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Death and eternal recurrence

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Many people – perhaps the vast majority of mankind – seem to believe that there is some kind of life after death. This is remarkable, if only because corpses appear to be so completely dead. Some people believe that each person has an immaterial soul that somehow lives on when the body is transformed into a corpse, but this is unlikely in view of the fact that a person’s mental life appears to be intimately connected with what happens in his or her brain. Even so, there is perhaps some other way in which we might survive death.

The belief in some kind of afterlife may of course be an instance of wishful thinking, but it is unclear to what extent a life after death is something to be wished for. To wish for good things – at least if one believes that they are at all possible – is perhaps not irrational, but it is not so obvious that life after death would be a good thing. It is very unclear what kind of life it could be. In this paper I shall explore the idea that life after death is exactly the same as life before death. This follows from the theory of *eternal recurrence*. Eternal recurrence – or “eternal return”, as it is sometimes called – can be described in different ways; roughly, the basic idea is that the whole history of the universe has happened before and will happen again; cosmic history is cyclic, with no beginning and no end. In particular, whenever someone dies, he or she will be born again in the next cycle of cosmic history. So even if all of us die, our death is never definitive. There is always an afterlife, and this afterlife is just like the life we live before death. In one sense, we are certainly mortal – but, in another sense, we are also immortal.

The idea that everything has happened before and will happen again may seem very implausible, but many philosophers have been attracted to it, and it used to be held by many people in earlier times. For traditional man, time was cyclical in the sense that life consisted in the repetition of archetypes; e.g. each year (often in the spring) men abandoned the past and started all over again, thereby achieving purification and recreation.¹ The distinguished historian of religions Mircea Eliade, in his book *The Myth of the Eternal Return*, writes as follows:

This cyclical conception of the disappearance and reappearance of humanity is also preserved in the historical cultures. In the third century B. C., Berossus popularized the Chaldean doctrine of the “Great Year” in a form that spread through the entire Hellenic world (whence it later passed to the Romans and the Byzantines). According to this doctrine, the universe is eternal but it is periodically destroyed and reconstituted every Great Year (the corresponding number of millennia varies from school to school).²

¹ See Eliade, 1955, p. 85.

² Eliade, p. 87.

Eliade approvingly quotes another author as follows:

According to the celebrated Platonic definition, time, which determines and measures the revolution of the celestial spheres, is the moving image of unmoving eternity, which it imitates by revolving in a circle. [...] No event is unique, occurs once and for all (for example the condemnation and death of Socrates), but it has occurred, occurs, and will occur, perpetually; the same individuals have appeared, appear, and reappear at every return of the cycle upon itself. Cosmic duration is repetition and *anakuklosis*, eternal return.³

Eliade also says that “the eternal return – the periodic resumption, by all beings, of their former lives [...] is one of the few dogmas of which we know with some certainty that they formed a part of primitive Pythagoreanism”;⁴ and “the Greek theory of eternal return is the final variant undergone by the myth of the repetition of an archetypal gesture, just as the Platonic doctrine of Ideas was the final version of the archetype concept, and the most fully elaborated”.⁵

In later years, the belief in eternal recurrence appears to have become much less widespread. This is probably because of the overwhelming influence of Jewish and Christian conceptions of cosmic history as linear and bounded by two unique events: Creation and Last Judgment.⁶ But some philosophers, notably Nietzsche,⁷ have been attracted to the idea, and it seems to have been accepted by C. S. Peirce.⁸ In one place, Nietzsche sketches an argument for eternal recurrence as follows:

If the world may be thought of as a certain definite quantity of force and as a certain definite number of centers of force – and every other representation remains indefinite and therefore useless – it follows that, in the great dice game of existence, it must pass through a calculable number of combinations. In infinite time, every possible combination would at some time or another be realized; more: it would be realized an infinite number of times. And since between every combination and its next recurrence all other possible combinations would have to take place, and each of these combinations conditions the entire sequence of combinations in the same series, a circular movement of absolutely identical series is thus demonstrated: the world as a circular movement that has already repeated itself infinitely often and plays its game in infinitum.⁹

³ Eliade, p. 89. The quotation is from Henri-Charles Puech.

⁴ Eliade, p. 120.

⁵ Eliade, p. 123. See also Sorabji 1983, p. 182 ff.

⁶ See Capek, 1967, pp. 61-2. But also Eliade, pp. 129-30. Eliade also says: “From the seventeenth century on, linearism and the progressivistic conception of history assert themselves more and more” (p. 145).

⁷ See e.g. Hatab, 2005, and Nietzsche 1968, pp. 544-50.

⁸ See Capek 1960. For more contemporary proponents or sympathizers of the doctrine, Eliade points out that “the work of two of the most significant writers of our day – T. S. Eliot and James Joyce – is saturated with nostalgia for the myth of eternal repetition and, in the last analysis, for the abolition of time” (p. 153).

⁹ Nietzsche 1968, p. 549.

Peirce seems to have reasoned in a similar way.¹⁰ Anders Wedberg claims that paragraph 1066 of *Der Wille zur Macht* – from which the above quotation is taken – can be interpreted to contain five postulates from which the eternal recurrence can be strictly derived. The five postulates are (in my translation):

P1. Time is the infinite and unbounded sequence of discrete moments $T = \dots, t_{-2}, t_{-1}, t_0, t_1, t_2, \dots$ (where a “moment” may be a point or a certain short interval of time).

P2. At each moment in T , there occurs exactly one of the states in the set Σ , where Σ is the finite set of all the possible total states of affairs.

P3. Each state in Σ occurs as some moment in T .

P4. Σ is a finite set $\{s_1, s_2, s_3, \dots, s_p\}$.

P5. If the same state occurs at t_i and t_j , then there is a state in Σ that occurs at both t_{i+1} and t_{j+1} .

Wedberg shows in detail that, if P1, P2, and P3 are satisfied, then the conjunction of P4 and P5 is equivalent to eternal recurrence, i.e. the thesis that there exists a specific sequence S of the states in Σ , such that the history of the world has the form ...SSSSSS... But Wedberg also notes that, while Nietzsche himself regarded P4 as the most problematic of the postulates, each of P1, P2, P4, and P5 can very well be questioned.¹¹

Most people today may be inclined to dismiss the doctrine of eternal recurrence as pure fantasy. However, one may wonder if it can be refuted by rational arguments. To some extent, this depends upon the exact version of the doctrine, and it also depends upon the nature of time and other cosmological facts – and these are matters upon which there appears to be no solid and convincing consensus among the experts.

RECURRENCE IN LINEAR TIME

We ordinarily think of time as *linear*; that is, we believe it can be represented by a line, where the points on the line represent moments or instants of time.¹² The line may or may not be bounded, in one end or in both. Eternal recurrence in linear time would mean that time is infinite, and that the history of the universe is finite,

¹⁰ See Capek 1960, pp. 291-2. Capek notes that this reasoning is related to a certain theorem proved by Henri Poincaré, but that Nietzsche grasped this intuitively a few years before it was proved by Poincaré (see p. 291). However, Capek claims that eternal recurrence “is incompatible with our present physical knowledge” (1960, p. 294); e.g., he cites “the lack of constancy and the lack of persistence through time of the alleged ‘particles’ of contemporary physics” and the fact that relativity theory forces us “to deny the existence of events simultaneous in an absolute sense” (p. 293). Capek’s reasoning is criticized by Bas van Fraassen (1962).

¹¹ Wedberg 1968, pp. 69-74.

¹² People disagree about whether time is continuous, dense, or discrete, but this seems to be irrelevant for problems concerning eternal recurrence, so it will not be discussed here.

but occurs over and over again, without beginning and/or without end. Each occurrence of cosmic history¹³ is qualitatively exactly like every other, the only difference is that they occur at different times.¹⁴

Given what we currently believe about the universe, it appears that eternal recurrence in linear time is not to be expected. In particular, physicists seem to hold that the world is not completely deterministic. If it is not, it seems very unlikely that the whole cosmic history would be qualitatively the same whenever it occurs. Besides, even if it were true that whenever it comes to an “end” it always “begins” all over again, we have no reason to believe that it will always begin in exactly the same way as before.

This talk of a beginning and an end of cosmic history may be bewildering. In one sense, eternal recurrence means that there is no beginning and no end. Clearly, however, the idea is that there is a *sequence* of cosmic histories, where every element in the sequence has a beginning and an end, but where there is perhaps no beginning and no end to the sequence itself. We might imagine that each instance of cosmic history begins with a Big Bang and ends with a Big Crunch or Heat Death (maximum entropy). But there seems to be no particular reason why one should expect there to be more than one instance of cosmic history – unless one finds it hard to believe that there is simply no time, or just empty (but infinite) time, before and after a single (finite) cosmic history.

CLOSED TIME

A completely different idea is that time is not linear, but *closed* (or “circular” or “cyclic”). If so, it can be represented by a circle, or some other closed curve, rather than by a straight line.¹⁵ The idea is that if we move from one instant or moment of time to a later moment, and so on, and so on, we will ultimately arrive at the very

¹³ One may wonder if the notion of a cosmic history makes sense at all, if “time is relative” as in relativity theory. Different reference frames split spacetime differently into space and time. But some physicists seem to believe that there is nevertheless a kind of “universal” or “cosmic” time in the universe, namely the time that is relative to a frame of reference from which the background heat radiation that fills space appears exactly uniform in all directions (see Davies, pp. 127-9). Besides, even if *clocks* are affected by motion and by gravity, as in relativity theory, it may perhaps be doubted that *time* is therefore likewise affected. This seems to *presuppose* that time is not absolute. There is no consensus on this. For example, J. R. Lucas says: “Time is not the same as change or motion, it is not just what the clocks say. For we are aware of the passage of time, even when we are not aware of any changes in the external world” (1973, p. 8).

¹⁴ If time is absolute, this is perhaps a qualitative difference. Otherwise, it can be regarded as merely numerical.

¹⁵ Some philosophers may even argue that if there is eternal recurrence, then, in virtue of the Principle of the Identity of Indiscernibles, time *must* be closed. For, according to that Principle, there can be no numerical difference where there is no qualitative difference. Susan Weir, e.g. argues in this way (Weir 1988, p. 204). But this, again, seems to presuppose that time is not absolute – for if time is absolute and linear, there is a qualitative difference between different cycles of cosmic history, namely that they occur at different times.

same moment that we started from. Someone might express this latter thought by saying that time itself recurs or repeats itself.

However, some philosophers say that a time cannot recur or repeat itself, since this would mean that one and the same time occurs at different times – while in fact each time can occur only once.¹⁶ This objection is not very strong. We may be inclined to agree that a time does not occur at different times, but this is perhaps mainly because a time does not “occur” (at some time) at all. Rather, the idea that a time, t , recurs must be taken to mean that there is some sequence of times, $\langle x_1, x_2, \dots, x_n \rangle$, where each x_{i+1} is later than x_i , such that $t = x_1 = x_n$.¹⁷

The relation *later than* is usually taken to be irreflexive, asymmetric, and transitive. But if time is closed, these assumptions are problematic. For irreflexivity as well as asymmetry implies that, for every time t , t is *not* later than t , whereas if times “recur” in the sense just indicated, transitivity would imply that t is later than t . We would have a contradiction on our hands. So it might seem that, if time is closed, either irreflexivity and asymmetry or transitivity must be given up.

We can hardly stay away from the relation *later than* altogether, for this relation (or something equivalent) seems to be absolutely essential for our notion of *time*. However, W. H. Newton-Smith claims that “no two-term relation will be adequate for characterizing order in a closed structure”.¹⁸ As a matter of fact, he seems to think that if time is closed, it has no direction – since each time is later than every other time, and each time is even later than itself.¹⁹ This is strange in view of the fact that he himself points out that positing closed time would require a distinction between *locally before*, which is an asymmetric but not transitive relation, and *globally before*, which is reflexive, symmetric, and transitive.²⁰ Surely, this is on the right

¹⁶ See e.g. Lucas (p. 58), and Newton-Smith (1980, p. 57). I will come back to the problem of repetition below.

¹⁷ Indeed, there is some indication that Peirce might have believed in closed time. Capek quotes what he calls a “peculiar argument” from Peirce (*Collected Works*, I, 498-50) as follows: “since every portion of time is bounded by two instants, there must be a connection of time ring-wise. Events may be limited to a portion of this ring, but the time itself must extend round or else there will be a portion of time, say future time and also past time, not bounded by two instants” (Capek 1960, p. 295-6). Wedberg points out that there are formulations in Nietzsche’s work that suggests that he sometimes thought of time as closed, even though this is incompatible with his assumption that time is infinite and discrete. Wedberg suggests that Nietzsche might have started with this assumption and then, after having used it to support eternal recurrence, changed his mind about time under the influence of Leibniz’s principle of the Identity of Indiscernables (see Wedberg 1968, pp. 80-3).

¹⁸ Newton-Smith 1980, p. 59.

¹⁹ The same point is evidenced by the fact that, when he illustrates closed time with a circle, he does not indicate direction with an arrow, as he does in the case of open, linear time (see p. 58). Lucas has a similar view. He says that “there are difficulties about the order of events in cyclic time. If we take ‘before’ and ‘after’ in their usual sense, every event will be both before and after every other event; and it will become impossible [...] to identify them by reference to their temporal ordering. [...] Moreover, even if we could introduce an order into cyclic time, we cannot import a direction” (1973, pp. 59-60).

²⁰ Newton-Smith 1980, pp. 58-9.

track, but Newton-Smith seems to forget about this possibility as soon as he has mentioned it.

Let us stick to the relation *later than*, and let us retain the usual characterization of this relation as irreflexive, asymmetric, and transitive. Let us notice, however, that these properties have to be relativized, explicitly or implicitly, to some set in which the relation in question holds; for a relation may be, e.g., transitive in one set but not in another. Now, if time is closed, it is quite reasonable to assume that *later than* is not connected in the set T of all times. For, as we have seen, this would lead to contradictions; e.g. a time would be later than itself (because of transitivity) and not later than itself (because of irreflexivity). But in “local” subsets of T , i.e. subsets whose elements are comparatively close to one another, we can still uphold the connectedness of the relation. In view of common usage, *later than* should always be taken as irreflexive, asymmetric, and transitive – but if time is closed it should only be applied in local subsets of T .²¹

Suppose time is really closed. Suppose, for example, that the history of the universe starts with a Big Bang and ends with a Big Crunch, which immediately (or after a while) takes us back to the time of the Big Bang and then further to the Big Crunch, and so on forever. Of course, we would never notice, since we only exist for a very small interval of time in the cosmic history. So we would naturally, but falsely, believe that *later than* is transitive without any restriction (and that time is linear). For the times at which we exist constitute a very local subset of the set T of all times.

If, for every time t , there is some sequence of times, $\langle x_1, x_2, \dots, x_n \rangle$, such that $t = x_1 = x_n$ and each x_{i+1} is later than x_i , then time certainly has a direction. The direction is determined by the asymmetric relation *later than*. And even if, in this sense, every instant in closed time will “recur”, it will not follow that every time is later than itself. Nor will it follow that for every pair of times, each member is later than the other.

But is there any reason to believe that time is closed? Perhaps not. But neither, it seems, is there any reason to believe that time is linear. For all we know, both alternatives seem equally possible.²² Both are equally compatible with all possible empirical evidence. Furthermore, it seems unlikely that simplicity could break the tie. In some respect, a straight line may be simpler than a circle, but with the straight line there is also the problem of how, and why, it begins and ends – unless it is of infinite length, which is also problematic and not very simple. Linear time may be

²¹ Notice, that this is somewhat different from Newton-Smith’s suggestion. He recognizes *two* relations, two senses of “before”, while I stick to *one* well-known relation – which may however not be connected in the set of all times (depending upon whether time is closed). His suggestion, as well as mine, removes contradictions, but it seems to me that mine is more natural in view of common usage.

²² According to Lawrence Hatab, Nietzsche did not try to decide between linear and cyclical time for eternal recurrence. This was partly because Nietzsche’s immanent naturalism is incompatible with an external, “God’s eye” standpoint from which one can survey all of reality and make the relevant decision (see Hatab 2005, pp. 71-3).

simpler in the sense that it appears more “natural” to ordinary people – at least in modern times – but, given the manifest “unnaturalness” of modern cosmology, this is surely not a very relevant consideration. Besides, the fact that people *nowadays* tend to think of time as linear may be primarily due to the overwhelming influence over many centuries of Christian dogma.

We may conclude, then, that closed time is a realistic possibility, which in turn appears to imply a plausible version of eternal recurrence.

OBJECTIVE AND SUBJECTIVE PERSPECTIVES

Some philosophers would still insist that eternal recurrence in closed time is incoherent: if time were closed, they would argue, it would *not* be the case that every time will recur. For example, J. R. Lucas says: “If time really were cyclic, there would not be a recurrence of events [...] not the same sort of event all over again, but the very same event just once”.²³ Lucas claims that recurrence presupposes precisely that time is *not* cyclic (closed). Adolf Grünbaum seems to have the same view; he says that “cyclic recurrence affirms the openness of time”.²⁴

It might be replied that this is just a matter of words. Lucas and Grünbaum may be right as long as “recurrence” is taken in its normal sense, but this normal sense probably reflects our normal, unreflecting belief that time is linear. If we believed that time is closed, the normal sense of “recurrence”, in contexts like this, would probably be the one indicated above.

However, there may still be some doubt as to whether this reply has any philosophical substance. Is there any real difference between recurrence in closed time – from now on, unless otherwise indicated, “recurrence” will always mean recurrence of this kind – and no recurrence at all? In particular, if there is a difference, is this difference of any interest to those of us who do not want to die (or, for that matter, to those who want to die)?

We need to distinguish here between objective and subjective differences.²⁵ From an objective point of view, there is a theoretical difference between linear and cyclical time, but this difference is never noticed by anyone. It is not noticed from any subjective point of view. Still, the *prospect* of death may appear quite different to those who believe in closed time than to those who do not. In other

²³ Lucas 1973, p. 58.

²⁴ Grünbaum 1973, p. 198.

²⁵ Thomas Nagel has made important contributions to our understanding of this distinction; see e.g. Nagel 1979, in particular, the chapter entitled “Subjective and Objective”, pp. 196-213. Most of us believe that the ambition to achieve objectivity, especially evident in the natural sciences, leads to an increased and more correct understanding of reality, but Nagel forcefully argues that a purely objective conception of the world can never be complete. The objective facts are not all the facts there are. Many truths are only accessible from a subjective perspective. For example, a complete and objective description of every person in the building where I am now writing this paper does not include the fact that *I* am one of these persons – even though this is clearly a fact. Similarly, there may be facts about *time* that are only evident from a subjective perspective – e.g. the facts that it is now 10 a.m. and that time now moves very slowly.

words, the *belief* in closed time – or the belief that closed time is at least a realistic possibility – may make a great difference from a subjective perspective.

When the prospect of death is terrifying it is, I suggest, the prospect of not having any future, of never again having any experiences. But the very idea of a *future* is only intelligible from within a subjective perspective. From an external perspective, eternal recurrence in closed time may be just the same as no recurrence at all, but from a subjective point of view it might be a great comfort, since it would remove the prospect of never again having a subjective point of view.

According to Thomas Nagel, “if death is an evil, it is the *loss of life*, rather than the state of being dead, or nonexistent, or unconscious, that is objectionable”.²⁶ This seems to me to be only partly correct. I should not really object to the loss of life, if it were not followed by the permanent state of being dead.²⁷ The loss of life seems quite tolerable if time is closed, for in that case death is followed by life.

But is that really what happens in closed time? Philosophers like Lucas and Grünbaum may insist that death is *not* followed by life in closed time, since in closed time a person’s life occurs only once. From a subjective point of view, it may appear that death will be followed by life in closed time – since the subject will never experience the time between death and life – but this, it might be argued, is an illusion. From an objective or external point of view, this illusion is dissolved; objectively, life is not later than death, since *later than* is only applicable in local subsets of the set of all times. However, as Nagel has argued, the subjective perspective is not (always) illusory and it is not inferior to the objective perspective; “our objective understanding of things [...] is in essence only partial”, and “objective reality cannot be analyzed or shut out of existence any more than subjective reality can”.²⁸ From a subjective perspective it certainly seems that death *is* followed by life in closed time.

It may be noticed that eternal recurrence in this sense appears to be subjectively equivalent to a kind of time travel between death and birth: from a subjective perspective, they would feel the same, and both prospects would (therefore) be equally desirable. It would not be time travel performed intentionally or even consciously, but it would be time travel in the sense that the person in question moves from one location in time to another.²⁹ If this were possible in linear time, it is hard to see why it should be impossible in closed time.

²⁶ Nagel 1979, p. 3.

²⁷ Nagel says in a footnote: “It is sometimes suggested that what we really mind is the process of *dying*. But I should not really object to dying if it were not followed by death” (1979, p. 3). By contrast, I should not object to death, if it were followed by life, as in closed time. – However, in fairness to Nagel, it should be added that in the paper discussed here he uses “death” and its cognates to mean *permanent* death; see p. 1.

²⁸ Nagel 1979, p. 212.

²⁹ Notice that this kind of time travel is not like the kind that occurs in science fiction stories. It does not involve the movement of a *body of a certain age* to an earlier time; rather, it is the movement of a *person* from one time, and from a body with a certain age, to another time, and to a rather different and much younger body. The time traveler is transformed into an earlier

It may be objected that we cannot move in time at all. Some philosophers believe that time's passage is a myth, an illusion, and that it is also an illusion – more or less the same illusion – that we advance through time.³⁰ Nevertheless, we certainly experience a passage of time. We often express this by saying that time moves or flows, but on second thoughts we would probably be more inclined to say that time does not move any more than space does. It is rather *we* who move; more exactly, our subjective points of view move from one position in space and in time to another, and so on. There is a difference, though. In space, we move around in many different ways and we have the impression that most of the time we move voluntarily, but in time we seem to move along automatically in one direction whether we like it or not. There is nothing we can do about it. We cannot control our movement in time (except, perhaps, by committing suicide). Our impression that time moves (while we do not) can perhaps be explained by the fact that we cannot affect our own movement in time.³¹

But *do* we move in time?

MOVEMENT IN TIME

From an objective point of view, it may be quite correct to say that we do not move in time. In particular, if the world is a four-dimensional manifold of events, ordinary objects and human bodies are a kind of perduring solids or “worms” that are composed of temporal parts, or stages, located at various times and places. Neither the worm itself, nor any of its stages, move in time. They just have some location in time. But from a subjective point of view, we certainly advance through time.³² The subjective perspective, the point of view of a person – the *subject*, for short – moves along from one stage of a human body to the next, and so on.³³ This is the perspective from which the person refers to times and places by words like

version of himself (or herself). So there is no room for any of the usual paradoxes here; for example, the time traveler will not be in a position to kill himself or his parents or grandparents, thereby preventing himself from being born or from being in a position to travel backwards in time. – Moreover, in time travel of the science fiction kind, there is a problem of how departure and arrival can be separated by two unequal intervals of time, as e.g. when I travel from the year 2009 back to the year 1954 in a couple of hours (see e.g. Lewis 1976, p. 145). This is not a problem for eternal recurrence in closed time, since there is then only one sequence of times, and one direction of movement in time.

³⁰ See e.g. Smart 1967, p. 127.

³¹ Suppose we always moved uniformly in space, without any control at all over the movement, as if we were looking out of the windows of a moving train. If so, we might be inclined to say that space, or “the landscape”, moved or passed by outside the window.

³² Physicists may not care about this. For example, Davies says: “We can envisage the time dimension stretched out as a line of fate, and a particular instant – “now” – being singled out as a little glowing point. As “time goes on,” so the light moves steadily up the time line towards the future. Needless to say, physicists can find nothing of this in the objective world” (1995, p. 258). On the other hand, if human beings are enduring three-dimensional objects it is hard to see how one can deny that they move in time.

³³ Periods of unconsciousness and multiple personalities are disregarded here.

“now” and “here”; these words have no place in an objective perspective, they can only be used by a subject.

Nevertheless, J. J. C. Smart and others claim that movement in time is just an illusion. They point out that movement is movement with respect to time, and they ask: if motion in space is feet per second, at what speed is motion in time? Seconds per what?³⁴ That is a good question, but it seems clear that the answer must involve *two* kinds of time, subjective and objective.³⁵ Objectively, there is no movement in time, but subjectively we certainly move forward in (objective) time. This is nicely expressed by Hermann Weyl as follows:

The objective world simply *is*, it does not *happen*. Only to the gaze of my consciousness, crawling upward along the life line of my body, does a section of this world come to life as a fleeting image in space which continuously changes in time (Weyl 1949, p. 116).

Everyone knows that subjectively some days, weeks and years appear much longer or shorter than others. So our answer to Smart’s question should be something like this: in many cases our movement in time is just one objective second per subjective second, but sometimes we move at considerably more or less than one objective second per subjective second. We may not currently have access to any good objective instruments to measure subjective time – to construct such instruments, might be a task for psychologists – but it can hardly be doubted that there is such a thing as subjective time.

However, it has been held, more specifically, that passage of time, or “a moving present”, is incompatible with closed time. For example, Robin Le Poidevin says that

once we introduce the idea of a moving present into the picture of cyclic time, we cannot but imagine the present going around the circle repeatedly, and if the circle represents time itself, then we have to say, thus contradicting ourselves, that each event happens both once and an infinite number of times. We are in fact importing *two* representations of time into the picture: the circle itself, and the motion of the present around it. But we cannot, it seems have both. So there appears to be a tension between the idea of cyclic time on the one hand and the passage of time on the other.³⁶

Le Poidevin claims that there is a contradiction here and that time is represented in two incompatible ways. By contrast, I suggest that two different systems of time of

³⁴ Smart 1967, p. 126.

³⁵ The distinction between objective and subjective time is not the same as the distinction between external and personal time proposed by David Lewis (1976, p. 146). For Lewis, personal time is primarily tied to bodily processes and the normal order of the stages of a human body; it has no essential connection to a subjective perspective.

³⁶ Le Poidevin 2003, pp. 86-7. Let us disregard the strange idea that time – or moments of time – can move; this would seem to involve us in the absurdity that one and the same moment of time can be located at different times. Instead, let us ask whether something like Le Poidevin’s argument may be applied to the position outlined above, namely that a *subject* (i.e. a person’s subjective perspective) advances through time.

time are involved, one objective and the other subjective. As far as I can see, this does not yield any contradiction. The circle represents objective time, but the movement around the circle is movement in subjective time. It is misleading to say that “the present” moves around the circle, for “the present” must surely be taken to refer to some time, and times do not move. But as I argued above, *we*, or our subjective points of view, move from one position in objective time to the next, and so on. Of course, for most of the (objective) time we are dead (or, not alive), so nothing happens subjectively; given closed time, we may assume that in subjective time we move directly from death to birth – or to some (objective) time after birth where we begin to have a subjective point of view.

Another point in Le Poidevin’s argument is that, if there is a moving present in cyclic time, then we would have to say that “each event happens both once and an infinite number of times”. This does not follow. Objectively, as we have repeatedly noted, everything happens just once in closed time. But, from a subjective perspective, since we move forward in objective time, the same events can be expected to occur over and over again in subjective time, if objective time is closed. It can also be expected that this repetition will never be experienced or remembered. But since there is also a kind of eternal repetition in subjective time, we should perhaps think of subjective time as linear rather than closed.

It might be asked how a subject can return to a time where it has already been. Is such time travel at all possible? Well, this is just what must be the case if objective time is closed. But, a sceptic may wonder, in the interval between death and birth, the subject does not exist at all, so how does it move over this interval? This question also seems to involve the problem of personal identity. So let us pass on to that.

PERSONAL IDENTITY

It is sometimes said that a person who reappears in a different cycle of cosmic history could not be numerically the same as before. Identity is usually taken to presuppose some kind of continuity, physical or psychological. According to Milic Capek, the Stoics believed, like Aristotle, that even though Socrates could reappear again and again, the Socrateses would be numerically different (since numerical identity presupposes uninterrupted existence). And St. Thomas rejected eternal recurrence on the ground that re-creation of numerically identical individuals would be contradictory.³⁷

Similarly, Lucas says: “Even if in another cycle there was, or will be, some one qualitatively identical with me, he will not be me unless either I can remember being him or he will be able to remember being me”.³⁸ Clearly, this rules out inter-cycle personal identity under eternal recurrence. If a person has memories from one cycle to another, then there is indeed a kind of psychological continuity, but, on the other hand, this requirement can hardly be satisfied if the cycles are

³⁷ See Capek 1967, p. 62.

³⁸ Lucas 1973, p. 59.

qualitatively exactly similar. One cycle cannot be qualitatively identical with another if it contains memories from the other. Besides, there cannot be memories from one cycle to another in closed time, since there is in fact only one cycle. A person has certain memories at any given time; the moving subject does not acquire any memories *in addition* to that.

In any case, it seems that the problems of combining personal identity with eternal recurrence seem to arise only for the linear time case – and we have argued that linear time is in any case not very promising for eternal recurrence.³⁹ In cyclical time, on the other hand, it seems that a person simply has to be the same in every instance of the person's life, since there is after all only one instance of this life.

Someone might say that in closed time there is presumably a very long period of time from the death of a person until he or she is born, and it may be asked how the person can retain his or her identity during all that time. This could be seen as a problem, even if it is granted that the person will not subjectively notice the long period between death and birth. (From a subjective point of view, it does not matter whether the interval between death and birth is long or short.)

However, it could be argued that in closed time there is in fact both physical and psychological continuity between the person who dies and the (same) person who is born, even though this continuity works backward in time rather than forward. One may of course question the assumption that the dying person has the same subjective point of view as the newborn baby, but we can hardly doubt that the subject, at any given time in his or her life, is the same as the subject at that time. This should be enough for anyone who wants to be born again to the same life as before.

But is it at all reasonable to want such a thing? This may be doubted. So let us now turn to that question.

DIFFERENT ATTITUDES TOWARDS ETERNAL RECURRENCE

It has been said that eternal recurrence is “a sorry counterfeit of immortality”, and that “[w]hat we really long for after death is to go on living this life, this same mortal life, but without its evils, without its tedium – and without death”.⁴⁰ Similarly, Schopenhauer said that “at the end of his life, no man, if he be sincere and at the same time in possession of his faculties, will ever wish to go through it

³⁹ Besides, the problems may not be overwhelming for linear time either. For the mental in general, and the subjective point of view in particular, might be expected to supervene upon physical traits, and these are the same in different cycles even in linear time (given eternal recurrence). But perhaps we cannot dismiss the possibility that the mere numerical difference in linear time entails that subjective points of view must be different.

⁴⁰ Unamuno 1972, pp. 57 and 252. Unamuno goes on to say: “And what else is the meaning of that comical notion of eternal recurrence which issued from the tragic inner voice of poor Nietzsche, in his hunger for a concrete, temporal immortality?” (p. 252). As far as I can see, however, Unamuno does not tell us *why* eternal recurrence is a “comical notion” and a “sorry counterfeit of immortality”.

again. Rather than this, he will much prefer to choose complete non-existence”.⁴¹ More recently, Paul Davies says that “the literal reappearance of the same people and events in cycle after cycle, [is] an idea that strikes most people today as utterly sterile and repugnant”.⁴²

It may be true that what many people want is a prolonged and perfectly happy life, or perhaps just an ordinary human life, but without misfortunes and without end. On the other hand, a life without end would not be an ordinary human life, and it would probably be unbearably boring. Bernard Williams cites the case of a woman in a play who takes an elixir of life until, at the age of three hundred and forty-two, she reaches a state of “boredom, indifference and coldness” and refuses to take the elixir, whereupon she dies.⁴³

Williams argues that “an endless life would be a meaningless one”.⁴⁴ He does not discuss eternal recurrence, as a possible version of “an endless life”, but he considers the possibility that death would be followed by an indefinite or infinite series of psychologically disjoint lives, some kind of reincarnation or metempsychosis, where a person may take on very different personality traits and other characteristics in subsequent lives. He says that “out of the alternatives it is the only one that for me would, if it made sense, have any attraction – no doubt because it is the only [way of avoiding permanent death] which has the feature that what one is living at any given point is actually a *life*”.⁴⁵ But there are still problems with this: is it really *oneself* that survives in all those different lives, and can one really *want* to live lives that are so different from one’s own? Williams also notes that those who believe in reincarnation usually see it as something negative, something that one hopes to be released from as soon as possible.

Eternal recurrence avoids the problematic aspects of reincarnation, but it also retains its desirable features. It provides a way to avoid permanent death, without running the risk of eternal boredom. It satisfies the consideration that “death gives the meaning to life”, as Williams puts it.⁴⁶ So we can have our cake and eat it too.

Or is there perhaps also something frightening or repugnant in the idea of eternal recurrence? As we have just seen, several people seem to take exception to this idea, but as far as I can see, they seldom give any grounds for this – except perhaps the general ground that life is evil, but this does not seem to apply in the case of those who fear the loss of life.

It appears that Nietzsche tended to oscillate between different attitudes towards eternal recurrence. In one well-known passage, he says the following.

⁴¹ *The World as Will and Representation* (I, 324), quoted here from Hatab 2005, p. 87.

⁴² Davies 1995, p. 29.

⁴³ See Williams 1973, pp. 82-100. The woman, Elina Makropulos, is forty-two years old for three hundred years. Richard Sorabji has suggested that her life would have been better if she had grown older for ever, or if she had become a Christian mystic with a sense of timelessness; see Sorabji 1983, p. 181.

⁴⁴ Williams, p. 89.

⁴⁵ Williams, p. 93-4.

⁴⁶ Williams, p. 82.

What if some day or night a demon were to sneak after you in your loneliness and say to you: "This life as you now live it and have lived it, you will have to live once more and innumerable times more; and there will be nothing new in it, but every pain and every joy and every thought and sigh and everything immeasurably small or great in your life must return to you, all in the same succession and sequence – even this spider and this moonlight between the trees, and even this moment and I myself. The eternal hourglass of existence is turned over and over, and you with it, a speck of dust!"

Would you not throw yourself down and gnash your teeth and curse the demon who spoke thus? Or did you once experience a tremendous moment when you would have answered him: "You are a god, and never did I hear anything more godly." If this thought were to gain possession of you, it would change you, as you are, or perhaps crush you. The question in each and every thing, "Do you want this again and innumerable times again?" would weigh upon your actions as the greatest weight. Or how well disposed would you have to become to yourself and to life to desire nothing more than this ultimate eternal confirmation and seal?⁴⁷

Nietzsche seems to have thought of eternal recurrence, partly at least, as a thought experiment or test. Hatab says: "Nietzsche is putting the perennial question of the meaning of life in the most dramatic and acute form imaginable. It poses the meaning question in terms of whether one will say Yes or No to life as actually lived, with no alternative".⁴⁸ In one place, Nietzsche states his position as follows: "My teaching says: Live in such a way that you must *desire* to live again; this is the task – you will live again *in any case*"⁴⁹

CONSEQUENCES

In order to form an opinion of the desirability of eternal recurrence we need to ask what its consequences would be for human life. However, we should distinguish here between consequences of eternal recurrence itself and consequences of the belief in eternal recurrence. It is mainly the latter that are of importance. Let me give some examples.

Belief in eternal recurrence may affect our attitudes to time. It has been noted that most of us have a bias towards the near and towards the future, at least with regard to pleasure and pain.⁵⁰ This bias might be greatly diminished if we believed in eternal recurrence, for presumably in that perspective different stages of our lives would tend to become of more equal importance to us. From a subjective point of view, they may all seem to lie in the future. Consequently, we might even acquire an attitude of temporal neutrality and this, according to Derek Parfit, would be good for us; we would lose in some ways, but we would also gain, and the gains "would outweigh the losses".⁵¹

⁴⁷ *The Gay Science*, section 341, here quoted from Hatab 2005, p. 66.

⁴⁸ Hatab 2005, p. 2. But Hatab also says that "Nietzsche always regarded eternal recurrence as more than simply a hypothetical thought experiment pertaining only to human psychology; he always took it to express something about life and the world as such" (p. 9).

⁴⁹ Quoted from Hatab 2005, p. 117.

⁵⁰ See e.g. Parfit 1984, p. 158 ff.

⁵¹ Parfit, p. 174.

Again, our attitudes to death and dying can be expected to change if we came to believe in eternal recurrence. Not only would there be less fear of death; it also seems quite likely that people would become less eager to prolong their lives when the prospects for a good life are bad. And people may be more prepared to commit suicide. Under normal circumstances, if the future looks bad, we may nevertheless want to live on because we think that a bad life can be preferable to death. But if we come to believe in eternal recurrence, we may see things differently. Death seems less bad, if it is followed by life, and we may wish to avoid the repetition of a bad future.

Belief in eternal recurrence may also result in a sense of meaningfulness. The way we live will matter more to us, if we believe that our lives will recur. We need no longer have the feeling that our life ends absurdly, that it has no purpose, that it is a preparation for nothing. For example, at the very end of his *Reveries over Childhood and Youth*, W. B. Yeats writes:

It is not that I have accomplished too few of my plans, for I am not ambitious; but when I think of all the books I have read, and of the wise words I have heard spoken, and of the anxiety I have given to parents and grandparents, and of the hopes that I have had, all life weighed in the scales of my own life seems to me a preparation for something that never happens.⁵²

By contrast, with eternal recurrence life is a preparation for something, namely for lives that will happen again and again in the future. Nietzsche seems to have had a similar thought when he claimed that belief in eternal recurrence would counteract “the paralyzing sense of general disintegration and incompleteness”.⁵³

Just as a single life can appear to be a preparation for nothing, so the whole history of humanity can seem to be futile since it plays such a small role from the point of view of the universe as a whole. In the words of Bertrand Russell,

Man is the product of causes which had no prevision of the end they were achieving [... and] all the labours of the ages, all the devotion, all the inspiration, all the noonday brightness of human genius, are destined to extinction in the vast death of the solar system, and [...] the whole temple of Man’s achievement must inevitably be buried beneath the débris of a universe in ruins....⁵⁴

This picture of humanity is chilling, but it may seem rather less chilling to people who believe that time is closed. However, such a reaction is perhaps not very rational, for it is still true that the history of humanity happens only once in closed time. Nevertheless, the reaction may occur. From the point of view of humanity, and endless future with “a universe in ruins” is certainly bleak, but if we believe that this future is not endless, but is instead followed by the past history of the universe, many of us may feel less depressed. If someone finds it more rational to focus on the horror of a “universe in ruins”, we need not let that affect us.

⁵² Yeats 1955, p. 106.

⁵³ Nietzsche 1968, p. 224.

⁵⁴ Russell 1919, pp. 47-8.

So far I have only considered consequences of the *belief* in eternal recurrence, and I am not sure that eternal recurrence itself has any consequences for human life that are worth mentioning. However, it might appear to be a consequence of eternal recurrence that we have no free will. For example, Hatab considers the thought that, “the repetition scheme seems to imply a rigid determinism [...]. Whatever I do next has happened an infinite number of times in the same way, and so there is only one possible future”.⁵⁵ It is true that eternal recurrence in linear time sits best with determinism and, therefore, absence of free will. But in closed time the situation is different. Here, there is no objective repetition, and no determinism has to be assumed.

JUSTICE

Even if eternal recurrence is an attractive notion for privileged people, it might seem unfair to those who are less privileged. This is one important respect in which eternal recurrence is different from various doctrines of reincarnation that are adhered to in certain religious traditions. Reincarnation – where some part of a living being survives death by being reborn in a new body, with a new personality – allows for compensation of the underprivileged in subsequent lives. But in eternal recurrence, the underprivileged are always underprivileged. Can eternal recurrence be desirable if this is so?

It is perhaps *possible* for this kind of injustice to be explained away. For example, just as someone may lead a great many different lives at different times, if reincarnation occurs, so one might lead many different lives at the *same* time – as long as one is completely unaware of this. This could even amount to a kind of solipsism: there is only one subject, but this subject is incarnated in many different bodies, some of which live at the same time while others live at different times. In other words, without knowing it, the subject plays many different roles – in fact, all the roles there are in all of history. If this were the case, there would be no serious form of injustice. The one and only subject would simply be privileged in some of its roles and underprivileged in others. Under such circumstances, eternal recurrence would not be morally repugnant. But, of course, we do not have much ground for assuming that such circumstances actually obtain.⁵⁶

In any case, eternal recurrence does not seem to make injustices any worse if time is closed. But recurrence would indeed be morally repugnant, if it occurs in linear time. For injustice would be worse, if it is repeated endlessly. In closed time, on the other hand, all injustices in cosmic history occur only once.

LIVES NOT WORTH LIVING

Injustices might be tolerable as long as everyone lives a good life, but in a world, such as ours, that contains an overwhelming amount of suffering, it may seem

⁵⁵ Hatab 2005, p. 127.

⁵⁶ Conversely, we may not have much ground for assuming that they do *not* obtain either.

morally impossible to wish for eternal recurrence. How can one wish for the recurrence of the Holocaust, for example?

In defense of Nietzsche's position, Hatab seems to think that there is a solution to this problem: "The crucial point is that affirmation does not mean *approving* of everything, but rather affirming the necessity of otherness for the emergence of one's values, which means that affirmation retains opposition to countervalues, retains the space of one's Yes and No".⁵⁷ There may be some truth in this, but it does not seem to remove the problem.

However, the problem is neither suffering as such nor the total balance of pleasure over pain in the universe. For a life may be worth living – from the point of view of the person living it – even if it contains a lot of suffering and even if it contains more pain than pleasure. And, since other things are equal in eternal recurrence, as long as a person's life is worth living it is worth living each time it is lived. So, eternal recurrence would be desirable if everyone's life is worth living.

But is everyone's life worth living? Some people seem to think so. For example, Thomas Nagel says: "All of us, I believe, are fortunate to have been born".⁵⁸ Of course, one can be fortunate to have been born even if one's life, at a certain moment in time, is no longer worth living. Again, a person's life may be worth living even if it would have been better, all things considered, if he had never lived. For example, Hitler's life was perhaps worth living even if the world would have been much better without him. But I take it that someone is fortunate to have been born only if his or her life is worth living. Therefore, if Nagel is right, it seems that everyone's life is worth living and that eternal recurrence is desirable from each individual point of view. I myself find it hard to believe that everyone is fortunate to have been born, but I shall make no attempt to settle that question here.

Eternal recurrence may perhaps be objectively desirable even if many lives are not worth living – provided that *most* people are fortunate to have been born.

In any case, the desire for eternal recurrence can hardly be morally repugnant if time is closed, for in that case everything happens just once. Even if some lives are not worth living, eternal recurrence cannot make things objectively worse.

CONCLUSION

The arguments that have been sketched above are perhaps not conclusive, but I believe they give at least some support to the view that eternal recurrence is both possible and desirable. The acceptance of this view may in turn reduce or exterminate the fear of death that many of us feel at least some of the time. Eternal recurrence gives a pretty attractive answer to the question of "what dreams may

⁵⁷ Hatab 2005, p. 139.

⁵⁸ Nagel 1979, p. 7. Nagel adds: "unless good and ill can be assigned to an embryo, or even to an unconnected pair of gametes, it cannot be said that not to be born is a misfortune". – According to Nagel, "life is worth living even when the bad elements of experience are plentiful, and the good ones too meager to outweigh the bad ones on their own" (p. 2), but he also says that "a sufficient quantity of more particular evils can *perhaps* outweigh" the goods that life contains (p. 2; italics mine).

come, when we have shuffled off this mortal coil”. It is perhaps the only intelligible and attractive version of eternal life that we can think of, and even if it presupposes a rather non-standard conception of time, it seems to be fairly compatible with what is known about the world we live in.⁵⁹

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⁵⁹ I am grateful to Björn Eriksson and Jens Johansson for helpful comments on an earlier version of this paper.