J. MCTAGGART AND H. MELLOR ON TIME

Jonas Dagys

Vilniaus universiteto
Filosofijos istorijos ir logikos katedra
Universiteto g. 9/1, LT-01513 Vilnius
El. paštas: jonas.dagys@fsf.vu.lt

The article analyzes John McTaggart's argument for unreality of time, a classical piece of fin de sičcle *Brittish idealist metaphysics. Having accepted the distinction between A-series and B-series, one can only resist McTaggartian conclusion by denying at least one of the two: that B-series alone is insufficient for change or that A-series implies a contradiction. Hugh Mellor's criticism is taken to represent this strategy. The lesson to be learnt from this debate is that if the world is conceived as* a mere totality of facts *no change could be real in such a world, and so McTaggart would right. However, if the reality of things determining those facts is recognized as more fundamental, it would not be denied that at least some of these things undergo genuine temporal change, and time as a dimension of this real change cannot be rejected.*

Keywords: time, change, metaphysics, British idealism.

A century ago in his article "The Unreality of Time" (1908) John Ellis McTaggart declared that time is unreal. His argument amounts to two claims – *first*, that change is essential to time, i.e. that time as commonly understood entails temporal change; and *second*, that no account of temporal change is possible, since any account of such change never escapes a contradiction, that is our concept of change is implicitly contradictory. Conjunction of the two claims has taken McTaggart to assertion of his famous conclusion that time does not exist. As time goes by, neither of the two claims, however, enjoy universal recognition.

In this paper I propose to inquire what could be said against McTaggart's controversial thesis, and to check whether (given the criticism stands) the arguments against it could rescue time and change from condemnation of being denied any sort of existence.

It would therefore be reasonable to start with the reconstruction of McTaggart's position. I will then move on to David Hugh Mellor's critique of the claim that change cannot be accounted without the use of what McTaggart calls A-series and the suggestion that McTaggart's argument fails to establish unreality of time, and only proves that tense is not a genuine aspect of reality.

Let me start with the famous McTaggartian argument for unreality of time. Basically it would not be an exaggeration to admit that ever since the argument in question has been published, none of the approaches to time in analytic branch philosophy could escape some or other kind of engagement in the controversy

115

this argument has caused around. So to say, any elaborate theory of time must supply its solution to the contradiction revealed by McTaggart, and thus these theories can be classified according to the relation they bear to the paradox and the ways out of it they suggest.

For the start, McTaggart obviously assumes that any expression that is contradictory or implies a contradiction cannot be true of reality. In other words, contradictions do not obtain in the real world, and no contradictory concept could ever refer to anything real. Therefore, it could be argued, the concept of time, would it appear to be contradictory, would fail to refer. This pretty much suggests the strategy McTaggart is about to follow on his way to his final conclusion: the aim of his argument is to discover a contradiction implicit in our concept of time, thereby establishing the unreality of time.

The other assumption that is crucial to McTaggart's argument is his claim that "it would be … universally admitted that time involves change" (McTaggart 1908: 459). This assumption derives its support from what might be called common sense, since time is normally taken to be the principal dimension of change. The implication of this claim for McTaggart is that any concept of time must itself embrace the concept of change. No theory that does not account for change thus would be accepted as a satisfactory account for time. Change is of time's essence. But the concept of change, one should observe, is not uncontroversial, and the success of McTaggart's argument rests on his definition of change as necessarily involving change of facts: "there could be no change unless facts change". It should be clear, that once it is agreed that time requires change, the way time is conceived pretty much depends on the conception of change, and as will be seen later,

116

McTaggart's argument can only achieve contradiction in the concept of time, if the concept of change can be demonstrated to admit of no uncontradictory account.

As the last thing in setting the stage for the argument, McTaggart introduces the distinction between what he calls the two ways that different positions in time, as time appears to us prima facie, could be distinguished. This distinction is probably the most influential heritage of McTaggart's article, as it is employed in most post-McTaggartian analytical discourse about time. So, as time prima facie appears to us, we can distinguish positions in time by the temporal relations those positions bear to each other – namely one being *earlier than* or *later than* another. "We may take here either the relation of 'earlier than' or the relation of 'later than', both of which, of course, are transitive and asymmetrical. If we take the first, the terms have to be such that, of any two of them, wither the first is earlier than the second, or the second is earlier than the first" (McTaggart 1993: 24). Temporal points ordered on the basis of these relations constitute what is called by McTaggart *the B-series*.

Such series is distinguished from the one constituted by temporal locations ordered according to their temporal properties of being *Past*, *Present* or *Future*. Any moment in time is normally ascribed one of the three temporal properties, and thus we can define temporal ordering as a series of positions which runs from the past through the near past to the present, and the from the present through the near future to the far future, or conversely. This one is called *the A-series*.

McTaggart is quick to point out the qualitative difference between the B-series and the A-series: "the distinctions of the first class are permanent, while those of the latter are not. If M is ever earlier than N, it is always

earlier. But an event, which is now present, was future, and will be past" (McTaggart 1908: 458). So to say, the B-series is fixed and unchanging, since the relation of 'earlier than' is permanent, while the A-series, on the other hand, is a fluid and changing series, since the distinctions of past, present and future change with time: at any two different times there are different A-series – the events that are present at one moment are past or future at another. This distinction between the A-series that is dynamic, and the B-series that is static, also implies that *the only change some event can undergo is a change in it's A-determinations, since B-determinations do not change by definition*.

Having distinguished between the two series extracted from our conception of time McTaggart considers whether both of these series are required by our concept of time. The necessity of B-series is considered not to be the issue – it seems clear that any two events, as long as they are temporal, always stand in relation of 'earlier than' or 'later than'. As Richard Gale puts it, McTaggart "thought the necessity for the B-series so obvious as to require no further comment: to conceive of a 'time' which admits of no distinctions between earlier and later times is a conceptual absurdity" (Gale 1968: 10). The question thus turns to be the one of sufficiency of the B-series for time. McTaggart comes up with the negative answer to this question – since B-determinations do not ever change by definition, then this fixed B-series cannot provide a ground for satisfactory account of change, and given that time requires change, it follows that B-series will provide no acceptable account for time either. Thus, even if reality of the B-series is necessary, it is not sufficient for reality time, since it cannot give us change.

Change could only be accounted for with reference to the A-series. And so reality of A-series comes to be a necessary condition for reality of time. But McTaggart seems to go further, claiming that "there can be no B series where there is no A series, since where there is no A series there is no time" (McTaggart 1906: 461). Thus A-series is considered to be more fundamental than B-series.

Having established the necessity of the A-series for the reality of time, McTaggart attempts to demonstrate the contradictory and therefore unreal nature of this series, thereby concluding that time is unreal. The argument goes somewhere along these lines. Every moment in the A-series is either past, present or future. But "past, present, and future are incompatible determinations", since even though "every event must be one or the other, no event can be more than one" (McTaggart 1908: 468). But even though these characteristics are incompatible "every event has them all. If M is past, it has been present and future. If it is future, it will be present and past. If it is present, it has been future and will be past. Thus all three characteristics belong to each event" (Ibid.). So every event within the A-series has three incompatible properties, and thus A-series is contradictory. In Gale's words, for McTaggart "A-expressions are mere noises signifying nothing" (Gale 1968: 12). Since A-series is contradictory, and thus unreal, time which requires A-series is also concluded to be unreal.

The most natural standard reaction to this argument is 'Hey! But no event ever has more than one A-determination at the same moment of time, therefore there is never a situation in which some event would possess contradictory properties!' Prima facie it seems rather easy to explain away the contradiction revealed by McTaggart. But this is only the first impression. McTaggart anticipates this kind of counterargument and claims that this reply will not suffice, since it generates either a vicious circle

or an endless regress. Contradiction is not resolved by claiming that each event has it's A-determinations successively in some second-order time, since this second order time is subject to just the same contradiction which has forced one to move from first-order time series to second-order time series. Second-order A-series, of course, could always be rescued by retreating to some third-order series, and so forth, but that simply transfers the contradiction to the next order, rather than resolves it.

McTaggart also points out, that interpreting A-determinations as disguised relations between two events within the B-series will not work either, since while the A-determination of an event changes, temporal relations between evens never do so.

Since A-series is either contradictory or entails another A-series which is contradictory just as well, McTaggart concludes that time which requires such A-series cannot be real.

So is there any way to resolve McTaggart's paradox and justify the existence of time? Is there a way to locate an error in his argument or some ill assumption that leads to the conclusion most of us would be happy to resist?

The conclusion that time is unreal seems to stem from the antecedent constituted of the following four claims:

1. No expression that is contradictory or implies a contradiction could be true of reality.
2. Change is necessary for time.
3. B-series cannot provide sufficient basis for change.
4. A-series can provide sufficient basis for change, but is contradictory.

Therefore

5. Time is unreal.

Rejecting the consequent would require rejection of antecedent, or, to be precise, rejection of at least one of the conjuncts constituting it. Let me have a look at the possibilities of arguing against these one by one.

It seems obvious that no one with the sane sense of reality would be prepared to deny the first claim that no contradictory expression could be true of reality, unless one is ready to deny that anything is real at all. But if we deny that at least something is real, McTaggart's conclusion about unreality of time follows directly, for in that case not only time, but space, water, sky and everything else would appear to be equally non-existent. So rejecting the first premise would be of no use in arguing against McTaggart's conclusion.

Most reasonable objections focus on McTaggart's claims that B-series alone is not sufficient for change, or that A-series implies a contradiction. I will take H. Mellor's views as representing a successful case against the former.

In his 'Real Time' Mellor promotes a kind of theory of time McTaggart was arguing against, while (ironically) defending and exploiting part of McTaggart's argument. Mellor takes himself against the common view that only *tensed* language can account for time. Accepting and supporting McTaggart's thesis that A-series generates problems for the account of time, Mellor then concludes, that the case is precisely opposite – if account of time is at all possible, then anything but tense can do that. Mellor accepts McTaggart's argument for the unreality of A-series, however he does not think that it implies anything more substantial:

> What is wrong with McTaggart's prosecution of time is not his prosecution of tense but his contention that disposing of tense disposes of change. Change can be explained and distinguished from spatial variation without any appeal to tense. And given that, the reality of changing tense can safely be denied without imperilling the reality of change and hence of time itself (Mellor 1981: 92).

Mellor reformulates McTaggart's argument against A-series in terms of token-reflexive truth conditions thus reinforcing it. Assuming that type/token distinction as applied to tensed expressions implies that "tensed tokens, as opposed to types, have definite and temporally unqualified truth values" (Mellor 1981: 99), he argues that there is no way to supply tensed sentences with non-token-reflexive truth conditions – whatever truth conditions could be provided for tensed sentences, they would be either self-contradictory or token-reflexive. Truth conditions of every tokening of a certain type of tensed sentence will vary depending on when the sentence is tokened: *the truth maker of the token will be a tenseless fact about relation of the time of tokening and the time of event refered to in the B-series*. Thus, there is no and there could be no need for tensed facts that would provide tensed expression with tensed truth conditions. "[Tenseless truth conditions of the all tensed sentence types] leave tensed facts no scope for determining their truth-values" (Mellor 1981: 102).

So far so good. But Mellor's views that tensed sentences have token-reflexive truth conditions, is similar to classical B-theory, like that of Russell's. Russell has argued that A-determinations are notions derived from psychology, since understanding them requires reference to consciousness. And McTaggart was not content with such a theory, since he claimed that it cannot account for change. McTaggart rejected Russell's view, that "there is change … if the proposition 'At time T my poker is hot' is true, and the proposition 'At time T' my poker is hot' is false" (McTaggart 1993: 27) on the basis that such definition of change does not provide sufficient ground for change. It is wrong, according to McTaggart, to understand change this way, since the former proposition will always be true, and the latter

will always be false, and thus no change is involved here. There is no place for change in the B-series. However, McTaggart's claim that there is no change within B-series rests not only on the idea that facts do not change, but on the fact that B-series is short of grounds for explaining why some object's having incompatible properties at different temporal points counts as change, but its having incompatible properties at different spatial points does not.

The crux of the debate between McTaggart on the one side and Mellor and Russell on the other thus turns out to concentrate on their understanding of change and the problem of possibility of change within the B-series. Mellor and Russell, while rejecting the necessity of A-series for change have to develop and account of change within the B-series which would be sophisticated enough to explain the difference between temporal and spatial variations in properties.

As it appears, the character of the concept of change, and the nature this change is ascribed depends on what is taken to be the object of change – what is that *it* which is undergoing temporal becoming? McTaggart suggests his own position, as opposed to Russell's:

> It will be noticed that Mr. Russell looks for change, not in the events in the time-series, but in the entity to which those events happen, or of which they are states. If my poker, for example is hot on particular Monday, and never before or since, the event of the poker being hot does not change. But the poker changes, because there is a time when this event is happening to it, and a time when it is not happening to it (McTaggart 1993: 27).

Mellor and, I think, Russell would not argue against the idea that events do not change in time, just as McTaggart seems to

119

agree that things (or what he calls entities) do. So where does their disagreement lie?

It seems that the question of the object of change leads to the question of whether things have temporal parts or not. As Mellor observes, some object a's having incompatible properties at different temporal parts "no more constitutes change than would a's spatial parts differring in their properties" (Mellor 1981: 111). While, on the other hand, "change requires one and the same changing thing to have both incompatible properties concerned" (ibid.). This means, only that if incompatible properties are possessed by different either temporal or spatial parts of something then no change could be observed. So something could really change only in case it had no temporal parts. Even more, according to Mellor, if something had no temporal parts, it would have to be able to be present at two different temporal locations, while nothing is ever present at two different spatial locations. So, if things had no temporal parts, their having some incompatible properties at two different times would count as change as opposed to variation in space.

This suggests that the question whether things have temporal parts on its own merit highly depends on a deeper metaphysical question – what is taken to be the fundamental constituent of reality. In other words, the problem which is at the center of the debate between proponents of B-series time and their opponents denying the possibility of genuine change occurring within the B-series is the question whether *things are reducible to events* or *are events ontologically derivative from changes things undergo*?

Let me summarize what has been said so far about the disagreement between McTaggart and Mellor. First, it has been accepted by both sides that time requires change. It has then been acknowledged that time could be understood either in tensed terms of the A-series or in tenseless terms of the B-series. It has also been accepted by both sides that concept of time derived from the A-series is inadequate, since tensed sentences do not express tensed facts. The disagreement arose considering the consistency of the concept of change with the concept of time based on the B-series, since according to McTaggart there is nothing in this series that ever changes. Nevertheless, both sides have agreed, again, that neither the events constituting this static series, nor their properties ever change (this stems from the definition of the series and could hardly be controversial). But while McTaggart stops here concluding that there is no change, Mellor takes us further, to the more fundamental realm of things, that are causes of the events constituting the relevant series.

Mellor maintains that McTaggart's conclusion rests on the confusion of things and events, while McTaggart would only respond that things are in fact analyzable in terms of unchanging events.

The lesson to be learnt from this debate so far is that if the world is conceived as *a mere totality of facts* no change could be real in such a world, and McTaggart turns out to be the winner. However, if the reality of things determining those facts is recognized as more fundamental, it would not be denied that these things undergo genuine temporal change, and time as a dimension of this real change cannot be rejected.

But can we really analyze things into events? Is it true that material objects are constituted by events? Mellor makes a strong point in favor of the negative answer to his question. There is more to a thing than events occurring. "A thing having … properties is in general not a matter of events occurring, but of what events would

occur if others did. … In other words, what things with properties embody is not events, but restricted cases of causal laws relating events of different kinds" (Mellor 1981: 138).

I prefer to terminate my investigation here, expressing my sympathy to Mellor's view, as it allows identity through time, which is another aspect of the world as we experience it. This way, I assume that McTaggart's argument is correct up to the point where the contradiction in the concept of time he comes to grips with is revealed. This surely implies that the concept of time he analyzes fails to refer to anything real. However, the lesson he wants to derive from that seems somewhat too strong. Rather than establishing the unreality of time, I would suggest, McTaggart's argument invites one to perform conceptual revision of one's temporal concepts. So to say, analytical argument reveals more about our concepts of reality that about the reality itself (elsewhere (Briedis and Dagys 2006) I've argued for the similar conclusion regarding the Zeno's paradox of Achilles and the turtle). On the other hand, as I hope I have managed to show in considering debate between McTaggart and Mellor, the metaphysical problem of time and temporality is inseparable from other metaphysical problems and is not to be considered in isolation from other no less fundamental ontological questions. Proper analysis of the concept of time should reveal its relation to our concepts of space, objects, consciousness, causation, laws of nature. Nothing of this has been attempted to accomplish here. But at least, I expect to have indicated some rationale for such enterprise.

REFERENCES

Dagys, J. ir Briedis, M. (2006). „Apie klaidingą implikacinę prielaidą", in *Problemos* 70: 176–182.

Gale, R. M. (1968). *The Language of Time*. London: Routledge and Kegan Paul.

McTaggart, J. M. E. (1908). "The Unreality of Time", *Mind* 17: 456–473.

McTaggart, J. M. E. (1993). "The Unreality of Time", in R. Le Poidevin and M. MacBeath (eds.). *The Philosophy of Time*. Oxford: Oxford University Press, 1993: p. 23–34.

Mellor, D. H. (1981). *Real Time*. Cambridge: Cambridge University Press.

J. McTAGGARTAS IR H. MELLORAS APIE LAIKĄ

Jonas Dagys

S a n t r a u k a

Straipsnyje analizuojamas vienas garsiausių XIX–XX a. sandūros britų idealistinės metafizikos pavyzdžių – Johno McTaggarto argumentas, neigiantis savarankišką laiko egzistavimą. Teigiama, kad, priimdami McTaggarto įvestą A sekos ir B sekos skirtį, susilaikyti nuo jo siūlomos išvados galime tik neigdami B sekos nepakankamumą kismui paaiškinti arba A sekos implicitišką prieštaringumą. Kaip būdingiausias tokios strategijos atvejis čia tiriama Hugh'o Melloro kritika. McTaggarto ir Melloro polemikoje paaiškėja, kad jei pasaulį laikytume faktų (o ne daiktų) visuma, tai tokiame pasaulyje tikras kismas nebūtų įmanomas ir McTaggartas būtų teisus. Tačiau jei tuos faktus nulemiančių daiktų tikrovę laikysime fundamentalesne, turėsime pripažinti, kad bent kai kurie šių daiktų kinta, ir laiko kaip pagrindinio šio kismo matmens negalima atsisakyti.

Pagrindiniai žodžiai: laikas, kismas, metafizika, britų idealizmas.