

## McTaggart and indexing the copula

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**Abstract** In this paper, I show how a solution to Lewis' problem of temporary intrinsics is also a response to McTaggart's argument that the A-series is incoherent. There are three strategies Lewis considers for solving the problem of temporary intrinsics: perdurantism, presentism, and property-indexing. William Lane Craig (*Analysis* 58(2):122–127, 1998) has examined how the three strategies fare with respect to McTaggart's argument. The only viable solution Lewis considers to the problem of temporary intrinsics that also succeeds against McTaggart, Craig claims, is presentism. This gives us *prima facie* reason to be presentists. But there is a strategy Craig does not consider—indexing, or relativizing, the copula. In this paper, I show that to the degree that indexing the copula solves the problem of temporary intrinsics, it also shows the invalidity of McTaggart's argument. The upshot: the copula-indexer needn't affirm the unreality of time, nor need she embrace presentism.

**Keywords** McTaggart · Unreality of time · Problem of temporary intrinsics · Lewis

The parallels between McTaggart's argument for the incoherence of the A-series and Lewis' problem of temporary intrinsics are obvious upon reflection.<sup>1</sup> In this paper, I show how one solution to the latter is also a response to the former. There are three strategies Lewis considers for solving the problem of temporary intrinsics—perdurantism, presentism, and property-indexing. William Lane Craig

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<sup>1</sup> The former comes from McTaggart (1908) and the latter from Lewis (1986, pp. 203–204).

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The problem of temporary intrinsics is that some objects have seemingly incompatible properties (or seem to have incompatible properties). For example, some objects are bent at one time and not bent at another. So, some objects are bent and not bent. Contradiction! The copula-indexer responds to this argument in one of two ways, both of which involve incorporating a time into the instantiation relation.<sup>4</sup> One strategy takes the instantiation relation to be three-place, holding between an object, a property, and a time. The other strategy posits a multitude of irreducible instantiation relations, one for each time.<sup>5</sup>

The first way of indexing the copula (a three-place instantiation relation) solves the problem of temporary intrinsics by denying that one can infer from '*x* is bent at some time' that '*x* is bent.' Rather, '*x* is bent at *t*' means [Bent(*x*, *t*)], and '*x* is bent' means [Bent(*x*)].<sup>6</sup> One who believes that the instantiation relation is three-place thinks that '[Bent(*x*)]' is not well-formed. She could, however, allow inferences like '*x* is sometimes bent' from '*x* is bent at *t*', since '*x* is bent at *t*' means [Bent(*x*, *t*)] and '*x* is sometimes bent' means [ $\exists t$ (Bent(*x*, *t*))]; and [Bent(*x*, *t*)] entails [ $\exists t$ (Bent(*x*, *t*))].

The second way of indexing the copula (a multitude of instantiation relations of the form *is-at-t*) solves the problem of temporary intrinsics by denying that an object *x* is bent at *t* and is not bent at *t\**, since the purported instantiation relations are incomplete. Rather, *x* is-at-*t* bent and *x* is-not-*t\** bent.<sup>7</sup>

One who thinks the instantiation relation is indexed in this way need have no fear of McTaggart's argument. McTaggart claims that if an event has<sub>*P*</sub>, had, or will have an A-property, then it has<sub>*T*</sub> that A-property.<sup>8</sup> Since every event has<sub>*P*</sub> every

<sup>2</sup> The view is first offered in Johnston (1987) and then further discussed in Lewis (2002).

<sup>3</sup> Lewis does not think that indexing the copula solves the problem of temporary intrinsics. He cites three criteria that a solution to the problem of temporary intrinsics must meet, and then shows that indexing the copula fails to meet the criteria. But, Lewis doesn't argue *for* the criteria; the copula-indexer is, of course, free to reject them. And in fact, Lewis shows that she must.

<sup>4</sup> Indexing the copula is attractive as a solution to the problem of temporary intrinsics since it allows one to say that the very same object is both *F* and not-*F* (contra the perdurantist), that the object exists at two different times (contra the presentist) and that the *F* and not-*F* are genuinely intrinsic (contra the property-indexer).

<sup>5</sup> Haslanger (1989) and Lowe (1988) advocate indexing the copula adverbially, so that objects have properties 'time-ly'. It's not clear how to work out this strategy in detail, so I set it aside.

<sup>6</sup> I use brackets around declarative sentences as names for the propositions expressed by those sentences.

<sup>7</sup> Of course, both strategies require that *t* ≠ *t\**.

<sup>8</sup> I use 'has<sub>*P*</sub>' for the present-tensed copula, and 'has<sub>*T*</sub>' for the tenseless copula. The A-properties are *being past*, *being present* and *being future*. The B-relations are *is earlier than*, *is simultaneous with*, and *is later than*.

A-property at some time, every event has<sub>T</sub> every A-property. But by their very nature every A-property is incompatible with every other A-property. So, contradiction.<sup>9</sup>

McTaggart's argument relies on the following conditional: If  $x$  is<sub>P</sub>, was, or will be  $F$ , then  $x$  is<sub>T</sub>  $F$ .<sup>10</sup> But the copula-indexer says that the inference from

(1) for some  $t$ ,  $x$  is-at- $t$   $F$

to

(2)  $x$  is<sub>T</sub>  $F$

is invalid. If it's valid, her solution to the problem of temporary intrinsics is nullified. There are at least two ways in which the copula-indexer can dispute the inference from (1) to (2). First, she can say that (2) is incoherent, either because all instantiation relations are relative to some time or other, or because instantiation is three-place. This amounts to denying tenseless predication altogether. But many copula-indexers will want to allow for a tenseless copula as well as indexed copulae, since they don't want to say that [7 is<sub>T</sub> prime] is incoherent and what is true is [for every time  $t$ , 7 is-at- $t$  prime].<sup>11</sup> So the second response is to admit tenseless predication, but claim that it is governed by this conditional: For all  $x$ , if (for all times  $t$ ,  $x$  is-at- $t$   $F$ ), then  $x$  is<sub>T</sub>  $F$ . This still solves the problem of temporary intrinsics, and it succeeds as a response to McTaggart since there are no events that, for all times  $t$ , have-at- $t$  one and the same A-property.

McTaggart needs to show that if A-properties are irreducible and changing, then every event must have<sub>T</sub> every A-property.<sup>12</sup> But for one version of the copula-indexer, this is incoherent, because 'have<sub>T</sub>' isn't indexed to a time. For the other version, it's false, since there's no time  $t$  and event  $e$  such that  $e$  has-at- $t$  every A-property. In order to force the copula-indexer into a contradiction, McTaggart must show that there is a time  $t$  such that some event  $e$  has-at- $t$  every A-property. But he cannot.

One who likes McTaggart's argument might respond by claiming that these don't seem like A-properties. There are two reasons she might cite. First, by the very definition of A-properties, as time flows events must change the A-properties they have. The copula-indexer has two responses. First, the neo-McTaggartian response simply assumes that there is such a thing as the having *simpliciter* relation (that events bear to A-properties); the copula-indexer expressly denies this, saying that it

<sup>9</sup> This is admittedly just a section of his argument. McTaggart begins the paper by assuming that time is dependent on change. He then argues that there can be no change without an A-series, where an A-series is composed of events having irreducible A-properties. He then argues that an A-series is incoherent; this is the argument above. McTaggart concludes that there is no change, and therefore time is unreal. For a detailed treatment of the argument and a repository of citations, see Rea (2003, pp. 254–260).

<sup>10</sup> Though McTaggart doesn't use this exact formulation, it is a premise in both Craig (1998)'s and Rea (2003)'s reconstructions of the argument.

<sup>11</sup> Some would say the latter is false, and some would say it's true. But regardless of one's stance on the latter, most everyone would say that the former is also true.

<sup>12</sup> Since the A-properties are incompatible, every event's having<sub>T</sub> every A-property is a contradiction.

is ill-formed. Second, to have as a premise that events must change their A-properties and to have as a premise that ‘if  $x$  is at some time  $F$ , then  $x$  is,  $F$ ’ is to beg the question. The copula-indexer can make sense of our talk of events having different A-properties. An event has different A-properties in virtue of bearing a different instantiation relation to each A-property (is-at- $t$  present, is-at- $t^*$  future, and so on), or by bearing the same three-place instantiation relation to each A-property and some time or other.

Second, the neo-McTaggartian might say that these aren’t A-properties, since every case of instantiation of an A-property (say,  $e$ ’s *being-at-t past*) entails a corresponding B-relation (in this case  $e$ ’s *being-at-t earlier than t*). Again the copula-indexer has two available responses. First, she can say that though the properties are co-extensive, the A-properties are irreducible; and for each case of an object  $x$  having-at- $t$  an A-property  $F$ , it’s a brute fact that  $x$  is-at- $t$   $F$ . Second, she can say that the A-properties are the fundamental ones, and events have B-properties in virtue of having-at-times the A-properties.<sup>13</sup>

In conclusion, copula-indexers have a ready response to McTaggart that is just an application of their solution to the problem of temporary intrinsics. Some can say that McTaggart’s argument is invalid since it infers from the fact that  $x$  is <sub>$P$</sub> , was, or will be  $F$  that  $x$  is <sub>$T$</sub>   $F$ , and  $x$  is <sub>$T$</sub>   $F$  is true only if for all  $t$ ,  $x$  is-at- $t$   $F$ . Others can say it’s invalid because it contains a premise that makes use of tenseless predication, and there just isn’t any such thing. Neither need become presentists, nor affirm the unreality of time.

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<sup>13</sup> Lewis (2002) would not like the second option. He is willing to go along with the copula-indexer’s instantiation relation story, as long as she doesn’t claim that the indexed instantiation relations are as fundamental or as natural as the tenseless instantiation relation. The copula-indexer could, of course, disagree. And if one denies that there is a tenseless instantiation relation, then all *having-at-t* relations are equally fundamental.