Published in final edited form as:

Camb Q Healthc Ethics. 2011 January ; 20(1): 21–29. doi:10.1017/S0963180110000599.

Considerable Life Extension and Three Views on the Meaning of Life

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Picture this. You are having your regular medical checkup, when, all of a sudden, the physician turns to you and says: “Oh, did I remember to mention that you can now live forever?” You look at the doctor enquiringly and she goes on: “Well, it’s not actual immortality, you know, but they’ve invented this treatment—I don’t have the full details—that stops aging, getting physically older. It might not be for everyone, but you seem to be a suitable candidate. You could still die of accidents and illness, of course, but they’ve calculated that with care and any luck you should live to be a thousand, as opposed to the hundred or so that you would now have. And in a millennium, techniques will advance further, so there could be more in store for you after that.”

What would your reaction be? Would you think, “Oh, fantastic, now I can do everything that I ever wanted to do: travel the world, learn to play the cello, live a little”? Or would you be more suspicious and say to yourself, “Hang on, though, another thousand years in the office,” perhaps adding, “And the bosses would be immortal, too; I would be acting junior assistant lecturer for eternity”? Or would you be inclined to ponder the wider ramifications, on the lines of “What kind of a society and a world would it be, anyway”? After all, with all present and future generations living on top of each other, there would have to be a completely different set of rules for career progression, inheritance, reproduction, and family relationships. Or would you take a philosophical turn, wondering, “Would it even be *me* living in the distant future”? Theories of personal identity often assume that we need to have memories of previous stages of our lives to remain who we are, but centuries of life would surely wipe out earlier recollections.

Questions like these, regarding considerable life extension and its desirability or undesirability, will be addressed in the following pages. Because it seems that people’s conflicting reactions to the matter are inextricably linked with their ideas on the point or purpose of human life more generally, my main aim will be to show that there are three views, all perfectly understandable in their own right, on the meaning of life that produce dramatically different responses to the issues of considerable longevity.¹

What Is Considerable Life Extension?

Let me begin by defining “considerable life extension” for the purposes of my examination. My starting point is that the definition should not be either too conservative or too radical. In the former case, philosophical and ethical questions remain invisible; in the latter they become too diverse to be concisely analyzed.

Consequently, I will *not* discuss the sort of moderate average life-span extension that can be reached by everyday medicine, healthcare provision, safety laws, emergency services, lifestyle choices, social work, international aid, or improvements in societal infrastructures. These account, to a certain extent, for mortality based on trauma and disease, and they can increase the statistical mean length of human lives, but they do not account for aging, and they do not promise anyone a life that would span much beyond the century that is selectively available already.

I will *not* discuss indefinite maximum life-span extension by human–machine interactions or mind uploading, either. These might offer some people significantly longer lives than those currently available to anyone, but they would also raise questions of humanity and identity that could cloud the issue of merely living longer. Human–machine interactions are already among us in the form of cochlear implants and cardiac pacemakers, and it can be expected that in the future an increased number of artificial parts will be attached to people to make them healthier and longer lived. The questions that I do *not* want to answer here include how many added parts would be needed to turn a human being into a machine and whether or not this should be reflected in the rights and duties of the individual in question. And, if a former “naturally” human being with no organic components left would still be human, would this also apply to “artificial” individuals, originally made out of exactly similar constituents? Mind uploading—the idea that our mental lives could somehow be transported into a virtual world that is maintained by computers and their networks—presents equally mind-boggling puzzles. How can we begin to grasp existence without our bodies? And if we “are” mechanical files or programs, are there as many of us as there are copies of these entities? These are questions worthy of their own treatises, but I will say no more about them here.

For my purposes, considerable life extension means the average and maximum increase of our biological and psychological existence from the current century (give or take a decade or two) to at least a millennium. As long as we stay in our own bodies, our humanity and identity are, by and large, preserved, and adding 900% to our lives can certainly be regarded as considerable. Some say that such an extension is actually possible with the help of a controversial branch of life sciences called “biomedical gerontology.” The champions of the discipline claim that the first human being to live a thousand years has already been born.

A prominent representative of biomedical gerontology is Aubrey de Grey, a Cambridge scientist who believes that he has identified the seven deadly processes that need to be beaten before aging becomes reversible and people can live indefinitely.² In his program *Strategies for Engineered Negligible Senescence* (SENS) de Grey lists the problems and solutions as follows.³ Cell loss currently associated with old age can be counteracted by physical exercise, growth factors, and stem cell treatments. Nuclear mutations and epimutations that cause cancer can be kept in control by cell replacement, that is, by changing all the cells in our bodies regularly. Mitochondrial mutations could be fought with gene therapies, once they have advanced far enough to do the job. Death-resistant cells, that is, harmful cells that the body tries but fails to exterminate, can be killed and expelled from our bodies by engineering our immune system and its responses. Tissue stiffening can be reversed by developing engineered repair molecules and inserting them into the right places. Extracellular junk in the organism can be rejected by devising vaccines that offer us better immunity. And intracellular junk and its lethal accumulation in the body can be confronted by finding enzymes that will break it down.

Is de Grey’s plan to abolish aging realistic? Opinions vary,⁴ but the prevailing scientific disagreement is not an issue for my present purpose, which is to study, in principle, the desirability or undesirability of considerable life extension. The question here is, if something like de Grey’s strategy can be made to work in the future, should we embrace it or shun it, and on what grounds?

Is Considerable Life Extension Desirable or Undesirable?

Proponents of life extension build their case on two simple ideas. The first is that if something is good, then more of it is better than less of it. The second is that if we want the ends, we should also want the means.⁵ Their argument begins by the observations that life as we know it is good, and that continuing to experience its benefits requires physical survival.

Dead people do not enjoy the goodness of human existence. This is why nearly no one wants to die just yet and also why nearly all instances of life saving are desirable. Individuals can accept the abstract idea of dying sometime in the more distant future, but when it comes to concrete situations and immediate decisions, they seldom want to reject rescue operations and emergency treatments. Life saving and life extension go, however, hand in hand. A person whose life is saved will live to see another day. Similarly, a person whose life is extended will live to see another day after the one during which she would otherwise have died. This is an unspecified day in the future, but we have every reason to believe that the person would be as reluctant to die on that day as she would be to die now. Life extension is also life saving, and therefore it should be given the same high priority that rescue operations and emergency treatments already have.

Opponents of considerable life extension can agree that life as we know it is good. They define, however, the goodness of lives differently from their adversaries and claim that social continuity rather than biological survival is the key to worthy human existence.⁶ People need communities, traditions, and cultures to flourish, and communities, traditions, and cultures in their turn need structural stability and historical progression to retain their vitality. The continuity needed can only be produced by current generations passing on their ways and roles to their successors. If individuals live for a very long time, they will not hand down their positions in society and community to their children, and this will interrupt traditions and their connectedness. Considerable life extension is undesirable because it would lead to the demise of humanity as we know it.

But what would be wrong with the demise of humanity *as we know it*? This is the inevitable response from those who favor considerable life extension.⁷ It is true, they admit, that with advances in technology and changes in the human constitution social traditions and ways of life can and will become history. But new traditions will emerge and people can create new, possibly post-human, identities. We tend to think that our lives are better than the lives of our ancestors because we have freedom, democracy, toothpaste, and plumbing. Is there any reason to believe, then, that post-human beings would not prefer their lives to ours? According to this line of reasoning, stalling progress is not a sign of sensible concern but a mark of irrational timidity.

What is the real point of extending lives, though? When people attempt to prolong their earthly existence indefinitely, the eventual aim seems to be immortality. But defenders of caution argue that the idea of immortality cannot be reduced to biological longevity.⁸ The pursuit of immortality is, they say, ultimately a pursuit for transcendence, an attempt to reach beyond this-and-now. Authors and scholars have identified, as possible goals for this search, achievements such as perfect love, ultimate wisdom, and spiritual completeness. None of these can, however, be secured just by living for a great many years. This is why opponents of biomedical gerontology hold that our best (secular) method of exceeding our own limits and extending our personal impact into the future is, quite mundanely, procreation. Having children will enable our genetic heritage to live on long after we are gone, and bringing them up to learn our ways of life will contribute to the continued survival of our tradition and culture. Considerable life extension in the biological sense would just interfere with the natural succession of generations and their roles and positions.

This debate on the desirability or undesirability of considerable life extension has been taken further in exchanges between the warring parties, and the arguments have taken increasingly complex forms. Let me proceed in another direction, though, and focus on the two views on the continuity of human life underlying the stances.

Two Views on the Continuity of Human Life

Considerable life extension is mostly discussed in the context of emerging medical technologies, and disagreement can be partly attributed to different opinions regarding the beneficial and harmful impacts of scientific and technological advances. But closer examination reveals a deeper clash in the outlooks assumed on the essence or purpose of human life. One group of scholars insists that the point of all this is to give individuals an opportunity to continue their physical lives for as long as these lives are worth living or have value in them. Another group counters that the point of our being is to give individuals an opportunity to live good lives in a community with a way of life worth preserving and conveying to new generations. In want of established terms, the first can be called the “more is better” view and the second the “moral is better” view.

Those who think that “more is better” do not believe that the meaning of life can be found in God or nature, like many religious and traditional doctrines teach.⁹ Instead, they argue, it can be found in our duty to create worthwhile lives and to respect people’s wishes to continue them for as long as they like. In reproductive choices, this means—inter alia—that genetic and other prenatal tests should be used to ascertain that the future child is reasonably healthy and would not have an utterly miserable and pain-ridden life. If a truly wretched existence is looming, the pregnancy should be terminated, whereas milder suffering can be allowed if the parents cannot or will not opt for offspring with even better prospects. In the case of individuals who have already been born and who want to go on living, the view dictates that failing to save a life is a bad thing—as bad, in fact, as killing someone deliberately. This applies to all people regardless of their personal characteristics and qualities, including their age, so that saving and extending the lives of chronologically more advanced individuals is no less our obligation than caring for the young. The purpose of our life, then, is to bring into existence all the worthwhile lives that we can and to keep them worthwhile and going for as long as possible.

Those who believe that “moral is better” do not think that the meaning of life can be found in its extension. Starting from a more social notion of what it is to be human, they reason that the purpose of our being is to lead a good life within a community and tradition that gives it moral shape.¹⁰ Religious thinking is often a part of the structure that defines our lives, and so are habits, customs, and widely held ideals about the family and its interactions with society. In reproductive medicine and healthcare more generally, the recognition of prevailing or historical mores commonly leads to the rejection of technological advances such as genetic tests, prenatal selection, stem cell research, gene therapies, and biomedical gerontology. Considerable life extension is shunned because communities cannot retain the vitality of their moral traditions unless new individuals take on the designated social roles from time to time. There is value in being young, middle-aged, and old, with the communal expectations that go with these phases, and it gives people’s lives structure that they mature from children to parents and grandparents and then give way to new generations. The rationale of our existence is to have children, to teach them the moral ways our parents taught us, and, eventually, to die and allow them to assume the roles that we now occupy.

Different as these views may be, one striking feature is that they both stress, quite unequivocally, the continuity of human life beyond the limits that biology has, at least so far, dictated. When “more is better” the emphasis is on persons as individuals, on their subjectively felt well-being, and on the active continuation of their physical and mental lives. Technologically acquired immortality is not only accepted but also put forward as an explicit goal of scientific advances. When “moral is better,” the focus is on persons as members of collectives, on the objective worth of their lives, and on respect for and preservation of what is handed down to us by external forces (nature) and preceding

generations (tradition). Technological life extension is refused and our “given” (biological) mortality is celebrated, but so is our “given” (communal or spiritual) immortality.

Epicureanism as an Alternative

So, despite their differences, supporters of both “more is better” and “moral is better” ideologies want to reach beyond the 100-year life span that we could now have as unenhanced biological beings. The first group want it individually, physically, and concretely; the second group want it collectively, spiritually, and symbolically; yet both want it. But could there be an alternative view, stating simply that what we have here and now is sufficient as it is? A view like this could challenge the conceptual foundation of the current debate and open new avenues for future discussion.

A dip into the history of philosophy shows that philosophical ideas on the good life associated with Epicurus (341–270 BCE) and Epicureanism can be helpful here.¹¹ Epicurus taught that the only goals worth pursuing for their own sake are pleasure and the absence of pain. This hedonistic view concedes, of course, that other things such as wealth, fame, and virtue can be worth pursuing, but only as instruments for avoiding pain and attaining pleasure, not for their own sake. According to the Epicureans, the best way to achieve the desired goals is not to indulge in pleasurable activities (which will inevitably lead to disappointments and hangovers) but to live quietly, enjoy life’s little good things, and cultivate friendships. The end result of these choices and a withdrawal from the affairs of the world is “ataraxia,” that is, peace of mind or freedom from preoccupations. Epicurus observed that people are often prevented from reaching peace of mind by their fears, especially their fear of gods and fear of death. He believed, however, that these can be dispersed by a proper philosophical understanding of how the world works.

The Epicurean world view is atomistic, which means that everything that exists, including divine beings and human minds, consists of very small particles of matter. Gods are not to be feared, because they are just immortal material beings who live happily in their own detached society, without any thought of or contact with humans. They are nothing like the interfering Olympian gods who toy with people’s lives and punish them now or in the afterlife. Grasping this, Epicurus thought, would be enough for anyone to stop being afraid of divine sanctions in this life. We may not think much of the ancient metaphysics involved, but secular philosophical accounts of ethics share the fundamental notion: even if gods existed, they should not be a factor in our decisionmaking.

As for sanctions after death, the atomistic case is even stronger. Our minds disintegrate with our bodies when we die, rendering all kinds of experience physically and psychologically impossible. Being dead some day should be of no concern to us because when we are, death is not, and when death is, we are not. The instance of dying should not frighten us because there will be no one to remember when we are gone. And worrying about not being alive during the eternity following our death is comparable to worrying about not having been alive during the eternity preceding our birth, something that very few people include in their list of apprehensions.

The problem with Epicurean reasoning is, however, that it might be slightly too philosophical for people to be entirely convinced by it. Apart from the sophistry of “being only when the other is not,” why should death and dying *not* cause us anxiety? Why should we *not* wish that we are still alive tomorrow, and the day after that, and hope fervently that death does not intervene?

Why indeed? Epicureans could defend their bold claim in at least three partly intertwined ways. First, they could say that our lives have diminishing marginal utility. This is the

phenomenon that the more units of an initially good thing we get, the less beneficial the last unit is to us. When we are thirsty, the first glass of water is truly useful, the third probably unnecessary, and the hundredth almost certainly lethal. The logic is that, by the same token, human existence could be good for a while, then tolerable, and in the end more trouble than it is worth. The reason for the declining value could be boredom, accumulation of painful memories, or just general mental overload. Second, Epicureans could argue that once we have found ataraxia, we have reached the goal of our life and nothing of value can be added to it. Dying happily today is essentially similar to dying happily tomorrow. And, third, as death is inevitable anyway, thinking about it can only cause unnecessary pain and distress. If aging does not get us, then disease and trauma will. Even if we could live billions of years (and survive the sun cooling off at some point), the known universe will eventually collapse and end our existence. With these facts in mind, it would make very little sense, hedonistically speaking, to think about death seriously enough to develop a fear of it.

Criticisms and Conclusions

The proponents of the two other views do not, understandably, share the Epicurean conclusions. The “more is better” people can point out that subjective experiences and, consequently, opinions on life’s value differ. Some may think that their life quality is poor, and they are, as far as the champions of acquired longevity are concerned, free to exit at will. But the lives of others can have steady or increasing marginal utility, and they should be equally entitled to go on living. Many experiences get better once we get used to them, and maybe life just takes a few centuries of practice before we can sense its full value. As for dying happily today or dying happily tomorrow, most people simply seem to prefer tomorrow every time. Commenting on immortality’s potential boringness, Jonathan Glover has summarized the position neatly: “Given the company of the right people, I would be glad of the chance to sample a few million years and see how it went.”¹²

Those who insist that “moral is better” are not any keener on Epicurean ideas, but their reasons are different. Hedonism is usually associated with the immediate pursuit of sensual pleasure and with the disregard of long-term benefits in the face of arduous or painful efforts to secure them. In the case of Epicurus and most of his followers, this association is erroneous, but even the moderate pursuit of contentment advocated by them is often seen as an attempt to take the easy way out in life. Defenders of tradition can argue that doing things in time-honored ways, even (or perhaps especially) when these things are spiced with perplexity and suffering, adds more to life than the cool calculation and calm serenity of Epicurean ataraxia. They can also maintain that fear of God and fear of death give structure to human existence. The anxiety induced by our vulnerability and insignificance forces us to seek protection in communities and their ordered manners and customs. The role of seriousness and responsibility in human life is forgotten if an attitude of “live as you like and die when you want to” is assumed.

Whatever the disagreements, however, my aim in this paper has been to present three views on the meaning of life and its extension, and this has now been accomplished. The first (“more is better”) view states that life is a string of experiences. When the experiences are good, life is good and it is desirable to continue it. Considerable life extension by advances such as biomedical gerontology adds value to the world by adding more opportunities for good experiences in the lives of individuals. The second (“moral is better”) view states that life is a story with a beginning, middle, and an end. Communities and their traditions enable the story by defining the roles that people are expected to play at different stages of their journey. Considerable life extension would only confuse this arrangement and undermine the moral basis of humanity. The third view states that life is a string of experiences, out of

which we can create a moral story by finding our own peace of mind. Continuity, individual and collective, is overrated.¹³

The Epicurean model that I have sketched here does not insist on a fixed normative view on considerable life extension. On the one hand, there is no particular reason to ban or restrict it, because the possibility of living much longer does not necessarily prevent people from finding their peace of mind, *ataraxia*. On the other hand, there is no particular reason to encourage the development of its techniques, either, because it seems likely that serenity, if it can be found at all, can be found in the course of decades as effectively as in the course of centuries or millennia.

Acknowledgments

The research for this paper was conducted as a part of Improving Humanity? The Role of Rationality and Morality in the Regulation of Genetic and Medical Advances, my personal project at the Helsinki Collegium for Advanced Studies during 2009–2011, and *The Human Body, Its Scope, Limits and Future*, a Wellcome Strategic Programme at the Institute for Science, Ethics and Innovation (iSEI), University of Manchester. Earlier versions of the paper were presented on June 25, 2009, at the David C. Thomasma International Bioethics Retreat in Lausanne, Switzerland; on September 10, 2009, at the iSEI Seminar in Manchester, United Kingdom; and on October 13, 2009, at the Helsinki Collegium for Advanced Studies Brown Bag Seminar in Helsinki, Finland. My thanks are due to the institutions who have supported my work and to the participants of the events for their insightful and constructive comments.

Notes

1. Considerable life extension can be examined from many other angles, as well. For a more detailed treatment of the relevant themes, see, e.g., Häyry, M. *Rationality and the Genetic Challenge: Making People Better?*. Cambridge University Press; Cambridge: 2010. chap. 9.
2. De Grey, A. *The Mitochondrial Free Radical Theory of Aging*. R. G. Landes Company; Austin, TX: 1999. ; de Grey, A.; Rae, M. *Ending Aging: The Rejuvenation Breakthroughs That Could Reverse Human Aging in Our Lifetime*. St Martin's Press; New York: 2007. ; de Grey, A. *Studies in Ethics, Law, and Technology*. 2007. Life span extension research and public debate: Societal considerations; p. 1 available at <http://www.bepress.com/selt/vol1/iss1/art5>; cf. Häyry, M. *Studies in Ethics, Law, and Technology*. 2007. Generous funding for interventive aging research now?; p. 1 available at <http://www.bepress.com/selt/vol1/iss1/art13>
3. These are all explained in lay terms at www.sens.org/index.php?pagename5mj_sens_repairing (last accessed 20 Oct 2010). For a more detailed description, see note 2, de Gray, Rae 2007.
4. For a debate on his thoughts, see www.technologyreview.com/sens/ (last accessed 20 Oct 2010).
5. See, e.g., Harris, J. *Intimations of immortality: The ethics and justice of life-extending therapies*. In: Freeman, MDA., editor. *Current Legal Problems* 2002. Oxford University Press; Oxford: 2003. p. 65-95.; Harris, J. *Enhancing Evolution: The Ethical Case for Making Better People*. Princeton University Press; Princeton: 2007. p. 59-71.
6. See, e.g., Kass, L. *Life, Liberty and the Defense of Dignity: The Challenge for Bioethics*. Encounter Books; San Francisco, CA: 2002. p. 257-74.; Sandel M. *The Case against Perfection: Ethics in the Age of Genetic Engineering*. 2007 The Belknap Press of Harvard University Press Cambridge, MA
7. See, e.g., note 5, Harris 2003 and Harris 2007.
8. See, e.g., note 6, Kass 2002 and Sandel 2007.
9. This view has been explained in more detail by Häyry (see note 1, Häyry 2010, especially chap. 2). It is exemplified by authors and works such as Glover, J. *Causing Death and Saving*. Penguin Books; Harmondsworth: 1977. ; Harris, J. *The Value of Life: An Introduction to Medical Ethics*. Routledge and Kegan Paul; London: 1985. ; Glover, J. *Choosing Children: The Ethical Dilemmas of Genetic Intervention*. Clarendon Press; Oxford: 2006. ; see note 5, Harris 2007.
10. See, e.g., note 6, Kass 2002 and Sandel 2007, and note 1, Häyry 2010:chap. 2.
11. On Epicurus, Epicureanism, and death, see, e.g., Warren, J. *Facing Death: Epicurus and His Critics*. Clarendon Press; Oxford: 2004.

12. See note 9, Glover 1977:57.
13. One point that has to be stressed is that the third, Epicurean, model is not cumulative or aggregative in the way that the first is. (This is an issue that has cropped up every time I have presented the ideas of this paper to live audiences.) From the viewpoint of the “more is better” view, it is natural to ask: “If I have found my serenity today and that is good, why is it not better that I live on to experience many more similar days in the future?” The best answer to this question that I can think of (and I do not expect it to convince everyone) is that if, for some reason, the peace of mind that I have so meticulously built all my life and experience today is transitory and cannot be found ever again, then by not dying I would miss my only chance of having a good life, at least in the sense of going out on a high note. If I have been prudential enough not to have a family that would depend on me or unfinished public business that needs my attention, both things that Epicurus warned against as impediments of ataraxia, why would I want to risk that?