

Forever Young?

Life Extension and the Ageing Mind

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ABSTRACT. This paper argues that the goal the proponents of radical life extension wish to attain is in fact unattainable, and that with regard to this goal, the whole project of conquering ageing and death is therefore likely to fail. What we seek to achieve is not the prolongation of life as such, but rather the prolongation (or restoration) of a healthy and *youthful* life. Yet even though it may one day be possible to prevent the *body* from ageing beyond a certain stage (or to bring it back to that stage), it may never be possible to arrest the ageing of the *mind*, which is what we desire most of all.

KEYWORDS. Life extension, immortality, ageing, youth

I. INTRODUCTION

Guardian: What would your superpower be?

Hugh Hefner: Immortality.

Guardian: If you could go back in time, where would you go?

Hugh Hefner: To my childhood.¹

Fuelled by recent scientific advances in biogerontology², the prospect of slowing down or even arresting the process of ageing and thus indefinitely extending our maximum life spans has led an increasing number of writers to jump on the bandwagon of life extension and to argue that virtual immortality is a good thing and that we should do everything in our power to attain it. The reasoning behind this demand is relatively simple and intuitively plausible: we all appreciate being alive and no one wants to be dead (unless something bad has happened to them or nothing good is likely to happen ever again, so that life has lost its meaning or worth). We do not

normally care very much for the idea of dying, and try to hold on to our lives as long as possible. So all things considered, we tend to regard life as a good, and death as an evil. Given this universal and strong preference for life over death, how could we not regard indefinite life extension and virtual immortality as a good thing? It would seem irrational not to endorse it.

II. THE IMMORTALIST FALLACY

Plausible as it may seem at first sight, however, this argument is misleading because it is based on the premise that we (normally) do not want to die, which is then taken to imply that we *do* want to live forever (i.e. have an implicit desire for indefinite life extension). Yet this conclusion is in fact not warranted. If you ask people whether they want to die, most of them will indeed say no. However, if you ask the *same* people whether they want to go on living forever, you may find that most will say no to this too. Admittedly, this contention is based on anecdotal evidence, tested with various groups of students and colleagues. I am not aware of any sociological surveys that would directly support it. Nor, however, is there sufficient evidence to support the opposite claim, namely that most people *do* want to live forever. Rather, this is often taken for granted. As Jayne C. Lucke and Wayne Hall have pointed out (2005, 101), “there is, as yet, no coherent picture of public beliefs and attitudes towards real life extension strategies.” However, my argument does not depend on how many people, despite valuing their lives, actually do not want to live forever (i.e. how many prefer living forever to dying at some time), or indeed whether there are any such people at all. Nor does it matter much what exactly those people who reply that they would not want to live forever imagine their unending lives would be like. The point I am trying to make is not empirical, but rather logical. What I am asking is whether we can, as it is often suggested (see, for example, Bostrom 2008, 113-116), legitimately conclude from the fact that people do normally appreciate being alive and

accordingly desire not to die, that they also have an (implicit) desire to have their life spans indefinitely extended, or in other words to live (potentially) forever. It is quite possible that some people do not want to die, yet still do not want to live forever. On the face of it, this seems to be a blatant contradiction. How can we not want to die *and* not want to live forever at one and the same time? Obviously, if you do not die you will live forever, and the only way to avoid living forever is to die. The one entails the other. However, there are many situations in which there are only two options open to us and we do not like either of them. We can wish to avoid illness and at the same time wish to avoid doing the things necessary to maintain our health as long as possible, such as following a strict diet or exercising regularly. There is no contradiction in *wishing* both of these things, only in *achieving* both. Perhaps we cannot have our cake and eat it, but there is no difficulty at all in *wishing* we could both have it *and* eat it. My point here is that it is entirely possible, as well as consistent, that many people find the idea of living forever to be just as abhorrent as the idea of dying. We thus cannot infer from the fact that they do not want to die that they *do* want to live forever. It simply does not follow. Note that I am *not* saying that indefinite life extension is a bad thing, morally wrong, or undesirable. I am simply pointing out that we cannot *assume* the desirability of indefinite life extension simply on the grounds that (to many of us) the prospect of our own death is rather unappealing. Even if life is a good, death need not be an evil (Hauskeller 2011), and even if we should decide that death is indeed an evil, non-death (or living forever) need not be a good. Based on the fact that a person does not want to die, it need not follow that the same person will consider (i) death to be an evil, or (ii) living forever to be a good. If this were a valid argument – which it is not – then we could just as easily conclude from the fact that a person does not want to live forever that they regard (i) life as an evil and (ii) dying as a good. The logical error of deducing a desire to live forever (or indefinitely) from a desire not to die is what I call the *immortalist fallacy*. A similar point was made by A.W. Moore (2006). Accord-

ing to Moore, there is a logical gap between always wanting something to be so and wanting that thing always to be so. I may at any particular time wish not to die, but that does not mean that I, at that or any other time, wish never to die. As Moore puts it: “I might never want to die, without wanting never to die” (313). To repeat, none of this tells us anything about whether or not indefinite life extension is desirable (let alone whether *moderate* life extension is desirable). The argument only demonstrates that it is not at all *obvious* (because implied by our appreciation of being alive) that indefinite life extension is desirable or at least commonly desired.

However, can we think of any good reason why anyone should *not* want to live forever? We may suspect that the reason why some people claim that they do not is simply that, when they think of a never-ending life, they imagine themselves becoming old and frail and burdened with various ailments (rather like Swift’s pitiful immortals, the Struldbrugs, or the unfortunate Tithonos who, on request of his lover, the goddess Eos, was granted immortality by Zeus, but not eternal youth), and then continuing to exist in that condition without any hope of ever improving or mercifully ending their miserable lives. Yet this is arguably a complete misunderstanding of what convinced life extensionists such as Aubrey de Grey are trying to achieve. The aim is to stop the ageing process at an ideal age, say at 35, or, if one is already past this age, rejuvenate the body and bring it back to that stage, in which we are supposed to be at the height of our powers. In other words, the aim is not the preservation of life as such, but rather the preservation or restoration of *youthful* life. So the reason why not all people are exactly crazy about the idea of living forever is perhaps simply that they imagine it to be different from what it will in fact be like. Perhaps we do not all want to live forever if that means being condemned to everlasting senility. But what we really do want, and cannot possibly or with good reason *not* want, is to be *young* forever. And that is precisely what anti-ageing science is going to get us: not merely eternal life, but, in the words of Aubrey de Grey “an endless summer of literally perpetual youth” (2007, 335). But is it really? Is it even *conceivable* that our youth could last forever?

III. BODY AND MIND

I do not wish to take issue here with the scientific evidence that suggests that engineered negligible senescence – the complete obliteration of all physical symptoms of ageing – can be achieved for humans. This may or may not be so. For all I know, science will have found a way to defeat human ageing in 20 years. So let us assume that sometime in the not too distant future we will fully understand the mechanisms that govern human ageing and be able to use this knowledge to stop or even reverse the ageing process. We will then be able to conserve our bodies at a biological age of, say 35, that is, retain the body of a healthy 35-year old even when we are 70, 120, or even older. It is not at all obvious, however, that once we have achieved this we will also have gained what we intended to gain, namely eternal youth – because youth might not merely be a condition of the body, but also, and perhaps even more importantly, a condition of the mind, a possibility that is generally overlooked by proponents of radical life extension.

A nice example of this common oversight is provided by the trans-humanist science fiction author and prolific writer of well-informed popular science books Ben Bova. In his book *Immortality*, Bova quotes the last stanza from Lewis Carroll's poem "Solitude" (1856): "I'd give all wealth that years have piled,/ The slow result of life's decay,/ To be once more a little child/ For one bright summer-day." According to Bova, Carroll has summed up in these lines "what most of us feel [...]: We would pay anything we have to avoid aging and inevitable death" (1998, 212). However, it is clear that what Carroll is saying here is something rather different. What he would pay anything for is to be *once more* (!) a little child, for *one* (!) bright summer day. Thus he does not express a longing for eternal life or a fear of death. Rather, he deplores the irretrievable loss of youth, which, by its very nature, cannot be retained and, once lost, cannot be retrieved. Neither Carroll nor anyone else for that matter can ever be a child again, not even for one single summer day, and the reason for this is not that science has not yet discovered

how to rejuvenate the body, but rather the impossibility of erasing the accumulated weight of all the experiences that make up our lives while at the same time preserving our personal identity. Carroll cannot become a boy again, because in order to do so he would have had to stop being Carroll the young man (he was only 21 when he wrote the poem), aspiring mathematician and poet. In the same poem, what Carroll calls the “fairy-dream of youth”, the “golden hours of Life’s young spring, of innocence, of love and truth, bright, beyond all imagining”, is by necessity transitory. One cannot be innocent forever, cannot live in the world, take it in and engage with it, and yet remain untouched by it, unchanged, unharmed, unless, perhaps, one is severely mentally disabled. That is *not* to say that staying innocent and childlike forever would, on the whole, be desirable, that is, be preferable to mentally growing up (i.e. becoming more experienced and worldly-wise). We may, occasionally envy those who, due to some developmental disorder, are like children throughout their lives, but more often we deplore their fate because we feel that their lives have not fully blossomed, that some development that should have taken place has been cut short and that this has harmed them. They have been prevented from living a full human life. But that does not change the fact that growing up has its own regrets, that we lose as well as gain by it. My point is not that it would be better for us to stay childlike throughout our lives, but that mentally growing up always incurs a loss and that the said loss is in fact *inevitable* in the sense that we can only avoid incurring it by not growing up, which would be an even greater loss. Under the conditions of experienced time, ‘eternal youth’, in Carroll’s sense of an eternal childhood, is therefore an oxymoron, a contradiction in terms.

Yet it is not only the experiential innocence of childhood and the particular kind of enjoyment that comes with it that cannot be preserved over time. Even for an adult, living one’s life is not possible without the passage of time, and the passage of time always brings about loss. The longer we live the more things pass by, pass away. Our memories are full

of things we will never experience again, because the experience cannot be separated from the moment it was experienced, and that moment is gone forever. This is actually what being ‘past’ means: being irretrievably lost. And sometimes, and more often as we grow older, we look back and long to be there again, and knowing that this can never be, it saddens us. As another poet, A.E. Housman (1896), puts it: “That is the land of lost content,/ I see it shining plain,/ The happy highways where I went/ And cannot come again.” The underlying sentiment is also expressed nicely in Kris Kristofferson’s song “Me and Bobby McGee”, in a line that echoes Carroll: “I’d trade all my tomorrows for one single yesterday (holding Bobby’s body next to mine).” The willingness to swap *all* of one’s tomorrows for one single yesterday must be a complete mystery to the immortalist. But the truth of the matter is that even if we were granted an indefinite number of tomorrows, it would not bring any of our yesterdays back to us or make up for their loss. This does not mean, of course, that the past is generally preferable to the present or the future. We may in fact look back to our past with nothing but relief, happy that certain events lie behind us. Indeed, we may be very happy with our present and be looking forward to what still lies ahead of us. But even if we prefer our present by far to our past, this very present will soon be past as well, and the better the present is, the more we will feel its loss when it is gone. Hence, even if our lives lasted forever we might still suffer from, and gradually be wearied down by, the sheer passage of time, which, by its very nature, incurs loss after loss. That may well be part of what makes growing old so hard: not so much the gradual weakening of the body, but the sheer accretion of past in our minds. It seems to me that what makes us young is less the possibility of a long future lying ahead of us, but rather the fact that there is not much past behind us yet. Accordingly, if the desire for everlasting youth that today’s life extensionists expect to be able to satisfy very soon, is not merely, and perhaps not even principally, a desire for *bodies* that do not age, but also for *minds* that do not age, then they may have a problem.

IV. THE TEDIUM OF IMMORTALITY

In his well-known paper on the tedium of immortality, Bernard Williams discusses the fictional case of Capek's Elina Makropulos ("EM") who gets tired of life after 342 years and chooses to die because her "unending life has come to a state of boredom, indifference and coldness" (1973, 82). Williams argued that, should we ever manage to extend our lives indefinitely, we would all sooner or later experience the same boredom, such that death would no longer be an evil to us. Thus, according to Williams, the insufferable state EM finds herself in has nothing to do with who she is. It is not her personal inability to do something worthwhile with her long life that makes her want to end it. Rather, the eventual boredom is generic and inevitable.

Naturally, those who believe in the desirability of radical life extension are quick to dismiss Williams' claims as unfounded. As John Harris declares in his typically curt manner: "only the terminally boring are in danger of being terminally bored, and perhaps they do not deserve indefinite life" (2007, 64). Thus EM and Bernard Williams himself belong to a particular type of person who simply cannot deal with immortality because they suffer from what Harris calls a "terminal failure of the imagination" (2007, 64).³ In truth, the world is so rich that there will always be something to occupy an inquisitive mind. Moreover, science and technology are progressing at such a fast (exponentially increasing⁴) rate that we will never be short of new developments that give us plenty to do and think about and make sure that life will forever remain an exciting adventure – at least for those whose minds are sufficiently alive and alert.

It is doubtful, however, whether the world will really change enough to sustain our interest in the long run. In many respects, of course, the world has changed considerably during the last 2,000 years, and it will most likely continue to change during the next 2,000 years. Yet, in other respects, it has remained remarkably unchanged. What engages people's minds is essentially the same it has always been. Basic human needs and

desires have not changed. Our lives still revolve around love and hate, playing and fighting, the search for pleasure and understanding, and the struggle to survive in an occasionally hostile world. Arguably, there may never be a shortage of new things in the world, of new discoveries to be made, new achievements to be proud of, or new worlds to explore. But to the extent that these novelties engage our interest they are merely variations of the same old themes. What they provide is yet another source of pleasure, occasion to prove oneself, or affirmation of power. Even though our interest in these things is undeniably strong, it is hardly inexhaustible. It is entirely conceivable that we might get tired of all of this, of hating, and loving, and caring for anything at all. Even the thirst for knowledge is not insatiable. And it does not really matter whether things stay essentially the same, or we, being who we are, look at things in essentially the same way, such that even though things may always be sufficiently different to capture *someone's* interest, we ourselves may eventually find ourselves incapable of realising this potential and failing to discover anything interesting about them. According to Williams, the reason why – given eternal life – I will eventually reach a state at which I will no longer wish to be alive, is not so much that I will then have had enough of the world, but rather that I will “have had altogether too much of *myself*” (1973, 100, italics mine). The reason for this is not, as Harris suspects, that I am such a terminally boring person⁵, but rather that for all the changes I might go through during my life I cannot avoid relating these changes to myself as *my* changes and thus adding them to the story of my life – a process by which, as it were, the weight of being me steadily increases. Leon Kass has pointed out – and rightly, I think – that after a while, “no matter how healthy we are, no matter how respected and well placed we are socially, most of us cease to look upon the world with fresh eyes. Little surprises us, nothing shocks us, righteous indignation at injustice dies out. We have seen it all already, seen it all. [...] Many of us become small-souled, having been humbled not by bodily decline or the loss of loved ones but by life itself” (2004, 318). Kass introduces these

reflections as part of an argument against the desirability of radical life extension. More than half a century earlier, H.G. Wells and Julian Huxley proposed a similar argument: “The bad habits he has acquired, the ineradicable memories, the mutilations and distortions that have been his lot, the poison and prejudice and decay in him – all surely are better erased at last and forgotten. A time will come when he will be weary and ready to sleep” (1934, 1434). So according to these writers it is actually good that each one of us is being replaced after a while by somebody who still has the freshness and innocence that we have irretrievably lost. Although I tend to agree with this assessment, to argue this point is difficult and I will not attempt it here.⁶ My own point is rather different. What I want to suggest is that the process Kass and his predecessors describe is in fact *inevitable* (though in some cases it may take longer than our usual eighty years or so until it becomes noticeable) and that due to this inevitability, the goal of radical life extension, namely the preservation of eternal youth, is impossible to attain. We simply cannot endlessly continue looking upon the world with fresh eyes.

V. BEING OLD, FEELING YOUNG

One can, of course, contest the idea that the process described above is inevitable. Bortolotti and Nagasawa have pointed out that EM in Capek’s play on which Williams based his interpretation is an immortal living in a world of mortals, and that this fact may be “partly responsible for her solitude and sense of detachment” (2009, 264), which would suggest that if everybody else were also immortal, EM would feel differently about her life. This is a good point, which is supported by the sociological literature on the subject. The fact is that many people who are biologically old do not always *feel* old, just as there are people who do feel old without actually *being* old (Baum 1983, Karp 1988, Cremin 1992, Thompson 1992, Barak 1999, Nilsson *et al.* 2000). According to Thompson, you can “feel old at any point in adulthood. [...] Feeling old is feeling exhausted in

spirit, lacking the energy to find new responses as life changes. It is giving up” (1992, 43). Remarkably, whether one feels old or young seems not to be *directly* dependent on the state of one’s body. Old people may suffer the effects of their ageing bodies, such as declining bodily function, difficulty in moving around, or dizziness, without actually feeling old. Nilsson *et al.* (2000) found that there are three aspects that contribute to one’s *feeling* old. First, when one feels helpless and a burden to others. Second, when one no longer recognizes one’s former self (one’s present self being fatigued, listless and indifferent and generally having different mental qualities than one’s previous self). And third, when one feels separated from others due to a difference in life experience and the loss of siblings and friends and generally people of one’s own generation who share one’s experiential background. This last aspect is obviously relevant to the Makropulos case. Following Bortolotti and Nagasawa, it seems likely that EM’s separateness is at least part of the reason why she decides that she has had enough of life. If that is so, then she might see things differently if there were enough other immortals around who shared her condition, to whom she could relate and who would be able to understand her. Since a physically fit and healthy immortal would have no reason to see themselves as a burden to others (Nilsson’s first aspect of feeling old), nor (if we assume that the often described listlessness of old age is directly dependent on the bodily decline) to think of themselves as different from what, or who, they used to be, then indefinite life extension may, after all, be possible without compromising the ability to feel young.

The truth is, however, that we cannot be sure how exactly we will feel when we live indefinitely extended lives, for the simple reason that nobody has done it yet. We may still find our lives meaningful, we may not become bored by the world or our continuing selves, we may still be happy to be alive. On the other hand, even though an eighty-year-old even today, with their body in decline, may still “feel young”, this does not tell us anything about how they would feel if they lived to 160, even with their bodies in good shape. Sociological evidence suggests that feelings

of loss are an important factor in the constitution of mental age, that is, how old one feels. And, as I have argued above, loss is inevitable due to the nature of time and will necessarily accumulate the longer one lives. It is possible that there is a threshold for each one of us, which may well differ from individual to individual, beyond which we fall victim to Kass's small-souledness, when little surprises us anymore and nothing shocks us. After all, if one can be physically old and still feel young, in other words: if there is no necessary connection between the ageing of the body and the ageing of the mind, then one can also stay physically young while becoming old mentally.

VI. ARE SECOND WONDERS BETTER THAN NO WONDERS AT ALL?

Even if the above reflections are considered plausible, however, one may want to object that it is still better to continue living with an aged mind in a youthful body than not to live at all. Perhaps life will feel rather dull after a while, or at least not as exciting as it used to be, but so what? Even if it is true that “first wonder goes deepest; wonder after that fits in the impression made by the first,” as Yann Martel writes in his *Life of Pi* (2002, 50), this does not mean that second and third wonders are not desirable at all and death is the better option. True, it does not. It all depends on how little wonder is left in the end (which we will not know until we get there) and how much value we attach to our mere existence. If we believe that (almost) any existence is preferable to non-existence, then no argument will persuade us that radical life extension is not worth pursuing. However, few people seem to feel that way. We could argue after all, and with equal justification, that if the only way to live forever was to live forever in a state of physical decline, then we should embrace it: because living in such a state would still be better than not living at all. Yet many people would regard permanent old age as a curse rather than a blessing. Hardly anyone seriously wants to be old forever. A fate such

as the one the mythological Tithonus had to suffer, until he was released to a degree by being turned into a cricket, is to be deplored and not envied. Yet if not only the body ages, but also the mind, and if only the ageing of the body, but not of the mind, can possibly be arrested through scientific and technological advances, then the indeterminate prolongation of life will eventually lead, one way or the other, to a situation that may turn out to be just as unbearable as Tithonus's. We may be forever mentally old.⁷ Why should this be more desirable than being forever physically old?

Of course, we could always kill ourselves if it turned out that life had become unbearable after a while. It has thus been argued that life extension is a win-win situation. We cannot lose. If we find that a life without physical ageing, one that is not naturally ebbing away, does not suit us, we can just leave. In other words, we would not lose the *option* of dying, just the *necessity* of it. As John Harris remarks: "Those who are bored can, thanks to their vulnerability, opt out at any time" (2007, 64). But is it good to have the choice? Given our fear of death, or rather of being dead or no longer being alive, we would almost certainly find it very hard to choose nothingness. It is much easier to accept a death that comes naturally and with certainty than a death that has to be deliberately chosen. I personally would rather not be forced to decide between taking my own life and going on with a pointless life. But this is ultimately a decision that everyone has to make for themselves.

Moreover, if we think it likely that our minds will indeed age in the way described above, then there is another reason to wish that our lives would end before we reach a stage at which we find ourselves in the predicament of, as Williams says, having had altogether enough of ourselves. Aristotle has argued that a person's life can only be considered happy or unhappy when it is over. Happiness requires "not only complete virtue, but also a complete life, since many changes occur in life, and all manner of chances and the most prosperous may fall into great misfortunes in old age, as is told of Priam in the Trojan Cycle; and one who has experienced such chances and has ended wretchedly no one calls happy"

(1908, I.9). Thus a disaster that strikes us shortly before our death (and, for Aristotle, even one that strikes us *after* our death) is not only something that must be weighed against all the happiness we have experienced during our lives, but rather something that may completely obliterate all this happiness and make our life *as a whole* an unhappy one. In this way, the suggested incrustation of the mind, which would take the wonder out of life and would make us experience everything new as a mere replication of the old, may in retrospect devalue the original experience and shed suspicion on the first wonder, thus making our whole life a miserable one. The more often you repeat the experience of loving someone, the less precious the first time you loved seems to be. If you come to despise, or be bored by, all things beautiful, if you are no longer capable of seeing the beauty (and wonder surely forms a great part of the experience of beauty), then it may seem to you that there never was beauty in the first place, that it was at best a pleasant illusion. Do we really want to look back at our lives one day, telling ourselves that nothing really mattered and nothing was really worth it?

Another reason to shy away from the prospect of indefinitely extending our lives at the price of an aged mind is that we may consider it better for there *to be* first wonder rather than second wonder. That is, we may adopt an objective point of view and, out of the conviction that the ability to discover the world anew is intrinsically valuable, forego the opportunity to extend our own lives in order to make room for others who can still do what we have long ceased to do: to look at the world with fresh eyes.

VI. THE OPPORTUNITY TO LIVE ONE'S UNLIVED LIVES

There is another idea that is often evoked when people seek to highlight the attractiveness of indefinite life extension, which strikes me as just as incoherent as the idea of eternal youth, and for similar reasons. It is the idea that immortality will allow us to pursue alternative life paths that we are now prevented from pursuing by our all too short life spans. Thus

Alan Harrington boldly states that in “eternity – always excepting the possibility of accident – men and women will have the chance to live out all the un-lived lives and travel the untraveled paths that they wish they had explored” (1969, 182). Thus, according to James Stacey Taylor ageing and death function as “biological constraints” that compromise the instrumental value of our autonomy by preventing us from pursuing all the options that we might wish to pursue: “A person cannot, for example, be both an internationally renowned mathematician and an Olympic-standard tennis player even if she were capable of excelling in both fields, for each of these goals requires a degree of dedication during the same period of a person’s life that would preclude the pursuit of the other” (2009, 109).

It is true, of course, that we sometimes wish we had chosen some other path of life and that we often wonder, even when we are entirely happy with the choices we have in fact made, what would have happened if we had chosen differently and wish it had been possible to avoid the choice altogether – to both do what we did *and* do what we did not simply because we did the other thing. In other words, we wish that we had more than one life to live. It may seem, then, that radical life extension will help us fulfil this hitherto impossible dream by providing ample opportunity to live one life first, and then another, and then yet another. We would, in short, be able to live all the lives we have ever dreamt of.

The trouble, however, is that *one* single person cannot live *two* or more lives. Once you have made a choice you cannot go back to make a different one, because every action has consequences, every path you take leads you somewhere else, and builds on the narrative that makes up your life. “Way leads on to way”, as Robert Frost writes in “The Road Not Taken”. It is not the *lack* of time that prevents us from leading more than one life. On the contrary, it is time itself that does: time and the fact that my actions must spring from what I am, or else they would not be *my* actions at all. I need to be committed to what I do, need to be serious about it. Perhaps I can now resolve to learn to play the piano and become a professional musician after I have done philosophy for, say, a century. But if what I am doing now is

important to me, why should I suddenly stop doing it after a fixed time? And if making music is important to me, how can I possibly wait for a century before I devote myself to it? Stacey's example of the brilliant mathematician who could also be a brilliant tennis player and who, through life extension, will be given the chance to be both, is far-fetched for several reasons. First, while it is probably true that I cannot be a world-class tennis player and *at the same time* a great mathematician, I do not see why I should not play tennis first, say from fifteen to twenty-five, and then pursue a career in mathematics, all within the life span that is currently allowed to us. Second, since I have yet to hear of a world-class tennis player who, after retirement (usually in their early thirties, but occasionally even earlier – Bjorn Borg retired at the age of 26) became a world-class academic, it is probably safe to assume that there are not too many people around that are so exceptionally talented in two very different fields. Third, it seems unlikely (or at least far from certain) that those who are indeed exceptionally gifted in two different fields and who feel that they cannot possibly spend less than a lifetime on either of them, while being patient enough to wait for sixty years or so until fully exploring the second of their talents, will after all those decades that they have spent on their first career be as interested in pursuing their second career as they were at the beginning. Fourth, even if they are, the fact that they can then leave their first career choice behind them for good, now dedicating themselves fully to the other, suggests that one can indeed become tired of doing even those things that one loves most. And if that is the case, then there will surely come a day when one also gets tired of pursuing that other career.

Of course I might some day lose my interest in philosophy (or mathematics) and discover my interest in music (or tennis) instead, but this is something that may or may not happen to me, and not something that can be planned in advance.⁸ Similarly, you can truly love someone and be with them and at the same time wish you could also have been with someone else, because you realise that that would have been a good life too, but you cannot truly love someone and at the same time already look forward to the day you can replace them by somebody new. You may, of course, lose a love and

then find another (or indeed love two persons), but you can never find a love in the first place if you regard them as merely one in a long, hopefully never-ending series of lovers and loved ones. Likewise, you cannot be a saint for a century and then be a rogue for the next. You may of course *turn* from a saint into a rogue (or, possibly, from a rogue into a saint), but you cannot *choose* to be one and then the other. To live a particular life means to be committed to certain values (or the lack thereof). You cannot just try it out, wear it and eventually shed it like a garment that you no longer like or that has fallen out of fashion. Decisions need to be made, which occasionally require sacrifices. One who really was talented in many ways was Albert Schweitzer, who gave up various promising careers – as a philosopher, a theologian, a musical scholar and an organist – to work at his own expense as a medical doctor in Africa, looking after the native population. Would Schweitzer have acted differently if he had known that his life would span two or three centuries instead of the ninety years that he in fact achieved? Would a longer life span have freed him to pursue those other careers as well as his career as a “jungle doctor”? No, it would not, because he was who he was because of the decisions he had to make. What he chose *not* to do defined his life just as much as what he chose to do. And this is the case with all of us. There are no un-lived lives to be lived in a never-ending future. All we will ever be able to do is continue the one life we have acquired, with all the missed opportunities, all the roads we have not chosen to take. We cannot start from scratch, unless, that is, we are willing to completely cancel out the accumulated past. But as I am going to argue in the next section, even then it is doubtful whether it is really *we* who start this new life.

VII. PLUNGING INTO THE RIVER LETHE

How do we cancel out the accumulated past? It seems to see that the only way of doing so and thus avoiding the ageing of the mind is to erase one’s memory of the past, to forget everything we have ever learned and witnessed. In other words, there is only one possible Fountain of Youth, and that foun-

tain is the river Lethe. However, even complete memory erasure might not entirely free us from the accumulated past, which sediments not only as a set of memories, but also as a clearly defined character that structures and confines the way we perceive and process the world. Yet even if we managed to somehow overcome this additional problem, complete memory erasure seems to be a strange way of achieving eternal youth. After all, one of the great perils of old age is memory loss, which we tend to identify with the progressive disintegration of the person (Katz and Peters 2008). Following John Locke (1894), personal identity is commonly regarded to depend on the ability to connect one's present experiences with one's past experiences, i.e. to form a mental image of the past and appropriate it as an image of one's *own* past. It is quite ironic that the only possible way to retain (or periodically regain) our (mental) youth over time seems to be the deliberate engineering of the very thing that to many people is the clearest symptom of old age and its detrimental effects, and that accounts for much of the fear that accompanies the prospect and the experience of ageing. And what would such a life, or such a series of consecutive lives, be like? It would resemble most the life of Peter Pan who, in J.M. Barrie's play, is the boy who stubbornly refuses to grow up and thereby retains an at first sight very appealing youthfulness. Yet what is often overlooked is that Peter Pan, the archetypal *puer aeternus*, pays a high price for his eternal youth: he has a remarkably short memory. He very quickly forgets, including his enemies (Hook) and his friends (Tinkerbell and Wendy), and every next day he starts all over again. There is no real commitment in his life, no deep personal relations, no development, no story. His is the shallow, unchanging life of the animal that lives entirely in the present moment, and not a human life at all (Lundquist 1996, Yeoman 1998). Such a repetitive existence is attractive only if you do not look at it too closely. For all practical purposes, Peter Pan dies each night and is reborn the next morning, without any memory of his former life, such that we cannot even say whether the one who goes to sleep and the one who wakes up are the *same* person or not. Is it the same Peter Pan, or a different Peter Pan? It is impossible to tell, and that is the reason why Peter Pan is not even a

person, or at least not *one* person. If a lack of memory is a *necessary* requirement of eternal youth, requiring us to erase our memories periodically in order to regain our youth, we will not only have to pay the same price as Peter Pan, we will also disconnect our consecutive lives in a such a way that it is doubtful that it will in any meaningful sense be *we* who lead the fresh life after the complete erasure of our memories. Although there will then be *somebody* who is young and has a brand new start in life, it will not be us.⁹

VIII. CONCLUSION

I have argued that the project of radically extending our life spans, although perhaps technologically feasible in the near future, may well fail with regard to its main objective. Assuming that the purpose of life extension is not the prolongation of old age, but the preservation or recovery of youth, our efforts are less likely to be successful if youth is not merely a condition of the body, but also, and even more so, a condition of the mind. Although we may be able to arrest the ageing of the body, we may not be able to arrest the ageing of the mind which comes with experience. Even by periodically erasing our memories, we cannot achieve our goal because memory erasure would imply the annihilation of the person that we are. And that is, I think, the reason why some people, although they do not wish to die, do not want to live forever either.¹⁰

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NOTES

1. Hugh Hefner launched *Playboy Magazine* in 1953 and has been editor-in-chief ever since. The quotes are from an interview that appeared in *The Guardian Weekend*, November 21, 2009.

2. It has been shown, for instance, that the ageing process, and particularly the *rate* at which an organism ages, is regulated by specific genes, which can then be manipulated in order to increase average life-span. See Guarente and Kenyon 2000; Hekimi and Guarente 2003. For a comprehensive summary of all scientific developments that raise hopes for eliminating ageing, see de Grey and Rae 2007.

3. The objection is expressly directed to Williams (and Walter Glannon) in Harris 2002, 289.

4. As Ray Kurzweil (1999) argues with reference to Moore's Law.

5. While it may be true that, as Larry S. Temkin remarks: "Some people bore easily, and others do not" (2008, 203), it is not very likely that this would make much difference *sub specie aeternitate*.

6. For one such attempt see Hans Jonas: "The ever-renewed beginning," writes Jonas "which can only be had at the price of ever-repeated ending, is mankind's safeguard against lapsing into boredom and routine, its chance of retaining the spontaneity of life" (1992, 39).

7. A similar point was made by David Gems (2003, 36).

8. Note that it is of course possible for me to divide my time and pursue both philosophy and music (if they are both equally important to me), but if I can do that then I would not need an extra life to do so.

9. Walter Glannon has argued that "a substantial increase in longevity would be undesirable because it would undermine the psychological grounds for identity and prudential concern about the distant future" (2002, 268). I agree with Glannon's general assumption that our interest in the future depends on the extent to which we can expect to persist "through time *as the same person*" (277). However, whether a life *without* occasional memory erasures would really destroy personal identity over time, we can only know once we have tried it. Surely the question whether or not personal identity in the form of "psychological connectedness", which Glannon believes to consist in the holding of "particular direct links between mental states, such as the persistence of beliefs and desires, the connection between an intention and the later act in which it is carried out, and the connection between the experience of an event and one's memory of it" (270), will be compromised, is an empirical, and not a philosophical one.

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