

*What is your life worth?* – John Broome

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What is your life worth to you? By that I mean: what do you lose if you die or, conversely, what do you gain if instead you continue to live?

‘Everything’, you might answer, since if you lose your life you lose everything. On the other hand, Epicurus’s answer appears to have been ‘nothing’. He said:

Become accustomed to the belief that death is nothing to us. For all good and evil consists in sensation, but death is deprivation of sensation. ... So death, the most terrifying of ills, is nothing to us, since so long as we exist death is not with us; but when death comes, then we do not exist. It does not then concern either the living or the dead, since for the former it is not, and the latter are no more.<sup>1</sup>

Epicurus seems to be saying that death does you no harm. If he is right, continuing to live does you no good.

I disagree with both the answers ‘everything’ and ‘nothing’. My answer takes a middle course. I shall start by rejecting the two extremes. On the face of it, ‘nothing’ is the less plausible of the two, but it has the most interesting arguments in its favour. I shall start with that one.

Most of us find the answer ‘nothing’ implausible because we take it for granted that dying would be a terrible thing to happen to us. Epicurus himself may not mean to give this answer. He may not mean to say that death does us no harm – I shall come to that. But he does supply materials that can be used to construct a case for the view that death does us no harm. I shall lay out this case and try to make it persuasive, but in the end I shall argue that it fails.

There are two components to the goodness of life: its quality and its quantity. You might come to think that the quantity of life does not matter at all; only its quality matters. Indeed, this is exactly what most of us do think about the goodness of life in another context. One way of adding to the quantity of life in the world is by having more babies. That way, more life is lived in total. But most of us do not favour increasing the quantity this way. We are concerned for the quality of life of the people who live, but we are not concerned to increase the number of people who live lives of that quality. When the Chinese government instituted its one-child policy, its aim was to increase the quality of life of the Chinese. The policy also decreases the quantity of life: there are fewer Chinese now than there would have been without the policy. But the government did not think of this reduction in quantity as a bad thing to be set against the gain in quality. Most of us would have agreed.

Moreover, this attitude we commonly have to the number of people can be supported by an argument. Suppose a couple are thinking of having a child, but eventually decide not to. As a result of their decision there is less life in the world than there would have been. Is this reduction in quantity a bad thing? Well, who is harmed by it? No one. No one is harmed by not being brought into existence. It is not as though there is some child who suffers the misfortune of not existing. There is simply no child, so no one is harmed. Consequently, we might plausibly think no harm is done. We might conclude it cannot be a bad thing to reduce the quantity of life in this way.

This argument needs to be slightly qualified. Perhaps some people will be worse off as a result of the child’s nonexistence. Perhaps her potential parents will come to regret having no child, and perhaps the child would have grown up to make a great contribution to civilization. So perhaps some people will be harmed by her nonexistence. But these are indirect effects, and to keep the argument simple we can assume them away. Though this is not in practice

plausible, let us assume there are no indirect effects of this sort. Under that assumption, the argument has some force.

Bringing more people into the world is one way of increasing the quantity of life. Another is to extend the lives of people who are already in the world. Epicurus shows us that a similar argument can be used in this context too. We can ask a parallel question about the quantity of a single person's life. Previously we asked who is harmed by not being created; now let us ask at what time a person is harmed by not continuing to live. Suppose you might have lived longer, but you actually die now. Is that a bad thing for you? Well, when are you harmed by your early death? At no time. As Epicurus says, you are not harmed at any time before your death, since so long as you exist 'death is not with [you]'. And you are not harmed at any time after your death, since at no time after your death do you exist. Since there is no time when you are harmed, we might conclude you are not harmed at all.

You may say there is indeed a time when death harms you: the time when you die. You could be making either of two points. The first is that the process of dying is often dreadful. Of course that is true, and it does mean that your death harms you in one way. But it is not relevant to the question I am asking. I am asking what is the benefit to you of continuing to live. Conversely, what harm would be done you by not continuing to live? What harm would be done you by having your life cut short? I sometimes express this question in the form: what harm does your death do you? This is a graphic but not entirely accurate way of putting the question of what harm would be done you by having your life cut short. The terribleness of the process of dying is not a part of the answer to this question. Cutting your life short does not necessarily harm you in this way, because your dying may be dreadful whether it occurs at the end of a long life or a short one. So we can set aside this aspect of the badness of death.

The second point you might be making is this. The question is whether death harms you. If it does, we know automatically when the harm occurs. It occurs at the time of your death, since it is your death that does the harm. But we must distinguish the time when a harm is caused from the time when it is suffered. If I drop a banana skin on the road, and you later slip on it and hurt yourself, we may say your harm is caused when I drop the banana skin. But it is suffered when you fall. Epicurus asks when the harm of death is suffered, not when it is caused. He concludes it is not suffered at any time. If there were any harm, it would be caused at the time you die, but that is another matter. We can set aside this point too.

Once we have set aside these two points, I think we should agree that there is no time when death harms you. That is a truth we should learn from Epicurus. Epicurus apparently draws the conclusion that, because there is no time when death harms you, it does not harm you at all. But to reach that conclusion we have to make the further assumption that you cannot be harmed unless you are harmed at some time. Is that a good assumption?

Once again, Epicurus supplies us with material that at first seems to support it. He says that 'all good and evil consists in sensation': the only sort of good that can come to us is a good sensation, and the only sort of bad is a bad sensation. This is a version of what is nowadays called 'hedonism'. It is highly contentious, and one way of responding to Epicurus is to deny it. But denying hedonism is also contentious, and I do not need to do it. Instead I shall show that, even if we grant Epicurus's hedonism, it does not truly support the claim that you cannot be harmed unless you are harmed at some particular time.

So let us assume like Epicurus that all good and evil consists in sensation. Since all sensations occur at particular times, we can quickly conclude that all goods and evils occur at particular times. So the goodness or badness of your life is made up of good and bad things,

all of which occur at particular times in your life. But the notions of *benefit* and *harm* are different from the notions of *good* and *bad*, and just because all goods and bads occur at particular times, it does not follow that all benefits and harms do.

*Benefit* and *harm* are comparative notions. If something benefits you, it makes your life better than it would have been, and if something harms you it makes your life worse than it would have been. To determine whether some event benefits or harms you, we have to compare the goodness of your life as it is, given the event, with the goodness it would otherwise have had. The comparison is between your whole life as it is and your whole life as it would have been. We do not have to make the comparison time by time, comparing each particular time in one life with the same time in the other life. So even if the goodness of your life is made up of good and bad things that all occur at particular times, there is no need for the comparison between lives to be made up of benefits and harms that can all be tied down to particular times.

Take an analogy. Suppose the text of a book is shortened before it is published: the last chapter is cut out. The book is shortened by six thousand words, but all the earlier chapters are left intact. Then six thousand words are cut from the book; yet no words are cut from any page in the book. This is so even though every word in the book appears on a particular page. Moreover, had the book been published in the longer, uncut version, every word in the longer book would have appeared on a particular page. The number of words cut from the book is determined by comparing the whole book as it is, with the whole book as it would have been had it not been shortened. It is not determined by comparing any particular page with that same page as it would have been.

Similarly, shortening your life may harm you even though there is no time when it harms you. To determine whether it harms you, we compare the goodness of the shorter life you have, taken as a whole, with the goodness of the longer life you would have had, taken as a whole. If we believe Epicurus's hedonism, the goodness of the shorter life is made up of the good and bad sensations that occur within it. The goodness of the longer life includes all those sensations, and also all the good and bad sensations you would have had in later life had you not died. If your life is going well, presumably these extra sensations would have been predominantly good ones. So the longer life would have been better than the shorter one. You are therefore harmed by the shortening of your life. But there is no time when you suffer this harm, just as, when the book is shortened, no page in the book loses any words. Epicurus's hedonism actually implies that death normally harms you. Epicurus thinks it implies the opposite, but he is making a mistake.

His argument fails. He is right that there is no time when death harms you. But it does not follow that death does not harm you. It may harm you, even though it harms you at no time.

I speak of 'Epicurus's argument', but Epicurus may not mean to argue that death does not harm you. He says that 'death is nothing to us', but by that he may mean simply that you should not mind about dying. It is possible that you should not mind about dying even though your dying will harm you. Perhaps that is what Epicurus thinks.

How could it be so? If dying will harm you, surely you should mind about it. Not necessarily. It depends on what you care about. Dying will harm *you*, but possibly you should not care about what happens to *you*, yourself. You are a person, with a life that extends from when you come into existence to when you go out of existence. Caring about what happens to you involves caring about the whole of that life. But why should you care about that? For instance, as an alternative, why should you not care just about what happens to you in the present? What you care about may change from time to time. Why should you not, at each

particular time, care about just what happens to you at that particular time?

This needs to be put carefully. Probably you anyway care about what happens to other people besides yourself. But you probably care in a different way about what happens to you yourself. Call this sort of care 'self-care'. The suggestion is that you should attach your self-care, not to what happens to the person you are, with the whole of your life, but just to what happens to you in the present.

Wittgenstein uses the expression 'living in the present', and I think this is what he means by it. He points out that: 'For life in the present there is no death. Death is not an event in life.'<sup>2</sup> He is saying that, so long as you care only about what happens to you in the present, rather than about yourself as a whole, you will never encounter death among the things you care about. Your death does not occur during your life, so for you it is never in the present.

Possibly Epicurus is making a similar point. Since there is no time when death harms you, death does not harm you in the present, whatever time happens to be the present. So if you care only about what happens to you in the present, you will never have any reason to mind about dying.

I am here not concerned with the correct interpretation of Epicurus. I am interested in how good it is for you to continue living. This is a question about the good of *you*, the person you are, who has a whole life. It is not about what you should care about at any particular time. The question is whether dying – ceasing to live – harms *you*. I asked whether we could find in Epicurus's remarks any reason for thinking it does not. His remarks provide the materials for an argument, but in the end the argument fails. This does not mean that dying actually does harm you. It only means we have no reason so far to think it does not.

Now I come to the opposite answer to the question 'What is your life worth to you?': the answer 'everything'. After you die, you will have nothing, so in dying you lose everything. That is the idea that lies behind this answer.

It can be quickly disposed of. It is not true that in dying you lose everything. That conclusion is supposed to follow from the premise that, after you die, you will have nothing. But although this premise is true, it is true only in a peculiar way. As a result, it does not support the conclusion that in dying you lose everything.

The premise that you will have nothing when you die is true because you will not exist after your death, not because you will exist but have nothing. In the same peculiar way it is true that Pegasus – a winged horse – has no wings, since Pegasus does not exist. In the same way too, it is true that Nelson now has no left arm; it is true because, being dead, Nelson now does not exist.

Think some more about Nelson's arms. Before he attacked Santa Cruz de Tenerife, Nelson had a right arm. Afterwards he did not. We can correctly conclude that he lost his right arm in the attack. Before his death at the Battle of Trafalgar, he had a left arm. Afterwards he did not. But we cannot correctly conclude that he lost his left arm at Trafalgar. He did not lose it there; it remained attached to his body. What happened at Trafalgar instead is that Nelson ceased to exist. Because of that, it became true in the peculiar way I mentioned that he afterwards had no left arm. But, although his left arm lost its owner, its owner did not lose his left arm.

To say you lose something at a particular time normally implies that you exist both before and after the time. Since you do not exist both before and after your death, it is not true that you lose everything by dying. 'Everything' is not the right answer to the question of what your life is worth to you.

However, we can ask what you lose by dying in a way that does not imply you exist both

before and after your death. We do not have to answer the question by comparing what you have after your death with what you have before it. We can instead compare what you have, given that you die at a particular time, with what you would have had if you had not died then. When we think this way, ‘what you have’ does not refer to what you have at a particular time, but to what you have taking your whole life together. What you lose by dying, understood this way, is not everything. It is just a part of the longer life you would have led, had you not died when you do. Death ends your life; it does not take it away.

The answer ‘everything’ encourages the idea that your life is infinitely valuable to you. But you should not believe that. No one’s life has infinite value. How could it have? Our human lives are only finite in length, and during them we can experience and achieve only a finite number of things. What you lose by dying is the finite difference between a longer life and a shorter one.

What do you gain by continuing to live? Conversely, what do you lose by dying? The answer is the difference between the value of the life you have if you continue to live, and the value of the shorter life you have if you die. The right answer to the question lies between the extremes of ‘everything’ and ‘nothing’, or between ‘infinity’ and ‘zero’. It is ‘something’.

But ‘something’ is not good enough; we need to know how much. Excluding the two extremes puts us in the domain of quantities. A person’s life has some value. What? Furthermore, once we abandon the extremes, we should expect different lives to have different values. Presumably the value of a life depends in some way on its length and its quality. How?

We *need* a quantitative answer to the question of what a life is worth because important decisions hang on it. Decisions are constantly being made that affect the lengths of people’s lives. Some are on a small, individual scale; others on the scale of the whole world. On a small scale, all of us regularly make decisions that shorten or lengthen our lives. Statistically, each doughnut shortens your life. Is it worth it? That is probably something you do not want to think about, and you are probably wise not to. But in other circumstances, you will want to make the calculation. If you have a terminal illness, you will need to decide at what point to give up treatment that aims to extend your life, and accept only palliative care. You may think carefully about that. Your decision may depend on your judgement of the value of extending your life – for instance, on whether you have a book to finish or a child to look after.

You will be weighing the quantity of your life against its quality. You may need to do this for yourself explicitly only in rare and tragic circumstances. But when the decision is for other people, you will need to be more careful. You can be cavalier about your own doughnuts, but not about other people’s lives. Governments particularly make decisions that affect the lengths of many people’s lives, and they should think very carefully about the value of those lives.

Governments often have to weigh some people’s lives against others, and weigh the quality of lives against quantity of lives. Take the provision of health care. Some treatments (such as hip replacements) improve the quality of people’s lives without extending them. Some (such as heart replacements) extend lives. Many governments set the priorities among different sorts of treatment. In doing so, they must weigh the quality of life against the quantity of life. They need to set values on people’s lives.

On a much larger scale, we must decide what to do about global warming. One of the greatest harms that global warming will do is to kill huge numbers of people. It will kill them in natural disasters; it will kill them in heat waves; it will kill them by extending the range of

tropical diseases; and it will kill them in marginal areas of the world by making them poorer – poverty is a killer. By reducing our emissions of greenhouse gases, we can reduce the number of people who will be killed. But to do that we shall have to sacrifice some of the quality of our own lives. What sacrifices should we make? What reduction in the quality of our lives in the present is worthwhile for the sake of extending the quantity of people's lives in the future? Again we need to set a value on people's lives, and weigh quality against quantity.

The value of lives is not the only thing at issue in these decisions. When some people's lives are weighed against others, fairness also has a central place. To make this clear, I shall give an example in two parts. First, suppose a doctor can save a patient's life, and can do so using either of two treatments. One will leave the patient in good health. The other will equally well save her life, but leave her blind. Obviously, the doctor should use the first of these treatments. That is because it will probably do more good than the second. Life with sight is generally better than life without. This is a truth we should not shrink from; only this truth explains why the doctor should choose the first treatment rather than the second. Since there is only one patient in this first part of the example, fairness is not a consideration. The goodness of the result is the only thing that matters, and more good will probably result from the first treatment than the second.

Now the second part. Suppose a doctor has two patients who each have a fatal sickness. She has enough resources to save only one of them; the other will die. One of the patients is in good health apart from her present sickness, but the other is blind. Which should the doctor save? This time the answer is not obvious. More good will probably be done by saving the sighted patient; we have already recognized that life with sight is generally better than life without. But just because more good will probably result, it does not follow that this is the right thing for the doctor to do. It would be terribly unfair to the blind patient to let her die just because of her blindness. Fairness is another consideration that is just as important as doing the most good. The doctor needs to find a way of being fair. Choosing between the patients by some random lottery might be a way to do it.

So goodness is not the only consideration, but it is a central one. Therefore, to make vital decisions properly, we have to consider the value of people's lives. We need a proper account of the value of life, and we need to go through the process of intellectual debate that will eventually bring a good account into the public domain. The spur is that, until lives are valued well, they will be valued badly. Because many decisions are affected by the value of people's lives, governments already make their own valuations, and they generally do so badly.

They generally take their method from economics, which has a ready-made way of attaching a value to anything. Economists value things on the basis of the preferences of individuals, which are revealed by their willingness to pay for them. Economists take their value for human life from people's willingness to pay to extend their lives or, in practice, from their willingness to pay to reduce the risks to life that they are exposed to. This method avoids the need to have any proper account of the value of life. That is left to the people. People make their own judgements about the value of their lives, and express them through their willingness to pay. The economist is spared the bother.

Values for willingness to pay are in practice gleaned from such data as the premium that workers require to be paid to induce them to take on dangerous jobs, or from questionnaires that ask people what they would be willing to pay to make their lives safer. The values that

emerge vary widely, and are in some cases incoherent. In one study, people's willingness to pay for a large reduction in risk was no more than their willingness to pay for a small reduction.<sup>3</sup> This is not surprising. It is wishful thinking to imagine that people's willingness to pay in these circumstances derives from any coherent view about the value of their lives. It is a difficult task to assign a value to your life. In practice, when you take on a dangerous job, or answer a questionnaire, you are not likely to have made a proper judgement of it. Your willingness to pay will probably be haphazard. A person's willingness to pay cannot be expected to reveal her judgement about the value of her life.

The worst thing about valuing lives by willingness to pay is that in practice it is not done even to the standards of good economics. Values measured by willingness to pay are, of course, measured in terms of money. There is no harm in that; we need to compare the value of lives with the value of other things, and we need some common unit in which to do it. Money is as good as any. But we have to recognize that money does not have the same value to one person as to another. Money is worth less to rich people than to poor people, who require it to satisfy their urgent needs. Money is worth less to someone who is nearer death than it is to someone who is not so near; if you are expecting to die soon, you will not have so many uses for your money. So if an old person is willing to spend more on extending her life than a young person is, that may not be because her life is more valuable. It may be because money is less valuable to her. If an American is willing to pay fifteen times more to extend her life than a Bangladeshi is, that does not mean her life is fifteen times more valuable.

This is an elementary point, and when economists do cost-benefit analysis well, they have methods of correcting for money's different values to rich and poor people.<sup>4</sup> But this elementary point is ignored within the practice of valuing human life. The Office of Management and Budget instructs federal agencies to set a higher value on a year of a senior citizen's life than on a year of a young person's life. Its explanation is that old people are likely to have accumulated savings to spend on their health.<sup>5</sup> Its thinking must be that, since an old person has saved up more money, she is likely to be willing to pay more to extend her life, and this shows that a year of her life is more valuable. But actually it simply shows she has more money to spend. One report of the UN's Intergovernmental Panel on Climate Change seriously suggested valuing Americans at fifteen times the value of Bangladeshis.<sup>6</sup> So long as willingness to pay is used in this crass manner, it would be better not used at all.

When economics is done better than this, it offers a way to correct for money's different values to rich and poor people. But it does not offer a way to correct for its different values to those near death and those who are further away. In order to make that correction, it would first need a proper account of the value of life. So even if willingness to pay were better applied, it would still not provide a way of evading the need for such an account.

Indeed, one branch of economics has already developed an account of its own. Health economists regularly value people's lives in terms of quality-adjusted life years – qalys – and their work strongly influences practical decision making in health care. They take the view that the value of a life is given by its length in years, adjusted by a factor that is supposed to measure its quality. There are many difficulties in implementing this theory in detail, but in broad terms it is a sensible theory of the value of a life.

I do not say it is correct. My purpose is not to defend any particular theory of the value of a life. I have said that the benefit of extending life, and conversely the harm done by shortening it, is the difference in value between a longer life and a shorter life. This is the first step towards a theory. It tells us that what we need is a theory of the value of a whole life. But I shall not go further than that.

My purpose is only to argue that we need a theory. Many people find it unsettling to try and fix a concrete value on human life. But we need to do it.

1. Epicurus, *Letter to Menoecus*, edited by Whitney Oates, New York, 1940, pp. 30–1.
2. Ludwig Wittgenstein, *Notebooks 1914-16*, Blackwell, 1961, p. 75.
3. M. W. Jones-Lee, G. Loomes and P. R. Philips, ‘Valuing the prevention of non-fatal road injuries: contingent valuation vs standard gambles’, *Oxford Economic Papers*, 47 (1995), pp. 676–95.
4. See Jean Drèze and Nicholas Stern, ‘The theory of cost-benefit analysis’, in *Handbook of Public Economics, Volume II*, edited by Alan J. Auerback and Martin Feldstein, North-Holland, 1987, pp. 909–89.
5. Office of Management and Budget, ‘Circular A–4: Regulatory Analysis’, September 17 2004, section E.
6. Intergovernmental Panel on Climate Change, *Climate Change 1995, Volume III: Economic and Social Dimensions of Climate Change*, Cambridge University Press, 1996, pp. 195–8.