plenum. It also includes knowledge of the mood of politicians and how they think, views of the ministers' representatives and other government officials that appear regularly before parliament, and last, but certainly not least - opinions expressed by the various stakeholders that are invited to appear before the committees.

The physical proximity to politicians creates an outstanding opportunity to personally influence their agenda in order to recruit them to the protection of future generations. However, acting in a political arena also means that the players react to activities that may grant them a political advantage. For the same reason politicians need advising regarding the effects of their actions on future generations, meaning that politics often deals with the very short-term interests of current voters. The Commissioner for Future Generations in the parliament must therefore provide positions that politicians feel it is worthwhile for them to support.

For these purposes, an institution within the parliament must adjust itself to lobbying, while taking into consideration coalition-opposition matters, political trends and the political climate. Due to strong coalition discipline, lobbying conducted in the backstage of the government is another imperative, in order to make sure that the Commission's opinion is considered when attached to a bill that is brought to the plenum for a vote – even if it had been accepted in an earlier legislative stage in the relevant Knesset committee.

These facts project also on the type of figure suitable to lead such an institution. Regardless of the professional background – environmental, scientific or juristic, the person at the head of the institution must have the public prestige that can be appreciated by politicians: appreciated not only for their professionalism, but also for their ability to grasp political nuances. In this sense, the appointing of a retired judge, the former legal advisor of one of the Knesset's principal committees, enabled the Commission for future generations to be seen as an organic unit of the parliament. As mentioned before, defense and foreign affairs issues are excluded from the authority of the Commission. In a country where politics revolve almost completely around defense issues, this might be an alienating factor. Nevertheless, this very fact, that allows the Commission to remain politically unaligned, gives the Commission the great advantage of neutrality and professionalism.

From the knowledge gathered so far, it seems that political differences of ideology might actually become synergetic in the future. Lack of natural resources, financial deficits and social gaps will probably be the real problems for future generations. That, of course, assuming that efforts towards peace will not stop until it is achieved. Not achieving peace brings into question the very existence of future generations in the Middle East. But when it is achieved, we hope they will still have air to breathe, water to drink and natural resources to benefit from.

Determining the scope of action and interim conclusions

Getting up in the morning with the task of assuring the wellbeing of future generations makes one prone to measure the scope of one's activity on a daily basis. The Commission has been experiencing this over the past three years.

The Commission started off with clear legal instructions regarding the focus of its action – the legislative process. Soon enough it turned out that, even under the rules and definitions adopted, when acting in defense against offensive legislation the Commission finds itself siding with certain NGOs, public initiatives, governmental ministries and even groups from the business sector that are already campaigning to promote or prevent specific legislation.

As much as this fact may call into question the exclusivity of the Commission – it is not discouraging. The Commission has seized the advantage of its unique institutional location to become a facilitator, channeling information and ideas into the parliament – information it scarcely had the resources to gather on its own. This fact obliges us to thoroughly scan this information in order to eliminate foreign interests that might sneak in. The Commission's power to change is partly founded on its being an official establishment. Even in an era when civil society is strongly recognized and taken into account, an institution that is committed to ministerial responsibility will still hold more weight.

The promotion of sustainable development cannot be done exclusively by the Commission. The Commission therefore had to develop positions and activities with added value for other existing establishments it cooperates with in this area. The emphasis was on supplying professional legal advice regarding legislation especially within the various parliamentary committees that handle legislation as well as initiating legislation. Initiating of legislation also creates links to the members of parliament that often seek new directions for public action. Legislation by individual members also requires that the government state its position on the bill at an early stage of legislation – thus speeding up the process.

Nevertheless, acting within the parliament is not nor should it be limited to initiating and preventing legislation.

The powers influencing legislation come into play at a much earlier stage. It starts with omissions and actions of the executive branch that call for legislation or that lead to irresponsible legislation. These trends can be detected before they reach the parliamentary stage – mainly in the executive process of governmental activity.

A holistic and ethical vision of the task of protecting future generations cannot allow us to overlook this political fact. Some of the issues may be resolved through creating public awareness or through making the government aware of the implications of its actions and the necessity to act differently in order not to harm future interests. The authority that was denied the Commission in the law that was actually enacted – the authority to directly advise the government – was certainly one that would enhance the flow of its influence.

Therefore, the legal scope of action of a parliamentary institution for future generations must include a gate through which it will be possible to act *vis-à-vis* the government, as the original bill for the establishment of the Commission suggested.

Nevertheless, this gate certainly exists in the current law establishing the Commission. First, as mentioned above, the Commissioner has the authority to demand information from all governmental entities.

Also, the section in the law authorizing the Commissioner to advise the members of Knesset on any issue of particular relevance to future generations also constitutes an expansion of the legislative authorities. In order to provide such advice, the Commissioner must be familiar with the work of the executive branch and its influence on society. This places the Commission at the heart of public action at all levels, having to keep in direct contact with the public as the parliamentary representative. The situation is even more notable in reality. Professional government officials, frustrated by the lack of coordination in government actions and with the difficulties of creating a change for the future within bureaucracy, find in the Commission the address to create influence through legislation. Unable to approach the Knesset independently, the Commission provides these officials with an appropriate platform for the enhancement of government activities and a bypass of bureaucracy. This is one of the wonderful and unique benefits brought by creating a state body to protect future generations.

After all, looking out for its own posterity is one of the basic instincts of each human being, both as an individual and as a member of society.

Ironically enough, this instinct seems to get lost in the process of climbing up the democratic pyramid – all the way to becoming an elected representative. However, there is much more to the scope of this concept than a single institution, with no operative authorities and a minor budget can deal with.

Indeed, the concept of future generations has found its way to all levels of governance as a result of the Commission's activities. Yet, this assimilation also commits the Commission to participate in and react to countless executive activities. Operating with meager resources creates considerable frustration. Would it be helpful if the Commission was an independent statutory corporation as initially planned? The budget would surely be helpful. Hiring more people would surely enable a larger scope of activities. However, could it really deal with all government activities itself? This might be possible if the Commission was located in the State Comptroller's office and granted a larger staff. Such a location, however, would not enable positive action of training and educating as the State Comptroller focuses on inspection and auditing.

The Commission's most crucial role is thus to create enabling frameworks and to pass on values and knowledge as well as a different dimension of 'thinking future'. This will enable the conceptual 'baby' that has been born to walk independently, so that, in time, theoretically there will be no need for a separate institution to represent the concern for future generations.

In this respect, the bill originally proposed and the now existing law do not differ a lot in regard to the institutionalization of future generations.

There is only one direction, and it must be comprehensive and holistic – incorporating all governing levels to make this nearly impossible mission both possible and effective.

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Appendix 13.1 The Knesset Law (Amendment on the Commission for Future Generations)

Appendix no. 2927a/MK

UNOFFICIAL TRANSLATION

Knesset Law (Amendment no. 14), 5761-2001

Addition to Section 8 1. The following will be added to Knesset Law 1994 (Legal Code 5754-1994, p. 140 and 5761-2001, p. 114), following clause 29:

Section 8: Knesset Commissioner for Future Generations

Definition

30. In this section, 'particular relevance for future generations' refers to an issue which may have significant consequences for future generations, in the realms of the environment, natural resources, science, development, education, health, the economy, demography, planning and construction, quality of life, technology, justice and any matter which has been determined by the Knesset Constitution, Law and Justice Committee to have significant consequences for future generations.

Knesset Commissioner for Future Generations 31. The Knesset will have a Commissioner which will present it with data and assessments of issues which have particular relevance for future generations. He will be called the Knesset Commissioner for Future Generations.

The role of the Knesset Commissioner for Future Generations 32. The Knesset Commissioner for Future Generations:

 Will give his assessment of bills in the Knesset which he considers to debated in the Knesset which he considers to have particular relevance for future generations;

- ii) Will give his assessment of secondary legislation brought for authorization of one of the Knesset Committees, or for consultation with one of the Knesset committees, which he considers to have special relevance for future generations;
- iii) Will present reports to the Knesset from time to time, at his discretion, with recommendations on issues with particular relevance for future generations;
- Will advise MK's on issues with iv) particular relevance for future generations:
- Will present to the Knesset, once a v) year, a report on his activities in accordance with this law.

Independence

33. In the performance of his duties, the Knesset Commissioner for Future Generations will be guided purely by professional considerations.

The status of the Knesset Commissioner for **Future Generations**

- 34. The Knesset Secretariat will pass to a) the Knesset Commissioner for Future Generations all bills tabled in the Knesset.
 - The Knesset Committees will pass b) to the Knesset Commissioner for Future Generations all secondary legislation tabled for their approval or for consultation with them, excluding only those matters defined by law as confidential.
 - The Knesset Commissioner for c) Future Generations will notify the Knesset Speaker periodically about laws and bills which he considers to have particular relevance to future generations; the Knesset Speaker will inform the chairmen of the Knesset

- committees responsible for the areas covered by the laws or bills.
- d) The Knesset Commissioner for Future Generations will notify the Knesset Committees regarding secondary legislation passed to him in accordance with sub-paragraph (b) in which he finds particular relevance for future generations.
- e) Knesset committee chairmen will invite the Knesset Commissioner for Future Generations to debates on bills or secondary legislation which he has declared to have particular relevance for future generations in accordance with sub paragraphs (c) and (d). The Committee chairmen will coordinate the timing of the debate with the Commissioner, allowing reasonable time at his discretion and in accordance with the issue for the collection of data and the preparation of an evaluation.
- f) Once the Commissioner has given his evaluation regarding a bill, a summary of this evaluation will be brought before the Knesset plenum as follows:
 - If the evaluation was given prior to the first reading of the bill – in the explanatory notes to the bill;
 - If the evaluation was given after the first reading – in the appendix to the proposal by the Committee presented to the Knesset Plenum for the second and third readings.
- g) The Commissioner is permitted to participate in any debate of any Knesset Committee, at his discretion; If the debate is secret by law, the

35.

- Commissioner will participate on the authorization of the Committee Chairman.
- h) A report in accordance with clause 32 (3) will be presented to the Committee responsible for the area of that issue, the Committee will discuss it and may present its conclusions and recommendations to the Knesset.
- a) An annual report in accordance with clause 32 (5) will be presented to the Knesset Speaker and tabled in the Knesset; the Knesset will hold a debate on it.

Acquisition of information

- a) The Knesset Commissioner for Future Generations may request from any organization or body being investigated as listed in clause 9 (1)–(6) of the State Comptroller Law, 5718-1958 (Legal Code 5718, p. 92) (consolidated text), any information, document or report (hereafter information) in the possession of that body and which is required by the Commissioner for the implementation of his tasks; the aforesaid body will give the Commissioner the requested information.
 - b) If a Minister whose Ministry is responsible for the area which includes the organization or body under investigation considers that passing over the information in accordance with the instructions of sub-clause (a) may put at risk the security of the State, the foreign relations of the State, or public safety, he is permitted to give instructions not to hand over that information; however if part of that information may be revealed without

- risk that part would be handed over to the Commissioner as aforementioned.
- c) Information in accordance with this clause will not be handed over if this is forbidden by any law.
- d) The instructions in this clause do not prejudice the obligation to transfer information to the Knesset and to its Committees in accordance with Basic Law: the Government (Legal Code 5752, p. 214), and in accordance with Basic Law: the Knesset (Legal Code 5718, p. 69).

Appointment of the 36. Knesset Commissioner for Future Generations

The Knesset Commissioner for Future Generations will be appointed by the Knesset Speaker, with the authorization of the Knesset House Committee from among the candidates recommended by the Public Committee appointed in accordance with the instructions of Clause 38, in accordance with the procedure determined by this Law.

Qualifications

- 37. Any Israeli citizen and resident who fulfills the following criteria may serve as the Knesset Commissioner for Future Generations:
 - holds an academic degree in one of the areas listed in Clause 30;
 - has at least five years' professional experience in one of the areas listed in Clause 30;
 - 3. over the two years previous to the presentation of his candidacy was not active in political life and was not a member of any political party; for this purpose, anyone who did not pay party dues and did not participate in the activities of any party institution will not be considered as a member of a party;
 - 4. has not been convicted of any charge which, by its essence, severity or

- circumstances, would make him unfit to serve as the Knesset Commissioner for Future Generations.
- 38. The Knesset Speaker will appoint a a) Public Committee which will examine the qualifications and suitability of candidates for the position of Knesset Commissioner for Future Generations and will recommend two or more of them to the Knesset, noting the number of committee members who supported the candidacy of each of them; the Committee may include its comments regarding each candidate; the names of the candidates recommended by the Committee will be published in 'Reshumot'.
 - b) The Public Committee will have six members to be composed as follows:
 - 1) Three members of the Knesset:
 The Chairman of the Knesset
 House Committee, who will serve
 as the Chairman of the Public
 Committee, The Chairman of
 the Knesset Science and
 Technology Committee, and the
 Chairman of the Knesset State
 Control Committee;
 - 2) Three faculty members from institutions of higher education, experts in various fields from among those listed in Clause 30, to be selected by the Knesset House Committee; for this purpose, 'an institution of higher education' is an institution recognized or having received a permit in accordance with the Council on Higher Education Law, 1958 (Legal Code 5718, p. 191).

The work of the Public Committee

39. The Public Committee will determine the procedure for the presentation of candidates for the position of Knesset Commissioner for Future Generations as well as the procedures for the work of the committee and for examining candidates, with the stipulation that the decision to recommend a candidate to the Knesset Speaker for the position of Knesset Commissioner for Future Generations is passed by a majority of at least four members.

The timing of the election

40.

- a) The appointment of the Knesset Commissioner for Future Generations will be made, if at all possible, not earlier than ninety days and not later that thirty days from the completion of the term in office of the serving Knesset Commissioner for Future Generations; if the position of the Commissioner is vacated before the end of his period in office, the appointment must be made within forty-five days from the day the position falls vacant.
 - b) An announcement of the appointment of the Knesset Commissioner for Future Generations will be published in 'Reshumot'.

Term of office

41. The Knesset Commissioner for Future Generations will serve for five years from the day of his appointment; and the Knesset Speaker has the right to appoint him for a further term of office.

Restrictions on activity

42. During the period following his term in office and during the following year, the Knesset Commissioner for Future Generations will not be active in political life or be a member of any political party; for this purpose, anyone who did not pay party dues and did not participate in the

44.

46.

activities of any party institution will not be considered as a member of a party.

Budget

43. The budget for the Knesset Commissioner for Future Generations will be established in a separate budgetary clause within the Knesset budget.

Conditions of employment and staff

- a) The Knesset House Committee will institute instructions regarding appropriate conditions of employment for the Knesset Commissioner for Future Generations and regarding a team of professional and administrative staff to be placed at his disposal.
 - b) The Knesset Commissioner for Future Generations is permitted to get help from Knesset employees for the discharge of his duties, as needed.

Completion of term in office

- 45. The term of office of the Knesset Commissioner for Future Generations will end:
 - 1) at the end of the term of office;
 - 2) with his death or resignation
 - 3) with his removal from office.

Removal from office

- a) The Knesset Speaker may, with the agreement of the Knesset House Committee, remove the Knesset Commissioner for Future Generations from office on one of the following conditions:
 - 1) he has committed an act inappropriate to his position;
 - 2) he has become permanently unable to fulfill his duties;
 - he has been convicted of an offence, which by its essence, severity or circumstances, make him unfit to serve in the position of Knesset Commissioner for Future Generations.

b) The Knesset Speaker will not remove the Knesset Commissioner for Future Generations from office until the Commissioner has been given the opportunity to present his case to the Knesset Speaker and to the Knesset House Committee.

Suspension

47.

- a) The Knesset Speaker, at the suggestion of the Knesset House Committee accepted by a majority of its members, will suspend the Knesset Commissioner for Future Generations if there are criminal processes against him as stated in Clause 46 (a) 3) until the end of the processes.
 - b) The House Committee will not propose, nor will the Knesset Speaker authorize a suspension, until the Knesset Commissioner for Future Generations has been given the opportunity to present his claims to them.

Temporary

- 48. a) The Knesset Speaker will appoint a temporary substitute for the Knesset Commissioner for Future Generations from among the staff as aforementioned in Clause 44 a).
 - b) If the position of the Knesset Commissioner for Future Generations has fallen vacant, and until a new Commissioner takes office, while the commissioner is out of the country, has been suspended or is temporarily unable to fulfill his duties, his substitute will fulfill his duties and use the authority given to him by this clause.

The First appointment

2. The Knesset Commissioner for Future Generations will first be appointed within six months from the day this law is enacted.

Appendix 13.2 The Fifteenth Knesset

Bill proposed by MK's: Joseph Lapid, Victor Brailovsky, Eliezer Sandberg, Yehudit Naot, Avraham Poraz, Yosef Paritzky P/1236

Commissioner for Future Generations Bill, 2000 (Unofficial translation)
Presented to the Knesset Speaker and deputies and tabled on 10 January 2000

Definitions	1.	In this law – 'The Committee' – The Knesset Constitution, Law & Justice Committee; 'future generations' – includes any person, not yet born, destined to be part of the population of the State at any time; 'special interest for future generations' – any issue that may have significant effect on future generations including economic, demographic, environmental and scientific issues and quality of life.
Establishment of the Commission for Future Generations	2.	The Commission for Future Generations is hereby established (hereafter the Commission) and will operate viathe Commissioner for Future Generations (hereafter the Commissioner) and the Commission staff.
Commission – corporation	3.	The Commission is a corporation, eligible for any legal obligation, right or action.
Commission – a controlled body	4.	The Commission will be a controlled body as stated in section 9 (2) of the State Comptroller Law, 1958 (consolidated version).
Function of the Commission	5.	The function of the Commission will be to represent the special interests of future generations <i>vis-à-vis</i> the Knesset and the Government; The Commission may represent any issue, which, in the opinion of the Commissioner, is of special interest for future generations.

Election of the Commissioner for Future Generations 6.

- a. The Commissioner will be elected by the Knesset by a secret vote.
 - b. The candidate who receives the majority of votes of Members of Knesset will become Commissioner; in the event that no candidate wins a majority vote, a revote will be held; beginning with the third round of voting, and in every subsequent round, the candidate who received the lowest number of votes in the previous round will be eliminated from the election.
 - c. The election of the Commissioner will be held not earlier than ninety days and not later than thirty days before the end of the term of office of the serving Commissioner. If the position of Commissioner falls vacant before the end of the current term of office, the election will be held within forty-five days from the day the position becomes vacant; if the time for the election falls when the Knesset is not in session the Speaker will summon the Knesset to a special plenary sitting for the election.
 - d. The Speaker will determine the date of the election; a notice of this will be published in the *Reshumot* (official gazette) at least sixty days prior to the election date.

Eligibility

 Any Israeli citizen resident in Israel is eligible to be a candidate for Commissioner.

Proposal of candidates

8.

a. Once the election date has been set, any person eligible to be a candidate has the right to propose his candidacy; The proposal will be in writing and be handed to the Knesset Speaker no later than ten days before

- the date of election; the proposal must be accompanied by written support for the candidate from at least ten Members of Knesset; no Member of Knesset may give his support to more than one candidate.
- b. The Knesset Speaker will notify all Members of Knesset, in writing, no later than seven days prior to the election day, regarding each candidate proposed and the names of the MK's who support him/her, and will announce all the candidates at the beginning of the election sitting.

Term of office

- 9. a. The term of office of the Commissioner will be seven years.
 - b. The Commissioner will serve one term of office only.
 - c. The term of office of the Commissioner expires:
 - i. at the end of the period;
 - ii. with the resignation or death of the Commissioner
 - iii. if he is removed from office.

Removal of the Commissioner from office

- 10. a. The Knesset will only remove the Commissioner from office following a request in writing presented to the Committee by at least twenty Members of Knesset and following a proposal by the Committee.
 - The Committee will not propose removing the Commissioner from office without giving him the opportunity to speak on his own behalf.
 - c. Knesset debates referring to this section will be held at a sitting for this matter only; the debate will take place not later than twenty days after the decision of the Committee; The Speaker will announce the date of the debate to all Members of Knesset in

writing at least twenty days in advance; if the date of the debate falls when the Knesset is not in session, the Speaker will summon a special sitting of the Knesset Plenum in order to hold this debate.

Responsibility *vis-à-vis* the Knesset

Forbidden occupation

- 11. In the fulfillment of his duty, the Commissioner will be responsible to the Knesset alone and will not be dependent on the Government.
- 12. During his term in office, the Commissioner will not be active in political life and may not:
 - i. be a member of the Knesset or the council of a local authority or stand as candidate for such a post;
 - ii. be a member of the board of any company that is in business for profit;
 - iii. serve in any other paid position or be involved, either directly or indirectly, in any business or profession;
 - iv. participate, either directly or indirectly, in any enterprise, institute, foundation or other body, that has a concession from the Government or is supported by the Government or if the Government is a partner in its management or it has been placed under Government supervision, and thus to benefit, directly or indirectly, from their income;
 - v. buy, lease, receive as a gift, use or hold in any other way state property, whether land or moveable property, receive from the Government any contractual work, concession or any other reward, in addition to his salary, excepting land or a loan for settlement or residency.

Representation

13. a. The Commissioner may represent the special interests of future generations

- in any way he sees fit, that is not related to instructions from legal proceedings or law of evidence.
 - b. For the requirements of the representation, the Commissioner may:
 - request any minister to give him, within a defined period and in a defined way, any information or document that may, in the opinion of the Commissioner, assist him in representing the special interests of future generations; any minister, who has been asked to supply such information or document, is obliged to fulfill the request;
 - ii. Invite the public to give him, within a defined period and in a defined way, any opinion, information or document that may, in the opinion of the Commissioner, assist him in representing the special interests of future generations.

Representation *vis-à-vis* the Knesset

14.

- a. The Knesset will present to the Commissioner all bills due to be discussed for the first time in any committee.
 - b. If the Commissioner notifies the chairman of the committee which is about to discuss the bill that he has found in the bill a matter of special interest for future generations, that committee will invite the Commissioner or his/her representative to all discussions to be held on the said bill.

Representation *vis-à-vis* the Government

15. a. Any minister, who is about to set a regulation under the powers invested in him in a law requiring consultation, must present the proposed draft of the regulation to the Commissioner and

- consult with him before finalizing the regulation.
- b. In this section 'a law requiring consultation' is a law regarding which the Commissioner has found a matter of special interest to future generations, as stated in sections 14b or 24b or that is among the list of laws published by the Commissioner as stated in section 24a.

Note in bills

16. Any bill presented to the Knesset for a first reading, will include a note, in the explanations, on the effect of the proposed law on future generations.

Commission Staff

18.

- a. The staff of the Commission will be considered civil servants in all respects; however, as regards receiving instructions and in regard to dismissals they will be under the sole authority of the Commissioner.
- b. The Commissioner may, for the implementation of his role, make use of people who are not members of his staff in the event that he feels this is necessary.

Duty of confidentiality

19. Members of the Commission staff, and any other person with whose assistance the Commissioner carries out his tasks must maintain secrecy regarding any information that reaches them within the framework of their employment.

Budget

20. The budget for the Commission for Future Generations will be determined by the Knesset Finance Committee based on a proposal by the Commissioner, and will be published together with the State Budget. The Finance Committee may, based on a proposal by the Commissioner, authorize changes in his budget.

Acting Commissioner

21. In the event that the Commissioner is temporarily prevented from fulfilling his

role, the Committee will appoint a replacement for the Commissioner for a period not exceeding three months; The Committee may extend the appointment for additional periods, as long as the total period in office of the acting Commissioner shall not exceed six months; in the event that the Commissioner is prevented from fulfilling his role for a period of over six consecutive months, he will be considered to have resigned.

Material that may not be used as evidence 22. Reports, opinions or any other document written or prepared by the Commissioner in the fulfillment of his role, may not serve as evidence in any judicial or disciplinary process.

Salaries and pensions

23. The salary of the Commissioner and other sums paid to him during his term in office or subsequently, or to his heirs after his death, will be decided by a resolution of the Knesset or of one of the Knesset committees that the Knesset has appointed for this task.

Instructions for the transition

- 24. a. Within twelve months from the day of his initial appointment, the Commissioner will publish the names of laws, legislated prior to his appointment, wherein he has found matters of special interest for future generations.
 - b. Within two months of the appointment of the Commissioner, he will announce the names of bills for which the committee stage has been completed but which have not yet completed the legislative procedure in the Plenum at the time of the announcement as stated in this sub section, and in which he has found matters of special interest to future generations;

The Knesset Speaker may, within 15 days from the date of the announcement as stated in this sub-section, issue instructions to recall a bill whose name is included in the said announcement, for further debate in the committee which recently dealt with it, so that the Committee can make a reassessment following consultation with the Commissioner.

Date of the law

25. This law will come into force at the end of 180 days from the day it is passed by the Knesset.

Appendix 13.3 Sixteenth Knesset

Bill proposed by MK's Michael Melchior, Lea Nass, Inbal Gavriely, Avshalom Vilan P/889

Proposed Basic Law: Sustainable Development

Objective

1. The objective of this Basic Law is to protect the rights of all people, including those of future generations, by ensuring that all development of the world in the social, economic and environmental realms will be sustainable.

The right to sustainable development

2. All activity by the State of Israel, or by any State authorities, must be carried out in accordance with the rules of sustainable development, for the advantage of the whole public and the benefit of future generations.

In this Basic Law – sustainable development: is development in the social, economic and environmental realms that does not cause damage to the basic resources it uses, to the quantity of those resources or their potential for renewal; that will take care to nurture the natural systems that, directly or indirectly, supply these resources; that is planned, and that does not cause any irreversible damage to its environment.

Violation of rights

3. There shall be no violation of rights under this Basic Law except by a law befitting the values of the State of Israel, enacted for a proper purpose and to an extent no greater than is required.

Stability of the Law

4. This Basic Law cannot be varied, suspended or made subject to conditions by emergency regulations.

Permanency of the Law

Indirect amendment to the Law: The Knesset

- 5. This Law may only be changed by a Basic Law passed by a majority of the Members of Knesset.
- 6. In the Law: The Knesset, 1984, at the end of section 32, shall be added the following: '(6) He will give his opinion on any conflict relating to a question as to whether a specific activity is sustainable or not in consultation with relevant government ministries, and with representatives of the non-government organizations concerned with the maintenance of sustainable development, as he considers appropriate.'

14 Institutional protection of succeeding generations – Ombudsman for Future Generations in Hungary

Benedek Jávor

The existence of our moral obligations towards future generations may be approached in several ways. The moral responsibility to provide coming generations with the conditions for life can be justified through the broadening interpretation of general human rights, through the general comprehension of democratic principles, by the concept of the common heritage of human kind or by relying on Rawls's theory of justice. This responsibility, however, will only become reality if we are able to convert it into real actions. One inevitable step for achieving this is to build the protection of the interests of the future generations into our current decision making mechanisms institutionally. The coming generations do not presently exist, therefore their interests cannot be represented by today's models of interest vindication that are based on the active participation (realized through some kind of mechanisms) of the concerned groups. However, there are special legal institutions which can ensure the representation of the interests of those groups with no or very low capability to vindicate their interests. One of these is the institution of the Ombudsman which, owing to its peculiarities, can surmount the legitimacy problems relating to the representation of the future generations.

In Spring 2000 the Hungarian association Protect the Future! initiated the establishment of such an institution, the office of the 'Ombudsman of Future Generations' in Hungary. The proposal that was presented by Protect the Future! in the form of a draft law has been roaming in the cobwebs of political decision making since then, and there is hardly any chance of its realization in the short run. The idea is, however, still on the agenda and may provide an example for establishing other similar institutions. Until the political will to set up the Ombudsman's office is gathered, Protect the Future! has founded and is operating 'REFUGE' (Representation of Future Generations), a civil initiative representing the coming generations in the spirit of the bill. REFUGE has been working for nearly five years and releases its results in annual reports similar to those of the existing Ombudsmen in Hungary. Finally, Protect the Future! makes a proposal to study and analyse the possibilities of

setting up an EU-level office of the European Ombudsman of Future Generations.

Introduction

May non-existing persons have rights? Although this may appear to be a captious question of legal theory, it does in fact face us with one of the fundamental problems of the democratic system. There is no question whether the technological civilization we are living in has serious, in many cases irreversible effects on our natural environment. Our decisions on infrastructural investments, the development of our energetics system, on our socio-economic system or the behaviour we display as consumers are able to exert a strong and long-lasting influence on our environmental conditions. It is a commonplace that these effects do not recognize national borders. Air and water pollution, global climate change, the thinning ozone layer do not consider administrational and political boundaries. We are, however, less conscious of the fact that these effects have a similar disregard for the passing of time. The greenhouse gases we emit may be present in the atmosphere for centuries. Also, the regeneration of the ozone layer demands decades.

The weather anomalies of recent years have convinced most scientists of the fact that climate change is not a theoretical possibility but a reality in itself that we have to live with. However, as most of the effects of the damage being inflicted to the global eco-system will appear later, the most serious problems will have to be faced by our grandchildren. Decisions we make today also influence their life possibilities and prospects – and rarely in a positive way. The price of our present activities will have to be paid by our descendants in fifty or a hundred years' time. If we take seriously the democratic principle according to which all groups affected by a decision have the right to take part in making the decision, to have their interests represented in the decision making mechanisms, the question inevitably arises: why do we not afford this right to those who will number more than us and be more deeply impacted by the damage resulting from our present day activities? Can we destroy the basis of their existence without the articulation of their interests, without assuring their right of participation? We can hardly say yes.

It is not only natural values, rare and never-heard-of species and forms of life that disappear as a consequence of the devastation of the natural environment. Without the balanced operation of the global environmental system our social systems are not viable, either, as human society is closely dependent on those ecosystem services provided by a healthy natural environment. By wounding and ruining it we also debar the future generations from their right for a healthy environment, human-worthy existence – and,

finally, from their fundamental right to life. Can we violate the human rights of our descendants merely because there is nobody to raise his voice for them? The answer, again, can hardly be yes.

But do we know what we must provide for the future generations? What they will need and what they won't? We are not able to see the future clearly enough to decide what we award them and what we don't. There is only one thing we can warrant them: the possibility of decision: the right of free choice. Therefore we must restrain ourselves from all the decisions and actions that curtail the freedom of choice of the future generations unless the rights of the present generations give sufficient reason to act otherwise. And this freedom first of all means that they retain the possibility to know the biological and cultural diversity we possess and they can decide themselves what they choose from this enormous assortment, considering, of course, the right of the generations following them to enjoy the very same diversity.

Whether or not we have moral responsibility for our descendants, for the future generations, is not a question. To make this moral imperative leads not to a guilty conscience but to concrete actions, it must be translated to the code of social activity that is the language of law and politics. In the case where they are not able to raise their voice in their own interests, someone else must do it. The institution able to represent the future generations in community decision making, in politics, has to be built on the three pillars mentioned above. On the fundamental human rights of the future generations, on the right of participation and the right of free choice. Of course, these rights are rather symbolic, speaking of rights in connection with them is rather metaphoric. As László Sólyom puts it: 'The rights of those being born in the future for us today means obligations towards them. International law presumes that future generations have rights so our present obligations can be construed since rights are contrasted with obligations' (Sólyom 2000, pp. 35-45). These rights, however metaphoric they are, exist. And our deriving obligations are very concrete.

The protection of future generations in international law

The concept of commitments towards future generations has spread to the field of law, as well. Most of the national law systems, like the Hungarian, refer to the rights of future generations in many points. The legal development in international law owing to which the rights of our descendants gradually gain ground and acceptance is even more apparent. Future generations were first mentioned in the preamble of the United Nations' Charter where one of the aims of establishing the UN was 'to save succeeding generations from the scourge of war'. The International Convention for the Regulation of Whaling, 1946, also referred to the

succeeding generations, and, 'recognizing the interest of the nations of the world in safeguarding for future generations the great natural resources' represented by the whales' livestock, created the international convention aiming at their protection. After these early mentions, the interests of future generations began to spread in relation to the sustainability concept drawn up in the report entitled 'Our Common Future' in 1987. According to the Rio Declaration 'the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.'2 Subsequent to the Rio meeting several international agreements referred to the interests of the succeeding generations, like the conventions on climate, marine ecosystems, international waterways, protection of freshwaters and water bases or agreements on the protection of cultural heritage. The effects appear in legal practice, as well: in 1993 the Philippines Supreme Court announced that 'Children and succeeding generations had standing claiming that the forestry practice was hurting their and the future generations' rights' (The Philippines Supreme Court, 1993). In 1997 UNESCO released a declaration on the protection of the future generations.³ This document emphasizes the responsibility the present generations have for future generations in assuring free choice, protecting and maintaining human kind, preserving terrestrial life, protecting the environment, preserving human genome and biodiversity, cultural diversity, the common heritage of human kind, peace and the possibilities of education and development one by one. The future generations are very definitely referred to in a less known document, the New Delhi Declaration of the International Law Association (ILA 2002), which deals with the connection between international law and sustainable development. The document does not only state:

States are under a duty to manage natural resources, including natural resources within their own territory or jurisdiction, in a rational, sustainable and safe way so as to contribute to the development of their peoples, with particular regard for the rights of indigenous peoples, and to the conservation and sustainable use of natural resources and the protection of the environment, including ecosystems. States must take into account the needs of future generations in determining the rate of use of natural resources. All relevant actors (including States, industrial concerns and other components of civil society) are under a duty to avoid wasteful use of natural resources and promote waste minimization policies.

In relation to this duty it makes it clear that

The principle of integration reflects the interdependence of social, economic, financial, environmental and human rights aspects of principles and rules of international law relating to sustainable development as well as of the interdependence of the needs of current and future generations of humankind. [...] States should

strive to resolve apparent conflicts between competing economic, financial, social and environmental considerations, whether through existing institutions or through the *establishment of appropriate new institutions*. (italics added)

Thus within less than half a century international law went from dimly mentioning the future generations to the possibility of introducing new institutions serving their rights.

Is it possible to institutionalize the representation of the rights of future generations?

The rights of future generations and our implied duties provoke the demand of the establishment of an institution (or institutions) able to resolutely represent these rights in democratic decision making. Since we are talking of a group which itself cannot choose the adequate way of representing its interests, and cannot, being neither voters, nor consumers, have any political or economic influence, the classic ways of interest enforcement are unfeasible for them. Therefore, a special legal institution is necessary in order that, avoiding these legitimacy problems, the rights of the succeeding generations be representable in decision making. The idea of the representation of future generations is definitely present in public opinion both internationally (Earth Council, UNESCO Future Generations' Program, Maltese Initiative for a 'Guardian' in the Mediterranean region and so on) and nationally (Israel: Knesset Commissioner for Future Generations; Poland: proposal for a Commission on the Future Generations; England: Green Party speaker for Future Generations; France: Council of Future Generations, nominated by the President; Finland: Committee for the Future, and so on). All these charge the tasks to a unique body standing outside the system of traditional interest enforcement and political representation, and established with the purpose of protecting the rights and interests of future generations. The advantage of this solution is that no doubt arises concerning the legitimate base of representation. On the other hand, however, the creators of these institutions, to avoid practical problems, difficulty in solving questions of competence and legal contradictions, strictly limited their competence because of their unsure relation to state administration and the democratic institutional system and of their standing outside the traditional political and democratic institutional system. They rather play a consultative role and cannot participate in effective decision making processes. They are 'heads' that think and speak but without real 'punch', that is competence and authority by which they could really enforce the rights of future generations.

There is, however, an existing democratic institution which offers ways of enforcing the rights and interests of defenceless groups, methods that

are alternative, yet integrated into the existing legal and institutional system: the institution of Ombudsman, the Parliamentary Commissioner. One of the advantages of the Ombudsman's institution is that its establishment and his nomination does not need the participation of those represented by him, therefore it is easily possible for this to be established for the future generations without any legitimacy problems, and can fulfil the tasks deriving for the state from its responsibility for future generations, as stated in UNESCO's Declaration, 1997. According to the decision of the Hungarian Constitutional Court, par. 54 of the Hungarian Constitution, which deals with the right for life and human dignity, also includes the duty of the state to 'ensure the conditions of life for the future generations'.

The roots of the Ombudsman go back to the early nineteenth century Swedish governmental system, but in the second half of the twentieth century, the institution had an outstanding carrier. Presently the Ombudsman office at the national level of government exists in approximately 120 countries around the world, protecting very different fields of human rights. In several states (for example Canada, Italy, India, Australia, Spain), ombudsmen at the subnational level are added to the system (International Ombudsman Institute 2005), and the European Union brought a new, international level, establishing the institution of the European Ombudsman, founded in 1995 to deal with complaints about maladministration by the institutions and bodies of the European Community (The European Ombudsman 2005).

The Ombudsman concept has appeared in non-official initiatives as well, namely in the International Ombudsman Centre for the Environment and Development (OmCED), founded in July 2000 by the IUCN and the Earth Council (International Ombudsman Centre for the Environment and Development 2005).

Proposal on the Ombudsman for Future Generations

Protect the Future! initiated the establishment of the institution of Parliamentary Commissioner for Future Generations in spring 2000 relying on these theoretical bases. The bill was written by László Sólyom, the first president of the Hungarian Constitutional Court following the transition and a widely honoured person till this day, who strived to accord the peculiarities of our obligations towards future generations and the regulations on Parliamentary Commissioners, and as a legal 'frame' took Act No. LIX., 1993, on Parliamentary Commissioners and the positions of the Ombudsman for Data Protection established by Act LXIII., 1992, on data protection. The operation of the planned institution has three basic points that are vital for the Ombudsman's to work effectively. These are: independence, wide competence and proactivity.

The Ombudsman's independence raises some practical requirements. The Commissioner must be independent of state administration since a part of his investigations must be conducted within its institutions. Consequently, an institution subordinated to any of the state organs, like for instance the nomination of a Ministerial Commissioner within the Ministry of Environment or the establishment of some kind of a committee or council within the Prime Minister's Office or any other governmental institution, is unacceptable.

Similarly, he must be independent of the present Ombudsmen's Offices, therefore the creation of a substitute position in the Office of the Parliamentary Commissioner for Civic Rights or the delegation of the competences and tasks of the proposed Commissioner to the General Ombudsman cannot practically be accepted. The protection of the rights of future generations cannot be ensured within the present structure, together with the general protection of civic rights. The reasons for wishing to solve the protection of the rights of future generations within the present commissional system are based on the thought that in case of environmental protection being given its own commissioner, sooner or later nominating an Ombudsman for the protection of each constitutional primary right will become unavoidable. It is claimed this would lead to a sudden growth in the number of Ombudsmen which would burst the existing commissional system. This reasoning, however, is lame in several respects.

First, the Commissioner for Future Generations is not a Commissioner for the Environment. Since we threaten our descendants' conditions for life mainly by ruining the global environmental system, he will primarily act in environmental cases. However, the background principle is not environmental care but the rights of future generations for life, healthy environment and free choice. Beside the direct environmental cases he must pay attention to the protection of cultural heritage, the operation of big social systems (for example systems of pensions or social insurance), to the longterm development concepts, infrastructural investments, the rate of state indebtedness and each of the decisions made in the state or private sector that concern periods of time bridging over generations or are able to influence the succeeding generations' conditions for life permanently and irreversibly. Thus, the Parliamentary Commissioner for Future Generations is not a Commissioner for the Environment, not a sectoral commissioner but the executor of a democratic basic principle and the representative of an important society organizing principle, sustainability. So, not one of the many commissioners, the establishment of this institution cannot start the avalanche of creating newer and newer Ombudsmen.

There are further arguments, too, in support of the independent commissioner. László Majtényi, who was the first Ombudsman for Data

Protection, drew up three main criteria giving reason for establishing an Ombudsman's office independent of the General Ombudsman (Majtényi 2000). In case a confidence crisis evolves between the state sector and the society concerning the vindication of some fundamental right, the society's ability of self-defence and enforcement of rights is originally low or lessens in the certain field, and there is strong economic, political or perhaps social pressure in favour of violating the certain right. These were the arguments used as a base by the Hungarian Parliament when establishing the offices of the Ombudsman for Data Protection and that for Minorities, both of which are independent of the General Ombudsman. Concerning the prevalence of the rights of future generations the above criteria are fulfilled since we cannot speak of our descendants' ability of rights enforcement while there are enormous economic – and social – interests exercising strong influence in favour of violating their rights and destroying their life conditions. In this situation, it is inevitable that society tries to counterbalance this overwhelming pressure, giving the possibility of interests enforcement for the succeeding generations. In fact, an independent and self-reliant Ombudsman's office is still too weak an institution when compared with the task it has to deal with. There are also opinions saying that an institution should be established that is far stronger than an Ombudsman's office and charged with authorial competence, too.

Finally, the Parliamentary Commissioner for Civic Rights cannot be responsible for the protection of the rights of future generations because this would make his activity contradictory. The Commissioner for Civic Rights is neither the commissioner of human rights, nor that of general human rights and least of all the commissioner of human rights extended over time. He protects citizens, and the succeeding generations make up a 'non-existing' citizens' group. Their rights and interests may, in many fields and many respects, overlap those of currently existing citizens. If I do not let cyanide flow into a river, if I do not operate worn oil tankers in the oceans, I not only ensure the rights of future generations for getting to know and use a more or less natural hydro-sphere, but I also preserve a more healthy and aesthetic environment worthy of human kind for the present generations. Therefore, the rights of our descendants can, to a certain extent, be protected by the representation of others' (the present generations') interests and by the protection of civic rights. However, as future generations are not able to put pressure on today's decision makers in favour of their own special interests, we necessarily charge a considerable part of the costs and destructive effects of our society's operation to them. And in this respect the present generations' interests stand against those of the future generations, their rights are in contradiction in many respects. It is a theoretical impossibility that the same institution could represent both,

since in many cases it is exactly the present generation which is in conflict with the future citizens, their own descendants, the future generations.

The Ombudsman's wide competence must primarily be realized in the fields of his investigations. The decisions ruining the terrestrial life conditions of our descendants are not only made within the governmental sector but also in the economy. That is why it is inevitable to extend the investigations of the Commissioner for Future Generations – similarly to the Hungarian Ombudsman for Data Protection – to the partakers of the economy. In case he has no authority in that field, he will be like a detective not allowed to visit the scene of action or to question the suspected persons. His wide competence, however, means only a strong investigative competence, not a decision making competence. The Ombudsman's proposals are worth considering: he can exercise pressure by stepping in front of the public, can represent the interests of future generations with all his moral weight but will not become an authority as feared by some people once they have become familiar with the proposal on the new Ombudsman.

In this respect he accomplishes the classical Ombudsman's model, even though it is a stronger version, similar to that of the Hungarian Commissioner for Data Protection.

Proactivity means that, unlike the usual agenda in environmental conflicts, the Commissioner should not only subsequently investigate the violation of the rights of future generations but must be active in preventing these violations. In practice this means two things. First, the preliminary examination of bills introduced to Parliament so that MPs cannot accept laws and regulations contradictory to the fundamental interests of our descendants (the Israeli Commissioner for Future Generations, for instance, plays such a role). Second, the Commissioner can actively initiate the creation of laws and regulations promoting the enforcement of the rights of succeeding generations, and can harmonize the legal system of the Hungarian Republic with the principle of sustainability.

The bill

The bill elaborated by Protect the Future! on the Ombudsman for Future Generations proposes the establishment of an institution that, while striving to interpret the unsure and 'soft' outlines of the protection of the succeeding generations as widely as possible, sets the reference base of its interventions in the effective Hungarian legal system so that the Commissioner's recommendations and procedures be built on a 'hard' legal base so their validity cannot be challenged. Under this dual pressure we outlined an institution possessing extremely strong competences in some fields as compared with the Ombudsmen's usual competence, in other cases its task stands closer to the 'advocate' Ombudsman's role or the 'guardian's' status described well in international legal literature (two inspiring work on the topic: Agius and Busuttil 1998; Stone 1996). This duality appears in par. 1. of the bill:

In order to ensure the representation of the interests of the future generations in long-term decisions fundamentally affecting their life conditions and to give effect to the laws on the right for a healthy environment and the protection of nature and the environment that are acknowledged and ordered to be enforced in par. 18. of the constitution, the Parliament elects the Parliamentary Commissioner for Future Generations' (full english text of the draft law in Jávor 2000, pp. 65–74).

The responsibility of the Ombudsman as an 'advocate' or a 'guardian' includes the representation of the interests of future generations in any decisions influencing their life conditions, but besides this it also has a strong legal enforcement and protection function which allows the protection of the rights of succeeding generations to a healthy environment through ensuring environmental laws and regulations are observed. This way the Ombudsman gets effective tools in his hands, legal guns which, besides having an influence on the conscience and goodwill of the society and the decision makers, establish the possibility of enforcing legal remedy in the case of decisions affecting the environment. The Commissioner controls the prevalence of the orders of the Constitution and other legal rules that refer to the preservation of the natural resources necessary for the survival and health of the growing and succeeding generations and the sustenance of these environmental conditions; in this circle he can conduct an official investigation and probe into the received notices (par. 1, Point [1]). In the case of an actual or default threat to the environment it is within his power to summon the user of the environment to terminate the destructive activity. If the necessary measures are not taken, the Commissioner has the authority to take necessary measures, can initiate legal proceedings, and can lay a petty offence or criminal information. He can call upon the authorities to take environmental measures, the execution of which must be reported by the authority within 60 days, and the Commissioner can also turn to the superior body of the authority. During fulfilling his tasks he is entitled to ask for information or data on any questions possibly related to the condition, threat or impairment of the environment. These are the tools ensuring the strength of the Ombudsman so that he will be able to act against the violation of the rights of future generations factually and effectively. The vertical aspect of his competence allows him to investigate deeply the activities threatening these rights. He can, however, act only relying on the existing and effective legal regulations, therefore his activity will inevitably manifest in the relatively narrow field of the decisions influencing the fate of succeeding generations, within the protection of the environmental conditions. The Ombudsman's competence, however, has a horizontal aspect, as well. He expresses his opinion in a circle much wider than environmental care, in the case of each decision influencing the life conditions of future generations. For example, he reports on the bills, the international covenants of the Hungarian Republic and the governmental measures exercising an effect on the succeeding generations (for example the national development plans). Although his recommendations are not binding, they serve as guidance for the decision makers, and the experiences of the last ten years of the Hungarian commissional system have shown that the Parliament and the state administration make considerable efforts to put the recommendations into practice.

The history and prospects of the bill

Protect the Future! elaborated then placed the bill in front of the decision makers in Spring 2000, at the same time initiating a public debate on the text. In order to gain political support the concept of the rights of future generations and the proposal itself were brought to the public. The written and electronic media have dealt with the proposal more than a hundred times during the previous years, the issue of rights of our descendants have become an issue for Hungarian public opinion. However, the political reception was not a clear success at all. The parties and MPs appealed to with the bill did not even react for a long time in spite of the fact that in order to discuss the topic in depth Protect the Future! organized a conference at the Hungarian Academy of Sciences in August 2000, to which the concerned political actors were also invited. However, while more than a hundred civil activists, experts, scientists and journalists came together at the meeting, the political sphere was represented by less than half a dozen MPs and officials. Having seen the restrained political interest, in November 2000 Protect the Future! established the Representation of Future Generations (REFUGE), an initiative aiming at realizing the content of the bill within a civil framework while also undertaking to keep the topic and the bill on the agenda. The efforts made for the codification of the bill were not given up either. Protect the Future! conducted negotiations with representatives of the political parties several times, trying to convince them to support the bill and introduce it to Parliament. Finally, two socialist members of the Parliament, Katalin Szili, then vice-president of the Parliament and Gyula Hegyi, who became the representative of the European Parliament in June 2004, introduced the bill to the Parliament as a private motion, that is without their party's support. In accordance with the proceedings of the Hungarian Parliament, prior to the general debate the bill was put on the agenda of the appointed parliamentary committees. Although the representatives of Protect the Future! attended the committees' debates, urging heavily for the bill to be allowed to the plenary debate and the Committee for the Environment found it proper for it to be included, the bill, albeit with a small majority, failed in the other two committees. These developments were not very promising, however, the coming parliamentary elections (in spring 2002) gave us a gleam of hope. Katalin Szili, one of those introducing the bill, promised to take the bill in front of the Parliament again if the Socialist Party became part of the government after the elections. Following the elections the Socialist Party became the leading constituent of the new coalition, and Protect the Future! drew the introducers' attention to their former promises in a letter. Consequently, the two representatives introduced the bill on the Ombudsman for Future Generations to the Parliament again in June 2002. The new government seemed to show more promise in the respect of the acceptance of the bill. However, soon it became clear that the two representatives' initiative was not backed by the effective support of the left.

Not much later, in the Autumn of 2002, two of the appointed parliamentary committees, the Committee for the Environment and the Committee for the Economy put the bill on their agenda, and found it suitable to be taken to the plenary debate, the other committees, despite the reiterated urging of Protect the Future! have not as yet discussed the bill. The last two years have seen no developments whatsoever. The talks conducted with the new government's Ministry of Environment and Water and the Ombudsman for Civic Rights were aimed at dispelling the fears drawn up by the leaders of theses institutions concerning the interference in the interests of their office and the planned commissional institution, however, we could not succeed in properly winning them for the bill. Certain representatives – of all the Parliamentary parties – supported the initiative, but none of the political powers stood for it institutionally.

The representatives who introduced it, too, seem to have backed out from behind the proposal. Gyula Hegyi, who was more resolute in supporting it became a representative of the European Parliament, Katalin Szili, who is one of the key figures in the fights within the Socialist Party, has been occupied with the scuffles around the change of the government, the party leaders' succession and the election of the new President of the Hungarian Republic. It is however, clear that Protect the Future! has to manage to have the bill discussed in this election cycle, by the Spring of 2006, as the new Parliament is not likely to deal with a proposal left to lie dormant for years by its predecessor.

At the moment, this is one of our most important tasks concerning the bill. New dimensions and possibilities of the realization of the Hungarian ombudsperson opened up in June 2005, connected to the parliamentary election of the new Hungarian president. In February, Protect the Future!

started a campaign to recommend Prof. László Sólyom, member of the board of the organization, and author of the draft law to the attention of the members of the Hungarian parliament, asking them to vote for Mr Sólyom at the presidential election. On 7 June, with quite a close majority, the deputies elected Mr Sólyom as new president of the Hungarian Republic. This gives a new hope, that the stuck official parliamentary proceedings concerning the draft law will be speeded up, and a moral and political pressure will be put on the deputies to accept the bill.

The Representation of Future Generations (REFUGE)

In respect of the lukewarm interest of political actors, at the end of 2000 Protect the Future! decided to establish and operate a civil initiative until the time comes when Parliament enacts the bill, to act in favour of future generations according to the spirit of the draft law, and to represent and popularize the concept of the Ombudsman of Future Generations both in Hungary and on the European scene. Representation of Future Generations (REFUGE), a consortium of numerous NGOs, acts as a 'shadow' Ombudsman in cases similar to those where REFUGE judges should be represented by the proposed Ombudsman. This network of NGOs works according to the following principles:

- 1. REFUGE takes on cases and seeks legal remedies, where the decisions of the authorities or private initiatives seriously damage the rights of future generations to a healthy natural and urban environment.
- 2. Due to its limited resources REFUGE can only address a small number of cases. During selection of these the primary criteria is that the subject creates a precedent and represents such general and typical conflicts, which endanger future generations' heritage. Over the last years REFUGE proceeded in such cases as, for example, the area of gene technology, urban planning, forestry, transport policies, chemical safety or the protection of freshwater resources.
- 3. During its proceedings, REFUGE utilizes all the legal tools available to NGOs. These include civil court cases, submissions to existing Ombudsmen, lobbying activities, media campaigns, public demonstrations, organizing conferences and facilitating the co-operation between stakeholders.
- 4. Our most important weapon is publicity. In all our cases, we made the issue public through new bulletins, reports and articles, and through our annual report on the Representation of Future Generations. We believe wide ranging publicity is the strongest restraining force in preventing and correcting damaging decisions, which endanger the well being of the environment for ourselves and our descendants.

- 5. REFUGE is a network of numerous civil organizations co-ordinated by Protect the Future!. The core role of REFUGE is to aid local groups fight for a healthier environment and human existence.
- 6. The activities of the network aim to prove that in Hungary today, the basic rights of future generations are damaged daily. If we don't want to deprive them the basic rights of participation, consideration and self-defence, there is an urgent need to establish their representation in decision-making. We want to force the Parliament of Hungary to enact the bill for an Ombudsman for Future Generations.
- 7. REFUGE is seeking to export the concept of Ombudsmen to defend the rights of future generations to the rest of Europe. We propose a new institution, the European Ombudsman for Future Generations.

Conclusion

Today's humankind is transforming its global environment in a new manner and at a never before seen rate. These effects span across generations and influence the conditions of existence of humanity for a long period. The fate of future generations is, more than ever, in the hands of the present generation. This generates new dimensions of morality and responsibility, which had not emerged before (more about these dimensions in Jonas 1984). But our responsibility is not solely moral. The new ethical system and considerations which are needed to handle the effects of technological civilization, have already infiltrated both into legal theory and existing legal practice. Both international law (particularly since Rio) and national legal systems know and, as is shown by the decision of the Philippines Supreme Court, are able to put the concept of the rights of future generations into operation in the process of legal practice.

Supposed and theoretical rights are becoming reality, when the possibility of their defence, enforcement and implementation is created. There are two ways to take this step. First is to lift the rights of future generations into our legal system as a statutory law. The Foundation for the Rights of Future Generations proceeds this way, when it proposes to include the rights of future generations in the German Constitution. These rights become real with this step, and they can be defended by existing institutions and the jurisdiction.

The other direction is trying to anchor the defence of the rights of future generations into the existing legal systems, but to make this defence effective it proposes the establishment of new institutions. This is where the proposal of Protect the Future! for an Ombudsman of future generations shows the way forward. Naturally the two approaches do not exclude each other, and a well-elaborated combination could be successful. Either way, the conception of a new institution for the protection of the rights of future

generations certainly has a raison d'être. However, the establishment of such an institution raises a number of questions. The source of its legitimacy, its legal status or the relationship with other institutions are all disputable questions. Regarding these considerations, the Ombudsman, as an accepted institution both in most European countries and at EU level, could be an ideal form for the defence of the rights of future generations. The Ombudsman is advantageous from several points of view: it is independent, does not need direct legitimacy, its competence can be extended to the necessary extent, but it is still not a decision-maker, this competence is left in the hands of the executive power. The draft law of Protect the Future! proposes the establishment of such an Ombudsman office. The model, outlined in the bill, has the following characteristics: independence from both public administration or governmental institutions, and the economic sphere; the competence to investigate both in the public and the private sphere; and the dual function of a guardian or speaker and a legal protector, anchored into the current legislation, and first of all into environmental law.

For different reasons, strong resistance could be experienced against such an institution from both the political and the economic sphere. To overcome this resistance, a well thought-out strategy should be worked out to win acceptance for its conception. The proposal should be worked out in detail regarding both its philosophical background and its fitting into the current institutional system. In my opinion, those debates which have been generated by the proposals and initiatives over the last decade, and the experiences which have been accumulated by the working institutions for the representation of the rights of future generations, compose a strong basis upon which to accurately draw up such an institution. Naturally this doesn't mean that further discussions on the topic could not improve the conception, putting new aspects of the question into the centre of the debate. However, by no means is there a real chance of the realization of even the most carefully elaborated proposal for such an institution, without gaining political support and at the same time the backing of the public and the media. This requires a continuous campaign, turning public attention to the democratic deficit represented by the missing legal protection and representation of future generations in decision-making. An interesting example of this is the Representation of Future Generations programme, run by Protect the Future! in Hungary, which focuses attention on the missing institution day by day, by representing public cases. Average citizens can identify with these simple cases, and this makes this otherwise strange and distant philosophical and legal argumentation understandable and acceptable to them, and proves the necessity for legal protection of future generations.

Finally, this should be represented not as independent and isolated national projects, but as a network of communicating and mutually supporting initiatives at different points (in the individual states) and levels (UN, international law, European Union and so on). This general and multilevel offensive could convince stakeholders, decision-makers and the public to regard rights of future generations as an actual stage in the natural process of the evolution of law. Civil society, being less bound by institutional constraints and more open to new ideas, should play a central role in this process.

Besides urging NGOs worldwide to initiate the institutional protection of the future generations in their countries, Protect the Future! starts a campaign to work out a proposal for this kind of institution at the European level. With the participation of experts, institutions and NGOs from different EU and non-member countries, a draft law will be prepared to set up the office of the European Ombudsman for Future Generations. This institution, planned to be based on the Hungarian proposal, should have a wider competence compared with the existing European Ombudsman, not only dealing with the maladministration of the EU bodies, but it should be able to effectively represent the interests of future generations in European decision-making. This could be not only a good example to show the strength of the European NGO sphere, and to prove the creativity coming from civil organizations, which could refresh the European Union, but could contribute to the EU goal of forming a sustainable Europe.

Notes

- In Hungary, the Ombudsman Act (Act No. LIX of 1993) established three Ombudsman
 offices: the General Ombudsman (Commissioner for Civil Rights) and two specialized
 positions for the protection of the national and ethnic minority rights and the
 Commissioner for Data Protection and Freedom of Information.
- UNCED Rio Declaration, 1992, Principle 3.
- UNESCO Declaration on the Responsibilities of the Present Generations Towards Future Generations, Paris, 1997.

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15 The role of CPB in Dutch economic policy

Rocus van Opstal and Jacqueline Timmerhuis

Introduction

In a democracy, politicians decide on economic policy and quite rightly so. In the political debate, however, it is difficult to distinguish objective arguments from normative or political arguments or sometimes even arguments designed primarily to reach a preconceived goal. Also, politicians can suffer from short-sightedness, giving priority to the short-term effects of their decisions, for example with a view to the next elections. This can be detrimental for long-term developments and the position of future generations.

In the Netherlands, politicians, unions, employers' organizations and the general public see the benefits of separating political arguments from economic ones. This is why CPB Netherlands Bureau for Economic Policy Analysis plays an important role in economic policy making in the Netherlands. While it was originally, that is immediately after the Second World War, designed as a planning agency to facilitate the post-war reconstruction of the Dutch economy, CPB soon evolved into a centre of economic information inside the government and an independent institute for economic forecasting and analysis. CPB provides politicians and policy-makers in and outside the government with information that is relevant for decision making.

In most cases this amounts to sketching the relevant trade-offs that politicians face, as it is often very hard to find policy measures that are Pareto-improvements. In other words: most policies that have a positive effect in one field, will have some negative effect in another field. For instance: policies to reduce unemployment might require a decline of benefit levels, which implies less income solidarity. And high economic growth may well have detrimental effects on the environment. The trade-offs that are presented include the costs and benefits both for the present generations as well as the future generations. Effects on structural economic growth, on sustainability of the government finances and on the environment are especially relevant for future generations.

In presenting these effects of policy options, along with the effects on the short term, CPB provides information for policy makers. But CPB does not provide direct policy recommendations. Rather, it tends to take an 'academic' approach, stating facts and pointing out the expected effects of different courses of action, but refraining from normative judgments.

This chapter discusses the role of CPB in Dutch economic policy making. The second section sketches the history of CPB and the formal status it has within the government. Especially the independent position is highlighted, which is rather unique in international comparison. The following sections describe some of the work of CPB, focusing on studies that also affect future generations. The analysis of election platforms in the months preceding general elections in the Netherlands is described in the third section. The fourth section gives an overview of the 2000 study on the sustainability of government finances in the long run. Cost-benefit analyses of government investment programs is the topic of the fifth section. The final section contains some concluding remarks.

CPB: history and present position

By the end of the Second World War, some people started thinking about how to stimulate post-war reconstruction of the Dutch economy, and, perhaps even more importantly, how to prevent an economic depression like in the 1930s. Because of the strict laissez faire policy in the Netherlands in that decade, the Dutch recession had lasted much longer than in other countries. To some degree, government intervention was now thought to be necessary.

Founding of the Bureau

A law was drafted by the Dutch government on 'preparing the assessment of a National Economic Plan'. The idea was to found a Central Planning Bureau which would on a regular basis prepare a National Economic Plan to co-ordinate economic, social and financial policy and help the government in planning and guiding the economic process. In anticipation of a legal basis, a Central Planning Bureau 'i.o.' (in formation) had been started in September 1945, as a separate agency within the Ministry of Economic Affairs. With Jan Tinbergen as its first director, by February 1946 it already offered an assessment of the economic situation and suggested a number of policy measures. The obvious usefulness of the information collected in this document, which was published in May 1946, has certainly helped to convince Parliament of the merits of the institution.

The law that passed both houses of parliament in early 1947 still mentions that the Bureau should regularly prepare a Central Economic Plan containing estimates and guidelines for the national economy, and that the government decides on the final contents of the Plan. Yet, a memorandum of the Minister of Economic Affairs to parliament explained that the Central Planning Bureau would be a strictly advisory body and only serve

to compile information on the current economic situation and prospects, as relevant for the economic policy decisions of both government and business. Indeed, right from the start the Bureau has focused on macroeconomic assessment and forecasting. The annual Central Economic Plan contains no guidelines. It was clear that the Netherlands did not opt for central planning in the communist tradition.

Providing independent economic analyses

No doubt the name in English, CPB Netherlands Bureau for Economic Policy Analysis, describes its role much more accurately than the Dutch name 'Centraal Planbureau'. Its core business is to make independent economic analyses that are both scientifically sound and up-to-date, and relevant for policymaking in the Netherlands. CPB provides these analyses both spontaneously and at the request of our primary customers, that is government, Parliament, political parties (parties in office as well as opposition parties), and employers' and employees' organizations. The key element in CPB's work is to provide politicians and other policy-makers with, on the one hand, objective information on the economic development of the world economy and the Dutch economy, and, on the other hand, sound economic analyses on the costs and benefits of specific policy plans in various fields.

Even in those areas where government planning is applied in the Netherlands, like energy, infrastructure and physical planning, CPB restricts its role to forecasting, flagging potential bottlenecks, and analysing the effects of policy options. The last 15 years witnessed a remarkable comeback of cost-benefit analyses for large infrastructural investment projects, which had vanished from the political agenda between 1970 and 1990. A relatively new trend is the growing attention to questions of institutional design, incentive structures and the correction of market failure and government failure.

Ambiguous position

The dual character of CPB's work – both scientific and policy oriented – is reflected in its position: a research institute that is independent with respect to content, but at the same time formally part of the central government.

This ambiguous position often raises questions. However, CPB itself does not experience its position as constraining. Successive Ministers of Economic Affairs, formally responsible for the institute, have all respected and, if necessary, defended CPB's independence, even at times when they did not agree with the conclusions drawn by the bureau. Beside that, the responsibility of the Ministry of Economic Affairs is restricted to organizational and budgetary matters.

Funding

The 2005 budget of the Ministry of Economic Affairs specifies an amount of 12.6 million euros for CPB. This lump sum budget enables the bureau to determine its research agenda on the basis of the relevance for society. All research – including research on request – is conducted free of charge. There are just two exceptions to this.

First, research for the European Union or the OECD, as these organizations allow paid research only. Second, some ministries may have a perhaps temporary demand for economic research in a specific area that is not yet covered by CPB, while it is not possible to finance this from its regular budget. Then these ministries can provide the funds, not just for one study, but for a full programme during a longer period. In the years 2001-2004 the Bureau received an annual amount of, on average, 1.8 million euros on this basis. This amount is kept small relative to the general funding.

If CPB were dependent on paid assignments, then the choice of subjects would also depend on the clients, entailing the risk that long-term problems would be dismissed to the back-burner by today's hot issues. Moreover, the pressure to report what paying clients want to hear is heavy: he who pays the piper, calls the tune.

Independent with respect to content

Most politicians accept and appreciate CPB's independence. This enables the institute to work for the Cabinet and the opposition at the same time. After all, politicians take decisions, viewing policy proposals from a normative perspective, whereas CPB restricts its role to clarifying – on demand or on its own initiative – the economic effects of these proposals.

One reason why most politicians value CPB's role is that they find it hard to set objective arguments apart from mere political arguments, both regarding their own proposals and those of other parties. In such a situation, CPB is often asked to provide insight in the pros and cons from an economic point of view.

Also, there is a possibility that a policy proposal focuses too much on the short-term effects. If short-sighted politicians do not want to look beyond their period in Parliament or beyond the life of a Cabinet, there is a risk that long-term effects are disregarded. This can be harmful for future generations. CPB analyses usually show both the short-term and the structural effects.

Comparable international institutes

The role CPB plays in the preparation of economic and fiscal policy is rather unique from an international perspective. Of course, some other European countries do have economic research institutes that are similar in several respects. A survey by the European Commission (2005) shows that in four member states of the European Union (Belgium, Austria, Slovenia and The Netherlands) macroeconomic forecasts are produced by independent institutes. However, in Belgium and Slovenia these forecasts can be overruled by the government. In Norway (not a member of the EU) independent forecasts and economic analyses are produced by Statistics Norway, yet the Norwegian Ministry of Finance uses its own forecast in preparing the budget.

External reviews

External reviews of the quality of CPB's work and methods are essential for protecting and improving its quality and independence and, through this, safeguarding its position. The bureau actively seeks critical reviews from academia, policy-makers and society as a whole. In this, it follows a five-track policy:

- The Central Planning Committee (CPC) is CPB's independent external advisory body. The CPC yearly reviews CPB's work plan and provides advice about establishing the priorities in that plan. Also, the CPC yearly assesses whether the ambitions stated in the work plan were realized, qualitatively as well as quantitatively.
- For specific research projects, during the research phase itself, CPB
 actively seeks insights and judgements in the area concerned. After
 finishing a publication, CPB presents the results to the parties
 involved and to the scientific community.
- Every five or six years, an independent international scientific Review Committee appraises CPB's work and methods. In April 2003, a Review Committee chaired by Prof. Dr Klaus Zimmermann assessed the CPB.
- Next to the scientific evaluations, CPB values policy-oriented evaluations. In 2001, the Committee Policy-oriented Review of CPB, consisting of Dutch policy-makers and independent experts, reviewed CPB's work, especially in the field of policy use.
- The members of the Committee for Economic Affairs (CEA) yearly evaluate CPB's work plan with a view to protecting its relevance for society. The CEA is a committee of civil servants, functioning as the official filter of the Council for Economic Affairs, which in its turn is a sub-council of the Cabinet.

Appreciation

CPB does not pursue its work from an armchair in the proverbial ivory tower. On the contrary, the Bureau's work on the edge of science and policy can only be done properly by creating a multitude of good relations with clients, other research centres, and other scientists. This is essential for protecting its significance for society and the scientific quality of its work.

The 2003 independent CPB Review Committee observed on CPB's position:

The Committee notes that CPB has a remarkable and unique position in Dutch policy analysis and policymaking. It serves as a clearing-house for all major economic questions at all political levels. The Committee was impressed by the respect shown by its clients to the work and contributions of CPB. While in general the Committee supports competition among analytic/research institutes, it does not recommend a break-up of the quasi-monopoly position of CPB. Dutch society would stand to lose from such a devolution.

The International Monetary Fund (2005) concluded in its yearly Article IV Consultation: 'Staff found that the CPB, as an independent economic forecaster and evaluator of public sector policies, plays an important role in disciplining fiscal policy.'

Despite these kind words, not everybody in the Netherlands appreciates the strong position that CPB holds. Sometimes it can be difficult to realize a proposed policy or investment if CPB analyses have shown the pros and cons. This feeling is illustrated in the cartoon about changes in the Disability Insurance (Figure 15.1). Unions and employers' organizations



Figure 15.1 Cartoon about changes in disability insurance

had agreed upon changes, of which both parties could benefit. CPB was then asked to assess the overall effects, including the costs for the tax payer and the structural effects for future generations.

In the media, CPB is an esteemed authority on economic issues. But, as a great tree attracts the wind, the media also like to attack the bureau, pointing to real or so-called mistakes or stressing differences in opinion between CPB and the Government. Exactly because CPB strictly keeps to its role, boring and irritating as it may sometimes seem, the Bureau has been able to establish and maintain its strong position during the last 60 years.

Economic analysis of election platforms

Election platforms deal with proposed choices. Everyone wants to take measures that cost nothing or have no down-sides. But in practice everything has a price tag. As Milton Friedman said famously, 'There is no such thing as a free lunch'. A party cannot raise public spending, cut taxes and reduce the public debt all at the same time. Another sphere in which choices have to be made is the balance between economic growth and environmental objectives that cannot be expressed in monetary terms (such as the reduction of CO_2 emissions). A third example is the dilemma between income solidarity with benefit recipients and stimulation of participation in the labour market by reducing the replacement rate (the ratio between the benefits for those out of work and the net pay of those in work).

At the request of political parties, CPB analyses the economic effects of election platforms to set out the choices that these parties propose in their programmes. This helps reveal the various preferences they have. Most foreigners view this objective analysis of political plans as a kind of fairy tale from the Low Countries. How did it come about?

In the run-up to the general elections in 1986 the three largest political parties (Christian Democrats, the Labour Party and the Liberal Party) asked CPB to work out the economic consequences of the implementation of their respective election platforms. Preceding the next elections (1989, 1994 and 1998) more political parties made such a request. For the general elections of 2002, all eight political parties represented in Parliament before the elections asked CPB to analyse the economic effects of their election platforms. This did not include Pim Fortuyn's party, as it had not yet been in Parliament before those elections. In fact, when the analysis of the election platforms started, no one had any idea that this party could pull so many votes as it turned out to do.

What is the analysis about?

Important elements of the analysis are the summaries of the budgetary and macroeconomic effects of the election platforms. The macroeconomic

effects relate to the implications for the Dutch economy: output, employment, consumption, earnings, inflation and so on. Also the effects on the income distribution are described. To prevent political parties focusing on the short term gains of their policy proposals, CPB also publishes effects on structural economic growth and on the structural budget deficit. Other indicators that reflect the effects in the longer run include the labour income share and the balance on the current account of international payments. In this way the costs and benefits for future generations are also taken into account.

In the course of preparing the analysis for the 2002-elections, various parties asked CPB to pay attention to the more qualitative aspects of the proposed policies. In consultation with the parties, CPB decided to conduct an institutional economic analysis of policy intentions in the health care sector. Furthermore, as in 1998 and 1994, the parties were able to call on the National Institute of Public Health and the Environment (RIVM) for analyses of the environmental effects of their programmes. The RIVM has reported its findings separately.

Merits

The CPB analysis contributes to a better understanding of the contents of the election platforms and their mutual comparability in several ways:

- The same basic scenario as the starting point for the analysis applies to all parties. One party cannot boast better outcomes than another simply by being more optimistic about economic developments under unchanged policies.
- The further elaboration and explanation which parties provide with their programmes create greater clarity about the specific content of their policy proposals.
- The uniform CPB presentation of the policy proposals and their financial consequences make the parties' commitments in the financial and economic sphere mutually comparable.
- CPB examines whether the various policy intentions are technically practicable and whether the resource allocations are realistic. The same measures have the same budgetary and economic effects, so that a party cannot obtain more favourable results simply by being more optimistic about the effectiveness of the proposed policy.
- To this examination CPB adds a projection of the economic effects of the various policy packages. The estimated economic effects offer a picture of the choices that the parties are making with regard to the various social and economic issues. These projections sometimes induce parties to adjust their draft programmes.

Limitations

This analysis also has some limitations. Not all policy intentions are easily translated into budgetary and economic effects, the figures suggest a precision that is not there, and election platforms deal with far more than just the economy.

For many policy proposals CPB considers the budgetary effects and the spending effects, but not what are known as the programme effects. Not enough is known about the economic effects of, for instance, more education, more public safety, or more infrastructure, leaving aside whether the proposed policy has been made concrete enough. As a matter of fact, in many cases the programme effects will only become apparent in the long run. One of the priorities on CPB's working programme now is to assess these programme effects, as these are very important, not least for future generations.

The analysis is restricted to measures that can be taken in the next government's term of office and to their economic effects within that term. Especially when measures only have a gradual impact on the economy, the effects in the final year may still be relatively small. This has been accommodated to some extent by highlighting the effects on structural economic growth.

The analysis is also limited to measures that the Dutch national government can take itself. Measures that can only be taken with international co-operation (for example about CO₂-emissions) are not taken into consideration.

The quantitative analysis of the economic effects is surrounded by a number of uncertainties. The behavioural reactions of businesses and households cannot be predicted accurately. However, the estimated effects of policy proposals are probably more reliable than the regular economic forecasts. The wide uncertainty margins that characterize the regular forecasts are to a large extent determined by uncertainties about international developments. The policy effects are not (or only marginally) dependent on international economic conditions. Even so, the results of the effect analysis should be treated as broad brush, and no great significance should be attached to small differences between parties.

The most important limitation of the CPB analysis is that the expected economic effects only touch on a few aspects of the wide-ranging political commitments contained in the election platforms. As mentioned, the RIVM deals in a separate publication with the expected effects of environmental policies. There are, in addition, many other political objectives that are not taken into consideration in these analyses.

Results

Among the wider public, the CPB analysis is invariably described as a 'calculation' of the election platforms. The public's interest in the analysis

	Green Left	Liberals
Structural economic growth	_	+
Equal income distribution	+	_
Public spending	+	_
Structural budget balance	_	+
Environment	+	(-)

Table 15.1 Results for two political parties in 2002 election platforms

focuses on how the quantitative results for the various parties compare, and often for only a few variables. The outcomes are then almost treated — without justification — as performance scores. However, the purpose of the analysis of the election platforms is to illustrate the choices that are being made by the various parties. A good result on one variable invariably means a lower score on another. Sometimes the dilemmas are contained within the financial and economic sphere, but in other cases the downside of the results will be evident in another sphere, such as the environment or the quality of the education system.

In Table 15.1 the general results of the analysis are illustrated, taking two election platforms for the 2002 general election as an example. The proposals of the Green Left party are targeted at a more equal income distribution, more public spending on, for example, health care, and measures to protect the environment, like higher energy taxes. These targets are met, but at the cost of lower structural economic growth, because incentives for labour supply are diminished and energy-intense production is heavily taxed. Moreover, the structural budget balance is worse off, which implies that future generations have to pay higher taxes.

The (conservative) liberal party aims, amongst others, to reform the social security system. This implies lower benefits and a more unequal income distribution. Their proposals stimulate labour supply and structural economic growth, improving also government finances. The Liberals chose not to ask for an analysis of the effects on the environment. However, given the lack of specific measures and the higher level of economic activity, one would guess that the programme results in a worsening of environmental indicators.

Ageing in the Netherlands

The ageing of the Dutch population in the coming decades will greatly impact future public expenditure and revenues. The CPB study 'Ageing in the Netherlands' (2000) explores in detail how ageing affects demographic variables, labour market variables and international economic variables, as

well as the implications of ageing for the sustainability of current fiscal policies. The study has had a significant impact on Dutch economic policy. Dutch politicians, both from coalition parties as well as opposition parties, often motivate fiscal discipline by referring to an honest treatment of future generations.

Long-term implications of ageing

Several factors have contributed to the ageing of the population in the last three decades. Important factors have been the decline in fertility rates and the increase in life expectancy. The combined effect has been that the elderly dependency ratio, defined as the number of persons aged 65 and over as a percentage of the 20- to 64-year olds, gradually increased from 19 per cent in 1970 to its current level of 22 per cent.

For the coming decades, demographic forces will continue to affect the structure of the population. First of all, the observed decline in fertility rates will continue to affect the age structure of the population for several decades. In addition, life expectancy is expected to keep increasing. Moreover, the baby-boom generations are now close to retirement. As a result, the elderly dependency ratio is expected to increase to a peak level of 43 per cent around 2040. After 2040, it will decline as the baby-boom generations pass away. This decline is relatively small and does not bring the elderly dependency ratio back to its original level; rather, it is expected to stabilize at a level of around 40 per cent.

For future generations this means that five persons in the working population will have to pay for two elderly persons, while the ratio is five to one at the present time. In other words: the burden will double.

Public finances

The impact of ageing upon public finances is far from trivial. In particular, pensions and expenditure on health care will significantly increase when the population becomes older. The study assesses whether ageing makes the public debt ratio explode, should current public arrangements be left unchanged.

As a working assumption government expenditure is indexed to the rate of productivity growth. This reflects the crucial assumption that income growth translates into a higher demand for public goods with an elasticity equal to one. Although this assumption doesn't necessarily have to be true, it corresponds with long-term empirical evidence. The study uses a generational accounting framework to take account of the effects of ageing on public finances. Figure 15.2 shows that, for the average citizen, tax revenues increase until the age of about 50, due to rising labour incomes. Beyond the age of 50, tax payments fall, due to a gradually

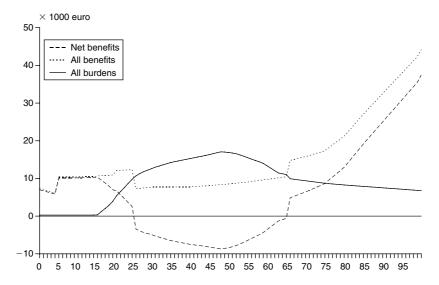


Figure 15.2 Age profiles

decreasing labour force participation. The declining labour income is not fully offset by various forms of pension income, which are subject to income tax. Accordingly, both income taxes as well as indirect taxes fall with age. Combining the expenditure and revenue side of the budget, Figure 15.2 also shows the age profile of the (average) net benefit from government. It turns out that the young and the elderly are net beneficiaries from the government, whereas the middle-aged are net contributors.

A sustainable policy

The result of the extrapolation of current fiscal arrangements is an answer to the question: will the public debt ratio explode or not? In view of the expected developments, present institutions may be called unsustainable, thus rendering our second question relevant: How to restore sustainability? The answer to this second question appears to be far from straightforward. Sustainability can be achieved by raising different types of taxes. Moreover, policies can be implemented immediately or postponed several years. Still, it would be helpful if the size of the unsustainability of public finances could be read off from a single number. Therefore, a measure of sustainability is used, which is the – growth adjusted – annuity equivalent of the present value of expenditure minus tax revenues. Luckily, such an immediate and permanent tax adjustment can also be advocated on the basis of the argument of economic efficiency. However, one should keep in

mind that the immediate and permanent tax adjustment is not the only way to cope with unsustainable public finances. Reducing public spending, for instance by lowering benefit levels, can be another way to improve sustainability.

A caveat is in order in interpreting the results. The study takes the angle of sustainability of public finances rather than the more comprehensive notion of social welfare. Policy options that help to restore sustainability need not be welfare-improving in a Pareto sense. The existence of this trade-off illustrates why the approach cannot give definitive answers to the question of whether typical policy measures should be taken.

Possible policy measures

According to the 2000 CPB study, sustainability of public arrangements can be achieved, for example by raising indirect taxes in 2001 by 0.7 per cent of GDP. In this sustainable path, the surpluses of the government budget are of such a magnitude that debt and interest payments are reduced sufficiently to offset the rise in expenditures due to ageing. The budget surpluses will turn into a (small) deficit in 2040, the period in which the elderly dependency ratio is at its peak level. When this ratio reaches its steady-state level of around 40 per cent after 2040, the budget happens to be roughly balanced.

This policy line of raising taxes and redeeming public debt in the short run (and well before the impact of ageing hits the budget), involves a burden in the near future, as well as for present generations. It will also, however, lead to alleviation in the more distant future, and for future generations, because the early implementation prevents the larger tax increase that would be necessary if the policy adjustment were to be delayed. This policy also smoothes taxes over time, thereby minimizing the efficiency costs of taxation. It effectively transfers part of the future costs of ageing to the present, thereby distributing the costs of the adjustment over both future and all currently living generations.

Table 15.2 compares the size of the required adjustment of indirect taxes to achieve sustainability with the size of the required adjustment when other budget items are chosen. It shows that the size of these adjustments does not differ much. However, columns 3–8 reveal that the measures do yield quite different effects on various generations. In particular, future generations benefit most from changes in budgetary items affecting the end-of-the-life cycle, such as healthcare and social security.

Evaluating government investment plans

Public investment is an important policy instrument wielded by government. As a substantial amount of resources is allocated through public

Table 15.2 Adjustment of budgetary items and their intergenerational effects

Budget item	Required	Е	ffect on r	et lifeti	me bene	fit	
adjustment GDP (%)	Future generations	Newly born	20-y olds	40-y olds	60-y olds	80-y olds	
			Thous	ands of	euros		
General government	- 0.7	7	- 6	- 5	- 4	- 2	- 1
Education	-0.7	3	-10	- 1	0	0	-0
Social security	-0.5	9	- 4	- 5	- 5	- 5	- 2
Healthcare	-0.5	9	- 4	- 5	- 5	- 5	- 5
Income tax	0.6	8	- 5	- 7	- 5	- 2	-0
Indirect taxes	0.7	8	- 5	- 7	- 4	- 2	- 1

investment, efficient use of the funds available is therefore of considerable importance. While on a general level the literature provides a number of criteria by which to judge the efficacy of public investment, the actual selection of projects is not always an easy task. Which projects regarding roads, railway tracks, nature reserves, scenic landscapes, education or inner city regeneration are most efficient?

Often these projects are quite different with respect to expected benefits. For example, some projects may be very important for present generations, while the significance of other projects lies mainly with future generations. What criteria can be applied to compare a whole range of plans if they compete for the same resources? And is public investment really the appropriate way to cope with specific problems? In some cases, other policy instruments may be preferable.

The study *Selective Investments* (2002) carried out by CPB plus three other planning agencies (on the environment, physical planning and social and cultural issues) addressed these questions in the context of a concrete policy case. Dutch government agencies were invited to submit investment subsidy proposals to the Dutch ICES. The ICES is a committee of high-ranking civil servants supporting the cabinet in designing investment strategies for the Netherlands. Some 300 investment subsidy proposals were submitted, representing a total cost of 100 billion euros. The projects were to be realized in the period 2003–2010. The ICES commissioned the co-operating planning agencies to analyse the quality of the submitted proposals.

Methodology

Classifying a large number of projects calls for a standardized methodology. In the analysis, each project was rated by a number of key criteria:

- Legitimacy of government intervention. Here the economic perspective is used. Policy intervention is assumed to be legitimate whenever market failure occurs. Typical examples are public goods and external effects. This criterion is a crucial precondition: if there is no (convincing) evidence for the legitimacy of government intervention, then a project has to be regarded as weak.
- Efficacy. Policy measures are effective when they contribute substantially towards achieving policy goals. Projects are more effective when there is synergy with other policy measures. The analysis also takes into account possible negative side-effects.
- Efficiency. A project may be effective, but at high costs. The efficiency of a project is measured by comparing all benefits and costs for the society as a whole, on a structural (that is long-term basis). The interest of future generations was not a separate criterion, but was included in the assessment of the projects' efficiency. If better alternative policy measures are available, then the efficiency is regarded as weak.

The planning agencies used a broad welfare perspective, including aspects that are difficult to quantify. All effects for society are thus taken into account: for example changes in economic production, savings in travelling time as well as effects on the natural environment, landscape, public safety and social welfare.

Next to an analysis on these key criteria, the risks accompanying each project were evaluated. If a project scored well on all criteria, it was rated as 'robust'. If a project was assessed as weak on only one criterion, the project was rated as 'upgradeable'. In this case, the analysis should indicate which aspects of the project should be improved. When improvements seemed to be impossible, the project was rated 'weak'.

In this method, the efficiency of projects is a very important criterion. Ideally, a cost-benefit analysis (CBA) should cast light on the efficiency of the proposed project. However, due to the limited availability of information, or because of measurement problems (for example assessing the value of nature for present and future generations), a CBA was impractical for evaluating the majority of projects. In those cases, the researchers used either the cost-effectiveness as a benchmark or performed a qualitative examination, depending on the available information.

For example, in the case of environmental issues, the planning agencies used previous environment projects as a benchmark. Of course, the type of

environment to be created and the geographic location of a project were also taken into account. In other cases, information on the decision process was considered most important for qualification. Is a selection procedure of possible measures incorporated in the decision-making process, and are alternative policies weighed against each other? Two examples illustrate this issue. First, do criteria exist for the selection of industrial sites to be restructured, or does a project simply propose a number of sites to be restructured? And second, are only spatial measures (flooding particular areas) part of the selection procedure for preventing river flooding, or does the project also take into account possibility alternatives like enlarging dykes?

Results

The outcome of the analysis is summarized in Table 15.3. Only 10 per cent of the proposals were rated as robust, 45 per cent could be upgraded, and the rest were classified as 'weak'. In absolute terms, most of the robust projects are found in the area of traffic and transport. Examples of robust plans are road-pricing to alleviate congestion (costing some 2 billion euros), and a road-safety programme (amounting to 2.3 billion euros). A major robust project in another area is streamlining key government data, like data on buildings, the water and electricity grid, enterprises and other geographic data, which could be carried out at a cost of 1.5 billion euros.

Improvements in school buildings, costing 0.3 billion euro, provide another example. In most other policy areas the volume of robust projects turned out to be rather limited, at least considering the proposed projects.

As mentioned above, many major investment proposals were classified as 'weak'. Examples include large investments (5.4 billion euros) in high-speed

	ICES-claim (billion euro)			
	Total	Robust	Upgradeable	Weak/insufficient information
Mobility	325	65	160	100
Nature, landscape and water	193	8	101	84
Urban policy	143	2	57	84
Information technology	31	7	12	12
Knowledge	121	7	48	66
Environment	61	3	7	51
Total	875	92	386	398
		(10%)	(44%)	(45%)

Table 15.3 Rating investment plans per policy area

public transport: the 'Zuiderzeelijn' connecting the urban area of Western Holland (the 'Randstad'), to the north of the country, and also a magnetic levitation connection in the 'Randstad' in need of a 2.7 billion euro government contribution. A proposal for double-decker roads and tunnelled roads to save space was also classified as 'weak'.

Projects were dubbed 'weak' for several reasons. In some projects the legitimacy of government intervention is questionable. In most cases, however, problems occurred in the field of efficiency of government investments. In addition to this, it seems that in some policy areas other policy instruments might achieve better results than government investments. These conclusions also provide decision makers with certain opportunities.

Upgradeable projects were found in the areas of restructuring towns and restructuring industrial areas, and included some projects that aimed at reducing the risks of flooding. Furthermore, most nature projects were classified as upgradeable. In many cases it was uncertain what would actually be achieved if the projects were to be financed. Other projects did not fully take into account alternative measures. This was the case with some water projects, and projects in the field of physical planning.

In 2005, once again there were some funds available for new investment plans. The first results of the new assessments show a much more positive result. Many initiators have taken into account the criteria by which they knew now their plans would be evaluated, resulting in better plans. This is beneficial for present as well as future generations, as no one gains by realising projects that cost a lot but reach little effect.

Conclusion

Founder Jan Tinbergen, in 1969 the first-ever winner of the Nobel Prize for Economics, contributed much to establishing the role and position of the Bureau. While inspired by contemporary questions of economic policy, he took a scientific and independent approach in trying to answer them.

The open-mindedness and quality of the work done by him and CPB's staff in the early days soon commanded respect, a respect indispensable for the Bureau to work in the way it does to this day, for example in assessing the costs and benefits of investment plans, the economic consequences of proposals in election platforms, or the sustainability of public finances in an ageing society. Future generations may still benefit from this, as CPB always stresses the importance of viewing the long-term effects of policy plans.

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16 Intergenerational justice

Emmanuel Agius

At the close of the fifteenth century, Giovanni Pico della Mirandola prophesied that in the coming modern age, through science and technology, human beings would determine their fate. This well-known Italian philosopher of culture envisaged humanity's deepest aspirations to improve the quality of life by the new vistas opened up by science and technology.

After so many centuries of science and technology, during the last few decades we have learned that our unrestrained economic and technological expansion, based on the nineteenth-century myth of progress, has in many ways impoverished rather than improved the quality of human life. It is not science and technology as such which are to be blamed for environmental degradation, but rather those in whose hands these powers have fallen and the way they were used short-sightedly. For many years science and technology were used for personal, national, regional and continental profit to the detriment of many born and unborn people. It is a shame that for many centuries science and technology were used as an instrument of rule over nature and of power over society and human beings, both living now and in the future.

Indeed, we are facing an irony that the cultural forces of science and technology, rather than 'liberating' humankind, are now the greatest threat to the quality of life of both present and future generations. Science and technology, which were expected to improve considerably the quality of human life, have increased hunger, poverty, war and environmental hazards, but they have also created serious future risks and burdens.

Now that the international community is convinced that science and technology offer both blessings and curses, most countries have adopted environmental policies designed to stem ecological degradation. Science and technology can work wonders only if they are put to the service of all humankind and are guided by the ethical principles of intergenerational solidarity, co-operation, sharing, justice and equity.

Moral sensibility for unborn generations

During the last few decades discussions, public debates and publications on our ethical responsibilities to improve the quality of life of unborn generations have become more common than before. It was during the late 1970s that the world community became more conscious and conscientious of its moral obligations to posterity. At that time many began to realize that it was unrealistic to speak simply of progress, without taking very seriously into account the limits of natural resources, the ecological crisis, the dangerous consequences of modern technology, and the ever-growing double gap: between some parts of the world and others; between present and future generations.

The increasing awareness of the finitude and fragility of our one and only Earth has brought about a sudden and amazing upgrading of the theme of the 'future' in almost every area of contemporary life. Questions previously asked by a few specialists have now become the concern of the public at large. What is the future of our one and only Earth? Does humankind have a future? If present trends continue, what kind of planet will be inherited by future generations? What quality of life will be enjoyed by posterity? Who can guarantee the future of the human species? Do we have any obligation at all to unborn generations? Can future generations claim anything from us as their right?

The three major documents on development and environment signed by many Heads of State in June 1992 at the Rio Earth Summit in Brazil reflect the international community's deep concern about the quality of life of posterity. The Rio Declaration on Environment and Development, the Convention of Climate Change and the Convention on Biological Diversity all endorse the concept of our responsibilities towards future generations (Agius 1993, p. 11).

The Rio Summit was one of the most significant international negotiation processes in the creation of an elaborate programme that could set the planet on a new course towards global sustainable development that could guarantee a life of an adequate quality for posterity. It was a manifestation of the new sense of solidarity among humankind and a clear sign of willingness to share the challenge of safeguarding the quality of life for generations yet to be born.

Moreover, the 1993 Vienna Declaration and Programme of Action adopted by the World Conference on Human Rights endorses also the concept of the present generations' responsibilities towards future generations. UNESCO's General Conference, in its 29th session held in Paris in November 1997, adopted a Declaration on the Responsibilities of the Present Generations towards Future Generations. This declaration, which has a moral and ethical force rather than being a legal instrument, was the fruit of many years of discussions among experts and of consultations with member states. Furthermore, the Convention on Human Rights and Biomedicine (known as the Bioethics Convention), developed by the Council of Europe and adopted by the Parliamentary Assembly in November, 1996, affirms that progress in biology and medicine should be

used for the benefit of present and future generations, and sets up safeguards that guarantee to protect the identity of the human species.

Two main factors underlay the contemporary ethical sensibility for future generations. First, it has now become evident that technological power has altered the nature of human activity. Whereas previously human activity was viewed as having a small effective range, modern technology has reshaped this traditional view. Modern technology has given us an unprecedented power to influence the lives not only of those now living, but also of those who will live in the far-distant future (Agius 1989b, pp. 293-313).

Second, today's apprehension about the future of mankind is the result of the discovery of the interdependence and interrelatedness of reality. Such truth has been known for centuries; but it is only lately that we are experiencing it in all its complexity. Never before has human experience shown so clearly that absolutely nothing exists in isolation. Everything affects everything else. Every action, decision and policy whatsoever has far-reaching consequences. Everything, from culture to genes, will be transmitted to posterity. It is therefore becoming more evident that our relations are not merely limited to those who are close to us, but extend to far-distant generations. This feeling of interdependence between generations is awakening a new vision of human community which encompasses all past, present and future generations. The contemporary sense of solidarity with all the members of the human species is the result of this emerging broader perception of community.

Future generations are disadvantaged

Future generations need to be protected because they are in a disadvantaged position with respect to the present generation which has the power to affect badly their quality of life by overpopulating the earth, by spoiling the delicate balance of the biosphere, by storing nuclear waste which are disastrous to the genetic heritage of posterity, by depleting the earth's natural resources and by using genetic engineering to affect the unity of the human species.

They are disadvantaged because they are 'downstream' in time from us and thus subject to the long-term consequences of our actions. Even their very existence is threatened! The scope of their choices is restricted by decisions taken by their predecessors. Moreover, future generations are inherently disadvantaged since they are 'mute', having no representatives among the present generation, and so their interests are often neglected in present socio-economic and political planning. They cannot plead or bargain for equal treatment since they have no voice and nothing they do will affect the present generation.

Degradation in the quality of environmental and cultural life

The present generation has the power to prevent future generations from enjoying both natural and cultural resources. It is now common know-ledge that the quality of air, water and soil in many regions of the world is diminished drastically due to human carelessness and lack of foresight. Recent generations have used resources of air, water and soil as a free resource for dumping their wastes, thereby passing on the costs of their activities to future generations in the form of degraded quality of air and water, with accompanying harms to planet and animal life and to human health. The concern of recent generations to reap short-term benefits from cheap disposal of wastes has created immense future risks and burdens!

We, as a species, need for our survival not only a natural but also a cultural environment. Cultural resources are essential for the well-being of the human species. For centuries communities have recognized that it is important to conserve our cultural heritage for future generations. Cultural heritage includes the intellectual, artistic, social and historical records of the human species. It embraces both physical objects which we create or produce as well as the non-physical, such as knowledge and social practices.

Future generations need to inherit a diverse cultural resource base to enjoy an adequate quality of life. Cultural diversity provides each generation with a range of experience, ideas, knowledge and instruments to help them to cope with the problems they will face in fulfilling their own goals. New developments in information technology are encouraging cultural homogeneity. New efforts are required to conserve cultural heterogeneity for the benefit of future generations.

Conserving the common heritage for future generations

The Earth's natural and cultural environment does not belong to one generation, but to all generations, both present and future. No generation can claim absolute rights on the resources of our planet Earth because they are common to all generations. As Edith Brown Weiss rightly states in the book *In Fairness to Future Generations*, '[. . .] at any given time, each generation is both a custodian or trustee of the planet for future generations, and a beneficiary of its fruits. This imposes obligations upon us to care for the planet and at the same time gives us certain rights to use it' (Brown Weiss 1989, p. 17).

The concept of the 'common heritage of mankind' which the Government of Malta put forward for the first time in 1967 at the United Nations in the context of the Law of the Sea introduced these obligations and rights in the context of international law. The Maltese proposal that the United Nations should take action on the seabed issue and pass

a declaration that the seabed and the ocean floor are the common heritage of mankind formed the beginning of a new era not only in the law of the sea but also in all international legal systems (Agius 1988, pp. 45–68).

The endorsement of this ethical principle in international law, conventions, declarations and treaties is a clear evidence that mankind as a whole is now emerging as the subject of rights to share the resources of the earth and to enjoy an environment of a quality that permits a life of dignity and well-being. This new dimension of human rights forms part of the third generation of human rights or 'solidarity rights' (Agius 1986, pp. 22–28).

The main elements implied in the concept of common heritage are the following:

- non-appropriation by any individual or state, that is, the right to use resources, but not to own them;
- international management on behalf of the interests of mankind as a whole (including future generations);
- benefit sharing by mankind as a whole; and
- (d) exclusive peaceful purposes.

Of special interest are the first three characteristics of the common heritage of mankind principle since they all have a common objective, namely the safeguarding of the quality of life of unborn generations. First of all, this concept is not a new theory of property. In fact, it implies the absence of property. The common heritage engenders the right to use certain property, but not to own it. The key consideration is access to the common resources, rather than ownership of it. This aspect of nonappropriation is highlighted by the term common heritage. Since certain goods constitute a heritage which is common to all mankind, it follows that all present and future members of the human species, no matter whether they are living now or in the future, have the right of access to these common goods, without however claiming any right of ownership. Accordingly, this principle highlights the fact that every generation has the responsibility to conserve and to protect the common goods in order to be enjoyed by generations yet to be born, thereby guaranteeing their quality of life.

Second, the common heritage implies participatory management, not ownership of goods. Though goods which belong to the common heritage are without any owner holding legal title in the traditional sense, an international administrative agency assumes responsibility for overseeing and regulating every activity conducted in the common area. Management includes also the supervision of the use of resources. Since every member of the human species has not only the right to inherit and enjoy the resources which are common but also the right to share in their management, unborn generations must also be represented. At one of the UNCED Prep COM Meetings held in preparation for Rio Earth Summit, the Maltese Government proposed the setting up of a supranational mechanism ('The Guardian') in order to ensure the participation of unborn generations in the management of the commons.¹

Third, the common heritage implies sharing of benefits. The right of access to the common goods implies that any benefit derived from these goods should be shared by all humankind, including future generations. Accordingly, no private company, or any particular generation has the exclusive right to exploit for its sole benefits the goods of the earth which are destined by God to all mankind. This third element of the common heritage principle safeguards also the right of future generations to the cumulative intellectual heritage. Knowledge is the cumulative result of the endeavours of mankind over the ages, and should therefore, by its very nature, be open and available to all members of the human species. No generation has the right to claim monopoly over intellectual property. Access to scientific discoveries by posterity ensures the improvement of their quality of life.

A 'guardian' for future generations

Our responsibilities towards future generations have already been endorsed in many national and international declarations, treaties and resolutions. However, recognition of our responsibilities to far-distant unborn generations alone is not enough! There must be an implementation of this principle. Time is now ripe enough to translate words into concrete actions. The appointment of a 'Guardian' to alert the international community of the threats to the well-being of future generations would be the most appropriate step in the right direction to safeguard the quality of future life (Agius 1998).

It is a long-established tradition in almost all civilized societies of the world that persons, who are declared legally incompetent, such as minors and the mentally infirm, are protected by a set of institutions from those who might either advertently or inadvertently exploit their disadvantage. For instance, some other individual or group is charged with the responsibility of acting as proxy, or an advocate, on behalf of the person whose ability to represent his or her own interests is non-existent or impaired.

In this respect future generations are similar to those that our society has declared legally incompetent. The same consideration that presently supports proxies for the incompetent among our contemporaries also gives credence to the idea of a proxy for future generations where contemplated policies could impose substantial long-term risks.

The authorized person or an organ ('Guardian') appointed to represent future generations at various international fora, particularly the UN, would be entitled:

- To appear before institutions whose decisions could significantly affect the future of the species to argue the case on their behalf, hence bringing out the long-term implications of proposed action and presenting alternatives. The role of the Guardian would not be to decide, but to promote enlightened decisions. Thus, the Guardian would have the power of advocacy, to plead for future generations. The Guardian would only have the right to put forward arguments on behalf of future generations.
- To introduce a new dimension that of the time horizon into the resolution of issues traditionally confined to the here and now. The greatest danger to future generations is that living resources essential for human survival and sustainable development are increasingly being destroyed and depleted. Future generations are seriously threatened to inherit a poor quality of life. The Guardian would face the burden of opposing the firmly established attitude of our civilization in discounting the future.

The appointment of a Guardian would be a true achievement for the interests of those generations yet to be born!

Rawls' 'Just Saving Principle' and the future generations

In introducing his anthology, *Responsibilities to Future Generations*, Ernest Partridge claimed in 1981 that we 'have an abundance of "facts" but are illequipped to make moral sense of it all' (Partridge 1981, p. 10). Concern about our moral relationship to future generations, which was rather marginal in the late 1970s and early 1980s, has recently become a topic of concerted philosophical debate in the field of environmental and bioethical issues. Many philosophers who attempted to make 'moral sense' of the future generations issue addressed the difficult and controversial logical and epistemological problems involved with talking about the future. John Rawls' *A Theory of Justice*, published in 1971, was important in bringing the topic of intergenerational justice into contemporary philosophical debate.

Some dilemmas of Rawls' theory are highlighted by Dierksmeier and Wallack in this volume. The inadequacy of Rawls' theory of justice to account for an intergenerational ethical theory is also evidenced by the fact that, in some cases, the 'just saving principle' is a threat to rather than a defence of the rights of future generations to the conservation of natural

resources and the environment. Rawls claims that if every generation follows the 'just saving principle', then future generations will in all cases inherit an increased capital stock and so their right to an appropriate rate of capital savings will be ensured. Hence, according to Rawls, they will always be better off than the preceding generation:

It is immediately obvious that every generation, except possibly the first, gains when a reasonable rate of saving is maintained. The process of accumulation, once it is begun and carried through, is to the good of all subsequent generations. Each passes on to the next a fair equivalent in real capital as defined by a just saving principle. (Rawls 1980, p. 288)

Rawls contends that, if a certain pattern of development is followed in all situations and conditions, future generations will always inherit benefits from their predecessors. On the basis of this assumption, Rawls explicitly rules out the consideration of the rights of the far distant future generations. Rawls is overlooking the fact that, in certain situations, a very high price has to be paid for economic growth in other aspects of life. Rawls' theory might perhaps have been readily conceded in the past, when it was accepted without any difficulty that the material accretions were more important in the general consideration of welfare than the state of 'nature'. But, evidently, this assumption cannot be made today. Its validity depends on the degree of 'development' reached or, more precisely, on the balance between environmental and other resources in a particular area. There could be circumstances where the state of the 'natural' environment could easily become a more important factor than the level of accumulation of capital goods. (For example, purer air may be more relevant than a second car.) In concrete terms, there appears to be a point in the course of the 'development' process as it has historically occurred, at which added material consumption plainly becomes worth much less in terms of welfare than a healthier natural environment.

It is evident that in many developed countries, the trend towards unlimited economic growth has led to the accumulation of greater capital stocks; but this has been accompanied by the deterioration of the environment and the depletion of natural resources. A situation has been created where, at least in these respects, the future generations of these countries will be more disadvantaged than the present generation. In the foregoing paragraphs I referred to Rawls' contention that all generations have the right to the preservation of natural resources and the environment on the part of their predecessors.

Rawls claims that one of the criteria of a 'just' policy is that it benefits the most disadvantaged. It is evident that, in some areas, the 'just saving principle' and its implied concept of development disregards this contention and becomes a threat to generations yet to come. The deterioration of the environment in many developed countries indicates that there is something wrong with the particular pattern of development which produces it. In other words, it brings out the fact that the process of 'development', such as it has, in fact, historically occurred in recent centuries, has produced a double unbalancing effect: between some parts of the world and others, on the one hand; between present and future generations on the other.

Accordingly, the pattern of developmental process implied by the 'just saving principle' should not logically take the same form immediately in all parts of the world. In order to be consistent with the first part of the second principle of justice, namely the maximization of benefit to the least advantaged, there should be, at least, a modification of the 'just saving principle' which Rawls introduced to regulate the relations of rights and duties between generations.

The Relational Theory of intergenerational justice

The weakness of the Rawlsian theory suggests the need of a different approach to intergenerational justice. In what follows, I shall employ the relational metaphysics of A.N. Whitehead as a basis for the construction of an intergenerational ethical theory. The main reason for adopting a Whitheadian perspective is precisely because process philosophy offers a paradigm of reality which throws new light on social ethics. Partly influenced by the twentieth-century science, which with its important conceptual revolution clearly revealed the limitations of the mechanistic world-view, Whitehead has developed an organic, dynamic and relational perspective of social reality. Whitehead's *Weltanschauung* provides us with a set of conceptual tools which are very relevant to the problem under study.

Whitehead defines his own philosophical perspective as a 'resolute attempt to enlarge the understanding of the scope of application of every notion which enters into our current thought' (Whitehead 1938, p. 171). Therefore, an important feature of the Whiteheadian philosophical system is the widening in scope of the application of concepts. The vision of the past, present and future reality as a unified whole implies a new perspective that can be employed for the reinterpretation of various concepts from a broader standpoint. Whitehead adopts this approach because he believes that 'traditional ideas are never static. They are either fading into meaningless formulae, or are gaining power by new light thrown by more delicate apprehension' (Whitehead 1938, pp. 187–188). Following this Whiteheadian axiom, I shall try, in what follows, to construct a process theory of intergenerational ethics by detecting the new light which the relational perspective throws on the concepts of humanity, society, moral

responsibility, common good and social justice. The redefinition of these concepts is essential for the construction of an adequate intergenerational theory.

1.

Since human activity can now, more than ever before, have consequences which extend far in space and time, a new meaning of human existence is emerging. Can the relational standpoint throw any light on the notion of the humanum? Is it important to state at the outset that Whitehead wished to avoid the modern concept of human nature as individualistic. During the Modern Period, the social nature of man was not completely rejected but postulated only in a derivative sense, for in the so-called 'state of nature', the person was considered to be completely free and self-sufficient. Precisely on this point, Whitehead remarks that 'the self-contained independent man, with his peculiar property which concerns no one else, is a concept without any validity for modern civilization' (Whitehead 1933, p. 34). Process philosophy is a rigorous denial of extreme individualism.

In line with the empirical insights of behavioural scientists into human sociality, Whitehead's philosophical system stresses the fact that the acts of every individual are necessarily social and relational. The relational nature of the human self is such that the individual does not first exist and then enters into relations with its world. On the contrary, the person is constituted by its relations and has no other existence than as a creative synthesis of these relations. Accordingly, the self is not a datum to which experiences and relations are superadded as 'accidental adventures'. The relational dimension of the act of being is not accidental to the being in question, but is a constitutive element of the being itself. The essential relational act of being is only possible because, like everything else in the universe, the self is in the process of becoming.

Now, if relations are necessary and integral to the human self, it follows that human existence has a common character. The human person cannot be separated from a network of communal relations. 'Every entity requires its environment. Thus man cannot seclude himself from society.' Which particular community is the true context of the human person? It is worth noting that the emerging concept of an intergenerational community is itself the result of the relational understanding of the humanum. Does the process redefinition of what it means to be human lead to any particular vision of human society?

A glance at the history of social philosophy reveals that the concept of human society was always defined in accordance with a particular view of the nature of the universe in general, and of human nature in particular. During the classical period, a concept of human nature as social, based on

a teleological picture of the universe, supported an organic model of the world and society. Then, during the modern period, a mechanical world-picture and an individualistic concept of human nature changed the whole perspective. Human society was no longer grounded, as a natural requirement, on the nature of the human person, since man in his 'state of nature' was constituted as a complete individual requiring no society to complete his nature. The political society was therefore conceived of as a voluntary association for a common purpose, this society being based on human contract.

Now, Whitehead's philosophical understanding of the universe as an interconnected web of relations, as well as the ontological nature of the relational self offer a new paradigm of human society. In contrast to the individualism of the liberal tradition, process philosophy defines human society as a relational 'structure of experience'. Every epochal structure of experience is related to an antecedent and succeeding structures. 'The present holds within itself the complete sum of existence, backwards and forwards' (Whitehead 1938, p. 46). According to this relational perspective, past history 'characterises the present and it thereby fashions the form of process in the future' (Whitehead 1938, p. 100). This implies that 'every generation will subsequently live amid the conditions governing the lives of its fathers and will transmit those conditions to mould with equal force the lives of its children' (Whitehead 1975, p. 182). To see the present events within a given society in isolation from the past and the future is to avoid the present reality of its relational character. As Whitehead remarks: 'The modern tendency is to say "I am happy now. The future does not matter!", but the "now" is meaningless without a significant future. What is wanted is to relate all the "nows" with the future' (Whitehead 1954, p. 153). Needless to say, the 'now' is equally meaningless without a significant past. Thus, human society, as an evolving structure of past, present and future experiences, is an expression of the relational character of reality in general.

Process philosophy sees the community as a relational structure of experience not merely because it draws its cultural heritage from its own past generations and shapes its own future. Every society is relational in another sense, namely, in so far as its structure of experience extends to other communities. There is a network of relations between all the nations of the world. Whitehead rejects an extreme sense of tribalism or nationalism. The interdependence of human nature does not stop with either the tribe or the nation. The relational standpoint calls for the recognition of a truly global community of communities: communities all in mutual interaction. All peoples, however different from each other they appear to be, are members of the one interdependent human family. Every society is just

one sector of a global community. This view of world-community is in tune with the contemporary sense of co-humanity with all people.

Whitehead's metaphysical outlook supports the contention that our interdependence does not end with the nation or even the global community. Relations extend not only over space but also across time; the scope of our relationships is broadened to include the whole family of humankind, which includes past, present and future generations. The long chain of generations forms one single community. Thus, every generation is related to all preceding and succeeding generations which collectively form the community of mankind as a whole. In relational metaphysics, the 'past and future are fused in the present' (Whitehead 1975, p. 184). Moreover, the present cannot be separated from the past and the future because 'no unit can separate itself from the others and from the whole' (Whitehead 1938, p. 111). According to the relational perspective, no generation can therefore be separate from past and future generations.

2.

One of the central notions of social ethics is that of common good. This concept has always been defined in accordance with a particular notion of society. For instance, in the individualistic and liberal theories of society, the common good is defined as the mere sum of individual goods. It is a state of equilibrium in the interplay of individual goods. By contrast, in a collectivist social theory, the common good is that state of society in which a certain social status is planned and ensured for every individual by directing and contributing his activities. Now, the process paradigm of human society is different from that of the individualistic and collectivist social theories. What concept of common good does the process vision of human society offer?

Compared with the traditional view, the concept of common good is defined from a much broader perspective within a Whiteheadian system. The 'generality of outlook' leads to a notion of common good that is wider than the good of a particular society, and even than that of the global community. The common good is the good of mankind as a whole. Relational metaphysics gives a philosophical reason for the broadening in scope of the notion of common good from a national to the supranational, from the supranational to the common good of mankind. The interrelatedness of all reality links every particular actuality to the whole, which encompasses the past, the present and the future. Since the ultimate community to which every human person belongs is the whole community of mankind, the common good of a particular society cannot be separated, first, from the common good of the world community, and from the common good of all mankind.

During the 1960s the concept of common good evolved from a national to a supranational level. This was the result of the newly awakened sense of interdependence that led to the notion of the 'family of nations'. During the late 1970s the concept of common good was redefined from a broader perspective. Environmental issues have shown that the common good of a particular society cannot be separated, first from the common good of the world community, and second from the common good of the human species.

Traditionally, the common good has been defined as that order in the community by virtue of which every member of society can experience an adequate quality of life. Recent ecological awareness has made it quite evident that the concept of common good must include also the natural resources of the earth. Every species-being, both living now and in the future, needs an adequate natural environment for his/her well-being. The human species is not apart from nature, but a part of nature. Every human species therefore needs natural resources for his survival and his quality of life. Accordingly, the natural resources should not be the privilege for some and a source of frustration for many, but the good of humankind as a whole. The atmosphere, the oceans, outer space and all the natural resources belong to all generations. Hence, our ownership of these resources is only ours insofar as we form part of the human species. In the use of these common heritages, we have therefore to consider the interests of the human species as a whole.

3. Human beings have differed greatly in the accounts they have given of the concept of 'justice'. They have spelt out the meanings and the practical implications of such phrases as 'giving everyone his due' in many different ways. But they have always agreed on a number of basic points.

The first is that justice is essential to human conviviality; second, that justice is not merely a matter concerning the relations between one individual and another; in traditional terms, 'commutative justice'. It also implies duties of the individual towards the community or communities to which they belong; in traditional terms, 'social justice'. Third, the concept of justice is logically connected with the concepts of 'equality' and 'proportion'; hence the requirement that an individual contributes to the welfare of the community has particular relevance to the question of proper conduct towards the needier and weaker members of humankind.

Social justice refers both to the duty of every member to contribute to the common good of the community, and to the responsibility of the community to all its members, with particular regard to those in a disadvantaged situation. Social justice demands the respect of everyone's right to share in the common good.

Social justice appeals to the principle that a community has the moral duty to give particular help to its handicapped or weaker members – not in terms of 'desert' or 'reward' for their contribution to the productive process, but simply because of human solidarity. Future generations can also be seen as 'handicapped', and the claim to reserve resources for their quality of life is based on similar ground to that on which it is argued that the State is bound in justice to make welfare provisions for the aged, the physically and mentally handicapped, and so on.

The resources of the earth belong to all generations. No country, continent or generation has an exclusive right to the natural resources of the earth. These resources have been handed over from past generations; it is therefore our responsibility to pass them on in good and enhanced condition to posterity. We have an obligation grounded on social justice to share the common heritage with all the present population as well as with future generations. Social justice forbids any generation to exclude other generations from a fair share in the benefits of the common heritage of humankind. In other words, social justice demands a sense of solidarity with the whole family of humankind. We have an obligation to regulate our current consumption in order to share our resources with the poor and with unborn generations.

4.

Some have argued that we can escape our responsibilities towards unborn generations. They claim that since future generations are distant in time, our ignorance of their needs, as well as their contingency, are sufficient reasons to discount the future altogether (Agius 1986, pp. 124–136). The concept of social justice from an intergenerational perspective proves the weakness of these arguments.

To achieve justice between generations, it is important to recognize the following principles of intergenerational responsibilities which Edith Brown Weiss proposed in her publication *In Fairness to Future Generations* (Brown Weiss 1989, pp. 197–203):

- (a) First, each generation should be required to conserve the diversity of the natural and cultural resource base, so that it does not unduly restrict the options available to future generations in solving their problems and satisfying their own values. This principle may be called 'conservation of options'.
- (b) Second, each generation should be required to maintain the quality of life of the planet so that it is passed on in no worse condition than the present generation received it, and should be entitled to a quality of the planet comparable to the one enjoyed by previous generations. This is

the principle of 'conservation of quality'. The principle of conserving quality does not mean that the environment must remain unchanged. Conservation of environmental quality and economic development must go together to ensure sustained benefits of the planet for both present and future generations. Thus the concept of 'sustainable development' which was a central principle at the Rio Earth Summit ensures present generation to meet its needs without however compromising the ability of future generations to meet their own needs.

(c) Third, each generation should provide its members with equitable rights of access to the legacy from past generations and should conserve this access for future generations. This is the principle of 'conservation of access'. Each generation can use resources to improve their own economic and social well-being provided that they respect their equitable duties to future generations. In the intergenerational context, conservation of access implies that all people, including future generations, should have a minimum level of access to the common patrimony.

Let us hope that there will be some gratitude from future generations for the present one for the efforts taken to hand over to them a better world.

Note

1. In 1992, in preparation for the 1992 Rio 'Earth Summit' (United Nations Conference on Environment and Development (UNCED)), the delegation of Malta submitted to the Preparatory Committee a proposal that the world community go beyond the vague declarations of responsibilities towards future generations that are appearing in international documents with increasing frequency, and actually institute an official Guardian to represent their interests. See 'Principles on General Rights and Obligations'. Preparatory Committee for the United Nations Conference on Environment and Development, Working Group III, Fourth Session (New York; 2 March-3 April 1992), A/CONF. 151 PC/WG.III/L.8/Rev.1/Add.2, 21 February 1992.

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Information about the Foundation for the Rights of Future Generations

Who we are

The Foundation for the Rights of Future Generations (FRFG) is a research institute on the interface of science, politics and the business world. In 1997, it was founded by a group of European students that worried about the future and wanted to promote intergenerational justice in terms of ecology and economy. To FRFG, intergenerational justice means that today's youth and future generations must have at least the same opportunities to meet their own needs as the generation governing today. Examples of the discrimination of the succeeding generations are the unprecedented ecological destruction, the pension crisis, the disenfranchisement of the young generation, youth unemployment and national indebtedness. FRFG aims to provoke, challenge, and ultimately, stimulate politicians to recognize the rights of future generations and to implement measures to protect these. In this sense, FRFG conceives campaigns in close collaboration with its sister organization, Youth for Intergenerational Justice and Sustainability (YOIS).

What are our activities?

FRFG takes action whenever the chances for succeeding generations are reduced by the measures of the current political establishment.

FRFG organized several congresses, symposia and meetings, like the congress with 330 young decision makers from all over Europe which took place at the World Exhibition (EXPO) in Hanover 2000. It publishes books which are also understandable to non-scientific readers (for example the *Handbook of Intergenerational Justice*) and issues policy papers, which give precise recommendations for possible future scenarios. The main emphasis of work focuses, among other things, on ecological policies, financial policies, the pension scheme, education policies, labour-market policies, youth policies and demographic change. Beside these activities the FRFG publishes a journal called *Intergenerational Justice Review*, which reaches many thousand of today's and future decision makers (all members of Parliament, numerous managers, journalists and professors and 3000 students from various fields of study).

Through the so called 'Generational Justice Price', endowed with €10 000, young scientists are encouraged to take a close look at issues concerning the future.

Numerous politicians asked for FRFG's advice on questions concerning Generational Justice, among them the German ministers for Work (reform of the pension scheme), and the minister for Justice (establishment of Generational Justice in the German constitution).

Who supports us

FRFG is supported by a scientific advisory council that comprises distinguished personalities like Prof. Dr Mihajlo Mesarovic (Club of Rome), Prof. Dr Bradermacher (Club of Rome), Prof. Dr Ernst Ulrich von Weizsäcker (Club of Rome), Lord Ralf Dahrendorf (UK House of Lords) and Kennedy Graham (UN University). Furthermore, an entrepreneurial council with highly reputable members assist the work of FRFG.

Awards

FRFG received the Theodor-Heuss Medal and the Medal for Good Citizenship of the town of Oberursel for its engagement. Furthermore, FRFG is associated with United Nations Department of Public Information (DPI) and the Economic and Social Council (ECOSOC).

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