

Immortal Ethics

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ABSTRACT: This article draws on ideas published in my “Intimations of Immortality” essay in *Science* (Vol. 288, No. 5463, p. 59, April 7, 2000) and my “Intimations of Immortality—The Ethics and Justice of Life Extending Therapies” in editor Michael Freeman’s *Current Legal Problems* (Oxford University Press 2002: 65–97). This article outlines the ethical issues involved in life-extending therapies. The arguments against life extension are examined and found wanting. The consequences of life extension are explored and found challenging but not sufficiently daunting to warrant regulation or control. In short, there is no doubt that immortality would be a mixed blessing, but we should be slow to reject cures for terrible diseases that may be an inextricable part of life-extending procedures even if the price we have to pay for those cures is increasing life expectancy and even creating immortals. Better surely to accompany the scientific race to achieve immortality with commensurate work in ethics and social policy to ensure that we know how to cope with the transition to parallel populations of mortals and immortals as envisaged in mythology.

KEYWORDS: ethics; life-extending therapy; aging

Life-extending therapies and optimistic discussions of their promise and probable effect are an increasing dimension of serious scientific and philosophical discussion.^a If such therapies ever become reality,^{1,2} and if our bodies could repair damage caused by disease and aging “from within,”³ the effects not only on personal health and survival but also on society and on our conceptions of ourselves and of the sorts of creatures we are would be profound.^{4–6} If we could switch off the aging process^{7,8} we could then, in Lee Silver’s words, “write immortality into the genes of the human race” (these possibilities were rehearsed in the BBC TV *Horizon* program⁹).

FAMILIARITY WITH IMMORTALS

Increased longevity and its logical extension, some would say its *reductio ad absurdum*, immortality, have a long history. The human imagination is familiar with the idea of immortals and mortals living alongside one another and interacting. The *Iliad*, the *Odyssey*, the Bible, the Koran, the Ramayama, and Shakespeare’s plays all

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^aI have benefited from the incisive comments of my colleague Søren Holm.

Ann. N.Y. Acad. Sci. 1019: 527–534 (2004). © 2004 New York Academy of Sciences.
doi: 10.1196/annals.1297.098

have made such ideas familiar, and even modern classics have taken seriously the possibility of immortality. In his celebrated trilogy in five parts *The Hitchhiker's Guide to the Galaxy*, Douglas Adams imagines a man who had achieved immortality by accident:

To begin with it was fun, he had a ball, living dangerously, taking risks, cleaning up on high-yield long-term investments, and just generally outliving the hell out of everybody.

In the end it was the Sunday afternoons that he couldn't cope with, and that terrible listlessness which starts to set in at about 2.55 when you know that you have had all the baths you can usefully have that day, that however hard you stare at any given paragraph in the newspapers you will never actually read it ... and that as you stare at the clock the hands will move relentlessly on to four o'clock, and you will enter the long dark teatime of the soul.^{10,b}

Despite the apparent pessimism of this passage many people would be prepared to endure "the long dark teatime of the soul" in exchange for immortality.^c Indeed, there is much evidence both from literature, and in the literature, that suggests that many people are willing to trade off quality of life for longevity.¹¹ From the pact of Faust, celebrated by writers from Marlowe to Goethe, to Bram Stoker's vampires,^d to choices made by cancer patients with a terminal diagnosis,¹² the evidence is strong that people want extra life time even at substantial costs in terms of pain and quality of life, even when outcomes are highly uncertain.

IMMORTALITY IS NOT INVULNERABILITY

Note that immortality is not the same as invulnerability, and even "immortals" could die or be killed. Accidents, infectious diseases, wars, and domestic violence would all take their toll, and although we might hope for progress in combating existing diseases, the development of new threats, such as HIV/AIDS and the emergence of variant Creutzfeldt–Jakob disease have demonstrated, may increase rather than reduce human vulnerability over time. If we add to this the diminishing effect of proven therapies such as antibiotics through the emergence of resistant strains of bacteria, it is difficult to predict the likely levels of "premature" deaths in a future in which increased life expectancy was developing and spreading through the human population.

LIFE EXTENSION SAVES LIVES

When we save a life, by whatever means, we simply postpone death. Life saving is just death postponement. This is a truth from which it follows that life-extending therapies are, and must always be, life-saving therapies and must share whatever priority life saving has in our morality and in our social values. So long as the life is of acceptable quality (acceptable to the person whose life it is),¹³ we have a powerful, many would claim an overriding, moral imperative to save the life, because to

^bFor the record, the immortal's name was Wowbagger (p. 9).

^cAnd we should note that Wowbagger himself did find something meaningful to do through all eternity.

^dI am grateful to Simon Woods for insights into the un-dead.

fail to do so when we can would make us responsible for the resulting death (this claim is defended in detail in Harris^{13,14}).

Three main sorts of philosophical or ethical objections have been leveled at life extension. It has been claimed that life extension would be unjust; it would be pointless and ultimately unwanted because of the inevitable boredom of indefinite life and would in any event be nugatory or self-defeating because personal identity could not survive long periods of extended existence. I may wish to be immortal but in the end it wouldn't be "me" so the project fails. Finally it is claimed that life extension would be prohibitively expensive in terms of increased healthcare costs. We will look at all these issues now, but necessarily briefly.

GLOBAL JUSTICE

One thing we do know is that the technology required to produce such results will be expensive. For existing people with multiple interventions probably required, the costs will be substantial. To make modifications to the embryo or even to the gametes before conception, people will have to be determinedly circumspect about procreation and will probably need to use reproductive technologies to have their immortal children. Even in technologically advanced countries therefore, "immortality" or increased life expectancy is likely to be confined to a minority of the population. In global terms, the divide between high-income and low-income countries will be increased, with low-income countries effectively denied access to the technology that might make some of their citizens immortal. The issue of the citizens of rich countries gaining further advantages over the poor will rightly disturb many. How are we to understand the demands of justice here?

Parallel Populations

A feature of life-extending treatments, which seldom has been thought through, is the fact that as treatments become available we will face the prospect of parallel populations, of "mortals" and "immortals" existing alongside one another.¹⁵ Thus, the problems of global justice will be repeated in those societies able to implement life-extending therapies. Just as there will exist parallel societies, some able to provide immortalizing therapies and some not, so within those societies that have the technology and the resources required there would exist parallel populations of mortals and immortals. This of course is precisely the destiny for which the poetic imagination has prepared us, literally from "time immemorial."

Although such parallel populations seem inherently undesirable and even unfair, it is not clear that we could, or even that we should, do anything about such a prospect for reasons of justice. If immortality or increased life expectancy is a good, it is doubtful ethics to deny palpable goods to some people because we cannot provide them for all. And this unfairness is not simply contingent, a function of a regrettable, but, in principle, removable lack of resources. There will always be circumstances in which we cannot prevent harm or do good to everyone, but surely no one thinks that this affords us a reason to decline to prevent harm to anyone in particular. If twins suffer from cancer and one is incurable and the other not, we do not conclude that we should not treat the curable cancer because this would in some sense be

unjust to the incurable twin. We don't refuse kidney transplants to some patients unless and until we can provide them for all with renal failure. We do, however, have a clear ethical responsibility to ensure that the question of which of those who could benefit receives the treatment should be decided according to some just principle of distribution.

We don't usually regard ourselves as wicked in Europe or North America because we perform many transplants (this claim is defended in detail in my *Violence and Responsibility*^e and in *The Value of Life*), whereas low-income countries perform few or none at all. The solution, however, is certainly not to say that we will outlaw transplantation unless and until equitable distribution on some agreed principles can be guaranteed. The introduction of any new complex and/or expensive technology raises these problems. The impact on global justice or on justice within societies is important and must be addressed; it is a principled objection, but not an objection in principle to the introduction of life-extending therapies. The principle requires that strenuous and realistic efforts be made to provide the benefits of the technology justly and as widely as possible, not that the benefits be denied because of the impossibility of ensuring adequate justice of provision.

Immortality as the Side Effect of Therapy?

Remember that immortality is not unconnected with preventing or curing a whole range of serious diseases. It is one thing to ask the question "Should we make people immortal?" and answer in the negative; it is quite another to ask whether we should make people immune to heart disease, cancer, dementia, and many other diseases and decide that we should not, because a "side effect" of the treatment would be increase in life expectancy. We are then unlikely ever to face the question: Should we make people immortal, "yes" or "no"? We may rather be called upon to decide whether we should treat a particular disease when we know an effective treatment will extend life span.

It might then be appropriate to think of immortality as the side effect of treating or preventing a whole range of diseases. Could we really say to people "You must die at the age of thirty or forty or fifty, because the only way we can cure you is to extend your life span?" Faced with such a choice, an individual might well say, "Let me have my three score and ten and then let me die." Given the quite pervasive and irrational hostility to euthanasia, whether societies would be willing to allow such bargains to be made is doubtful.

LONGEVITY IS A RATIONAL GOOD

Given that people want life and fear death, it is difficult not to see longevity, and perhaps immortality, as a palpable good. Many have taken issue with this claim on two main grounds: either that indefinite life eventually would become terminally boring or that over long periods of survival personal identity could not be maintained and so the survival of a particular individual would prove illusory. Elsewhere (see p. 282 in Ref. 16) I have criticized, and I believe decisively refuted both these

^eAlthough still many too few.

objections. Suffice it to say that only the terminally boring are in danger of being terminally bored, and perhaps they do not deserve indefinite life. Those who are bored can, thanks to their vulnerability, opt out at any time. But those of us who do not have terminal failure of the imagination should be left to create new ways of enjoying life and doing good. It is easy to see that that personal identity is not required for a coherent desire for indefinite survival. Suppose "Methuselah" has three identities, A, B, and C, and that C can remember nothing of A's life. But suppose the following is also true: A will want to be B who will remember being A, B will want to become C who will remember being B but possibly not remember being A. It is not irrational for A to want to be B and not irrational for A to want to be B partly because he or she knows that B will be able to look forward to being C, even though by the time she is C she won't remember being A. Thus, even if personal identity in some strict sense fails over time, it is not clear that a sufficiently powerful motivation for physical longevity fails with personal identity. This would remain true however many selves "Methuselah" turns out to be.

Prominent among recent denigrators of the idea of life extension has been Leon Kass, who identifies the core question as the following: "Is it really true that longer life for individuals is an unqualified good?" Kass has many arguments against life extension, all of which fail disastrously.¹⁶ We have space to consider only his main objection: "For to argue that human life would be better without death is, I submit, to argue that human life would be better being something other than human The new immortals, in the decisive sense, would not be like us at all. If this is true, a human choice for bodily immortality would suffer from the deep confusion of choosing to have some great good only on condition of turning into someone else."¹⁷ Insofar as this claim of Kass's relies on claims about psychological continuity, over time it has the problems we have already considered. However, Kass's argument seems to be suggesting a more simple objection: that since the (current) essence of being human is to be mortal, immortals would necessarily be a different type of being and therefore have a different identity. There is a sense in which this is true, but not, I think, any sense in which it would be irrational to want to change identity to the specified extent. Someone who had been profoundly disabled from birth (blind say, or crippled) and for whom a cure became available in his or her mid-forties would become in a sense a different person. They would lead a different type of life in many decisive ways. It does not follow that the blind or crippled individual has no rational motive to be cured. It would be both odd and cruel say to them, as Kass presumably would have us do, "it is deeply confused to want to cease to be disabled because then you will no longer exist."

POPULATION POLICY

Many people addressing the question of life extension have assumed that such a possibility will have a disastrous effect on the world's population with the present generation living indefinitely and a procession of subsequent generations adding to the congestion.¹⁸ However, this is by no means either a likely or even the most likely scenario. The effect of life extension on population will be a function of several different factors, the outcomes of which are all difficult to predict. The first is the degree of uptake, which itself will be heavily dependent on cost and availability of

the therapies. Granting, as we have, that life-extending therapies gradually will become available, cost, risk, and uncertainty will mean that for a very long time the numbers of people availing themselves of such therapies will be a tiny proportion of the world's population. We already have noted a possibly increasing human vulnerability due to new infectious diseases or antibiotic resistant strains of bacteria. Again it is difficult to predict the continuing effect of these on population or how the advent of some immortals would affect the equation. Disease may well continue to be an effective leveler, improving its own technology as we improve ours. And of course immortal but vulnerable people will continue to die in accidents and from injuries received.

THE END OF REPRODUCTION

Should we assume the necessity for, or desirability of, the creation of future generations? Is there a moral difference between a future that will contain x billion people succeeded by another x billion different people and so on indefinitely, or x billion people living indefinitely and replacing themselves on the (rare?) occasions when they are killed? Although, as we have noted, this is an unlikely scenario, posing the question in this stark form enables us to ask an important question. That question is whether what matters morally is that life years of reasonable quality exist or that different people with lives of reasonable quality exist. Put in this way the problem assumes a familiar form—should we maximize life years or individual lives? (There is an enormous literature on this. See, e.g. Refs. 19–21.) From the life years perspective, it ought not to matter how many new people the world would contain but simply how many life years of acceptable quality it will contain. Those who, like me, find the life years approach unsatisfactory will be inclined to think that individual lives matter. But even so, it could consistently be held that it is the individual lives of existing people that matter, not how many new individual lives there will be.

However, the argument for making sure that there will be new generations is not settled by the outcome of the debate between those who think that future lives count equally with existing lives and those who do not. One group of such reasons has to do with the desire to procreate and the pleasures of having and rearing children.^{22,23}

The second set of reasons has to do with the advantages of fresh people, fresh ideas, and the possibility of continued human development. If these reasons are powerful, and I believe they are, and if the generational turnover proved too slow for regeneration of youth and ideas and for the satisfactions of parenting, we might face a future in which the fairest and the most ethical course might be to contemplate a sort of “generational cleansing.”^f This would involve deciding collectively how long it is reasonable for people to live in each generation and trying to ensure that as many as possible live healthy lives of that length. We then would have to ensure that, having lived a “fair innings,” they died at the appropriate time to make way for future generations. Achieving this result by voluntary or ethical means might be difficult; attitudes to suicide and euthanasia might change, but probably not overnight.

^fI deliberately choose the term “generational cleansing” for its obvious unpalatable connotations.

Christine Overall, in her recent book *Ageing, Death and Human Longevity*,²⁴ has found it difficult to be sure of Harris's attitude toward "generational cleansing" (p. 85). For the record, I think it would be unjustifiable, and therefore it is difficult to see how we could resist death-postponing therapies.

IMMORTALITY IS COST-EFFECTIVE

Søren Holm^g has suggested that immortality so far from increasing health costs per individual actually might dramatically reduce them; there might be in short an economic discounting argument for the public funding of "immortality" interventions.

Let us assume the following: (1) for both mortals and immortals, there is the same period of old age with increased healthcare costs (say 10 years, but the length does not matter for the argument) and the same costs of treatment during those years (let's say £10,000 on average); (2) the mortals will reach this period in 70 years and the immortals in 1,000 years; (3) there is a 1% per year rate of real economic growth. The present-day discounted costs of treating a person in 70 years will be £4,948, whereas the present-day cost of treating the same person in 1,000 years will be 43 pence! It thus makes economic good sense to invest now and postpone healthcare costs from 70 years into the future to 1,000 years into the future, and as is evident from the figures, it makes sense even if immortals would have a much longer and more costly old age (because of the discounting, even a 10-fold increase in costs would not matter).^h Add to this the probability that a greater number of immortals would die as the result of accidents rather than long drawn out illnesses and the economic arguments grow stronger still.

CONCLUSION

For the first time in human history we face the prospect of a truly open future, involving sequential as well as simultaneous opportunities, and stretching, open-ended before the individual in an unprecedented but truly liberating pathway. We should be slow to reject cures for terrible diseases even if the price we have to pay for those cures is increasing life expectancy and even creating immortals. Better surely to accompany the scientific race to achieve immortality with commensurate work in ethics and social policy to ensure that we know how to cope with the transition to parallel populations of mortals and immortals as envisaged in mythology.

^gIn a personal communication. The calculations are those of Søren Holm.

^hDouglas Adams used a similar argument to show that the cost of traveling in time to eat at "the Restaurant at the end of the universe" would bring the price of eating at the most expensive restaurant of all time easily within reach of the most humble budget. "All you have to do is deposit one penny in a savings account in your own era, and when you arrive at the End of Time the operation of compound interest means that the fabulous cost of your meal has been paid for." See his *The Restaurant at the End of the Universe*. Pan Books. London. 1980: 81.

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