

Public Ethics Radio

Public Ethics Radio • Centre for Applied Philosophy and Public Ethics
Australian National University • LPO Box 8260 • Canberra ACT 2601 Australia
contact@publicethicsradio.org

Transcript of Episode 5, Larry Temkin on Extending Human Lifespans

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MATT PETERSON: You're listening to Public Ethics Radio. I'm Matt Peterson. This podcast features conversations between our host, Christian Barry, and scholars and thinkers who engage with ethical issues that arise in public life. The show is a production of the Centre for Applied Philosophy and Public Ethics, an Australian Research Council Special Research Centre, in association with the Carnegie Ethics Studio at the Carnegie Council for Ethics in International Affairs. You can find us on the web at www.publicethicsradio.org.

MATT PETERSON: On average, Americans watch about 4 hours of television per day. Of course this figure varies by age. In fact, it's directly proportional to age. Whereas young children watch a little bit less than three hours a day on average, people over sixty-five watch about 5.7 hours a day.

Now, compare that to life expectancy. In 1900, the global average lifespan was 31 years. By 2005, it had reached 65.6. Again, there's much internal variation in these figures. Average lifespans in the U.S. are about 77 years; in some developing countries, it's in the 40s.

There appears to be a correlation between growing older in developed countries and watching more television. So, the question then, is what has this tremendous growth in longevity brought us? Is it just more time to watch TV?

Our guest today, Rutgers philosopher Larry Temkin, is taking a good hard look at the downsides to longevity. We all know what we have to gain from longer lives; Temkin wants to know what we have to lose. And in the process of figuring that out, he thinks we can learn something about what a life well lived is. He and Christian Barry spoke in Canberra.

CHRISTIAN BARRY: Larry Temkin, welcome to Public Ethics Radio.

LARRY TEMKIN: Thanks very much, Christian, it's a great pleasure to be here.

CHRISTIAN BARRY: There was a recent article in the *New York Times*, in which the following claim was made. "Some of the country's top cellular biologists will sit in their offices

at Harvard and M.I.T. and announce, their faces alternately grave and gleeful, that within the next 10 to 30 years a drug will appear on the market that will slow down the process of aging.” Now Larry, would this be good news or would it not be good news. Is living longer, living better?

LARRY TEMKIN: It’s a great question. I like the title too. I think we don’t know the answer to this question, and I think it’s extremely important that we think long and hard about this. Indeed, I think it’s extremely important that we think long and hard about this before on these various people at Harvard and MIT make this announcement. That speculation could well be the case. There are lots and lots of longevity researchers working around the world right now on, and various of them have had really significant results. There’s a person at the University of California Irvine, a professor of evolutionary biology who’s head of longevity research for the entire University of California system, and he has already developed a line of what he calls Methuselah flies, that can live many many many times the normal lifespan of such flies. And he says that there’s no biological reason why we should have to die, that indeed as he puts it, we can tune the length of life up and down and he does it in his laboratory all the time.

Similarly, there’s a person named Dr. Aubrey de Grey at Cambridge University, who heads a major senescence project there. He is on record as saying that they have already got an entire detailed plan in place to be able to replicate, fix and so on and so forth on, every cell in the human body and this isn’t just you know sort of far-fetched research. A lot of this is already in practice or the very scientific techniques are available now and just need to be combined. So he expects to have this perfected for mice within ten years and for humans within the following ten years. Now maybe that’s true, maybe that isn’t true, but I do think it’s extremely important we think about these things and we think about and sooner rather than later. And this much is clear, once the possibility of this kind of enhancement becomes available, it will be produced and it will be used, I mean there’s no doubt about that. People are deathly afraid of dying ...

CHRISTIAN BARRY: Mm hm.

LARRY TEMKIN: ... and would do anything to prevent dying if they could.

CHRISTIAN BARRY: Mm hm.

LARRY TEMKIN: So if we’re going to have an intelligent debate about this before the proverbial horse has left the barn—or whatever current expression might be—we need to have it now.

CHRISTIAN BARRY: Well, you mentioned are Aubrey de Grey, who is of course a, not only a distinguished a scientist, but a great enthusiast of a longevity research, and in a recent article, I remember reading that he says, well, the case for longevity research is pretty straightforward. Aging kills about 100,000 people every day worldwide. And in general things that kill people are considered bad, and you can see this by looking at how much we invest in trying to address problems that kill just a tiny fraction of this number of people every day. And yet there isn’t a lot of resources put into longevity research. At least not yet. And that the question of—into the question of why that is, He simply thinks that you know, there are these sort of old—he calls it the “pro-aging trance” if I recall correctly—and that that’s just based on outdated ideas of the normal human life and so on and so forth. So that really if we care about human life and human

well being we ought to be investing a great deal more of our resources into biotechnological developments that could retard aging.

LARRY TEMKIN: First of all, I think that that the benefits to stopping death seem transparent. I mean I think people would be so eager about this prospect. You know, people have been looking for the fountain of youth long before Ponce de Leon. So the argument for why we should want this, you might think you don't need much. So the question is, what would the arguments be against it, and I think there's quite a number of social, political, moral and practical considerations that would need to be weighed in here. And, if you want I'll just go on and try to suggest some of these.

CHRISTIAN BARRY: Yes, please do.

LARRY TEMKIN: All right, let me suggest that with a few a few issues just to bear in mind that some other people have mentioned and then let me add some of my own to the list. So Leon Kass, who was the chair of the President's Commission on Bioethics in the United States, wrote long before he had had that position on the so-called virtues of finitude. And he pointed out several things to worry about vis-à-vis longevity research. One was the general comment that we wouldn't appreciate life and the beauty of youth as it were in the absence of aging. The thought here is a very simple one. It's the idea that you know to a large extent we don't appreciate what we have, whether it's good health or a good job a good home or anything of that sort, good friends, until we lost them, or we've suffered through a period where we never had them. So if indeed we tune our lives to any age of our choosing and we could live in that perpetually youthful beautiful state, of say 40 years, perfect bodies, perfect minds, kind of thing, ...

CHRISTIAN BARRY: Sounds good to me.

LARRY TEMKIN: ... whatever it was. Yeah it does sound pretty good. Sounds pretty good to me too. I think it sounds good to all of us. Would we really appreciate that the way we do now, when we can contrast it with the withering and the age. I think there's some reason to think that we wouldn't. Now as I say I want to be very careful here. That's not enough reason to say that it wouldn't be a good thing, all things considered. Because you might think that the crucial question is not whether living such a life for a very, very long time would be appreciated by us. The real question is would it be better for us, and it might be that a really wonderfully long life that was unappreciated or underappreciated would still be better than a much shorter life that we appreciate because we see the withering and the death that follows an earlier age.

Here's another consideration of a similar kind. So, the way things stand now, as Kass points out, aging prepares us for death, prepares many of us for death. Many of us have elderly parents, elderly grandparents. We watch them age, we watch them slow down, we watch them suffer from a multitude of infirmities in their old age. And to be honest, when they die, at 87 or 92 if we're lucky and they're lucky, after having really suffered for the last three or four years of their lives, everybody can accept that, and can accept it with some kind of not mere resignation but almost welcome the death. The family, the friends, even the person affected themselves. We all know many people who have said, "I've lived too long. I'm ready to go."

Now if in fact we can cure aging, we can stay at the age of 40, the age of 45, whatever the ideal number is, then there's an important sense in which nobody would be ready for death. Any time

a death comes it will be a tragic death, in the sense that it will be closing off an unended open future that could have continued as it were in perpetuity.

The last point of Kass's that I'll just mention is that right now amongst the worst tragedies that humans face is when a parent has to bury their own child. Now it might be that if we end up living for thousands of years, and I'll come back to that, you barely remember the child that you would have to bury, maybe you wouldn't even be the one that was burying them. But, I don't regard that as a positive notion. I regard that as a tragedy of its own sort. If it got to the point where I no longer particularly cared if I buried my first child, or second or third, that would be in itself very tragic. So, again, this is hardly settling the issue, but it's a reminder that there will be consequences to pay of a certain sort if we develop this kind of thing. Let me ...

CHRISTIAN BARRY: I wonder ...

LARRY TEMKIN: Sorry, go on.

CHRISTIAN BARRY: Let me just ask you one quick question, related to that. I know a lot of people will think something along the following lines. Well, you know, at the start of the last century, life expectancy was a great deal shorter than it is now, such that the whole idea of what a normal human life would be quite different. And it wouldn't have been implausible to think back then that extending lives as much as they've been extended would change all sorts of things, and in fact there were probably all kinds of arguments at the time about some sorts of deleterious social consequences that these sorts of advances would bring. But we seem to have adapted so far to longer lives. Of course there are some difficulties with social security and issues around the edges ...

LARRY TEMKIN: Mm, right.

CHRISTIAN BARRY: ... But we have adjusted our idea of what a normal human life is, and what the stages of a normal human life are, in fact, arguably, the whole idea of childhood as we understand it today is a function of having longer life spans than we did in the past, along with a lot of other things, including some benefits that may have come economically from having longer lives. So how would this, I mean perhaps, much more radical extension of life spans really change our understanding of a human life in such a way that we wouldn't be able to make these types of adjustments.

LARRY TEMKIN: Let me make several comments. You raise a lot of very important questions. One important question is there's always the issue of the naysayers at every stage of human development who say, well wait, slow down, let's put the brakes on. Who knows what it'll be like if we get rid of the horse and buggy, and if we start you know industrializing, or we start cars, or we start planes and so on and so forth. Now, before we too flippantly dismiss that kind of line, it should be remembered that the jury is out on many of the advances that we have made. If someone had made that argument about the atomic bomb or biological weapons, and someone said, well, you know, there's always the path of progress, but you know, blah blah blah.

Well, the jury's out. If in the next hundred years human beings end up destroying themselves entirely, it will have turned out to be a very bad thing that we developed nuclear energy in the way that we did, and atomic weapons, biological weapons, et cetera. These things are very hard to predict. It's certainly not my view that we have a clear answer here nor is it my view that we

shouldn't in the end proceed with such research. You know, I'm no better placed—I'm maybe worse placed than many—to have this speculation.

Nonetheless, I think it is very important to engage in the debate. So let me continue some of the arguments against. You raise the question yes, you're absolutely right, childhood may... You know, there's a big difference now, there used to be, and still is in some places in the world, you know you reach 13, you reach maturation, 14, 15, 16, you might get married. Now in the West you might not get married if at all until your thirties. So these conceptions do change and we do adjust. The question is, what comes with them? You know you mentioned "at the edges." Sorts of things at the edges. Well, if you're extending life by more than 10 years, 20 years, or even doubling it, you know, yes, living longer would be good if we lived another 20 years or 50 years but what if it was another 1,000 or 10,000 or unending years. Then what comes into play?

Well, let me suggest a number of things that might come into play that are certainly worth considering. Well, you mentioned one already. I mean Social Security in the United States and most developed countries is on the brink of collapse. There's no doubt at all that if we succeed in going on and on and on, then until we reach the stage where we no longer need to work in order to live, which would bring its own kinds of questions, but I won't address those here, basically, going on and on in terms of living, would carry with it, people not being allowed to retire. Now this wouldn't be a problem in one sense, in that people would be in this circumstance perfectly capable of working forever. The question is, would people want to work forever? I mean, I myself have been working for a grand total of 27 years, and I'm already looking forward for retirement. Especially when I'm grading exams and so on and so forth, lots of blue books, I can't imagine what it would be like not to be working for 27 years but for 1,000 years, or 2,000 years, or 10,000 years, with, as it were, no end in sight. So certainly the whole idea of Social Security, which, as you say, is at the fringe of the question, well, it'll be at the heart of the question if people are not dying of old age.

Here's another obvious question. The population growth question. There's the simple question of where would everyone live and where would the resources come to support everyone. This is a huge question and as we have more and more people who are living without dying, there will be more pressures on space, more pressures on the environment, more pressures on resources, all the problems we currently face about the ozone and you know gas emissions will only be exacerbated.

So the obvious point will be that if we succeed in slowing significantly and perhaps ending death through aging, this will necessarily require at some point, sooner rather than later, probably a restriction of births. Now, one straightforward question is how are we going to effect such a restriction? This would require a tremendous global bureaucracy, a tremendous global investment of power in the hands of people to ensure that births are not going on in the villages around the world, having slowed or significantly ended deaths through aging. We don't have anything like that kind of bureaucracy on the global scale, nor is it clear that it would be desirable for us to have it.

MATT PETERSON: This is Public Ethics Radio. We're talking to Rutgers philosopher Larry Temkin about extending human lifespans.

CHRISTIAN BARRY: At least in a world in which people can expect to bear the consequences

of their political choices now indefinitely into the future, for example of climate change, and present consumption against future. That might also give them incentives to exercise restraint, or at least take special care to consider the longer-term consequences of their decisions than they do at present. And at least a lot of people would argue, along the lines you mention, that maybe one of the reasons why there is this sort of conservativeness amongst aging populations is that they're not going to have to live with the consequences. Yes, of course they care about their grandchildren and everything else. But they're generally very influential groups and they can be conservative groups, and they don't really have to worry too much if they make mistakes.

LARRY TEMKIN: Well, I'm certainly aware of that argument. I don't want to dismiss it. I'm certain there's something to it. If you don't think you're going to personally bear the consequences of your actions, you might do things differently. It's really pretty hard to deny that. On the other hand, it's easy to put too much weight on that. It's easy to make lots of decisions that are really bad decisions, quite straightforwardly bad decisions. Even for a lifetime of 80 years old, and yes, you read all the studies, you hear that smoking is bad for you and so on and so forth, and yet, you know, huge proportions of the population continue to smoke. Notwithstanding they know that 80 years from now or 50 years from now that could cause them troubles.

But in any event, even if people were much, much more, much wiser, as more and more people are born and fewer people are dying, we will inevitably face this issue of limited resources on the earth. You know, eventually we might have interplanetary or then intergalactic travel, but unless and until that day arrives, you might face many, many pressing issues that really are going to require the restrictions of births, to return to that issue. So, I'm assuming that we would, in a fairly short amount of time, would have to really severely restrict the number of people who came into the world via birth, if we succeed in severely slowing down or retarding the death rate. Is this a good thing? Would this be a good thing?

Well, now we get into the biggest question of all, which is really at the heart of this question you started with, is living longer living better? And the question is, what is really most valuable in a human life? What is it that's most significant? Wherein does the value of not just individual lives, but collective lives, of humanity lie? And I actually think a great deal of what's most important in human life lies in those extraordinarily close relations between parents and children, parents and grandchildren, the love, the just unqualified—where it exists—support and attention and care and so on. And this may just be my own view. I know not every one else has the same relationship with their parents. Not everyone has the same relationship with their children. But I do think for many many human beings, one of certainly the richest source of value in their lives is in the relation that they had with their children. Sometimes their grandchildren. As we begin to slow down the birth rate so that eventually people can't have children and now here you are 10,000 years into your life, you had children you know 8,000 years earlier, I think a lot of what's most valuable in the continuing generation and regeneration of human lives will have disappeared from the scene.

CHRISTIAN BARRY: One of the themes that, in this discussion has been sort of moving from the idea of living longer to living a whole lot longer, and I think that one of the things that people think of when they think of longevity research, when they think about living longer lives, they tend to be focusing on living a bit longer, so 10, 20 years, wouldn't it be a blessing? Especially now when we're thinking about people who have a reasonably high quality of life while they're alive. If people lived 150 years or something like that, yes, when you start talking about 800

years or 1000 years, then some of these arguments take place. So if we go down this road at all, that's where we're going to end up. So it really is something of an all or nothing thing.

LARRY TEMKIN: Yeah, right.

CHRISTIAN BARRY: Is that your view?

LARRY TEMKIN: So, right. I'm not sure if it is my view. It is my concern. So where do I think we should have the debate. Let me say a couple of words. I sort of intimated this at the beginning of the discussion, I'm actually a huge proponent of science, I'm a huge proponent of the of the Bacon's Enlightenment project. I really do seek the amelioration of the human condition, etc. etc. And I do see science as a way to do that. I'm not an opponent by and large of enhancements. I think there's many enhancements that would be desirable. It would be great if we could run faster, jump higher, it would great if we could think better, all that kind of stuff. And I'm not an opponent of living longer for 5 years, 10 years, 20 years.

But I'm not sure that the longevity research is going to work that way. I think that's what a lot of people speculate, but de Grey, Aubrey de Grey's project for example really is to find ways—which he thinks are already out there—to enable all of our cells to do what many of cells already do for much of our lives. That is, for most of our lives, most of our cells reproduce themselves naturally. They regenerate, they repair old cells and they replace dying cells for most of our lives. But this happens now, as we age, that process ceases. And what de Grey and others are seeking to do is to find this switch that enables our various cells to reproduce themselves as they get sick, as they tire, as they wear out, and keep that switch turned on as it were instead of turning it off. And have that be true not only for most of the cells which are, which currently work this way for most of our lives. But for all of our cells, which don't currently do that. Some of our eye cells, some of our brain cells, and so on.

And I actually believe this is a quite feasible project. I believe that via stem cell research or other kinds of research, we will be able to do what de Grey thinks that we're gonna be able to do. Which is to have it be true that each of our cells is going to be capable of replacing itself, replenishing itself on a continual basis. At that point there's no special reason to think that this'll last ten years but not a thousand, or forty but not a thousand. If you can replace your cells, you can replace your cells. If you can regenerate your cells, you can regenerate your cells. And as I said at the very beginning, this seems to me to be the very thing that could happen, and that could happen much, much sooner than most people realize. We're very notoriously horrible predictors at the rapid advance of science.

MATT PETERSON: This is Public Ethics Radio.

CHRISTIAN BARRY: Well, let's connect this discussion with some practical issues. And so suppose someone is convinced that really engaging in longevity research is the thin edge of the wedge, and once we get it going down a line, it's going to, for the reasons that you mentioned, is going to feel that it's always a gain for them to live longer. That it's just going to explode. And well, what could we do? There might be two kinds of concern. One is, given the tremendous incentives that each individual person has, there's the strong desires of each individual person to live longer. It's going to be extremely difficult, without a tremendous amount of coercion, to keep people from developing these technologies. And then another related concern, you

mentioned stem cell research and some other things, that the types of technologies that would be sufficient to extend people's lives may simply be pretty inseparable from other types of research which would bring benefits which are seemingly recognizably to be benefits for all. So if you could just comment on those two types of concerns.

LARRY TEMKIN: Those are wonderful concerns. I share those concerns. And to be honest I'm pretty pessimistic about whether there's any plausible place to draw the line. And to prevent the kinds of issues that those concerns are raising from coming into play. I do think that would be extremely difficult to, you know there's the old question of putting the genie back in the bag. And people say you can't do that, well, once the genie's out, so you want to stop the genie from getting out. So then the question is can you stop the genie from getting out? And oftentimes the answer is no. There is enormous amount of incentives—personal incentives, social incentives, and so on—to to pursue longevity research. You may, you know, governments may be able to systematically focus their attention elsewhere. And that may have the effect of slowing it down a bit, but perhaps only a bit. And I do think that's a serious concern.

I think that the other thing that raises an important concern, which is that fundamental, basic research has a way of spilling in all sorts of directions, which are often an unanticipated. And even if you said, well, we're not going to allow the basic research for longevity, as long as we're going to allow the basic research on, you know, biology, you know, stem cells, all this other kind of stuff. The research that's valuable for all sorts of other things that we do think that's valuable and which we do regard of as valuable, medicines and so on and so forth, may be precisely the kind of research that will solve the problem of aging. And then the question is are we going to close off all of this research? And presumably the answer is going to be both practically no and even theoretically no.

So that raises the question of what's the point of even raising the types of alarm bells, which I seemingly have been raising so far. And I think at the end of the day, it's really to try to get us as a society to take more seriously this question of whether living longer really is living better. And that's to take the question of what is it that really matters in a human life.

There's a wonderful short story by Benjamin Franklin. It's a fantastic story. It's called "The Ephemera." And in this story, Benjamin Franklin imagines this ironically fly like—ironically because that's what the Methuselah flies that Michael Rose extended the lifespans of—but anyway, these fly-like beings, they live for only seven or eight hours, but otherwise they're kind of like humans. And there's this elderly fly who's lived for eight hours or so, and he's looking at all these other flies and he's laughing at the fact that they only live for seven or eight hours, and yet they spend all their time consumed with really these truly trivial matters, like who's the best foreign-born musician, that sort of stuff. And of course Benjamin Franklin's point is that we are ephemera. We live 70 years, but it doesn't matter that whether it's seven hours, or 70 years, or 7000 years, but the real question is, what do we do with our lives?

One of the things that I think is most interesting and central in this debate, is the question how when you ask the question what is it that really matters. I really do think it might be better for each of us if we could live longer. And I think it might be better for all of us collectively if we could live longer. But I'm not sure it would be a better world if all of us could live longer. In fact, I'm pretty sure it wouldn't be. And that's partly related to the issue I raised earlier. I mean there's this whole question of what is it that's valuable in a human life.

In *King Lear*, the Fool says to Lear at one point, “Thou shouldst not have been old til thou was wise.” And I sort of think that way about our society. When I think about our society, I think now about Americans. Americans are infatuated with shows like Fear Factor and Nip/Tuck and Desperate Housewives, and all this sort of stuff. And by all accounts they can’t get enough of the latest pictures of Brad Pitt and Angelina, whatever her name is, sorry, Angelina Jones, and Britney Spears, and you know the latest gossip about this and that and everything else. It’s a society that will spend 500 million dollars on a single athletic stadium, which is one of two or three in a major city, but they can’t fund inner city education. It’s a society where, in America, there’s many sections of America where the poorest members of the barrio and the ghetto have a mortality, infant mortality rate which exceeds that of many developing nations, while a few blocks away, the richest people can come for a first class medical care in the equivalent of five-star hotels, world-class medical care. I mean, the point is simply that when you look at life in American society and in many other societies in the world, I just don’t think that we are living well.

And well, Tom Nagel made the point that, if your life isn’t meaningful at 70 years, it’s not going to be meaningful just because it’s a lot longer. I mean a sort of meaningless, absurd, silly life at 70 years is a meaningless, absurd, silly life, even more so, at 700 years or 7000 years. And I think that’s a quite significant point. And so I guess what I’m saying really here is, I’d like to see us focus on this question about longevity research not because we’re actually going to stop it, and you know prevent the technology, or stop it coming into being, you know, prevent people from taking it once it becomes available. I mean, that’s not going to happen. When it’s available, people will take it. But the question is what will we have gained, you know, who are we as people. What are we as a society, what is it that’s actually valuable, what should we value, and I’d like to see us pay more attention to those questions. And I think when you think about the question is living longer living better, it helps focus your attention on what really does matter. And sadly I think it’s not very much of what most of us do focus on for much of our lives.

CHRISTIAN BARRY: Larry Temkin, thanks for joining us on Public Ethics Radio. I would have thanked you even more wholeheartedly for your time, but now that I know we’ll be around for another 800 years or so, I won’t thank you too heartily.

LARRY TEMKIN: Yeah, wonderful, I hope that’s true for me, and you, and everyone else we know.

MATT PETERSON: Thanks for listening to Public Ethics Radio. And thanks especially to Barbara Toterdell, who was invaluable in helping to produce this episode. We’ll be back soon with another conversation about public ethics. In the meantime, you can find out more about us and our guests on the web at www.publicethicsradio.org. Thanks for listening.