Three Flawed Distinctions in the Philosophy of Time

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There are three distinctions in the philosophy of time which I want to examine. It is worthwhile to examine them because they are basic. I mean the distinctions between A-series and B-series, between synchronic and diachronic identity, and between perdurance and endurance.

1. McTaggart's Series a

It was the Hegelian McTaggart who first distinguished between the A-series and the B-series. Following C.D.Broad, who extensively commented on McTaggart's philosophy, this distinction was adopted by almost all analytic philosophers of time, though they disagreed with the conclusion to which McTaggart arrived on the basis of that distinction, namely that time is unreal. Today, philosophers of time even group themselves as either A-theorists or B-theorists.

However, MacTaggart's distinction arises from a misunderstanding of Russell's ontology of time. He calls the series generated by the relation 'earlier than' "A-series" and takes it to be the time according to Russell's view. The B-series, which he contrasts to the A-series, is generated by the tenses present, past, and future. He analyses the tenses as relations to a present.

Now, McTaggart emphasises that the B-series changes (what is future to a present, becomes present and finally past etc.) while the A-series does not. Then he argues that the gist of time is change and that therefore the A-series is not really temporal, or that it is at least incomplete and has to be supplemented to form what he calls the C-series. He characterises the A-series as static and the earlier-relation as a mere order relation.

But the popular opposition of order and dynamics misleads him here. When Russell describes a relation as an order relation, he means only that it obeys certain formal laws and he does not imply at all that it is somehow static. A static model of some piece of reality leaves out the temporal dimension or, at least, takes into account only what is simultaneous. In that sense Russell's ontology is not static at all. It includes temporal relations and temporal relations other than simultaneity.

As to McTaggart's argument that the A-series cannot be temporal because it does not change, it is misleading and wrong mainly for two reason. Firstly, the task is to analyse ontologically the general structure of temporal phenonemena, the task is to analyse the dynamics, not to dynamise the analysis. The task of science, including philosophy, is to find out what the entities involved in its research object are and what their laws are; it is to describe and explain, not to imitate the object. Secondly, the B-series remains changing just because the ontological analysis leading to it is incomplete: the changes in the holding of the tense relations are left out in the analysis. As soon as they are taken into account, as is the case with the C-series which combines A- and B-series, we have no longer a changing series.[1]

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[1] cf. E. Tegtmeier: Der Hyperdynamismus in der Ontologie der Zeit. Logos 1 (1994).

Undoubtedly, time is change and an earlier-relation from which change has been abstracted to have pure order is an absurdity since the order is meant to be according to time. Order is always order in a certain dimension. Moreover, if one looks more closely how Russell introduces temporal relations, one cannot discover any indication for the impossible attempt to abstract the order aspect from the perceived temporal phenomenon. On the contrary, in accordance with his empiricist principle of acquaintance Russell introduces the relation 'earlier' with respect to a full-fledged temporal phenomenon such as a sequence of two tones, e.g., a c-tone and an e-tone. This phenomenon of the c-tone resounding and then the e-tone resounding is as dynamic as anything can be and not at all static. Russell explains that the relation 'earlier' is the relation we hear holding between these two tones.

2. The Distinction between Diachronic and Synchronic Identity

The terms "diachronic" and "and "synchronic" have been adopted from linguistics. "Synchronic" means roughly "simultaneous" and "diachronic" "non-simultaneous". Thus "synchronic identity" refers to identities between simultaneous entities and "diachronic identity" to identities between non-simultaneous entities. Now, strictly identical entities, entities which are one and the same, are always simultaneous. Not all simultaneous entities are strictly identical, of course, but all entities which are temporal and strictly identical are simultaneous, that is to say, all temporal entities are simultaneous to themselves. This is true independently of whether the entities have a short or a long duration. That an entity has a relatively long duration does not prevent it from standing in the simultaneity relation to itself. Obviously, a long duration does not prevent it from being identical with itself either. Therefore, all temporal entities whatever their duration are simultaneous and strictly identical, which entails the "synchronic identity" pleonasm.

If "synchronic identity" is a pleonasm, then "diachronic identity" is a *contradictio in adjecto*. Being strictly identical implies being synchronic (simultaneous) and being synchronic implies not being diachronic (non-simultaneous). That follows by the law of hypothetical syllogism.

We have noted already that even objects of long duration are simultaneous to themselves and not later or earlier than they themselves. However, relations 'earlier' and 'later' do occur in connection with a persistent object and that is what may mislead the users of the term "diachronic identity" to think there is non-simultaneity in such an object. Yet, this non-simultaneity concerns only our contacts with the object, not the object itself. One contact with the object occurs later or earlier than another. That does not make the object later or earlier than itself.

It seems that the term "diachronic identity" means nothing but the persistence of an ordinary object through time and change. We ordinarily like to say that an object "remains the same" instead of saying merely that it "persists". The former phrase, though, implies already an ontological analysis of the phenomenon of persistence, if it

is used in philosophy, namely that persistence grounds on strict identity, i.e., that the ordinary thing remains strictly the same while changing. The phenomenon of persistence has to be taken to involve only the relatively long duration and continuity of an ordinary object. As in any empirical science, the phenomena of ontology are less determinate than their theoretical analyses.

On the whole, there are three different ontological analyses of the phenomenon of persistence:

1. the substance analysis,
2. the strong serial analysis,
3. the weak serial analysis.

According to the substance analysis, an ordinary object is simple and remains literally the same in spite of its changes. According to the strong serial analysis, an ordinary object is a series of momentary things and remains literally the same in spite of its changes. According to the weak serial analysis only the momentary stages of the ordinary object exist. Hence, it is not literally the same during time and change. According to this analysis, the persistence of the ordinary object is not grounded on strict identity, but on close causal connections between its momentary temporal parts. The main theoretical, ontological difference in the background between the weak and the strong serial view is the acknowledgement of a series as an entity which the former view presupposes and the latter view does not.

Now, what to make of the distinction between synchronic and diachronic identity? If "diachronic identity" is taken to describe the phenomenon of persistence, what about "synchronic identity"? If it were a synonym of "strict identity of simultaneous entities", then it would be true independently of what ontological analysis is right that diachronic identity is synchronic identity, with the "is" being the "is" of strict identity. We saw that even permanent objects are simultaneous to themselves. Thus, we arrive at a no-distinction.

Even if "synchronic identity" is taken to mean simply "strict identity" it would still be true according to the substance and the strong serial view that diachronic identity *is* synchronic identity (i.e. strict identity), according to the substance and the strong serial view. And the last "is" again expresses strict identity and hence the identity of diachronic and synchronic identity.

Obviously, this strict identity does not hold under the weak serial view. However, under the weak serial view there is diachrony (non-simultaneity), namely between between the momentary stages of the ordinary object. Thus one could express a complaint about the composite term "diachronic identity" pointedly by saying that if there is diachrony (with objects as weak series) there is no strict identity and if there is strict identity (with objects as substances or strong series) there is no diachrony (non-simultaneity) (The distinction between synchronic and diachronic identity seems to have come up in the attempt to make sense of Aristotle's metaphysics.[2]

3. Lewis' Distinction Between Perdurance and Endurance

Lewis' distinction concerns just the phenomenon called diachronic identity. i.e., the phenomenon of the persistence of an ordinary object. He claims that there are two kinds of ontological views of the phenomenon of persistence, those viewing it as perdurance and those viewing it as endurance. I object that Lewis distinction and classification is neither exclusive nor exhaustive.

Lewis defines persistence, perdurance, and endurance as follows:

> Let us say that something *persists* iff, somehow or other, it exists at various times; This is the neutral word. Something *perdures* iff it persists by having different temporal parts, or stages, at different times, though no part of it is wholly present at more than one time.[3]

The definitions are not general because they presuppose an absolutist view of time, i. e., they presuppose time points. Analytic philosophers which are logically oriented tend to think that it is easy to translate from absolutist to relationist temporal terms. They are wrong. Take e.g. Lewis definition of persistence. It assumes existence to be a relation to time points. The relationist equivalent of a time point would be the simultaneity to a very short anchor event such as a clock signal. Hence it would be a relational property. But a time point of the absolutist is by all accounts an individual and therefore both are not substitutable for each other. Moreover, a case against the existence of relational properties has been made.[4]. Naturally, this is relevant not only for relating existence but also for relating predication to time points.

Lewis classification is not mutually exclusive either. There are ontologies with a relationist view of time and substances (i.e. persisting entities) which perdure as well as endure. These substances are simple though they have temporal parts.[5] It depends on whether one takes ordinary objects literally to consist of their temporal parts or not. A corresponding ontology with temporal absoluta could be put together without great difficulties since the duration of the substance need not be reduced to that of its temporal parts if the substance does not consist of its temporal parts.

The relation between the duration and temporal location of the persisting thing to the duration and location of its temporal parts it critical, indeed. If one tries to place the weak and the strong series view in Lewis classification, one gets into difficulties. The members of the series, the temporal parts of the ordinary object, are each localised at a certain point of time, but the series as whole is not. That does not matter with the weak series view because the series is not assumed to exist in addition to the members. But it is a difficulty with the strong series view which takes the series as a whole to exist in addition to its members. Lewis' definition of persistence entails under the strong serial view that what perdures (the series of temporal parts) does not persist, since it defines persistence as existence at various times. The consequence is queer, indeed, as the strong serial analysis is designed for no other purpose than to explain ontologically the phenomenon of persistence. The strong serial analysis cannot be fitted into Lewis' schema, anyway, because it implies that the ordinary object both perdures (by virtue its temporal parts, which are the members of the series) and endures (virtue of the series as whole).

It is also questionable to take existence to be a relation to time point and to equate existence with temporal location. That Lewis does the latter can be

[2] See: E. Tegtmeier: Individuation, Identity, and Sameness. A comparison of Aristotle and Brentano, in: The Object and its Identity. Topoi Supplement 4).

[3] D. Lewis: On the Plurality of Worlds. Oxford/Cambridge (Mass.) 1986, p.203.
[4] see R.Grossmann: Russell's Paradox and Complex Properties. Nous 6 (1972).
[5] see E. Tegtmeier: Grundzüge einer kategorialen Ontologie. Freiburg 1992, §9.

gathered from his substitution of "exist at" in the definition of "persist" by "present at" in the definitions of "perdure" and "endure". What about the existence of any non-temporal entity? What about the existence of the time-points themselves? These questions point to flaws in Lewis ontology.[6] However, in order to develop an adequate classification of the alternative ontological analyses of the phenomenon of persistence it is not only useful to have an articulate and thought-out ontological theory, but also to take into account the relevant ontological alternatives such as the alternative between absolutist and relational view of time or the alternative between complex and non-complex ontologies. Mereo-logical ontologies, to which Lewis's own belongs, are designed to avoid complexes.

The tripartite classification into substance, strong serial, and weak serial views, is, of course meant to be an alternative to Lewis' dichotomy and an alternative that is based on a more sophisticated and sound ontological background than that of Lewis.

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[6] For further criticism see E. Tegtmeier: Warum Lewis' Unterscheidung zwischen Mitdauern und Währen verfehlt ist, in: W. Löffler (ed.): Substanz und Identität. Paderborn 2002.