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# Future Generations and Contemporary Ethics

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#### ABSTRACT

Future generations do not exist, and are not determinate in their make-up. The moral significance of future generations cannot be accounted for on the basis of a purely individualistic ethic. Yet future generations are morally significant. The Person-Affecting Principle, that (roughly) only acts which are likely to affect particular individuals are morally significant, must be augmented in such a way as to take into account the moral significance of *Homo sapiens*, a holistic entity which certainly does exist. Recent contributions to *Environmental Values* by Alan Carter and Ernest Partridge are criticised (but not entirely rejected).

# KEY WORDS

Future generations, person-affecting principle, individualistic ethics, holistic ethics

There are conclusions from which a great many of us would recoil in disgust. (Indeed, we might recoil from those who did not so recoil.) Such a conclusion is all the more disturbing when it follows, or appears to follow, from (evidently) acceptable premises, leaving us (evidently) with no viable means of avoiding it. Perhaps then we really ought to accept the conclusion after all – or perhaps we need to rethink our premises and presumptions more deeply. When such conclusions are powerfully supported they demand a response.

Very disturbing indeed is the conclusion that we have no moral obligation to respect the welfare of future generations. That we are morally obliged to appropriately respect the interests of future generations is almost universally accepted in principle (if not so widely in practice). Certainly it is true that how we act will profoundly affect the world in which future generations live. It will affect them economically, socially, culturally, and politically, and it will affect the living and non-living environment in which they live. *Prima facie* this

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suggests that we are morally obliged to respect their interests, at least to some appropriate extent. As well as the many difficulties in determining just how we ought to put our concern for them into practice (and balance it with our concern for our contemporaries), there is a logically prior problem of whether it is possible to have obligations to future generations, or to make the lives of future individuals better or worse. Ethics as it has traditionally been pursued, in its many forms, has great difficulties in providing a rationale for our having obligations to future generations. Moreover, there is a powerful argument, which I shall shortly review, to the effect that it is not *possible* for us to have such obligations. Recent contributions to *Environmental Values*, by Alan Carter and Ernest Partridge, have canvassed differing ways of defeating that argument and avoiding that distasteful conclusion. I quite agree that the conclusion is to be rejected. However, I argue that their respective reasons for rejecting the conclusion are not sufficient, and I argue for what I propose as a preferable alternative.

The fundamental difficulty about our having obligations to future generations is the simple fact that they do not exist.<sup>1</sup> There is no one already here from the future, no one who has rights or toward whom we have duties, no one whose utility must be considered, no one who might be helped or hurt. There is no one from future generations here at all. This line of thought will strike most people, certainly most non-philosophers, as being silly and selfish. Of course future generations do not exist now. But they are going to exist, and it is not fair for us to muck things up for them before they even get here. Some of the more philosophically inclined might perhaps invoke a Rawlsian idea of intergenerational justice, whereby our position in time does not affect our moral entitlements. The trouble with any such response is that it tacitly assigns to future generations a shadowy sort of existence, or pre-existence, as if they were actors waiting in the wings for their eventual entrance. In point of fact, though, there is no one waiting anywhere, no particular them for whom matters might be better or worse. Not just non-existent, they are indeterminate. Worse even than that, their identity tends to depend on (among other things) our actions which affect future living conditions. The problem was posed by Thomas Schwartz (1978). As well as the indeterminacy of future generations and their contingency on the very actions determining their living conditions, there is a further (implicit) pivot on which the argument turns: this is the Person-Affecting Principle (PAP). As explicitly formulated by Partridge (2002, p. 81) the principle is that

*only* acts which affect or can reasonably be expected to affect (i.e. benefit or harm) the ongoing lives of particular individuals can count as morally significant.

This is relevant to the actual situation which confronts us now. No temporally distant person is ever made worse (or better) off by any of our actions, as they would not otherwise be better (worse) off because they would not otherwise be at all.

In elaboration, consider the fact that when an ovum is fertilised there are usually millions of spermatozoans in the area. Had the prospective parents stayed up to watch the late movie, or not done so, as the case might be, a different child would have resulted, or no child at all. It is rather like Tristram Shandy's father winding the clock. Things would have been different had someone changed lanes suddenly in front of one of the prospective parents earlier that day, had the share market gone up or down, had one of them had watery eyes because of the air pollution, had someone been hired or fired by a mining company or a flower shop, ... It is not just what specific children a couple would have. Consequences rapidly multiply, and different people meet and marry, having other children in other numbers and at different times and with different partners. As well as wars, presidential elections, and what we do about the Kyoto Protocol, a butterfly flapping its wings anywhere on earth can blow away an entire generation and fan another one into existence.

Carter (2001) argues that even if we accept the PAP, we are not forced to accept the conclusion that the effects of our actions on the living conditions of future generations are morally indifferent. He maintains that individual actions can affect future individuals. Partridge (2002), in turn, accepts the Schwartzian argument as a *reductio ad absurdum* of the PAP and offers his own way of avoiding the outcome. Carter replies (2002). In this article I offer my own more radical alternative. First to Carter's discussion of the problem.

Carter argues that an individual's actions now can harm (or benefit) particular future individuals:

Certainly, a person would be unable to harm any future person if *every* future person's existence was dependent upon *every* one of his or her otherwise harmful actions. But it is absurd to think that anyone has the power through *every* one of his or her environmentally destructive activities to determine the coming into existence of *every* future person. . . . highly improbable . . . [Then, imagining a scenario concerning a decision about where to bury a container of radioactive waste] It seems improbable in the extreme that the mere act of burying the container at site A would determine the identities of every future person. (2001, pp. 442–3)

It may be that this generation, as a whole, does alter the entire make-up of future generations – and thus affects no individual. Yet, Carter is arguing, what we do as individuals does not alter entire generations, and therefore does affect future individuals. Accordingly, the moral onus is properly on individuals. According to Carter (2001, p. 444), then, the argument of the Non-identity Problem

... appears to generate the seemingly paradoxical implication that, whereas we, as individuals, can harm future generations, the collectivity which all presently existing humans constitute cannot. The simplest way to avoid this paradox, it seems to me, is to avoid being mesmerised by collectivities.

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Carter offers no reason why he considers it so implausible that one individual might, in trivial actions, affect the make-up of an entire generation. For my own part, I would consider it a virtual certainty, due to the 'butterfly effect', if we are looking forward more than (at most) a year or two. (If nothing else, all of those sperm would make it millions to one against any particular person being conceived in an alternative future, even if the same two people conceived at very nearly the same time. And if we buried the container at site A, we would have affected traffic on one road rather than another, sending dominos falling in all directions. Etc.) Indeed, I find it difficult to imagine how the same person *could* happen in an reasonably distant alternative world. It could only be a theoretical possibility, like winning the lottery several time in a row.

Whatever the odds, Carter's position still leaves us with an awkward moral difficulty. Suppose that we accept, as I believe counterfactually, that specific future individuals are injured, which same individuals might not have been injured, when we act contrary to the welfare of future generations. We can still pose the conceptual hypothetical question of whether we would be morally free, were no specific individuals at all to be affected, to act as we pleased with regard to future generations? Even as a hypothetical, such a question demands an answer. Were we able to do something that caused a great deal of misery, but only to people who are now indeterminate (even in principle), would we be morally blameless were we to go ahead regardless? Some might perhaps accept such a conclusion. As for me, I would look for some more plausible alternative. I am inclined to see Carter's argument as a last-ditch attempt to save a way of thinking which would be better abandoned. I suggest that we ought not to be mesmerised by an exclusive concern for individuals (conceived of as particular persons). Nor, for that matter, ought we to be mesmerised by 'collectivities' of such individuals. We need, I believe, to reconsider the nature of ethics, and its preoccupation with individual persons, and also to reconsider the nature of humanity. I think it also true that we need to reconsider, in some ways, what individuals are and also what their morally considerable interests might be.

It might be tempting to try and side-step the problem. One response to the problem is to claim that even if there are no particular persons who will certainly come to exist and have things better or worse for them, there will still be future generations (unless we go totally mad). Though their composition may be indeterminate, the generations themselves will certainly come. We are to take the generations as being morally significant in their own right, and not via their individual members. Though I shall argue later that there is a distorted grain of truth in this, this response also fails. Such terms as *future generations* and *those who will be alive in the year 2345* only appear to have determinate referents. They will only have a determinate identity when they happen, and everything we do affects which lot of people are going to happen. No particular (reasonably distant) future generation will be made worse or better off by anything we do. Rather, in that part of time some other generation will be made to be.

Even so, a world in which there is a great deal of misery seems evidently worse than one where there is much happiness and very little misery. This seems so, even if it is different people who will have the happiness or misery. It certainly seems so to Partridge:

It appears, then, that if it is wrong to harm someone by causing injury *to* that person, it is equally wrong to be responsible for the existence of a life that suffers injury, even if the cause of that injury to the latter person is a *sine qua non* of that person's existence.... What is lacking is an argument to support those intuitions. (2002, p. 80)

Partridge finds the basis of an argument for these intuitions in a rejection of the PAP. Or at least we should amend it to leave out the *only*. Acts which affect particular individuals are morally assessable, but so too are some other acts. I believe that so far he is correct. He writes that:

[E]nvironmental policy makers are choosing among *different populations with varying life-prospects for those populations* ... [W]e have a forced choice of better or worse living conditions for whomever may live in the future ... And these remain morally significant decisions, even though they are not decisions that will alter the quality of eventual individual lives ... one is faced with a forced choice between hypothetical populations with variable and discernible degrees of value in their lives. (2002, pp. 81, 83)

I would agree that it would be wrong knowingly to bring about generations whose lives were of less than neutral value, but if they were to have lives worth having, what is it that makes one outcome better than another? There is no determinate person nor determinate generation affected one way or another. Partridge gives us no clear answer.

In a footnote, he tells us that:

I am deliberately avoiding adherence to one or another moral theory. That 'value of lives' is open to various interpretations – as *happiness* or *preference satisfaction* (utilitarianism), *rights, self-realisation* (Aristotle), or *justice as fairness* (Rawls). (2002, p. 84)

But what theory can deliver the goods for us? I have already noted how Rawls cannot help us here. Nor can any self-realisation or rights theory, for similar reasons. Indeterminacy militates against respecting vague maybes as ends-in-themselves. If we go beyond the PAP and try to rely on some Factor X, we have to find a workable X. And is what we need a theory about the 'value of lives'?

A utilitarian theory, according to which we ought to promote happiness rather than misery, is attractive on the surface – and has, I believe, a trace element of validity to it. Yet any such theory faces fundamental problems, and also fails. Let us start by asking about the sort of utilitarianism we are to follow. The crunch question is *not* that of what good is it we are to maximise. The fundamental

problems here persist however we define the good. Are we to try to bring about the greatest total amount of good? (Let us also set aside here the problem of the just distribution of that which is good, whether between individuals or between generations, a notorious problem for utilitarianism.) While the principle of maximising the total amount of good might seem appealing to start with, it has been pointed out, by Derek Parfit in particular (1982, 1984), that logically this would imply a, to use his term, Repugnant Conclusion. We would have to accept the conclusion that adding people to the population would be a good thing to do, so long as the additional people had lives with a balance of good over bad, and so long as they did not detract by as much in total from other people's lives. The optimum would be astronomical numbers of people having lives just barely worth having, inasmuch as their numbers, greatly multiplying a small balance of good over bad, would have the greatest possible total balance of good over bad. It seems a depressing thought, all those people grubbing along with lives hardly worth having, and little hope of betterment in, as I imagine it, a world of plastic, silicon and soy beans. Yet for whom is this a bad thing? It is not a matter of these people having marginal lives rather than good ones. They either exist with lives slightly worth having, or they do not exist at all. These are the only alternatives for those people. Still, there seems little imperative to bring such a world about.

Perhaps, instead of trying to bring the greatest total amount of good, the thing to do would be to work toward the greatest average amount of happiness. It would seem preferable to have far fewer people having far better lives. (But for whom would it be better?) Yet the principle that we should maximise the average also has unpalatable implications. (It might even raise questions about whether we should eliminate those with unhappy lives, or even those happy people whose happiness was below average. But let us set aside considerations of homicide.) As Parfit points out, we might elect to utilise our environment at an unsustainable rate whilst lowering our numbers by natural attrition and low birth rates. Thereby we might have very enjoyable lives, happier than if we practiced sustainable lifestyles. In the end we might elect not to reproduce at all, allowing the human race to go extinct (presumably the last happy few would be tended by robots). This would then be a moral obligation, had we good reason to believe that this course of action would bring about the greatest average happiness. We might query whether this were a possible scenario, a contingently factual question. But suppose this were a conceptual possibility, would the outcome be anything less than a reduction to absurdity of the idea? Remember that we cannot escape by taking the operative principle to be that we ought to maximise the average happiness for those individuals who do or would exist anyway. Due to the indeterminacy of future generations, that would leave only our contemporaries as objects of moral concern.

Utilitarianism, I conclude, cannot make good the short-fall of the PAP, at least so far as it is concerned with the utility of individual persons. I offer the thought that we need to go beyond an exclusive preoccupation with individual

persons or their utility. Certainly when persons are affected that raises moral issues, yet there is more to it than individual persons or collectivities thereof. What else *can* we incorporate into our widened moral foundation? I can think of three possibilities:

- (a) It might be that we need a sort of deontological ethic according to which certain acts are right or wrong according to their character, where their character is determined not just by how persons are treated. Kantian, Rawlsian, or other deontological ethical systems might perhaps be subtheories concerned with dealings between persons.
- (b) We might perhaps adopt a virtue ethic according to which having a virtuous/ sound/healthy character necessarily includes or excludes certain sorts of activity, and according to which a callous disregard for future generations is ruled out as being incompatible with a sound character.

These two are certainly not mutually exclusive. Neither are they incompatible with what I identify as the third possible way of widening our moral base beyond an exclusive regard for individual persons:

(c) We might regard *Homo sapiens* or, if one prefers, humanity itself as being an object of moral concern.

I definitely accept (c), an acceptance of which allows for a broader approach to (a) and (b). It also allows for a broader version of utilitarianism.

That I accept (c) may strike some people as absurd. Is not humanity, or *Homo sapiens*, just the aggregate of all those, and only those, who are human? That aggregate, of course, changes all the time. On this view, future generations and future *Homo sapiens* are really the same, and are therefore equally indeterminate. Having rejected the former I must also reject the latter as being of indeterminate identity, not subject to itself being injured or benefited. However, I would make the point that a species, *Homo sapiens* or humanity in particular, is best not thought of as a collection or aggregate. To be sure, the very term *species* (Latin: appearance, kind, quality) does suggest that a species is the set of whatever meets a particular specification. From Aristotle down to relatively recent times, biology tried to operate on that assumption. This was in the face of severe difficulties. For some species, it is impossible to identify any characteristic which every member of the species has. Moreover, species do things which collections are incapable of doing. As David Hull, a philosopher of biology put it (1981, p 146):<sup>2</sup>

I am not sure why, but in the past philosophers have not realised that the characteristics usually attributed to species make no sense when attributed to classes as timeless entities. Species are the sorts of thing which evolve, split, bud off new species, go extinct, etc. Classes are not the sort of things which can do any of the preceding.

For such reasons, the biological orthodoxy emerging over recent years has been that a species is not a collection, but a spatio-temporally located *individual*, an entity in its own right.

A species is, moreover, a *living* entity. This may seem like a strange sort of thing, scattered through space, but, then, biology is full of very strange things. Still, we must ask, what is a living entity? As part of a re-think of ethics, we need to reconsider what it is for an entity of whatever sort to be alive. How could a species conceivably be said to be alive? In recent decades there has been much discussion of what it is to be alive. An emerging consensus is that a living entity is not a *thing* of some sort. A living entity requires a body, obviously, but it is not the body. Rather, the body is where the living entity is happening. The living entity is best thought of as an ongoing *process*. As the distinguished biologist Lynn Margulis explains it:<sup>3</sup>

Life is distinguished not by its chemical constituents but by the behavior of its chemicals. The question 'What is life?' is thus a linguistic trap. To answer according to the rules of grammar, we must supply a noun, a thing. But life on Earth is more like a verb. (Margulis and Sagan 1995, p. 22)

Drawing on Margulis and other sources, I offer the following summary characterisation of life:<sup>4</sup>

A living entity is an ongoing process, occurring in a dissipative thermodynamically open system, organising and maintaining itself in near equilibrium with its environment by means of high levels of homeorhetic feedback sub-systems.<sup>5</sup>

Every human being and every other individual organism on earth, be it plant, animal, fungus, or whatever else, meets this characterisation. For that matter, every living organism not from earth would also meet it. Whatever is out there in distant space may be strange beyond our current capacity to imagine, and we can bet that it will not have DNA, but if it meets this characterisation it is alive. Symbiotic entities such as lichen [alga/fungus] likewise meet this characterisation, and so too do species. In particular, it is met by the species *Homo sapiens*.

If humanity is an entity, rather than a collection, one which is an ongoing process rather than a thing, we can start to make sense of the idea of obligations to future generations. Instead of being a collection of indeterminate individuals who do not and might not exist, future generations are indeterminate future sections of a real and present living entity existing right now. Consider: a smoking adolescent is probably not going to kill her-/himself in the very near future, but might well be detracting from the quality or quantity of life of the somewhat indeterminate person the adolescent might some day become. The adolescent will make decisions and have experiences which will shape the future person s/he will become, but that indeterminate future person is nonetheless a future section of what is really the same person, the same ongoing life-process.

I would therefore think it unwise for the adolescent to smoke. More to the point at hand is that what we do now, individually and collectively, has an impact on future sections of the *Homo sapiens* life-process.<sup>6</sup> How the adolescent affects his future self is a matter of prudence rather than of morality, but how we affect others is subject to moral assessment. *Homo sapiens* being a distinct being, how we treat it is a moral matter. If what I am suggesting is correct, then to be viable the PAP must be widened at least enough to assert something like that

*only* acts which affect or can reasonably be affected to affect (i.e. benefit or harm) the ongoing lives of particular individual persons or of the species *Homo sapiens* can count as morally significant.

Still, the argument has a way to go. We may well question whether an entity with no consciousness can have interests at all, let alone interests worthy of moral consideration. Yet I would point out that we individual humans have interests, morally considerable ones, which do not and may never impinge on our consciousness. We are wronged if we are slandered behind our back, even if it never affects us in any way. A woman is wronged if she is raped when unconsciousness. Nor could a life which was worth living but lived entirely on an 'experience machine' be as good as a life which was experientially the same but lived in reality.<sup>7</sup> Certainly it is true that, biologically, we evolved consciousness to serve our interests, rather than developed interests because we have consciousness – though our consciousness does generate further interests. I characterise interests as follows:

A living entity has an interest in whatever contributes to its coherent and effective functioning as the particular ongoing life-process which it is, with its own particular character. The interests of a human individual are complex, reflecting our complex physical, mental, and social character. Contrary to our interests is whatever tends against our coherent effective functioning.

Physical and mental disorders, from colds to cancer, including psychoses, neuroses, and stress, are instances of breakdown of our coherent effective functioning, of some breakdown in our ability to maintain ourselves within our favourable range of states. Death, of course, is the ultimate breakdown.

Even so, it will inevitably be remarked, a species exists only through its individual species-members (and becomes extinct when the last one expires). How then could it possibly have interests except as the aggregated interests of its individual species-members? In response we might similarly note that an individual human exists only through her/his bodily cells (plus, to be comprehensive, some material which cannot properly be described as cells). Yet what is good for us is not some grand integrated total of what is good for our cells, etc. We have identity and interests on our own level, and not just as an aggregate. So too does a species, as witness the interest some species have in being preyed

upon. Thereby the health and environmental balance of the species is maintained. Predation benefits the holistic entity, even though individual plants may suffer in the process. Humanity likewise has interests which are not just the aggregated interests of individual humans.

I hasten to add, I hope unnecessarily, that I am thoroughly disgusted by the thought of innocent human lives being sacrificed for the supposed greater good of the human race. I would prefer to avoid that sort of thing even when it comes to the not-so-innocent. It is not just that we humans have a higher moral significance than do deer. Unlike them we have the capacity to think and act knowingly and rationally about ourselves and our future. With reason, augmented by wisdom, we could live lives which were good lives and which contributed to, or at least were consistent with, the long term wellbeing of *Homo sapiens*. Unfortunately, we humans more often display ingenuity than wisdom. With insufficient wisdom, we may some day have to face some nasty choices. Whether we are talking about future individual persons, future generations, or contemporary individual persons, part of recognising that they have moral significance is accepting that we may have to sacrifice some of our own interests for some of theirs.

Granted that we ought to give appropriate moral respect to the interests of future generations, it is not easy to determine what that requires of us. To start with, we have the difficult question of what the interests of future generations will be. A person in 1903 could not have envisioned life in 2003, nor well declared what we needed for good lives. Indeed, we may not entirely know that even now. How then are we in our turn to know what people will need many years hence? Knowledge of ourselves and of our world, our ways of relating to ourselves and to our world, and our attitudes and values are all sure to change. That being so, some would suggest that inasmuch as we cannot know the needs of future generations it is pointless to inconvenience ourselves for them.

Nevertheless, for that ongoing life process which is the species *Homo sapiens* to carry on coherently and effectively functioning, it will have to maintain an effective and continuing functional interaction with the world around it. For that to happen, we would have to make sure that the world of our interactions continues to function healthily. Even if substantial numbers of us were some day settled on space-stations or distant planets, there would be complex physical and chemical interactions to be maintained. And there would be our psychological needs to be met. After many tens of thousands of years living and evolving as members of biotic communities, it would be strange indeed were our healthy psychologically functioning not to involve some interaction with other lifeforms. There is a considerable body of evidence that we, at least most of us, do benefit psychologically from contact with non-human life, and that we suffer from its absence. E. O. Wilson argued (1984) that, as a result of our evolutionary background we have come to have, characteristically, a love for life around us

and a psychological need for it to be there – a need that is not satisfied by human life only. He deemed this putative need *biophilia*. There is indeed a wide variety of evidence to support this view, evidence which to me appears to confirm the self-evident. We need and receive from the biosphere more than bread alone.

That as an ongoing species we do in many ways need a functional world, living and non-living, in which to live seems tritely obvious. Yet that we have an obligation to future generations, which we now recognise as an obligation to Homo sapiens or humanity, on those grounds alone has implications for how we order our institutions and our ways of living, and concerning whether and how we manage our numbers. Accordingly, we need to - have an obligation to maintain the internal health of humanity as well as that of the world. Unfortunately, history warns us that the perils of remembering that obligation are very nearly on a par with those of forgetting it. Communists, fascists, and religious extremists of various persuasions have all called upon us to reorganise our lives and make sacrifices in order to bring about the sort of human life deemed by them to be most desirable. On the most physical level, the Nazis tried to protect the health of humanity (or, rather, their part of it) through their loathsome programme of eugenics, removing from the gene pool those thought to pollute it. If those sorts of things are the best we can do, then we serve future generations far better by disregarding them.

I believe that we can do better than that, with caution, with compassion, and with much needed humility in the face of our shortness of vision and the range of our presumptuous self-conceit. The conception of humanity as an entity with morally considerable interests can give us some help here. It can, for instance, give us a useful point of reference with respect to the disquieting matter of genetic engineering. To be sure, if we can get rid of the haemophilia gene, so much the better. Yet we must be very careful about how far we go down that slope. In their genetic and moral ignorance, the Nazis gave us a strong precedent for how not to protect the human gene pool. Instead of undertaking to improve the gene pool - an enterprise for which we lack the knowledge, the wisdom, and too often the moral character - a better approach would to be to refrain from doing things which do, or plausibly might, injure humanity by injuring the human genetic make-up. Literature offers us some horrible scenarios. Most of us feel appalled at the idea of creating the mentally and physically stunted Epsilons of Brave New World - yet life is slightly worth living for them, and their being made that way is a condition of *their* being made at all. Otherwise, other people would have resulted. For the Epsilons, things could not have been any better. Nor is any other person injured. Yet intentionally creating such individuals is to make of human life less than what it might and ought to be, debasing that flow of humanity which is humanity as a whole. On a purely individualistic ethic, such a debasement cannot clearly be faulted.8

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Living in fulfilling and sustainable relationships with ourselves and our environment are not, with all respect to Carter, objectives which can be achieved purely on the basis of an ethic focusing on individual persons.<sup>9</sup> If the PAP is to be maintained at all, it must be in some such revised form as that proposed above. Were we, collectively and individually, to treat individual persons in a morally appropriate manner, that would go a long way toward making human life sustainable (and worth sustaining), and our getting far closer to that ideal than we are now may well be a necessary condition for sustainability. Yet there are still humanity/future generations to be considered. If we did treat individual persons decently, our concern for humanity's future would then centre on sustaining the possibility of future wellbeing. With sustainably good ways of getting on among ourselves, our ensuring a sustainable future would be a matter of ensuring a sustainable accommodation with our environment.

Unfortunately, it is possible that our concern for the welfare of individual persons might conflict with our concern for future generations of humanity (even though there are no particular future persons involved). Parfit offers us a broad sort of scenario, which he appropriately calls Depletion, where we bring about a higher quality of life for people now and in the near future, at the cost of substantially lowered quality of life thereafter. Were such a scenario actually to occur, we might well have to face some very nasty decisions. Suppose, for instance, that we were producing more food than is sustainably possible, using agricultural methods which lessen our ability to produce food in the long run. There is a body of opinion which holds that this is indeed the case.<sup>10</sup> As it is, we are hardly producing enough to feed people now in the world, and on average a person somewhere in the world dies of malnutrition about every thirty seconds, most of the deaths being of children. It is an inspiring mantra of faith (whatever its statistical support) that there is enough food to go around, that the problem is in its distribution. Suppose that we made all efforts possible to rectify the situation. Suppose that instead of letting people starve, as we do now, we took care to distribute food as equitably as possible, and to grow the most nutritious crops (soy beans instead of beef, and all that). Suppose also that we were to try to use the most productive and sustainable agricultural methods possible. What if we did all that and we were only just keeping up, or people were still starving? Worse, perhaps it becomes apparent that sustainable agricultural methods would have to be considerably less productive. We might have to choose between saving lives of persons existing now, or acting to keep future indeterminate persons from starving and to protect the long-term quality of human life. Let us consider this only as a logically possible situation, without trying to decide on its factual accuracy.

The question remains, how are we to adjudicate a conflict between the interests of existent persons and those of *Homo sapiens* as a whole? There is no answer here that is automatic, easy and clearly correct. To start with, utilitarian-

ism cannot supply one. Certainly an assessment of probable outcomes can give us useful information and ought to be undertaken. Just as certainly we cannot just weigh up and maximise utility for persons. Not even in principle is there a definite answer. The future does not work that way. A fortiori, we cannot weigh up consequences for individual persons and balance them against the interests of humanity. The interests of future generations/humanity may not always outweigh those of individual persons. Clearly the interests of Homo sapiens would have to take precedence over those of many persons if the alternative were the certain extinction of Homo sapiens. Short of that, sooner or later we are going to have to do something about such matters as global atmospheric pollution, even at some inconvenience to ourselves. Yet if we are to make sacrifices for posterity, how many lives of currently starving children are we to trade off against how much lessening of our capacity to feed future people? We might decide to feed as many as we can right now in the hope, whether or not the belief, that we may be able to reduce our numbers and our demands on our environment by means other than the Four Horsemen. Or we might decide that a policy of protecting our agricultural sustainability is morally preferable in the long run. Utilitarianism cannot solve such moral quandaries for us.

Nor do I look to deontological ethics with any great hope. We cannot adjudicate between the competing rights of determinate and indeterminate starving persons. Much less can humanity take its place behind the veil of ignorance on an equal footing with individual persons – the only footing there possible. Nor is there clear way in which we can treat individual persons and Homo sapiens all as being ends-in-themselves in every circumstance. Personally, I am not convinced that it is consistently possible (let alone moral) even to treat individual persons as ends-in-themselves all the time. Supposing it were possible to treat all persons as ends-in-themselves, our adding Homo sapiens as an end-in-itself would be problematic in the Depletion scenario. Do we sacrifice individual persons for the sake of improving Homo sapiens's long term prospects? Yes if the alternative is extinction or massive misery, no if we can respect the vital interests of individual persons at a cost which is only slight (whatever 'slight' means here). To a point we can use either Homo sapiens or individual human persons as means to ends. Conceivably it might be possible for a deontologist to tackle the problem by means of some system of assigning ordinal priorities to interests. I would be pessimistic about such a project because in the process of life, differences of interests are more a matter of degree than of sharp differences of kind. There is also the question of whether any rule or principle can be without exception. In sum, the problem of future generations does not appear tractable on the basis of an individualistic ethic, even if we do (as we must) include Homo sapiens as a morally significant individual. Nonetheless, in the long-term, the welfare of humanity is the solution to the problem of future generations.11

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I would not care to leave it at that, though what I can offer further is only tentative and incomplete. I suggest that as well as recognising *Homo sapiens* as an object of moral concern we need to take a broader approach to ethics. That is, we need to not conceive of ethics as revolving around rules and principles to be followed. Not, to be sure, that any ethicist believes that ethics is *merely* a matter of following rules and principles of some sort. We ought to follow them with a morally good attitude. Virtue-ethicists turn things quite around and maintain that, while rules and principles have excellent uses, ethics is better conceived of as revolving around attitudes and dispositions, and, most fundamentally, as revolving around having a sound character. Such a character is *virtuous* in the classical sense, being strong, whole, healthy, and well functioning. By any account it is desirable for one to have a character which is strong, whole, healthy, and well functioning. I believe that it is a contingent truth about us humans, a fact which might have been otherwise, that to have such a character we must have the attribute of being *life-affirming*.

Central to being life-affirming is to affirm our own life. That is not the same as being selfish, greedy, or predatory. Indeed, such traits in humans are characteristically manifestations of an unhealthy character. That is, they are vices. Closer to the mark is flourishing and being true to oneself, having what Rousseau called amour de soi. To affirm one's life is to develop and maintain one's integrity, one's integrated wholeness, being true to the core values implicit in one's life. (Affirming one's life does not require hanging on to it at all costs and it may even be that sacrificing it is an affirmation of the core values of that life – as when a parent gives up her life for her child.) Part of living a healthy human life is having an openness to the world around us. Not all would accept Wilson's belief that we have an innate biophilia, but it is virtually undeniable that it is characteristic of humans to desire human company and to value good relations with other people. We evolved as social beings and were social beings well before we were human beings. To be sure, some people's lives have led them to desire only the company of pets or to be hermits entirely, and perhaps at that stage this is the best option left for them, but it is hard to conceive that a life could arrive at such a stage healthily. Misanthropy certainly is a symptom of poor health of character. Little healthier is callousness. An attitude of openness toward and affirmation of other human life is a much healthier sign.

And what of humanity as a whole? Some people profess no concern for humanity as a whole, as distinguished from individual humans, or deny that there is any such thing. Some profess no concern for humanity beyond the near future. For myself, I would *speculate* that indifference to the future prospects of the human life-process of which we are a part is a sign of a not fully healthy character. I can offer no rules, utilitarian or deontological, for how we are properly to treat the interests of individuals and humanity. I doubt that it can be a matter of rules. What it can be is a matter of attitude, a matter of respect for and affirmation of the quality and richness of life. With that, we can sometimes find our way where

no rules guide us. Without that, no rules can guide us to where we ought to go. So I do believe. Be these things as they may, we cannot base a call for respect for future generations on an ethic concerned only with individual humans. We can have an ethic of respect for future generations on the basis of a recognition that humanity is a morally considerable entity – or not at all.

'The smallest unit of health is a community.' (Wendell Berry)

#### NOTES

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<sup>1</sup> Let us assume that we are considering generations many years hence, when all people alive then are not yet alive now.

<sup>2</sup> See also his (1976).

<sup>3</sup> See also Sayer (1976), and Ho (1993). For a further discussion of the scientific history of the topic, with some informed speculation about future progress, see Murphy and O'Neill (1994).

<sup>4</sup> In my (2001).

<sup>5</sup> A *thermodynamically open* system is one which admits of an in- or outflow of energy in some form, such as matter, light, or heat. A system which does not admit of that is *closed*. In a *thermodynamically closed* system, the Second Law of Thermodynamics tells us, everything which happens brings about an increase of *entropy*, which is, roughly, a decrease of order. Life requires creating and maintaining high levels of order. A living entity is able to do this by taking in energy from its environment and passing it on in degraded form. Systems which do this are *dissipative* systems. Unlike other dissipative systems, such as hurricanes and refrigerators, living entities are able to maintain themselves in a range of states favourable to their continued functioning by means of vast, very vast, numbers of feedback systems. Following Margulis (1983), I adopt the term *homeorhetic*, rather than the more familiar *homeostatic*, because life maintains itself within a favourable range of states, but does not continually maintain constant states.

<sup>6</sup> For present purposes I shall use the terms *humanity* and *Homo sapiens* interchangeably. For convenience, I shall also use *person* and *human* interchangeably here, as the discussion does not take us into areas wherein their equation is problematic.

<sup>7</sup> I argue at much greater length for the moral significance of our unconscious as well as our conscious interests, in Ch. 3, 'A Matter of Interest', of my (1991).

<sup>8</sup> I have sketched some thoughts on this in (2001), a project which I propose to develop further.

<sup>9</sup> Being a biocentric rather than an anthropocentric ethicist, I would advocate that our relationship with our non-human environment be *just* as well as sustainable, but here I am concerned specifically with the future of humanity.

<sup>10</sup> Beyond doubt, in many places soils are being eroded and nutrients lost. In many places irrigation is causing a build up of salts in the soil. Rainforests and wetlands are being lost. We turn kilojoules of energy from fossil fuels, at a huge discount, into kilojoules of food

energy. We do this through our use of fertilisers and other agricultural chemicals derived from fossil fuels, and through our direct expenditure of energy in farming, processing, and transportation. I claim only that it is logically *possible* for there to be a situation in which we produced food in a way which lessened our long-term capacity to sustain human life in its projected numbers.

<sup>11</sup>Granted that the interests of humanity can be in conflict with those of individual humans, we might perhaps ask whether they could conflict with those of future generations. To be sure, when future generations become determinate, when they exist as the then-present generation, they may then be faced with a conflict between their interests and those of humanity. But could a current generation ever face a conflict of interests between the interests of humanity and those of then-future generations? I maintain that the indeterminacy ('butterfly') factor would rule that out. Let suppose that there were some possible course of action which would improve the living conditions of future generations but was contrary to the long-term interests of Homo sapiens. Something like Parfit's Depletion scenario, combining very affluent living conditions for future individuals with the gradual extinction of the human race, would seem to be the most likely such scenario. Clearly the interests of humanity are at stake – but with whose interests are they in conflict? Those future generations who would inherit the opulent but unsustainable living conditions do not stand to lose their prospective affluence were we to opt instead for a less affluent but sustainable life-style. Such future generations would never come into existence, and so would never stand to lose anything, remaining indeterminate might-have-beens that never were. Other future generations would happen. By respecting the long-term wellbeing interests of humanity we respect what will be the interests of those generations which do come into existence. But there is no way in which we can affect the interests of any particular future generation. There are no particular future generations. Insofar as respecting the interests of future generations has meaning at all, it is a matter of respecting the interests of humanity.

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