Time: Experience and Reality

In March 1955, after receiving news of the death of his old friend and fellow physicist Michele Besso, Albert Einstein writes the following in a letter of condolence to Besso's family:

"Now he has departed from this strange world a little ahead of me. That means nothing. People like us, who believe in physics, know that the distinction between past, present and future is only a stubbornly persistent illusion."

In retrospect, these lines are lent an added poignancy by the fact that Einstein's own death was just around the corner when he wrote them. He died just one month and three days later, on 18th April 1955.

Einstein is of course one of the great physicists of all time, but his words in fact echo a long-standing debate in philosophy concerning the nature of time. Indeed, it has some claim to be one of the longest-standing debates in philosophy, going back more or less to the very beginnings of Western philosophy in ancient Greece. Two of the earliest known Greek philosophers, of whose work we only know through a few enigmatic fragments, together with some second-hand reports of their lives, seem to present us with two strikingly different pictures of time.

One the one hand there is Heraclitus, amongst whose writings we find the following aphorism:

"Everything flows and nothing abides; everything gives way and nothing stays fixed. You cannot step twice into the same river, for other waters and yet others, go flowing on. Time is a child, moving counters in a game." ¹

As typically understood, these words are meant evoke a picture of reality as marked by something like a constant flux; it is a constant process of things coming into existence and then going out of existence again – everything is transient.

An opposing view of reality is expressed by Parmenides, in whose writings we find passages such as the following:

"There remains, then, but one word by which to express the road [that leads to the discovery of true reality]: Is. And on this road there are many signs that *What Is* has no beginning and never will be destroyed: it is whole, still, and without end. It neither was nor will be, it simply is—now, altogether, one, continuous."²

On this alternative picture, the world simply is; each event in history – no matter whether it is, from our perspective, past, present or future – in reality enjoys the same existence alongside all the others. The world itself, as it exists independently of us, is devoid of the kind of change we describe as events first lying in the future, then becoming present, and then receding into the past.

It is clear that these descriptions of two supposedly contrasting pictures of time are highly metaphorical and in need of considerable further unpacking. But the general idea of two fundamentally different ways of understanding the nature of time,

¹ See Wheelwright, Philip, 1960. *The Presocratics*. Indianapolis: Bobbs- Merrill.

² See Wheelwright, as above.

which we need to choose between, has continued to occupy philosophers. Sometimes these are referred to as a 'dynamic' versus a 'static' view of time, or as 'transientism' versus 'eternalism'.

Crudely speaking, the first type of view, following Heraclitus, thinks of time as something that intrinsically 'passes' or 'flows'. It also thinks of one particular time as very special – namely the time that is present, the 'now', though of course which time is present changes as time goes by. Added to this picture are often other ways of explaining how the past, the present and the future supposedly differ from each other, such as the thought that the past is 'fixed', whereas the future is 'open', with the present marking the transition point between them.

This is typically taken to be the kind of view of time that is closest to how we actually experience things. Here, for instance, is the philosopher Clifford Williams trying to capture the idea of a characteristic form of 'passage' as part of our experience of time:

"It is simply that we *find* passage, that we are immediately and poignantly involved in the jerk and whoosh of process, the felt flow of one moment into the next. Here is the focus of being. Here is the shore whence the youngster watches the golden mornings swing toward him like serried bright breakers from the ocean of the future. Here is the flood on which the oldster wakes in the night to shudder at its swollen black torrent cascading him into the abyss."³

Or consider Bradford Skow writing in somewhat less luxuriant prose about the idea that the present is somehow special:

"I cannot survey all the motivations philosophers have had for [this idea]. But the motivation that I like best appeals to the nature of our conscious experience. Of all the experiences I will ever have, some of them are special. Those are the ones that I am having NOW. All those others are ghostly and insubstantial." ⁴

The contrasting view of time that goes back to Parmenides is a less familiar one, further removed from the way we ordinarily think about time. Perhaps the best way of making sense of it is by thinking of it as a view about these aspects of experience that Williams and Skow are trying to describe – namely the view that these aspects of experience are in fact illusory. They are the product of our own minds, rather than reflecting how the world really is. As one argument goes in this context, if time itself 'flows' or 'passes', there must be an answer to the question as to how fast it does so. Yet the only possible kind of answer to this question, it seems, is 'one second per second', 'one minute per minute', or some such. And there is something odd about that kind of answer, suggesting that there is something wrong with the question to start off with, and with it the idea that sparked it, of time itself as 'passing' or 'flowing'. Similarly for the idea that the present is special. How can there be anything genuinely special about the experiences I am having *now*, for instance, if the experiences I will have tomorrow will do so too?

³ Williams, D. C. 1951: 'The Myth of Passage.' Journal of Philosophy, 48, 457-472.

⁴ Skow, Bradford 2009: 'Relativity and the Moving Spotlight.' Journal of Philosophy, 106, 666-678.

Thus, on this view, time, of itself, no more 'passes' or 'flows' than space does, and there is no real difference in kind between past, present and future events. We do of course typically *know* less about future events than about past ones. But in this respect future events are simply like the events described on the pages we have yet to read of a novel we are only half way through reading. Nothing about the book itself changes as we read it; it is just *us* who find out more and more about what happens in the story as we read on. Just so it is with time itself; objectively, there is simply the sequence of events that makes up the history of our universe, spanning from its beginning to its end (if it has one). Amongst those events – for at least a stretch of that cosmic history – are of course also those that constitute the lives of human beings, including their having different thoughts at different times. But there is no special light of the 'present' that shines on some of these events but not others. In themselves, they are all completely on a par with each other.

So here we have a debate between two quite different pictures of the nature of time. The branch of philosophy within which that debate is conducted is *metaphysics*, the philosophical enquiry into the ultimate nature of reality, as it is in itself. Metaphysics is, as it were, amongst the most philosophical of all areas of philosophy, but it is also an area that sometimes gives philosophy a bad press. Perhaps the most famous cliché of philosophers wasting time on pointless metaphysical speculation is that of medieval monks endlessly debating the question as to how many angels can dance on the head of a pin. But some of what goes on in metaphysics at the moment can easily seem equally meaningless. For instance, there are book-length treatments of the nature of holes, debating such questions as to what happens when you spin a doughnut – does the hole in the middle spin with it, or does it remain stationary?

In the case of the two contrasting pictures of the nature of time that I have described, we probably don't think of the issue as quite as meaningless-sounding as this. But we might have another worry – that it is simply an illusion to think that philosophy can have anything useful to say on the issue. The worry, in other words, is that philosophers debating the metaphysics of time are trying to do 'from the armchair', as the expression goes, what should really be left for empirical science to resolve, and that the issue should simply be handed over to physics. Recall that Einstein, for instance, thinks that it is physics – in particular his relativistic physics – that proves that the distinction between the past, the present and the future is "only a stubbornly persistent illusion".

Most philosophers working nowadays see themselves as being engaged in constructive dialogue with the sciences, but I think the topic of time is still one raising issues going beyond what physics can investigate. One set of issues concerns the contrast between the picture of time that is suggested by physics and our everyday experience of time. If thinkers such as Parmenides and Einstein are right about the nature of time, how can it be that time, as it features in our experience, is so different? A second set of issues arises from the fact that time is a topic that is not just of theoretical interest to us, but that how we relate to time plays a fundamental role in how we live our lives. In fact, I think there are good reasons for considering both of these sets of issues together.

One of the key themes of the forthcoming book *Felt Time* by the psychologist Marc Wittmann is how deeply our well-being can be affected by the way we perceive time.⁵ As he explains, for instance, just becoming aware of time itself can sometimes

⁵ Wittmann, Marc 2016: *Felt time: The psychology of how we perceive time*. Cambridge, MA: MIT Press.

act as a trigger that provokes strong emotions and reactions. One example with which he illustrates this is that of a Californian highway, which had to be closed entirely to traffic in order to complete necessary maintenance work. During an earlier phase of that work, some lanes had been kept open but there had been frequent traffic jams. Again and again, this had led to maintenance workers being threatened by drivers, some of whom had also thrown objects such as burritos, and even fired a shotgun in one case. As Wittmann interprets this example, when our attention is drawn to time, this "functions as an error signal indicating that something is amiss", for which we then seek to blame someone.

Time also affects our attitudes in other ways. In one empirical study, participants read a story asking them to imagine that a friend had offered them to use his vacation home. They were then given descriptions of eight wines, including their price, and asked to pick an appropriate bottle of wine as a thank-you gift for their friend. There were two slightly different task conditions. In one of them, participants were asked to imagine that they had just come back from a one-week stay at the vacation home; in the other, they were to imagine they were about to go there for a one-week stay. Whether they imagined the stay at the vacation home as lying in the past or in the future turned out to significantly affect which wine participants chose: They gave the friend a bottle that was 37% more expensive when they imagined that the stay in the vacation home was in the future than when they imagined a stay in the past. Similar studies have also shown that people are likely to charge more for work that they have yet to carry out than work they have already completed, and that more compensation will be judged necessary for future compared with past harm.⁶

What these observation seem to point to is that we ourselves would actually be better off in various ways if we recognized some aspects of the way we ordinarily experience and think about time as illusory. In a similar way, I now wish to suggest that adopting the kind of picture of time sketched by Parmenides, on which in reality there is no such thing as the 'passage' or 'flow' of time, can also serve as an important form of corrective. I think one thing that might help us see this better is when we reflect on the significance the idea of eternity has within Christian religion – or the thought we came across in the reading earlier, of God as an eternal presence, watching us wherever we go.

There are in fact ways of understanding the notion of eternity on which the idea of an eternal life should strike us with terror. In the third act of Leoš Janáček's opera *The Makropulos Case*, based on a play by Karel Čapek, the character Elina Makropulos is revealed to have lived, previously under a number of other names with the same initials, for the last three hundred years at the biological age of 42 – her father, the Court physician of a sixteenth century Emperor, having tried out an elixir of life on her. When we meet her, in Janáček's opera, at the age of 342, her unending life has, in the philosopher Bernard Williams's words, "come to a state of boredom, indifference and coldness. Everything is joyless." As Williams argues, the more we reflect to any realistic degree on the conditions of an unending life such as this, we will come to realize the eventual inevitability of such an outcome. As he puts it, in as far as we remain recognizably ourselves over such a seemingly endless period of time, we "would eventually have had altogether too much of [ourselves]".⁷

⁶ See Caruso, E. M., Gilbert, D. T., & Wilson, T. D. 2008: A wrinkle in time: Asymmetric valuation of past and future events. *Psychological Science*, *19*, 796-801.

⁷ Williams, Bernard 1973: 'The *Makropulos case*: reflections on the tedium of immortality.' In: *Problems of the self.* Oxford: Oxford University Press.

So it is hard to see how the idea of an eternal life that faith can bestow on us, as it says at numerous places in the Bible, could mean the same thing as the idea of an unending life. What might an alternative conception of eternity look like, which can better explain the significance of that notion in Christian thought? I think here the difference between the two metaphysical pictures of time that I have outlined earlier, together with the other idea I have also discussed – that there might actually be value for us in coming to see some of our ordinary ways of experiencing and thinking about time as illusory – might help us arrive at such an alternative conception of eternity and appreciate its significance.

The basic thought would be that adopting something like the view of time that Parmenides articulates, on which there is an important sense in which time, as it is in itself, doesn't really 'flow' or 'pass', is not just of intellectual interest, to get it right about the metaphysics of time. It also lets us see that what has value in life doesn't just get to count any more – pass into oblivion – as time goes on. Just this kind of thought, of course, is what stands behind the idea, implicit in Einstein's letter to the family of the deceased Michele Besso, that the thought that "the distinction between past, present and future is only a stubbornly persistent illusion" can serve as a source of consolation for their recent loss. If below the surface of our ordinary experience there is in fact a reality that is in some sense unchanging, the thought of it can serve as an antidote to the sadness we may sometimes feel at the seeming transience of everything we value. One reason, perhaps, why Paul, in his second letter to the Corinthians, says: "look not to the things that are seen but to the things that are unseen are eternal."