

LONGEVITY

DOUGLAS MACLEAN

The University of North Carolina at Chapel Hill

Department of Philosophy

The value of a person's life is not reducible to the satisfaction of one's desires or interests, including the interest in living longer. A person who takes pleasure in beach vacations each summer may look forward to another stay at the shore next year, but this is not the kind of interest that gives her a reason to continue living. Assuming she has lived a normal life, one beach vacation more or less will not affect the value of her life, even in the slightest degree. Similarly, we wouldn't say of a person who has lived a full life that his life would have been more valuable if he hadn't suffered that wretched toothache several decades ago. The value of a person's life is not simply a function of the good and bad experiences it contains. More controversially, neither is it simply an aggregate of a person's accomplishments. Discovering another great self-portrait by Rembrandt (who created nearly one hundred of them, so far as we know) would not affect to any degree our assessment of his greatness as an artist. Rather, the value of a human life is determined by what adds meaning to life, what—and not simply how much—she achieves or how well she lived up to her ideals. If this is right, then for most people who live to a reasonable age, living longer will not add value to their lives. The social value of longevity is a question of whether a society in which the median age is higher or human life over time is packaged in fewer individuals is better than a society in which the median age is lower and the same amount of life is packaged in more individuals living shorter lives. I see no reason for thinking the former society is better and hence no justification for nations like the United States or Great Britain to spend health-care resources on promoting longevity of its citizens by adding to the normal lifespan.¹

Keywords: lifespan, value of life, public policy, social value, wellbeing.

1. I wrote this paper in 2005. I have made small changes since then.

Contact: Douglas MacLean <maclean@unc.edu>

He can only visit his father in the cemetery, that's what this bitch-of-a-life is like, it always runs out on us

—Saramago 2004: 10

Introduction

Most of us want to go on living for a very long time, if not forever. The desire to live is one of the few desires that does not diminish as we get more of it. In fact, we think it odd if someone who is not incurably ill or irreversibly infirm does not want to continue to live. If such a person declares themselves to be tired of life and happy to see it end, we probably think they suffer from depression or other illness, which should, if possible, be treated.

People at all ages may also have an interest in continuing to live. This means that they have reasons to satisfy their desire for more life. When someone is twenty years old, in good health, and experiencing fortunate circumstances, they have goals to achieve, potential to realize, and a strong interest in living to see these things happen. When a person is forty or sixty, in good health, and experiencing fortunate circumstances, they have a different kind of interest in their future. They may have children, a career, and worthy projects in which they are actively engaged. When a person is eighty, still in good health, and able to work productively at some meaningful task, with friends and family who care about them and whose company they enjoy, then they too have an interest in continuing to live for as long as they are able to engage in the activities that give meaning to life and bring happiness. There seems to be no upper bound to our interest in continuing to live. The normal infirmities of age may reduce our capacities and make us more susceptible to injury and illness. But if these infirmities lessen our passion for life, they seldom extinguish altogether the desire to keep living. Progress in science and technology, moreover, helps to reduce or postpone these infirmities. And we can expect this progress to increase, especially now that the baby boomers of my generation, who have accumulated an enormous amount of wealth and the power to set research priorities, swell the number of senior citizens and their percentage of the population in most developed countries.

The raw will to live is one of the most powerful forces in nature. It can survive even the absence of most or all of one's reasons for living or the conditions that make life good. A mortally injured bird will struggle to move itself to safety, with all the energy it can muster, right up to the moment when death overtakes it. No doubt the will to live, as well as the more human fear of death, have genetic roots and evolutionary value. People whose lives are on the whole miserable may struggle fiercely nevertheless to stay alive, and we who witness their struggles often regard them as courageous and admirable.

You may have known someone like my father, who suffered greatly from an incurable disease but continued without any hope of recovery to battle it for as long as he was able. Or you may know someone like my mother when she was eighty-five. Suffering from Alzheimer's disease, her mental capacities at that age had diminished to the point where she could scarcely engage in meaningful activities or conversation. Occasionally she would admit to being lonely, but for the most part she was cheerful. She enjoyed having company, taking walks, and visiting nice places. But her memory deficit caused her to have little interest in her future. When I would talk to her about plans that would affect her more than six months ahead, she would dismiss my comments or advice as irrelevant, as if it was based on a false premise. Yet she continued to exercise regularly, eat conscientiously, and take her medications every day. She did whatever her physician prescribed to keep her healthy. My mother, like many people her age, had a desire to live, even though she had no interest in being alive at any time in the medium-term future.

The desire to live is pervasive and robust in most humans and other animals, but it can persist even after it becomes unreasonable to satisfy it. I want to distinguish this 'raw desire' to live from having an interest in continuing to live. A person has such an interest, as I said, if their desire to keep living is reasonable. I take this to be the state of most people most of the time.

More importantly, I want to distinguish having an interest in living from its being good for a person that this interest is satisfied. The latter expression has different senses. In one sense, it is good for a person to satisfy their reasonable desires. I may desire going for a walk in the woods, having a good wine with dinner, finishing the paper I am writing, that my children prosper, or that UNC beat Duke in their next basketball game. Some of these desires aim at my own happiness and some do not. Satisfying the desire that my children prosper increases my happiness or well-being only in the indirect and trivial sense that my well-being increases when my preferences are satisfied. But there is another sense of something being good for a person that means, roughly, adding value to his life. Whether satisfying my desires or my interests adds value to my life is a different question and not so easily answered.

I will argue that satisfying the reasonable desires that give a person an interest in living longer do not necessarily make their life better or add to its value. The value of a person's life is not simply a function of the good things that happen in it, the interests that are fulfilled, or increases in well-being. I may have a desire on a hot day to walk to the ice cream parlor and eat an ice cream cone. Under normal circumstances, it would be in my interest to satisfy this reasonable desire. But if the ice cream parlor is closed, and this interest is frustrated, it does not to even the slightest degree detract from the good or the value of my life. Things that add value to my life give me a reason to go on living. My interest in an ice cream

cone is not such a thing. Some people will want to object to this claim, and I will return later to address this worry, but my aim here is simply to mark a distinction between the satisfaction of a person's interests and the value of their life.

I am using *interest* to refer not only to the things a person in fact desires but also to the things we would say they have reason to desire, whether or not they are aware of these reasons or are motivated to desire something by their recognition. It is in Mary's interest to turn off the electric stove she has left on in the kitchen because of the risk of fire, even if Mary is unaware both of the risk that such a condition poses and the fact that she has left the stove on. Some desires are unmotivated by reasons—they just arise in us—and some are motivated by reasons that have nothing to do with a person's good. It may be in a person's interest that both kinds of desires are satisfied, even if only because the person happens to have such desires. Thus some interests are conditional on the existence of a desire. If I don't desire an ice cream cone on a particular hot afternoon, then it is not in my interest to have one, even if I would enjoy it. Finally, I want to say that it can be good for a person to live longer if continuing to live is likely to enhance the quality or add to the value of their life. And this can be true even if they have no desire to continue living.

Two Questions about Longevity

Now, the first question about longevity that I want to examine is this: Is it always good for a person to be able to satisfy an interest in living longer? Even assuming that things will go the way she hopes, with their interests being satisfied and their well-being thus increased, does living longer necessarily add value to their life?

I need to continue with preliminaries and distinctions just a bit longer here, in order to bring this question into focus. First, I am not proposing to discuss the impersonal value of life in some general or abstract sense. The question I am posing here is primarily about the value of living longer for the person whose life is in question. Secondly, I will not discuss Lucretius's arguments about whether death is a bad thing or his concerns about the apparent asymmetry between the past and the future in our desire for longevity. I will not explore the reasons why our concerns about mortality do not make us equally concerned about prenatal nonexistence.

Finally, I want to distinguish a desire to continue to live from a desire that one's life will have lasted for many years. Joseph Raz imagines a genie who offers a person a choice of either dying within a week or sacrificing ten years of his past life and all the experiences and memories of that period, which the genie can make happen, in exchange for five additional years of life (Raz 2001: 97; also

see Parfit 1984: 174–86). I confess that my own imagination fails me when I try to make sense of the deletion of ten years of my past life while maintaining a sense of my own identity, but Raz nevertheless imagines that most people would accept the exchange that the genie offers. His point is that our concern with longevity is normally for extending our lives further into the future rather than merely increasing the number of years that we live. The genie experiment aside, I agree with Raz's conclusion. The first issue I will address, therefore, is whether it is good for a person to continue to live in the future. The answer, I believe, depends crucially on the age of the person whose future we are considering.

The second and more important practical question that I will take up is about the social value of longevity. Should we be supporting research aimed at increasing life expectancy? Is it reasonable to devote resources to this goal? This question is about policies aimed primarily at helping people to live longer, not better. When we learn, for example, that life expectancy in Somalia is currently fifty-one years, we rightly see this as an avoidable tragedy, but this is not merely because the average life of a Somalian is so much shorter than that of the eighty-plus years a Briton can expect to live.² Rather, the tragedy lies mostly in the fact that it also means that Somalians suffer a shockingly high rate of infant mortality, and the population is wracked by malnourishment and other curable diseases, which reduce their level of vitality even in their prime. Increased aid could improve the health and vitality of the average Somalian while at the same time dramatically increasing their life expectancy. In many situations like this, health and longevity go together.

Throughout much of the world today, however, people live actively for longer than they have at any other time or place in history. At the time of the Roman Empire, average life expectancy in Europe was between twenty-two and twenty-five years, but in many developed countries today life expectancy has increased by more than that amount in just the past century. In the United States, for example, life expectancy has increased by more than thirty years since 1900 to a current level of 79.6 years. The average American, like the average Briton or Swede, is now expected at birth to exceed the biblical allotment of three score and ten years. More importantly, our sense of what constitutes a normal life, our expectations for how one can live at ages sixty or seventy, our understanding of human potential and the range of projects and goals one can realistically adopt, are all shaped and significantly changed by these dramatic increases in life expectancy. Unlike the ancient Romans or even Americans in 1900, most people in developed countries today expect to live to see their grandchildren

2. These are 2014 figures taken from the Economist's Infoplease website, <https://www.infoplease.com/world-statistics/health-and-social-statistics/life-expectancy-countries-2014>.

growing up. We live more fully and in better health during a prime of life that is constantly expanding.

My second question, therefore, concerns only longevity relative to normal conditions in developed countries like England or the United States. Would increasing life expectancy in these circumstances, *ceteris paribus*, be good for the people whom it would affect? Should we be allocating resources to increase longevity for ourselves?³

The Value of Living Longer

I turn now to examine the first issue, whether longevity is good for an individual. I have already acknowledged the existence of a primitive, unmotivated, nearly universal desire to live. This desire by itself does not constitute a basis for claiming that it would be good for any animal in which it is present to continue living. Clearly in many cases it would not be good. Darwinian pressures are not always sensitive to what is good for an individual.

But many elderly people who desire to keep living may look forward to a pleasant future and thus have an interest in satisfying this desire. They may indeed have good reasons for continuing to live, which motivate the desire. Most people want to live long enough and in a way that they develop some of their potential and engage in and fulfill some of their important and worthy projects. It is reasonable to want as much life as this requires for oneself and others. Beyond this, if a person reaches retirement age in good health, they may still have an interest in the pursuits and engagements that are normal for a person of their age. Writers can still write, painters can still paint, and accountants can still account. If one can no longer play tennis, a senior citizen can still take walks and perhaps take up 'real tennis' or pickleball. Grandparents can help out around the house, and many septuagenarians are still able to garden, row, gather signatures on political petitions, play a decent game of bridge, enjoy sex, and join in dinner conversations lamenting the current decline of culture. Like the rest of us, they can read new books, reread old ones, and enjoy another performance of *Carmen*

3. I have phrased this question in a way to suggest that it applies primarily to the allocation of public funds. But we can also ask whether this is a noble way for the super-rich to spend their money. This is not an idle question. A recent article by Pollack (2014) reports, 'J. Craig Venter is the latest wealthy entrepreneur to think he can cheat aging and death. . . . On Tuesday, Dr. Venter announced that he was starting a new company, Human Longevity, which will focus on figuring out how people can live longer and healthier lives'. The article goes on to mention that 'last year, Google's chief executive, Larry Page, announced that his company was creating an anti-aging company, Calico, which is being run by Arthur D. Levinson, the former chief executive of Genentech. Oracle chief executive, Lawrence J. Ellison, has financed anti-aging research through his foundation'.

or another Rolling Stones concert, as they have for decades. (The septuagenarians who are Rolling Stones can enjoy going on yet another tour.) They can enjoy seeing new movies and older movies again, and they can look forward to getting together with family and friends as much as younger people do. My wife's uncle Wally used to meet the same group of friends at a diner every morning for breakfast, and he looked forward to these rendezvous day after day, year after year, for decades. These are all worthwhile and meaningful activities.

A Comment on Immortality

If health and circumstances permit, I see no reason why the enjoyment of such things should ever cease. Bernard Williams has famously argued that, were we immortal, our interest in living longer would eventually come to an end (Williams 1973: 82–100). He claimed that given enough time to try all the new activities we can imagine and to repeat the pleasant ones often enough, life would inevitably become boring. I don't think Williams is right about this.⁴ Given enough projects of interest and enough time to elapse between rereadings of *Pride and Prejudice*, I don't see why an interest in living need ever give way to the tedium of immortality that Williams foresaw. Perhaps I simply lack Williams's imagination, but I think Williams may himself have lacked an appreciation of people's capacity to enjoy trivial pursuits and the repetition of pleasant experiences.

The prospect of immortality might affect our interests in other ways, however, for at least two reasons. First, an awareness of our mortality, and more specifically an awareness of our expected lifespan, is relevant in important ways to how we value the projects and activities we choose to pursue. For, among other things, we know that when we choose to pursue certain projects, this means that we forego the opportunity ever to do many other things. We do not expect to live long enough to take up all the projects that might interest us, and part of what gives value to the projects we do take up is the fact that we chose these particular things from among some greater number of possibilities. Immortality would put this choice of goals in a different light, and that would surely change what they mean for us.

Secondly, the fact that all of us who are currently alive will someday be dead has a different effect on how we value things. When we think about things like building and maintaining cathedrals, producing great art, or environmental protection, we value them in part with a sense of our legacy to posterity, and surely this is different from valuing them because they will enrich our own lives and the lives of our peers. If everyone who is currently alive were to live forever,

4. For further discussion, see Glover (1990: 29).

and no new people were to inherit the Earth, then the dimension that a legacy adds to the value of some important goods would disappear. The quality of our valuing would be significantly changed and diminished. If immortality has a downside, it is not the risk of boredom but the other ways that it undermines important values.

By disagreeing with Williams, however, I am merely making a harder case for the argument I am trying to develop, which is that longevity is not always good for a person, even for a person who has an interest in living longer. But arguing about the value of immortality is, in any case, a moot point in practice. For the foreseeable future, our concerns about increasing longevity should be restricted in scope to an additional fifty years, I would guess, and more likely an additional twenty.

Accomplishments, Achievements, and the Satisfaction of Interests

So let us concede that, assuming good health and other favorable circumstances, a person may have a reasonable desire, an indefinitely continuing interest, in living longer. Assume that things continue to turn out as one hopes they will. Does living longer make life better or add to its value?

If someone has a desire to live, which is supported by the kind of reasons that constitute having an interest in continuing to live, then it does not make sense to say that it would be bad for this interest to be satisfied. And it may be tragic when a life is cut short in its prime and death prevents someone from realizing their potential and exercising their talents. But consider an older person, someone who has already lived a full life but remains in good health, who is able to engage in further projects, and reasonably wants to continue to live and enjoy a few more years. Does the satisfaction of *this* interest contribute to their good or add value to their life?

Some people, as I mentioned previously, will find this question easy to answer in the affirmative, and they might think that some confusion is involved in anyone who thinks it worth asking. They believe that the value of a person's life simply consists in pursuing and satisfying reasonable desires, and it does so in some sort of additive way, so that the value of a person's life is increased by the pursuit and satisfaction of an interest. John Broome writes that 'the value of a life is simply the value of the good things it contains' (Broome 2012: 161). This is a conception of the value of a life that I believe to be mistaken.

When we stand back and try to assess a person's life, taking into account their happiness, the impact they had on others, and all the other things we might find relevant, then assuming that the life they lived was full or complete, the

length of their life will rarely be a factor in this assessment. If Uncle Joe and Aunt Tillie each lived full and happy lives, if both were beloved by friends and acquaintances and will be well remembered by all, then it is irrelevant to any reasonable assessment of how good or valuable their lives were that Tillie lived six years longer than Joe.

Things get more complicated of course when we take accomplishments or achievements into account. I certainly don't mean to suggest that what a person accomplishes late in life is not relevant to a judgment of how well their life went, the value of their life, and what they may have contributed to the world as an artist, an intellectual, a citizen, a neighbor, or simply a person who lived a good and full life. But to understand when a person's accomplishments do substantially affect an assessment of their life's value, we should distinguish two kinds of goals that are common for people to have (Raz, 2009: 104–11; Williams 2009: 85). Compare the difference between my lifelong desire to visit St. Petersburg (which was satisfied only last summer) and my desire to spend a weekend at the beach next summer. I had read and learned much about St. Petersburg over the years, and it was one of my goals in life to go there. I wanted to see the beautiful and historically important things it has to offer; I wanted to visit the birthplace of my grandfather. If I had died before visiting St. Petersburg, then one of my goals in life would have been frustrated, and this would have been bad in the sense that it would have detracted from my overall well-being or good.

It matters, however, that St. Petersburg is the one spot on Earth that it was my goal to visit before I die. It could have been otherwise. I might simply enjoy reading up on cities I have never seen, working up a desire to visit them, and adding them to the list of places I'll try to visit. If there were a hundred such cities on my list, and I only get around to seeing forty of them before I die, then it might not matter at all that I never got to St. Petersburg, Tegucigalpa, or Katmandu.⁵ My desire to visit St. Petersburg would in this case be a conditional desire, in much the same sense that my desire to spend time at the beach next summer is conditional. When I look forward to next summer, I assume that I will be alive and will have time and opportunity to do some things just for fun. I'd like to spend a weekend at the beach. This becomes one of my goals, and of course my dying before next summer would frustrate this goal. So long as I am alive, I want to enjoy certain kinds of experiences, including the sensually pleasant experiences that time at the beach provides. But this is not the kind of desire or goal that living longer in order to fulfill it adds value to my life. One more trip to the beach will not affect the quality of my life in any significant way. Nor will

5. It would be different, of course, if my list was complete in some objective sense. If my goal were to climb all the peaks in Colorado higher than fourteen thousand feet, and I managed to climb all but one before I died, then perhaps my life was worse for failing to climb this last peak.

adding one more city to the list of exotic places I have seen (Williams 1981: 1–19; Raz 2009: 119).

This point applies quite generally, I believe, to the way we understand the value of pleasant experiences. Imagine someone who is approaching the end of an experience or a stretch of life that they are thoroughly enjoying; for example, a pleasant dinner with good friends, a fortnight's vacation in Spain, or life as an undergraduate. It is natural to feel sorry that any of these experiences is soon to end, but this natural feeling of regret does not provide one with any reason to try to eliminate its cause, which is the impending end of a good stretch of experience.

Suppose that after two weeks of sightseeing in Spain, enjoying the countryside, and simply relaxing at outdoor cafes, you are not bored and would surely enjoy extending your stay for another week. There may be several reasons nevertheless for not doing so. First, there are cost considerations, both the expense of the trip and the opportunity costs involved in staying longer. You may need (and want) to get back to work, to tend the house and garden, to clear out your inbox—in short, to resume the activities from which vacation is an escape (and is enjoyable in part for that reason). But even if we assume that both the expense and other opportunity costs of extending the stay are insignificant, other reasons may count against doing so. Although you may continue to enjoy a third week in Spain, the pleasure might begin to diminish, even if it never falls to indifference. Were this to happen, then even though your overall enjoyment would in one sense be increased, empirical evidence suggests that you would remember the trip as less enjoyable than a shorter one (Fredrickson and Kahneman 1993: 45–55; Kahneman 1994: 18–36).⁶ In this important sense, it would end up being a less enjoyable experience overall.⁷

A third and more important reason for not extending your stay, however, is that the fortnight's vacation is itself a full experience of its kind, which fully accomplishes the goal of a vacation. A three-week trip would also accomplish this goal, but perhaps no better than a two-week trip is capable of doing. If you were contemplating extending your stay to three months or a year, it would be a different matter. It would then become a different kind of trip with different goals. But adding pleasant time to a full and enjoyable vacation does not by itself make it a better or more valuable experience of its kind. Similarly, the fact that you would enjoy more of the experiences you have found to be most pleasant is not a reason in itself to stay at college another semester or linger another half

6. For a philosophical discussion of the empirical findings, see Broome (1995: 6–11).

7. Someone might disagree with this conclusion. I am assuming (but I have not defended this assumption) that what makes one experience better than another for the person who has them is determined by how the experiences are remembered, not by how one would rate them as they are being experienced.

hour over coffee after a very nice dinner with friends reaches a natural end. It might not be bad to prolong either of these experiences, but neither would it make them better.

Similar considerations apply to the relevance of bad or unpleasant experiences to the value of a person's life. We have an unconditional interest in avoiding many negative experiences, such as humiliation, shame, or severe and prolonged pain or disability. These things can affect our overall well-being and the value of our lives. But the same cannot be said of more routine ailments, which we may also have an unconditional interest in avoiding, but which all of us suffer and are part of a normal life as we understand it. It may be in my interest to avoid a very painful dental condition, but whether or not I succeed in avoiding this stretch of misery is irrelevant to the value of my life. It detracts nothing, not one iota, from my good. It would be bizarre for someone reflecting on the death of a friend to think, 'He lived a good life, but it is too bad that he suffered that wretched toothache twenty years ago'. Routine ailments like toothache and routine pleasures like a weekend at the beach, *ceteris paribus*, are irrelevant to life's value.

This distinction between interests that do affect the value of one's life and interests that do not applies also to the relevance of personal achievements. By achievements I mean the projects a person may have that matter to others as well as to oneself and one's friends. To illustrate this point, consider Édouard Manet, whose reputation as a great and revolutionary painter was secure by 1874 but who lived and painted for another nine years. In his last weeks of life, as Manet was dying in great pain from untreated syphilis, he managed to create some remarkably beautiful and unique still-life paintings of flowers in glass vases, paintings that certainly rank among his greatest. These paintings are relevant to the value of Manet's life because they add to his achievements as an artist. It does not matter whether realizing these still lifes was one of Manet's unconditional goals or whether instead he wished that death would come to relieve his pain and continued to paint only to take his mind off it. The point is that the achievement of these paintings contributes to our assessment of his genius and to his contribution to modern art because of the particular nature and quality of these works, not because they increased the number of great paintings that Manet produced. In this case, the number of his paintings is irrelevant to a reasonable assessment of his accomplishments as an artist.

Compare the fact that every few years another Rembrandt is discovered or identified. A few years ago, a newly discovered self-portrait sold for \$11.3 million, and more recently a portrait of a servant girl was purchased at auction in New York City for \$4.27 million (Vogel 2006). But these additions to Rembrandt's oeuvre, even if they are great paintings, do not in any way affect our assessment of his accomplishments or his value as a painter, because they do not reveal further dimensions of Rembrandt's genius. Johannes Vermeer's contribution as

an artist is not diminished by his meager output of thirty-six paintings, nor is Claude Monet's reputation enhanced by an awareness of the number of square yards of canvas he managed to fill.

If someone can achieve something in the last years of their life that they were not able to achieve earlier—an achievement that can affect our assessment of their contribution to some field or to the world or to improving the well-being of others—then it is unquestionably a good thing and adds to the value of their life that they lived long enough to bring this achievement about. But such achievements are rare. For most of us the issue will not arise, and the assessment of our life's accomplishments or achievements would not be affected by denying us the ten or so extra years I am imagining.

I do not mean to suggest that achievements necessarily result in the creation of products or objects of value. It is an achievement to be a good teacher or a good citizen and neighbor, and in these cases the amount of time engaged in such valuable activities is clearly relevant to a person's good. But even with achievements of this kind the value they add to a person's life cannot be a simple function of time. If a person is a gifted teacher, then it is an accomplishment that is part of what makes their life good or valuable that they taught for forty years and not just for five. But adding or subtracting a few years to that impressive career does not affect the accomplishment in the slightest degree.

I have been arguing that living longer than our current life expectancy may in a sense increase our total well-being, but it will not positively affect the value of our lives. Of course, whether I am right or wrong about this is of little practical importance. I am not suggesting, after all, that it is bad to live longer; nor am I advocating that we take measures that would prevent any individual from living longer than they have a reasonable desire to live. My argument so far has been that in most cases satisfying this desire has no effect on the value of one's life. Satisfying an interest in living longer, even under favorable circumstances, does not add value to a person's life. It is in this sense not worse to die sooner rather than later.

Should Public Policies Promote Longevity?

I turn now to the second question of this paper, which has more practical implications. Assume that most of us have an interest in living longer. Would it be good to adopt policies and devote resources to trying to satisfy this interest? Would it be good to extend average life expectancy to one hundred in societies where it now hovers around eighty?

Imagine two worlds, A and B, in which the population is the same and remains constant at some number N . In both worlds people are born and die

at different times, but in World A, everyone lives eighty years in good health and then dies painlessly and quickly, and in World B, everyone lives one hundred years in good health and then dies painlessly and quickly. Which of these worlds, A or B, would an impartial sympathetic observer regard as better?

To make more salient what is at issue in choosing between these worlds, we can add some more content to them. The people in A and B all live long enough to realize much of their potential and fulfill or make sufficient contributions to their important goals and projects. Their lives are rich and meaningful. People in World A retire at age seventy and enjoy the activities and leisure that retirement offers for ten years. Some people in World B also retire at seventy and live an additional thirty years, while others choose to work longer and retire later, with several decades of life still ahead of them. The people in A live long enough to see their children grow and witness the shape their lives will begin to take. They also get to see and know their grandchildren. The people in B get this and more. They are more likely to get to know their great grandchildren as well.

If we think that capacities and vitality inevitably diminish as one gets closer to death, then let us imagine that they diminish in the same way in both worlds, slowly over the last ten years of life and increasing at equal rates over, say, the last two years. In other words, the people in B live full lives for longer than the people in A. The interest in living longer, assuming that it is universally held, is more fully satisfied in B than in A. But as I have already argued, the satisfaction of this interest does not add to the value of most people's lives.

There is also an important structural difference between World A and World B: the median age in A is lower than in B. Because we assume that the populations remain constant and equal in both worlds, this means that during any given era—say a period of five hundred years—more people will live in A than in B. A will allow for a higher birth rate and more generous immigration policies. If B has the advantage of having more people who are older and can contribute to society what older and wiser people are uniquely able to contribute, then A has the advantage of a greater influx of new blood. I see no reason for thinking that the advantages of World B are greater than the advantages of World A and good reasons for believing the opposite. These reasons are similar to those that favor a mandatory retirement age in universities. The benefits of keeping faculty beyond the retirement age, while often not insignificant, are outweighed by the benefits of allowing a college or a department to bring in younger faculty with newer and fresher ideas. I am suggesting that increasing the number of immigrants and younger people adds more life and vibrancy to a culture than what a similar increase in the percentage of senior citizens would offer. New blood

certainly improves the music and food of a culture, and it probably improves most things.

If I am right, then longevity has no social value. If longevity does not add to the value of a person's life, and it has no social value, then we should conclude that longevity per se has no value whatsoever.

Four Objections Considered and One Further Comment

The Interests of Others

I will try to give further support to these conclusions by addressing four objections that they invite. First, in arguing that increasing longevity has no social value, one might object that I have taken up only the perspective of a person's interest in their own life and the perspective of an impartial spectator. I have not considered the interests of others, such as friends or relatives, in seeing that the people they love live longer and die later rather than sooner.

I do not think that these other perspectives affect the argument. Of course we don't ever want to see Dad or Grandma suffer or die. We never want to lose the people we most love, and we mourn their loss whenever it occurs. But the question of the value to friends and family of extending life expectancy from eighty to one hundred years is then the question of whether it is worse if Grandma dies earlier than later. An implication of the argument I am defending is that there is no significant value added to her life or ours by extending her life and our relation to her another twenty years.

You may think that I am making an outrageous and cold claim, but such a reaction is explained by the fact, which I appreciate, that we never want to lose the people we love, whatever their age. As you grow older, however, and think back to your grandma and how you loved her, the fact that she died when she was eighty and you were thirty, say, instead of surviving until she was one hundred and you were fifty is of vanishing significance. Or so I claim. If she dies at the younger age, then of course it will mean that your children will never get to know their great grandmother, or not as well as they would were she to survive until they are adults, but this will always be true of ancestors of some generation. Such losses are more properly attributed to our mortality than to any lack of longevity.

Complete Utilitarianism

The second objection is more philosophical. In arguing against the value of longevity, I have also argued that it would not be better to change our world so that

the population over time consists in fewer people living longer lives rather than more people living shorter lives. It might seem that this argument commits me to a view that John Broome calls ‘complete utilitarianism’. According to this theory, well-being is a property of experiences, and the morally best state of affairs is simply the one with the greatest amount of well-being. ‘A complete utilitarian’, Broome explains, ‘does not care in any way how wellbeing is distributed. For one thing, she does not care how it is packaged in individual lives. All that matters is wellbeing; who gets wellbeing is irrelevant’ (Broome 2004: 110). One implication of complete utilitarianism is that longevity has no value, or, as Broome puts it, ‘Several short lives are just as good as one long life’ (Broome 2004: 256).

Complete utilitarianism has many unattractive consequences, and neither Broome nor I accept it. His reason for rejecting it, however, is in part because it denies the value of longevity. He writes:

It is surely true that our intuition normally rates continued life better than replacement. For instance, we think it better to save the life of a baby if we can, rather than let her die, even if, were she to die, her parents would replace her with another baby. (Broome 2004: 108)

I’m all for saving the lives of babies rather than dispensing of them willy-nilly and replacing them with others. But my reasons for saving babies are not based on the more general claim that continued life is generally better than replacement. Rather, it is that we don’t kill people in order to make room for others and that, under most conditions, the survival of a baby matters for the same reason that the survival of a twenty-year-old or a forty-year-old matters. This is because of the nature of human potential, goals, projects, and the like. These reasons change with age, however, and they become less compelling as we grow older. If the decision whether to save the baby or replace them is up to the parents, moreover, then there are other important reasons for not killing babies or letting them die simply because the parents would prefer to replace one baby with another. These obvious reasons have to do with loving the individual who is one’s child rather than thinking of one’s child as merely a vessel of potential well-being.

In his own nuanced arguments against complete utilitarianism, Broome embraces the intuition that longevity is a value, and his consequentialist moral outlook leads him to assume that valuing longevity commits one to accepting the general claim that, ‘It is better for wellbeing to be packaged into fewer rather than more lives’ (Broome 2004: 109). I don’t agree, but my arguments against the value of longevity appeal mostly to a person’s own reasons for wanting to live longer. Satisfying a person’s interest in living longer, an interest which may even be stronger in older than in younger people, does not add to the value of a person’s life and becomes a compelling reason only in the light of unconditional

goals or achievements, which can explain how living longer might affect the meaning or the value of one's life.

In responding to the question about the social value of longevity, my aim was not to defend a view about the ideal packaging of well-being but rather to suggest that replacing older people with younger ones is often beneficial to a society or an institution, and that allocating scarce resources specifically to increase longevity among people who have already lived full lives has little justification.

In fact, I suspect that Broome's intuitions about the practical and policy implications of valuing longevity are not seriously at odds with my own. Immediately after the passage in which he supports the intuition that we value longevity by appealing to the example of saving the life of a baby rather than replacing her, Broome writes, 'There may be limits to this intuition. I am not sure we would think it better to prolong a 100-year-old person's life for another 100 years, rather than having a new person live for 100 years' (Broome 2004: 108). Given current circumstances and the resources it would require to make this possible, I feel certain that it would not be better to prolong the life of a one-hundred-year-old for another one hundred years. The goal of this paper has been to explain why.

Citizens' Sovereignty

The third objection to my argument is also philosophical. I have argued that even if every person at every age has a reasonable interest in living longer, and even if every person believes that at age eighty they will have an interest in living to be one hundred, we would not be justified in adopting public policies aimed at increasing life expectancy by another twenty years. But if we accept something like a principle of citizens' sovereignty, then what other basis can we have for making political or public policy decisions than that they promote the interests of most or all of the citizens?

My response to this objection is that some policy justifications must appeal directly to moral reasons and arguments and are not mediated through individual interests and preferences. The values of equality or justice, for example, cannot plausibly be understood as values that emerge from an aggregation of individual interests. Equality and justice have either irreducibly social value or are supported by different kinds of moral reasons. Similarly, issues involving our moral obligations to future generations, which include the environment and culture we believe we have reasons to bequeath to posterity, cannot, for philosophical reasons, be understood as an aggregation of any past, present, or future individuals' interests.⁸ My argument that, other things being equal, a world in

8. This is an implication of the 'nonidentity' problem. See Adams (1972: 317–32) and Parfit (1984: 351–79). I have discussed this issue in MacLean (1983: 180–97).

which the life expectancy is eighty is probably better than a world in which life expectancy is one hundred, even assuming that every healthy eighty-year-old has an interest in living longer, must also be seen as an argument that appeals to reasons in a way that is not mediated by an aggregation of individual interests.

Of course I have not in this paper discussed the principle of citizens' sovereignty directly or argued that it must be constrained by certain moral principles, so I have not adequately responded to this objection to my argument. I have only indicated how I would respond, given enough space and, all importantly, enough time.

Ideas of a Full or Natural Life Are Conditioned by Science and Technology

The fourth objection is that my arguments presuppose or appeal to some conception of a full life, which once having been lived, undermines the value of longevity. My argument is in this way similar to the view of Aristotle (whose life expectancy at birth, by the way, was somewhere around thirty years). The problem is that the idea of a full life is itself crucially dependent on life expectancy, which in turn is determined in part by developments in science and technology. The same is true of closely related concepts like health.⁹ As we increase longevity, our idea of what constitutes a normal span of life and what are reasonable goals for people at different ages will change, and these changes in turn affect our understanding of the value of living longer.

I don't deny this fact, but what follows from it? Whether or not to pursue the means of increasing our life expectancy is up to us. We can decide whether or not to allocate resources aimed at reducing child mortality (which increases life expectancy overall), improving education, protecting the environment, or enabling more people who might otherwise expect to die at eighty to survive to one hundred and beyond. Given that eighty constitutes for most people a full life by standards we do not now find to be unreasonable, my argument can be interpreted as claiming that we have no reason to attempt to alter the circumstances that will change these standards and thus also our conception of a normal or full life. Our focus, and our investments, should be directed elsewhere.

Death Deprives Us of Nothing

My final remark is in reply to a fascinating paper by Galen Strawson entitled 'I Have No Future'. He argues that death at any age deprives us of nothing.

9. For a discussion of problems in defining the concept of health, see Boorse (1977: 542–73).

This is because it is a mistake to think that a person—at age one, ten, or one hundred—can lose something by not living longer. Strawson is making a metaphysical point, which is that we cannot claim any future as ours that we do not live to experience. If that is right, then it is confused to think that we can lose or be deprived of future life. To think that death deprives us of our future is like thinking that a piece of string is deprived of length because it is not longer than it is. It involves a fundamental mistake about identity.

Strawson acknowledges that we can have reasonable regrets if we know we are about to die. He cites the moving testimony of the philosopher Gareth Evans who, shortly before he died, spoke of regretting that he would not live to see how beautiful his wife Antonia would be at age fifty. But, as Strawson explains, this kind of regret is simply what anyone might feel knowing that, for whatever reason, they will not be able to experience something that they would like to have experienced. It is like knowing that if you choose to become a trial lawyer you will not be able to pursue a career as a journalist, even though you would very much have liked to be a journalist. We mortals are not able to do all the things that we would like to do. But to regret that we cannot capitalize on all the possible futures we might have had is not the same as regretting the loss of something that was ours. It is a mistake to think of a possibility, including a possible future, as something that is ours to lose.

If I understand Strawson correctly, then reasonable regret can also be a function of time, but in a sense that makes the past and the future symmetrical. When I reveal details of my misspent youth to my daughters, they sometimes express regret that they were not alive during the heady days of the late '60s and early '70s, just as I have had the thought that it's too bad I couldn't have been alive in ancient Athens or have been a Florentine in the fifteenth century. But neither my daughters nor I can feel that we have been deprived of anything on this account.

I want simply to point out that my argument is not about the metaphysical issues of personal identity, unrealizable possibilities, and reasonable loss. It is about the value of our lives. I believe that lives can have different values—some are better and some worse—and that the value of a life is not usually in any significant degree a function of our experiences or satisfied interests. I also believe that death can deprive a person of realizing the value of a life that living longer would have realized. Death can keep a person from achieving something of value, even if the death of an adult does so less often than we usually think.

And I agree with Strawson that when we mourn the death of a parent or grandparent, our grief is for what we have lost, not for the mistaken belief that they have been deprived of something of value. But when we mourn the loss of a teenager or a young adult who has died, we also regard it as regrettable that they will never reap the rewards of the investment they and others made in their life by becoming the person or doing the things that they were preparing to become

and do.¹⁰ This is a loss of value, which as it turns out is also a loss as much for us as for the person who died. We should be careful, however, to distinguish the loss of value, which can come from unrealized potential or promise, from the loss of life and unfulfilled interests. I believe it is possible for death to be a bad thing, perhaps even bad for a person, even though it is not in general better to live longer.

Conclusion

At age eighty-five, my mother had an interest in continuing to live, and I was grateful that she was able to satisfy that desire for nine more years. She was happy, and our time together was good for her and good for me. Moreover, our relationship added to the value of her life and of mine. But it was the nature of that relationship, not its duration, that added value. If my mother had died at eighty-five, or even at seventy-five, it would have had no effect on the value of her life or the value of mine. Her contribution to the world and to my life had already been made. The time of her death certainly determined the quantity of pleasant experiences for both of us, but life's value is not a function of the accumulation of such experiences.

It is natural for most people, at all ages, to want to live longer, and it can be admirable to see someone who is sick and dying cling to life. But it is not good or valuable for people with life expectancy like ours to cater to an interest in longevity. We don't improve the world in any obvious way by living longer and increasing the median age of the population. And we waste resources pursuing the vain but popular quest for the Fountain of Youth.

References

- Adams, R. M. 1972. 'Must God Create the Best?', *Philosophical Review*, 81, pp. 317–32
- Boorse, Christopher. 1977. 'Health as a Theoretical Concept', *Philosophy of Science*, 44, pp. 542–73
- Broome, John. 1995. 'More Pain or Less?', *Analysis*, 55, pp. 6–11
- Broome, John. 2004. *Weighing Lives* (Oxford University Press), p. 110
- Broome, John. 2012. *Climate Matters: Ethics in a Warming World* (W. W. Norton)
- Dworkin, Ronald. 1993. *Life's Dominion* (Vintage Books)
- Fredrickson, B. L., and D. Kahneman. 1993. 'Duration Neglect in Retrospective Evaluations of Affective Episodes', *Journal of Personality and Social Psychology* 65, pp. 45–55

10. The connection between the value of life and the investment we make in our lives is defended by Dworkin (1993).

- Glover, Jonathan. 1990. *Causing Death and Saving Lives* (Penguin Books), p. 29
- Kahneman, D. 1994. 'New Challenges to the Rationality Assumption', *Journal of Institutional and Theoretical Economics*, 150, pp. 18–36
- MacLean, Douglas. 1983. 'A Moral Requirement for Energy Policies', in *Energy and the Future*, ed. by D. MacLean and P. Brown (Rowman & Allenheld), pp. 180–97
- Parfit, Derek. 1984. *Reasons and Persons* (Clarendon Press), pp. 174–86
- Pollack, Andrew. 2014. 'A Genetic Engineer Sets His Sights on Aging and Death', *New York Times*, 5 March 5
- Raz, Joseph. 2009. 'The Value of Staying Alive', in *Value, Respect, and Attachment* (Cambridge University Press), pp. 104–11
- Saramago, José. 2004. *The Double* (Harcourt), p. 10
- Vogel, Carol. 2006. 'A Storied Rembrandt Goes to a Mystery Bidder', *New York Times*, 27 January
- Williams, Bernard. 1981. 'Persons, Character, and Morality', in *Moral Luck* (Cambridge University Press), pp. 1–19
- Williams, Bernard. 1973. 'The Makropulos Case; Reflections on the Tedium of Immortality', in *Problems of the Self* (Cambridge University Press), pp. 82–100