### **McTaggart on the unreality of time** PHIL 1480: Metaphyiscs 12 January 2006

### 1. A-sentences and B-sentences

A-sentences (tensed)	B-sentences (untensed)
It is <i>now</i> sunny in Pittsburgh	It is sunny in Pittsburgh on January 12th 2006
There <i>were</i> dinosaurs on the Earth	The extinction of the dinosaurs is one of the most calamitous events in world history.
The sun <i>will</i> someday turn into a red giant 2010 lies in the <i>future</i> .	Ordinary stars sometimes turn into red giants From the standpoint of 2006, 2010 lies in the future.

• An A-sentence could be uttered falsely at one time and truly at a different time. A B-sentence couldn't (assuming it doesn't contain words like 'I', 'here' etc.).

One can similarly distinguish A-judgments from B-judgments, A-concepts from B-concepts, etc.

## 2. McTaggart's terminology

For events or times to "form an A-series" is for each of them to be past, or present, or future.

For events or times to "form a B-series" is for each of them to be earlier, later or simultaneous with each ther one of them.

To say that the A-series is *real* is to say that *in reality* events or times form an A-series.

- A possible gloss (?): "some A-sentences express facts that cannot be reduced to, or explained in terms of, any B-sentences".
- This is sometimes called 'The A-theory'

## 3. Structure of McTaggart's argument

*First premise:* Time cannot be real unless the A-series is real (§307–324) *Second premise:* The A-series is not real (§325–332) *Conclusion:* Time is not real (§333)

# 4. The "B-theory" (aka reductionism about tense, aka indexicalism about tense)

Leading idea: 'now' is like 'here'. Just as 'It sometimes gets very hot here' is used to say different things depending on *where* one says it, so 'It is now hot in 321CL' is used to say different things depending on *when* one says it.

- Uttered at a time *t*, 'It is now hot in 321CL' expresses the proposition that it is hot in 321CL at *t*.
- Likewise, 'It will be hot in 321CL', uttered at *t*, expresses the proposition that it is hot in 321CL at some time after *t*; and similarly for the past tense.

Where does this theory fit into McTaggart's classification?

- In §313 McTaggart discusses a view of Russell's which seems like a version of indexicalism. He treats it as a version of the claim that the A-series is *not* real.
- This should help us work out what he means by 'real': after all, indexicalists don't *deny* that some events are present, past and future, any more than they deny that some objects are here! What they do claim is that tensed sentences are not in the business of expressing irreducible tensed *facts*.

## McTaggart's argument for the first premise

(i) Time is not real unless change is real.

(ii) Change is real only if events change in respect of being past, present or future.

(iii) Events change in respect of being past, present or future only if the A-series is real.

(iv) Therefore, time is real only if the A-series is real.

## McTaggart's argument for the second premise

(i) No event or time can have more than one of the three characteristics pastness, presentness and futurity.

(ii) But if any event or time has any one of these three characteristics, it has them all.

(iii) Therefore, no event has any of these three characteristics.

Why (ii)? '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 the three characteristics belong to each event.'

### The A-theorists' reply

It's not true that every present event *is* past and *is* future: what's true is just that every event that *is* present *will be* past and *was* future. (Similarly for the other cases.) No contradiction there!

McTaggart's response: to say that an event *will be* F is to say that it is F at some future time; to say that an event *was* F is to say that it is F at some past time, and to say that it *is* F, where the 'is' "is used with a temporal meaning, and not simply for predication", is to say that it is F at the present time. So we could

avoid the contradiction in this way only if we already had some other means of avoiding the conclusion that every *time* that is past, present or future is all three.

What's going on? The key is to get clear on the alleged ambiguity of 'is' (and many other verbs grammatically in the present tense) between a genuinely 'present tense' form and a 'tenseless' form.

*B-theorists* need to posit some such an ambiguity, if they want to be able to formulate tenseless truth-conditions for tensed judgments. But do A-theorists have any need for such a thing?