



Introduction

Theories of intergenerational justice: a synopsis

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Abstract

In this paper, the author offers a synoptic view of different theories of intergenerational justice, along two dimensions (savings/dissavings) and three modalities (prohibition, authorisation, obligation). After presenting successively the indirect reciprocity, the mutual advantage, the utilitarian and the Lockean approaches, special attention is given to the egalitarian theory of intergenerational justice. Two key differences between the egalitarian view on intergenerational justice and the sufficientarian interpretation of sustainability are highlighted.



Keywords: generations, sustainable development, just savings, indirect reciprocity, lockean proviso, Brundtland, Rawls, justice

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"(...) as though man were never alone, as though he had inherited substance and strength, a gift which he must in turn hand on, through a being or an action". (Márai, 1993: 164)

1. INTRODUCTION

We have been facing threats to our environment and the risk of depletion of natural resources for a very long time. To such an extent, that they even appear to be determining factors in the decline of certain civilisations. One of the explanations given for the collapse of the Easter Island civilisation is resources overexploitation (See e.g. Ponting, 1993; Diamond, 2005). Lead poisoning, which is very ancient, is said to have contributed to the fall of Rome (Gilfillan, 1965; Lessler, 1988; Brännvall et al., 2001). Despite technological progress, we remain highly dependent on our environment as well as on natural resources. The scale and the nature of these issues have admittedly evolved over time. Yet, our philosophical theories on justice fall astonishingly short of expectations in attempting to deal with the normative issues

raised by environmental and resource depletion problems. Emphasis on the long term, the concept of pollution and the issue of externalities are potent challenges to our attempts at articulating equitable rules for individual behaviour and social organisation. Simultaneously, new concepts are constantly emerging from political and scientific debate, such as "sustainable development", "ecological debt", "degrowth" and "ecological footprint" (See e.g. Maréchal & Quenault, 2005 on the former). They represent as many invitations to revisit de novo the nature of normative issues at stake. In order to do that, these emerging concepts must be retranslated every time into the specific language of each theory of justice. Otherwise, it would be impossible to link environmental and natural resources issues with all the other societal challenges we simultaneously have to cope with in today's world.

The concept of sustainable development is extraordinarily fashionable. There is no doubt that a requirement for intergenerational justice constitutes one of its key components. In fact, its most popular definition is development that "Meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987: 53). Yet, despite the degree of sophistication in evidence elsewhere in theories of justice, discussions on sustainability devote too little attention to a thorough examination of what intergenerational justice might actually mean. We must, however, underline that several other normative dimensions should also be considered so as to deal exhaustively with environmental matters. Firstly, issues of international or interspecific equity are crucial also. But local justice (in the geographical sense) or gender issues cannot be neglected either. For some of the environmental challenges, these dimensions are even more significant in practice or conceptually more challenging than the intergenerational dimension in isolation.

Furthermore, as we are focusing on the notion of sustainability, it is essential to differentiate two issues: "Should 'it' endure, and if so, why?" and "Since it probably will endure, how should we go about making sure to do so equitably?". We can reply to the latter question while sticking to an agnostic stance on the former question. This in no way means that we are denying the importance of considering the very possibility that we might all decide to cease having children, and to think about its meaning. This hypothetical situation raises several issues. For example, the very fact that human reproduction would then cease implies the end—a voluntary end in this case—of the human species. Would the actions leading to such an outcome have to be considered immoral? Hans Jonas' thoughts are often referred to as being central, although we are not in fact inclined to consider that his characterisation of the alleged immorality at stake here is entirely plausible (Gosseries, 2004a: pp8-22). Furthermore, the hypothetical case of generalised refusal to have children also puts us in the situation of a "last man" which invites reflection on the moral status of non-human animals (see e.g. Gosseries, 1998: pp401-05).

We should therefore remain aware of the specific niche of the intergenerational dimension so that we do not attempt to force into the subject problems which would best be analysed from other angles. Furthermore, if we focus on the intergeneration issue, it is essential to compare the treatment proposed for environmental problems with what would be proposed for other matters which are just as important for intergenerational equity, such as public debt management, funding of pension schemes or passing on a language. This paper aims to demonstrate that justice between generations can be understood in different ways and that some are more robust than others. It also aims to explain why sustainable development as defined in the Brundtland report (WCED, 1987) is unable to exclude two

major kinds of intergenerational injustice that we propose to highlight. It is up to readers to consider whether the intuitions relating to justice that they would endorse in the intergenerational context are consistent with the intuitions to which they would be committed with respect to similar problems in a strictly *intragenerational* setting.

2. TOOL BOX

In view of the scale of environmental issues, it could be very tempting to postulate at the outset that unprecedented conceptual challenges should be associated to them, requiring a complete revision of our general theories on justice. We cannot exclude that this might well be the case. However, we intend to work from the opposite assumption and to begin by using as best we can available conceptual resources before exploring whether anything remains unaccounted for, requiring the use of a radically new approach. To use an analogy, before coining new words or inventing a new language, let us see whether an existing language—in this case theories of justice—painstakingly constructed by successive generations of practitioners does not already provide sufficient vocabulary to deal with the issues in hand.

There are different ways in which a layman can be introduced in a reasonably intuitive fashion to intergenerational equity issues. One of them is to refer to rules for the use of common spaces by successive users. Consider the metaphor of the uninhabited mountain hut. We can take a certain number of rules commonly found posted in this kind of refuge and use them as points of departure for general theories. The following could be compared: "Please leave the premises clean", "... as clean as you would have liked to find them on arrival" or "... as clean as they were when you arrived". All of these are starting points for theories of intergenerational equity based on different logics and with a different content.

Another possible point of entry consists in envisaging the nature of our intergenerational obligations through the prism of concepts of private law, focusing specifically on the idea of property as well as on specific types of contracts. Consider the famous native American saying: "Treat the Earth well: it was not given to you by your parents, it was loaned to you by your children. We do not inherit the Earth from our Ancestors, we *borrow* it from our children". It refers to a loan contract, the next generation being the lender and the current one the borrower. This is not the only existing proposal. Burke (1790) refers in general terms to the idea of a partnership "Between those who are living, those who are dead, and those who are to be born". The Pennsylvanian constitution (art. 1, § 27) uses the idea of *common property*. Locke (1690 [2003]: First Treatise, § 88) refers to an idea of *joint possession at the overlap*. The Japanese constitution uses the notion of an intergenerational trust (art.XX). Jefferson (1789) claims that "The earth belongs in *usufruct* to the living". And Jaurès (1902) even



worked out a concept of “everlasting *mortgage*”. We should not exclude that lessons may be learned from a closer look at the potential and limitations of each of these proposals. Note that once such a full conceptual clarification has been made, it will be useful to re-translate such findings in the specific language of general theories of justice.

Using the mountain hut metaphor or referring to various kinds of contracts or types of rights in *rem* are helpful forms of introduction to the subject. Yet, they are only partially illuminating. The approach we intend to use here will be constructed a little differently. It will compare different philosophical theories of justice along two lines. Firstly, only the size of the basket to be passed on to the next generation will be of concern, not its *composition*. This basket is filled with the components which make up a *capital*, in the broadest sense of the word. Such capital is not only physical, but also technological, institutional, environmental, cultural, relational, etc. We will therefore propose a table to summarise the key-conclusions of each of these theories, based on two concepts: generational savings and dissavings. *Savings* occur (generationally speaking) when one generation transfers to the next a capital (in the extended meaning of the word) which is *greater* than the one it inherited from the previous generation. Inversely, there are generational dissavings whenever one generation transfers to the next a capital which is smaller than the one it inherited. We will then go on linking these two concepts (savings/dissavings) to three modalities: authorisation, prohibition and obligation.

This approach may seem both desperately simplistic and excessively quantitative. And yet, the use of the savings/dissavings concepts—on top of the fact that they refer to a very broad understanding of the word “capital”—first of all seek to highlight how much the various theories of justice, as applied to the intergenerational realm, differ from each other both in terms of rationale and of practical implications. Furthermore, we certainly do not deny the importance—and the possibility—of a debating on the contents of the basket to be passed on from one generation to the next. This would require more than just weighing the significance of environmental assets and comparing them with other requirements, such as those connected to the transmission of special cultures or the preservation of mechanisms of solidarity. Even among the environmental questions themselves, selections are also to be made between, for example, dams generating green energy and endangered species, between preserving areas in their natural condition and human intervention to save certain species that are to be found there, etc (see Gosseries, 1997).

Finally, two further points should be noted. On the one hand, since the present paper is intended to provide a synopsis, we will not be proceeding with a detailed examination of more applied issues where intergenerational justice matters, such as defining the level of a global cap on CO₂ emissions,

justifying the preservation of biodiversity, or selecting a funding scheme for the dismantling of our nuclear power stations (see respectively: Gosseries, 2006b; 2004a: pp241-65; 2008). On the other hand, intergenerational justice also raises the issue of our obligations to past generations. This dimension, which we are also not intending to broach in this paper, is present at several levels, including in some the theories presented below. It is also particularly relevant for specific environmental issues, such as the integration of past CO₂ emissions in the definition of the current share of obligations to reduce emissions (see Gosseries, 2004b). That being said, let us now consider the crux of the matter.

3. INDIRECT RECIPROCITY

One theory, discussed in particular by Brian Barry (1989), is the indirect reciprocity theory (see de Shalit, 1995: pp96-99; Gosseries, 2006a). The general idea of reciprocity presupposes that in the event people are able to do so, they are under an obligation to return to others what they themselves have received from them. In the case of intergenerational justice, one can assume that the idea of reciprocity is sociologically widely endorsed in the public (see Wade-Benzoni, 2002). In its “descending reciprocity” version, it breaks down into two maxims. The first one seeks to explain *why* we are obligated to the next generation. In this case, it is because we received something from our parents that we must transmit something “in return” to our children’s generation. The intuitive idea can then be accounted for in certain ways in the language of property or more directly as reciprocation for an effort on the part of our parents. But this differs for example from the idea that if we owe our children anything, it is because in fact we are only *borrowing* what already belongs to them. It also differs from egalitarian logic as we shall see. Regarding the second maxim, it defines the content of our obligations to the next generation. As a result, we find:

Descending reciprocity

Justificatory maxim: The current generation owes something to the next generation because it received something from the previous one.

Substantive maxim: The current generation must pass on to the next a capital at least equivalent to the one it inherited from the previous one.

For those who associate justice with reciprocity, indirect reciprocity is quite a potent idea. It has the advantage of justifying obligations to people who so far have never given us anything and who may be giving us less in the future than what we will have given them. In the case of *direct* reciprocity, it is the original benefactor who ends up getting back what he put in, whereas with indirect reciprocity, there is a third party who benefits (in this case: the next generation) instead of the initial benefactor (in this case: the previous generation), giving rise in this way to a chain of obligations. An obvious objection could be

that a simple donation cannot in itself justify a return obligation. However, the nature of the moral difficulty arising out of non-reciprocation in this case can be accounted for through reference to the idea of a free-rider, getting a free ride on the intergenerational railway without buying his ticket, and therefore taking advantage without any counterpart of the sacrifices made by all the preceding generations.

What are the obstacles in the way of the indirect descending reciprocity view? Firstly, if we refuse to dissociate the existence of an obligation to the initial benefactor and that of an obligation to the third party beneficiary, the justificatory maxim presupposes the idea that we have obligations to past generations, i.e. to the dead. It is in fact those obligations which are the source of our obligations to the *next* generation. However, for a state to justify its sustainable development policies by reason of obligations to the dead is a challenge to the liberal requirement of neutrality on the part of the state towards various metaphysical conceptions and views of the good life. It can be demonstrated that such obligations to the dead only make sense if it is postulated that the dead do exist in a sense that is morally relevant. Yet, we do not all subscribe to this postulate, which makes it difficult to see it as metaphysically unproblematic (Gosseries, 2004a: chap. 2).

Moreover, the justificatory maxim fails to justify the first—be it hypothetical—generation's intergenerational obligations, because by definition such a first generation did not receive anything from a previous generation. How could we then explain what the problem would be if a first generation were to squander from the outset a considerable part of the capital available to it? For that matter, were we to view each generation as a first generation insofar as the goods it invented or discovered are concerned, it would become immediately apparent that the present difficulty is necessarily devoid of practical implications.

A few other points could be mentioned such as the difficulties encountered by the substantive maxim in case of demographic fluctuations. It should also be underlined that descending indirect reciprocity is not the only possible form of the idea of reciprocity in the intergenerational realm. For the sake of comprehensiveness, let us also point at the *ascending* indirect reciprocity idea (relevant for example to explain the logic of pay-as-you-go retirement schemes) as well as at the *double reciprocity concept* (Cosandey, 2003) which involves direct reciprocity transfers between generations. However, these two alternative forms of intergenerational reciprocity are not directly relevant to the environmental field which constitutes our focus point here (Gosseries, 2006a).

In any event what really matters in this context, is to emphasise the need to check whether indirect reciprocity really reflects our intuitions about justice, both intergenerationally and as a component of a *general* theory of justice. The simplest method for such a purpose consists in testing the idea of reciprocity in

an intragenerational context. Take for example the case of a person with multiple congenital disabilities. Let us accept the idea that she will give us less in return for what we as a society gave to her—which is not meant to deny the benefits we may of course derive from her company. Given such an example, the limitations of the idea of reciprocity are clear. As regards justification, is it because that person (or someone else) gave (or will give) us something that we feel obliged to care for this dependent person as a matter of justice? The reply is probably negative for many of us. And on the substantive side, should I measure the *dimension* of what I owe this disabled person on the basis of what he or she gives me in return? Here again, the answer will be in the negative for many of us. This suggests that for many of us, over and beyond internal consistency difficulties, the idea of reciprocity is not fully capable of reflecting intuitions of justice in general and in the intergenerational context in particular.

4. MUTUAL ADVANTAGE

The idea of mutual advantage is not very distant from that of reciprocity. Yet, it is not identical, both in logic (what justifies the existence of obligations) and by its demands (for instance, the idea of *guaranteeing* the promised transfers between actors in a cooperative game). Briefly, a theory of justice based on the idea of mutual advantage has to show that a "rational" agent—i.e. one acting exclusively out of self-interest—will serve his best *interest* by engaging in a cooperative venture and submitting to certain social rules accordingly. The point therefore is to demonstrate that it is rational—in a narrow sense—to be fair and that rules of justice must be justified by reason of rationality—in this same narrow sense. In practice, this requires the demonstration that gains may result from cooperation between individuals and that these gains can make *every* one of us net beneficiaries of such cooperation.

In an intergenerational context, we therefore need to check how the idea of cooperation can be transposed. A key difficulty in this respect is related to the issue of intergenerational overlap (Gauthier, 1986: chap. IX-6). The fact that not all generations are—not even temporarily—contemporary is a challenge on two counts. Firstly, does this not threaten the very possibility of the benefits of cooperation being *mutual*? Because if benefits are real but are only in favour of certain generations, so that others are net contributors, a theory of mutual advantage would be incapable of justifying that all generations should submit to a common rule of justice. Replying to this question amounts to asking to what extent the possibility of descending benefits (from one generation to the next) and ascending benefits (from one generation to the previous one) depends on these generations overlapping with one another. Furthermore, not only must it be possible for benefits to be mutual, but there must also be a guarantee that the conditions exist for the rule of cooperation to be effectively *respected* by each generation. In this case again, the non-



contemporary nature of many generations in respect of each other challenges the possibility of enforcing respect of a given rule of intergenerational transfer. The degree to which a threat of ascending or descending *sanctions* can remain credible in the absence of intergenerational overlap therefore remains to be ascertained.

This twofold challenge is compounded by a further question: supposing it is possible to construct an intergenerational model in such a way as to successfully address this challenge, there will still be a need to verify what that implies in relation to our question on savings and dissavings. It would be perfectly possible to imagine that it is rational for each generation to submit to a rule, which would nevertheless be compatible with a gradual deterioration of the stock of resources transferred by each generation to the next. There is an ongoing debate on this point (Heath, 1997; Arrhenius, 1999), but it has not reached a point where clear conclusions can be drawn (see Gauthier, 1986: pp302-05). It is however obvious that any serious attempt at articulating a theory of justice from the angle of mutual advantage cannot elude an in-depth examination of such difficulties.

5. UTILITARIANISM

Let us now explore a very different theory: utilitarianism. It is characterised not only by its preoccupation with people's welfare (*utilitas* in Latin) but more particularly with the idea that a fair organisation of society is one which maximises the *aggregate* welfare of its members (See e.g. Smart & Williams, 1973). This is why we can refer to it as an aggregative theory. There are several unsound reasons for criticising utilitarianism. Yet, it is entirely true that this theory of justice is not primarily concerned with the *distribution* of welfare among the members of society. What matters is the size of the welfare pie from which society as a whole will benefit, not the relative size of the pieces of that pie each member will be receiving. Hence, sacrificing entirely the well-being of a few people (to the point for example where they are reduced to slavery) making it possible to maximise society's well-being as a whole (by the fact that a large portion of society would benefit from the slavery imposed on a tiny minority), could be the policy advocated by utilitarians in specific circumstances. Therefore, more than any other theory of justice, this one is likely to lead to *sacrificial* consequences, although in its more elaborate versions, it does try as best it can to avoid such counterintuitive outcomes.

In an intergenerational context, there is one fact that plays a crucial role in this respect. Giving up the consumption of part of our capital today may enable us—provided it is wisely invested—to consume much more of that capital at some more or less distant future time. Consider a bag of seeds, part of which could be either consumed immediately or sown so as to multiply its volume. If you are a utilitarian,

savings (in generational terms) are not just authorised; they are *required* since the goal is to maximise the size of the intergenerational welfare pie. This means that the first generations in history have to tighten their belts and invest for the benefit of future generations. A point worthy of mention is that the idea of productive investment, which is central to this theory, is not necessarily linked to the *number* of generations following us—at least for investments whose return does not depend solely on human activity, but rather to the fact that they will be arriving *after* us.

This result leading, in a way, to sacrificing the earlier generations is magnified by two extra—and independent—factors. On the one hand, it is realistic to postulate some intergenerational altruism due partly to the fact that the succession of generations is also linked to biological parent-to-child relations which inevitably generate a certain degree of altruism. It is also plausible to postulate that this altruism is asymmetric, being stronger from parent to child than from child to parent. If such a descending altruism is taken into account, an extra degree—and in this case a purely voluntary one—of saving may be added to the obligation to save referred to above. In other words, descending altruism could further intensify the generational savings trend already present in the utilitarian model. Nevertheless, it does not necessarily lead to an additional welfare differential if the actors themselves derive well-being from these altruistic acts. On the other hand, the utilitarian conclusion becomes more worrying if it is accepted that the number of coming generations is, if not infinite, at least *indefinite*. For one way of interpreting utilitarianism consists in forcing us into everlasting sacrifices, since there is no way of knowing where they should stop. Such a sacrifice would ultimately be to no one's benefit, since every generation would be obliged to save given the permanent uncertainty as to how many generations would follow.

Utilitarians are well aware of this problem. Let us therefore emphasise two factors pointing in the opposite direction. Firstly, a factor which could attenuate the scope of the obligation to save is *diminishing marginal utility*, a (fairly plausible) postulate traditionally referred to as a justification for aggregativists' concern for the *distribution* of levels of well-being (see Gauthier, 1986: 305). The underlying idea is that the more a person has of a given good (e.g. apples), the less an additional good will bring her additional utility. This means that if we have an extra apple, it should be given to the one who has less apples if we aim at maximizing the additional welfare generated by this apple. But more importantly, there is another idea, the one of a social discount rate. This has been the subject of extensive philosophical debate for decades (see e.g. Cowen & Parfit, 1992; Birnbacher, 2003). And one recent instance is to be found in the discussions surrounding the Stern report on the economics of climate change (Stern, 2007). The idea is simple: if the rate is positive, a unit of future welfare will be granted less value than the same welfare unit produced

today. A discount rate of this kind can meet certain concerns besides addressing the single "sacrificial" issue mentioned above. For example, it would be possible to give a lower discounted value to a future welfare unit because of the uncertainty as to its actual future existence. However, when it is simply a question of a pure time preference for the present, it becomes morally problematic once applied to relations between different individuals (rather than to merely planning the welfare profile within one's own existence). In fact, the idea can be put forward that at that level it is still only an attempt—an ad hoc (Rawls, 1999: 262) and rather ineffective one—to reduce the size of a problem—i.e. an inclination toward sacrificing earlier generations—which is in fact the logical outcome of utilitarianism.

Even if descending altruism is left aside, the conjunction of recognising the productive nature of capital (whenever properly invested) and the indefinite nature of the number of future generations is such that, in the intergenerational context, utilitarianism can lead to particularly sacrificial outcomes, albeit attenuated by the inclusion of diminishing marginal utility as well as the introduction of a social discount rate. The reason why such outcomes seem especially unacceptable to many of us probably has to do with the fact that our conception of justice generally involves a distributive motive besides or instead of an aggregative one.

6. LOCKEAN PROVISIO

Before examining the paradigmatic example of a distributive theory of justice — Rawlsian egalitarianism — let us consider yet another family of theories. This time, it is neo-Lockean rather than neo-Hobbesian, and is commonly referred to as libertarianism. Briefly, libertarian views are building on two core features: On the one hand, a definition and a strong protection of self-ownership; on the other, a particular way of broaching the subject of ownership of external resources—in contrast to internal resources which are part of self-ownership. In this way, libertarians aim at guaranteeing, both against state and third party intervention, a strong protection for people's physical integrity as well as e.g. for the ownership of their talents. What is of particular interest here, however, is the status of external resources. We need in this respect to determine how to allocate to members of society the property of the goods we have inherited.

Consider a first generation allocating the property of arable land. Some libertarians would incline to allocate ownership of such property on the basis of a rule of the "first come, first served" variety, which for that matter is a rule in use in various sectors of society, for instance as regards intellectual property rights. Others would have us subordinate legitimacy of appropriation to complying with so-called "Lockean" provisos. In general, the difference between those two major approaches will reflect, coexist with or result in differences in perceptions of the initial patrimonial status of external resources. For some,

generally right-wing people, arable land initially does not belong to anyone, hence the use of the first come, first served principle. For others, generally more left-wing, the initial status of external resources would be that of collective property, which would explain the need for respecting a Lockean proviso. One difficulty is that the idea of a Lockean proviso is interpreted in different ways, depending on whether Nozick's views or those of others are adopted (Vallentyne & Steiner, 2000). What did Locke really mean when he said that initial appropriation can be legitimate "At least where there is enough and as good left for others" (Locke, 1690: second treatise, §27; Waldron, 1979)? Let us be more direct in our formulation: "At least where there is as much which is left in common for others". Applied to the intergenerational domain, this could give us for example Arneson's formulation: "*The continued legitimacy of private ownership from the standpoint of self-ownership depends on each successive generation obtaining the equivalent of a per capita share of unimproved, undegraded land*" (Arneson, 1991: 53).

A libertarian theory wishing to apply such a Lockean proviso will first of all need to determine its content ("as much as what?") and apply it specifically to the intergenerational context (see Elliot, 1986: 217ff.; Arneson, 1991: pp52-53; Steiner, 1994: pp268-73; Wolf, 1995: 791ff.). Let us outline three versions applicable to the intergenerational domain. A first possible interpretation is: each generation should leave to the next at least *as much (or the equivalent) of what the first (prehistoric) generation initially appropriated for itself*. For those who consider that the basket of goods inherited from the immediately previous generation exceeds far and away the *value* of what the prehistoric generation would have had access to, this formulation of the proviso may appear too lax. For it would authorise the entire generation to dissave, inasmuch as the resources transmitted *in fine* to the next generation are in no way less substantial, as regards their productive potential, than the resources available to the (first) prehistoric generation. In effect, that formulation could be amended in two ways.

The first consists in taking into account the *natural* modifications of our resources as time goes by. Let us imagine that the generation before us was the first to be victim of a minor ice age which will continue for two generations. Ex hypothesi, this overall has a negative impact (as regards land productivity, biodiversity, etc.). Should the present generation compensate for the difference — originating in natural events — between the value of the prehistoric world and what it has in effect become due to natural circumstances? For a Lockean, there is no particular reason why this should be so. What matters as a reference scenario to implement such a Lockean proviso, is to be able to identify what other people's situation would have been in my absence — in this case, the situation of any previous generation if it had been the first. The following alternative formulation therefore seems commendable: each generation must leave to the next *at least as much as what the next generation could have appropriated in the absence of any*



previous generation, or preferably¹, what the coming generation would otherwise have inherited if no previous generation had by its actions brought about a net improvement or a net deterioration.

Let us however imagine a hypothetical situation where some of the previous generations — and not this time natural disasters — had damaged, without any compensating technological improvements, the state of external resources compared to what they would have been if left to the sole effect of natural causes. Using the above proviso, there would be an obligation to save. Now why should the current generation bear the cost of compensating for *deteriorations* brought about by the activity of previous generations and for which they are in no way responsible, or at least no more so than the coming generation in whose favour it seeks to meet its obligations? Conversely, for those who consider that the cultural capital inherited from our ancestors considerably increases the productive potential of natural resources which the next generation would have inherited in the absence of any previous generation, the degree to which such a formulation authorises anew a very significant margin of *dissavings* becomes apparent.

A further reformulation of the Lockean proviso is however possible: each generation must leave to the next *at least as much as what the next generation could have appropriated if the current generation had not contributed by its action to a net improvement or deterioration of what the following generation would otherwise have inherited.* This third interpretation takes into account not just the natural improvements or deteriorations that have occurred since prehistoric times. It also includes the accumulated product of the physical and intellectual activities of the generations which preceded the current one. The only thing we need to do then is to consider what would have been the situation of each generation in terms of external resources (both natural and cultural), not in the absence of all previous generations, but rather in the absence of the *single preceding* generation.

In the language of savings and dissavings, that means that savings are authorised, whereas such a Lockean proviso in no way authorises dissavings, *unless* the environment which the next generation will inherit has deteriorated compared to what we ourselves inherited, for reasons unrelated to our own activity (i.e. natural events or resulting from the activity of previous generations). This implies, for example, that any climate change resulting from strictly historical emissions (i.e. resulting from our ancestors' activities only, not from ours) and which would lead to a worse climate for the next generation than for our own, would not imply for us any specific obligations – which by the way shows that the question of historical emissions raises not just transgenerational equity issues (Gosseries, 2004b), but also issues relating to intergenerational equity. While what would be defended in this case by a proponent of indirect reciprocity is not entirely clear, the egalitarian view would clearly differ here from the Lockean one. Be that as it may, we

are concentrating here on possible differences between “at least as much as what prehistoric generations had”, “at least as much as what G+1 would have had in the absence of any earlier generations” and “at least as much as G+1 would have inherited in the absence of G only”. And the specificity of the Lockean approach is to focus on the question of knowing to what extent my existence deprives someone else of something he could otherwise have benefited from.

7. RAWLSIAN EGALITARIANISM

Rawls, in his masterpiece “A theory of Justice” (1999: §44), is aware of utilitarianism’s major difficulties in the intergenerational context. At the same time, he considers that moving away, be it minimally, from the initial condition of prehistoric men is necessary, not just for reasons of efficiency, but even for reasons of justice. How can both these concerns be accommodated? By defending a “two-stage” model in which a steady state phase follows an accumulation phase. During the accumulation phase, principles are identical to those of utilitarianism (compulsory savings). But this phase is supposed to have a limited duration. And the rationale underlying the need for such accumulation is totally unrelated with maximising the size of the intergenerational welfare pie. For Rawls, the aim of the accumulation phase is to allow economic affluence to build up so that at least minimal stability to just institutions can be ensured. As soon as this point is reached, accumulation ceases to be an obligation and the steady state phase begins. And for that second phase, the principle defended by Rawls is identical to the one defended by the indirect reciprocity view.

Like Rawls, we believe that such a “two-stage” approach is necessary. We also believe that he is justified in defending the principle of an obligation to save during the accumulation phase (for a full discussion: Gaspart & Gosseries, 2007). However, this second thesis is not self-evident. What is potentially shocking for an egalitarian like Rawls, is to propose for the accumulation phase a principle of compulsory savings that goes against a concern for the worst off. In fact, from this viewpoint it is unfair, strictly speaking, to demand savings from the first generations. Doing so would bring about an intergenerational world where the least well off are not as well off as they could possibly be. Merely sticking to a prohibition on dissavings would not have such consequences. Rawls is aware of this problem but still insists on an obligation to save. Let us attempt a brief defence of Rawls’ position the principle applicable to the accumulation phase.

His theory is not just egalitarian, it is also liberal but in a very specific sense which must not be confused with its usual meaning in the designation of certain political actors on the European political arena. It is liberal in the sense that pursuing the improvement of the situation of the least well off must be done within the constraints we refer to as “basic liberties”. In other words, defending those few basic liberties (physical

¹ I owe this improved formulation to P. Vallentyne

integrity, freedom of speech, etc.) takes priority over the objective of improving the social and economic condition of the underprivileged. It could then be said that the reason why a violation of the egalitarian objective is allowable in the accumulation phase, has to do with the aim of setting up as quickly as possible institutions which could then be able to defend personal basic liberties and that this latter objective takes priority over the former. Now, if we can demonstrate that the richer (in terms of GDP) a democratic State becomes, the more likely are its chances of retaining its democratic character, we are in possession of an empirical argument able to support the claim that setting up equitable institutions requires a certain level of affluence. Although we can agree with the "two-stage" theory and with the principle Rawls defends for the accumulation phase, we believe that an upholder of equality of opportunity should be defending a different principle in the steady state phase. And what principle should that be?

8. EGALITARIANISM REVISITED

We do not believe that Rawls is entirely true to the demands of egalitarianism in the steady state phase. We consider that *prohibiting dissavings* should go hand in hand with prohibiting savings. This may sound absurd. Is it at all unfair for parents to voluntarily scrimp and save to provide a better life for their children than the one they could have had themselves? Who could the victims of such allegedly unjust behaviour be? The answer to this question is that the victims would be the least well off members of the generation of such parents. Let us consider the situation of a generation anticipating that, at the end of its existence, it might have transferred a surplus to the next generation in comparison with what it had received from the previous generation. The theory we are defending here is that it should not be the next generation taken as a group that should be benefiting from this surplus, but rather the least well off members of the current generation. To transfer a surplus into the future sacrifices to the same extent today's least well off. It is only if each generation adheres to the principle of prohibiting both *savings* and *dissavings* that the intergenerational world that we will build can be seen as one where the least well off, regardless of the generation to which they belong, will be better off than they would have been in any other alternatively organised world. Note that this prohibition on savings has nothing to do with a preference for the members of our own generation. It is derived from a generational impartial concern for improving the situation of the least well off, whichever generation they belong to. Admittedly if this surplus were passed on to the next generation, it could well benefit the least well off members of that generation. But what we would have to make sure of is that the least well off members of our own generation would not end up then in a worse situation than the one experienced by the least privileged of the next generation.

We cannot go into the details here of this rather counter-intuitive principle, or which at least seems to be so at first sight (for a more extensive defence: Gosseries, 2004a: chap. 4; Gaspart & Gosseries, 2007). But we must emphasise that even if such an approach is not totally incompatible with the idea of growth, it should certainly be contrasted with other ideas in the "anti-growth" family of arguments (see Gosseries, 2004a: pp224-25, Gaspart & Gosseries, 2007). Among these, let us mention four, all different from the one defended here. The first consists in stating that growth, in so far as it would lead to increased inequalities internationally, would be unfair in this respect. The second underlines that the adoption by a State of a policy to encourage economic growth is contrary to the principle according to which the State should remain neutral as regards people's varying concepts of what the good life should be (Bonin, 1997). The third states that growth is futile, if not counter-productive, from the point of view of really worthwhile conceptions of the good life. A fourth argument considers that growth, in so far as it mobilises large amounts of physical resources, would not be sustainable at the current rate. Each of these four arguments deserves closer scrutiny, both on their factual assumptions and their normative plausibility. However, it should be stressed that intergenerational egalitarianism as developed here presents an argument which differs from those, notwithstanding the fact that it does refer to a concern for justice as do the first two "anti-growth" arguments outlined above.

It is also clear now that the conclusions of an egalitarian theory do not converge, in the steady-state phase, with those of for instance, indirect reciprocity. Furthermore, there is another significant angle from which the proposed convergence is absent. This becomes clearly apparent if we consider a future natural phenomenon (e.g. an earthquake) negatively impacting the fate of the next generation. From an *intra*-generational point of view, a destructive earthquake must give rise to compensation from those who did not suffer its effects, so as to mitigate as much as possible, the negative consequences for the unlucky few of a phenomenon they were not responsible for. For a luck egalitarian, any disadvantage arising out of circumstances beyond people's control should give rise to compensation from the rest of society. A congenital handicap or a particular mother tongue are characteristics which are unquestionably circumstances affecting those concerned. A luck egalitarian would immediately add however that if disadvantages arise out of people's own choices, their costs should be borne in principle by the very people who made such choices. The debate in France on local mountain communities having to foot the bill for rescue missions to save people practising dangerous sports, or the debate in Austria concerning the non-reimbursement of hospital expenses for alcoholic coma induced by particular drinking habits in the younger population, clearly point in the direction of practices which could well be viewed by an egalitarian as the result of a choice. In such cases, it would not be society's duty to shoulder the burden of its cost (on choice/circumstance: Dworkin, 2000).



How can we transpose this choice/circumstance distinction into the intergenerational field? Let us go back to our previous example. If we were able—by extraordinary means—to predict the occurrence and magnitude of such future earthquakes and if we were able to demonstrate that the next generation will be particularly affected by them although, we, the current generation, would not be affected in the slightest, the current generation would then be under a *savings obligation* so as to ensure that, as a result of these earthquakes, the next generation does not find itself in more unfavourable circumstances than the current one. This obligation to save arises out of a very different logic from one based on utilitarianism or the one included in the accumulation phase of the egalitarian theory. But above all, it does not seem for example, that an indirect reciprocity approach could ever *compel* us to transfer *more* to the next generation than what we received from the previous one.

9. BRUNDTLAND'S SUFFICIENTARIANISM

We are now well prepared to support the assumption that Brundtland's definition of sustainable development would not be a sufficient safeguard for intergenerational justice. As mentioned above, development is only said to be sustainable if it "Meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987: p53). Contrast this formulation with Daly's, according to which "... the basic needs of the present should always take precedence over the basic needs of the future but the basic needs of the future should take precedence over the extravagant luxury of the present" (Daly, 1996: p36). Brundtland's reference to the concept of need can admittedly be understood in its broader or narrower meaning. To our mind, the most appropriate interpretation is that of "basic needs". But even with a less restrictive version, there is still in such a definition the idea that once everyone's needs are covered, fairness does not require any further redistribution. As long as everyone's basic needs are covered, this "sufficientarianism" based on the satisfaction of needs would not demand, for example, that a person born with a missing finger due to genetic malformation, should be receiving compensation if that missing finger does not prevent him from satisfying his basic needs (on sufficientarianism: Casal, 2007).

In the view of a luck egalitarian, the residual injustice following Brundtland's sufficientarianism in that case, is twofold. First, it authorises a possibly significant degree of dissavings as long as it is compatible with the capacity of the next generation to provide for its own needs. Second, by authorising generational savings—that is as long as it does not compromise the capacity of all the members of the current generation to satisfy their own needs, it is not responding to the egalitarian requirement for prohibiting savings on principle out of concern for the least well off in our own current generation.

Let us be quite clear: this is not an internal criticism of Brundtland's theory. Furthermore, if space permitted, we could certainly try and demonstrate with far greater subtlety the extent to which Brundtland's report probably opens the way to alternative interpretations. Nevertheless, what is of importance here, is that those who consider that luck egalitarianism is the most plausible theory of justice when dealing with intragenerational allocation issues have no reason to abandon this theory when moving on to intergenerational issues. Egalitarians should certainly reject Brundtland's theory as being insufficient.

10. CONCLUSION

This short paper is based on a set of simplifying assumptions. We did not, for example, consider the composition of the basket of goods to be transferred to the next generation (e.g. can the oil or the biodiversity that we are squandering be replaced by motorways or cultural assets?). We only broached on a very general level the issue of equitable intergenerational transmission, on the basis of two categories (savings/dissavings) and three modalities (prohibition, authorisation and obligation). Nevertheless, this synopsis has allowed us to highlight two important points. Firstly, using a very simplified framework, one can see in outline some very different operational principles. We can observe for example that both the utilitarians and the egalitarians (in the accumulation phase and in certain limited assumptions in the steady state phase) include the generational savings obligation in their theories, albeit for very different reasons. We can also see that the dissavings prohibition option is to be taken seriously by egalitarians in the steady state phase. Finally, are also worth noting the departures from the dissavings prohibition that are present in the Lockean or sufficientarian approaches. Secondly, it is now obvious that the standard approach to sustainable development as Brundtland views it is by no means the only option. And it is clearly problematic on two counts for an egalitarian.

In point of fact, these theories of justice provide resources for thinking not just along different lines, but also for broaching the issue of intergenerational justice through the prism of various logics which, if they are understood in depth, can generate a multiplicity of implications. This is particularly true once the ultra-simplified world represented here is enriched with a set of additional variables to bring it closer to the real world. Each of these theories can respond differently for example to demographic fluctuations, the case of the indirect reciprocity view being probably the most emblematic on this count. For certain theories, population changes would modify what we owe to the next generation, whereas for others, it would in no way alter the magnitude of our intergenerational obligations. Similarly, the degree to which descending intergenerational altruism turns out to be significant will affect, to a greater or lesser degree, our obligations to the next generation depending on the theory which is adopted. Generational overlap (or its absence) is also more significant in

TABLE 1: Synopsis of the various intergenerational theories of justice

	Savings	Dissavings
Indirect reciprocity	Authorised	Prohibited
Utilitarianism	Mandatory	Prohibited
Lockean proviso	Authorised	Prohibited, unless ...
Rawlsian Egalitarianism	Phase 1: Mandatory Phase 2: Authorised	Prohibited
Egalitarianism revisited	Phase 1: Mandatory Phase 2: Prohibited, unless ...	Phase 1: Prohibited Phase 2: Prohibited, unless ...
Brundtland's Sufficiency	Authorised, unless ...	Authorised, unless ...

some approaches than in others, particularly in the case of mutual advantage theories. And the fact that a previous generation has, or has not, fulfilled its own obligations (non-compliance issue) will affect, also in varying degrees, the obligations that each of these theories places on the current generation. It is illuminating in this regard to have in mind how a Lockean proviso tackles the disregard, by a generation previous to our own, of its intergenerational obligations; and how an egalitarian theory can take on board the risk of non-compliance with its intergenerational obligations by one of the generations that comes after us.

As we can see, taking the standard theories on justice seriously is fairly enlightening as to the various possible ways of tackling the issue of our intergenerational obligations. To be sure, there is still a long way to go before we can define the precise contours of these obligations... and set up the institutions to enforce them.

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