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True at

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Relativism and Monadic Truth

In

Analysis Reviews

Cappelen and Hawthorne tell us that the most basic, explanatory notion of truth is a monadic property of propositions. Other notions of truth, including those applying to sentences, are to be explained in terms of it. Among them are those found in Kripkean, Montagovian, and Kaplanian semantic theories, and their descendants – *to wit* truth *at* a context and circumstance. If such relativizations are to make sense, the authors correctly maintain, they must be explained in terms of the monadic notion of truth. (1-2)

I would have thought this was the received view, but the authors indicate otherwise. They describe possible-worlds semantics as making it “very natural to think of the foundational mode of evaluation for propositions as *truth relative to worlds*.”(7) I see it differently. The most natural way to understand possible worlds-semantics is to take world-states to be properties, and to take *the truth of p at w* to be *the fact that p would be true (i.e. would instantiate monadic truth) were the universe to instantiate w*. The authors add that it is somewhat natural to take “the actual truth of a proposition as [being] a matter of the proposition getting the value ‘true’ relative to a distinguished world -- the actual world.” (7) If this means that *being actually true* is *being true at* the actual world-state @, this is more than natural, it is unassailable -- as long as one doesn’t erroneously identify *being true* with *being actually true*. Since Cappelen and Hawthorne don’t do this, I take us to be on more or less the same page.

Others, apparently, aren’t. We are told that “a number of the participants in the relevant disputes [about relativism] seem to take it for granted that philosophical semantics has somehow shown that the semantic value of sentences cannot be evaluated for truth or falsity *simpliciter*, since truth and falsity hold of a proposition relative to a world.” (77-8) We are also told:

Contemporary Analytic relativists reason as follows: ‘Lewis and Kaplan have shown that we need to relativize truth to triples of <world, time, location>. Hence, in a way, anyone who follows Lewis and Kaplan is already a relativist. There are only truth and falsity relative to settings along these three parameters, and so there is no such thing as truth *simpliciter*. But having already started down this road, why not exploit these strategies further. In particular, by adding new and exotic parameters in to the circumstances of evaluation, we can allow the contents of thought and talk to be non-specific (in Kaplan’s sense) along dimensions other than world, time, and location.’ (10)

I won't comment on who does, or doesn't, reason this way. I will say why one shouldn't.

For a sentence S (used to make assertions and express beliefs) to have a meaning, or semantic content, is for S express a proposition that represents something as being some way or other.¹ In virtue of this, we speak derivatively of S representing things. For example, the 'Snow is white' represents snow as white, while 'The ball over there is round' represents the property *being a ball over there* as uniquely instantiated, and *being round* as instantiated by whatever instantiates *being a ball over there*. More generally, a meaningful sentence of this sort represents the universe (or parts of it) as being a certain way (or ways). Its truth conditions follow from this; if S (simply) represents A as *being B* (and nothing else), then S is true iff A is B . We have no idea what it is to be representational, independent of having such (monadic) truth conditions.

We can modalize our statement of truth conditions, as in schema (1).

1. Necessarily, the proposition that S is true iff S .

Assuming a connection between modal operators and possible world-states, we derive (2a,b).

- 2a. $\forall w$ [at w (the proposition that S is true iff S)]
- b. $\forall w$ [at w , the proposition that S is true iff at w , S)]

Note, the truth predicate that occurs in these examples is still monadic, and 'at w ' is a sentential operator, with roughly the force *if w were instantiated it would be the case that ...* Next we introduce a two-place truth predicate 'is true at', giving us (2c).

- 2c. $\forall w$ [the proposition that S is-true-at w iff at w , S]

In any particular case, we can do the same on the right-hand side of the biconditional.

- 2d. $\forall w$ [the proposition that Kripke philosophizes is-true-at w iff Kripke philosophizes-at- w]

Since we can do to any monadic predicate what we have done to 'true' in (2c), and 'philosophizes' in (2d), we should take "possible worlds semantics" to establish that truth is *really* at least dyadic, while superficially appearing otherwise, only if we draw the same conclusion about the predicate 'philosophizes', and other superficially monadic predicates.

¹I adopt the simplifying assumption that every complete sentence of this sort semantically expresses a proposition at a context. Though this is untrue (Soames 2010, chapter 7), it doesn't affect the discussion.

Really, the conclusion goes, there are no genuine monadic predicates -- or properties! If possible worlds semantics shows there to be no monadic notion of truth, then it shows there to be no monadic properties at all. But this is lunacy. No semantic theory could establish that.

Semantic theory is devoted to illuminating what ordinary speakers mean by their words. Possible worlds semantics does this by stating the modal truth conditions of sentences.

3. 'Kripke philosophizes' is a sentence of English that is true at w iff Kripke philosophizes at w .

No truth-conditional theory of this sort will tell us what English sentences mean, or, by itself, allow us to understand and use object-language sentences as even minimally competent speakers do. However, its theorems do provide important information about meaning -- provided we antecedently understand what it is for a sentence to be true at a world-state, and, in the case of (3), what it is to philosophize at such a state. Fortunately, we do. For x to philosophize at w is for it to be such that *if w were instantiated, then x would philosophize*. Notice, modal notions are not defined away by quantifying over world-states; they are presupposed in making sense of a theory that does so.

What about truth at a world-state? We can't quite say that for S to be a sentence of English that is true at w is for it to be the case *if w were instantiated, then S would be a true sentence of English*. As 'true at w ' is used in possible worlds semantics, S can be true at w even if S isn't a sentence of English at w , or S means something different at w from what it actually means, and expresses a proposition that is false at w . These complications indicate that the dyadic truth predicate of possible worlds semantics is modestly technical. Strictly speaking, S is (monadically) true iff S expresses a true proposition; so S is (monadically) true at w iff S expresses at w a proposition that is true at w . But this is a bother for a theory attempting to illuminate S 's meaning by stating its truth conditions, since what S expresses at other world-states is irrelevant to this task. Thus, we introduce a technical predicate ' S is-true-at w ' to mean *the proposition p that S actually expresses is true at w* , where for p to be true at w is just for it to be the case that *if w were instantiated, then p would be true*.

The bottom line is no less important for being simple. The dyadic sentential truth

predicate of possible worlds semantic theories is parasitic on our ordinary monadic truth predicate of propositions a.k.a. *what is said*. Given this, we can understand their truth-conditional theorems as providing information about the *meanings* of the sentences they mention. One who maintains that monadic truth has been *replaced* by a new dyadic notion drains these statements of truth conditions of the content needed to provide this information. Worse, one's so-called "semantic theory" will have no content at all, until one *provides* the dyadic truth predicate with a new, specialized interpretation. Semantic theorists sometimes present their theories in the form of "definitions of truth" -- relative to a model, world-state, and/or context. But semantic theories *never* define truth; rather, they use our ordinary notion of truth, with its conceptual connection to the notions of meaning and representation. If one rejects the ordinary notion, one must provide a replacement that duplicates these conceptual connections. To fail to do so is to fail to have a semantic theory at all, no matter how much formal apparatus from the Tarskian tradition one employs.²

What about the idea that "the actual truth of a proposition" can be identified with "the proposition getting the value 'true' relative to ... the actual world?" (7) – i.e., that the propositional predicate 'is true' is short for the supposedly more basic 'is true at @', where '@' names the world-state the universe actually is in? Clearly, this won't work. Since a proposition that is true at @, has the property *being true at @* at every world-state, this property is an essential property of anything that has it. Since the monadic property expressed by the predicate 'is true' is not, the two properties are different even though they are coextensive at @. Nor will it do to define 'is true' in terms of the supposedly prior 'is true at the world-state that is actual' – where what one means by the description 'the world-state that is actual' is 'the world-state that

²Two things we know by understanding our ordinary truth predicate are: (i) that a proposition is necessarily and a priori equivalent to the proposition that it is true, and (ii) that any warrant for asserting, believing, or denying one of these propositions is warrant for taking the same attitude toward the other. (Soames 2003) Adding the claim *that a non-context-sensitive sentence is true iff the proposition it expresses -- which is its meaning -- is true*, allows us to derive information about meaning from claims about truth conditions. (Soames 1999, chapter 4) Relativizing semantic content to context (Kaplan 1989), recognizing multiple assertions made by single utterances (Soames 2002), and allowing pragmatic enrichment of incomplete semantic contents (Bach 1994, and Soames 2010 chapter 7) bring modest complications that don't change the fundamental relationship between linguistic meaning and propositional truth.

obtains or is instantiated'. Adding such a suffix to any predicate is simply redundant. To say that x is F at the world-state that is instantiated is just to say that *if the world-state that is instantiated is instantiated, then x is F* . There is no point in that. *Truth* is not replaced by *truth at the actual world-state*, it is presupposed by it.

Some of what I have said about truth at world-states might also be said about truth at times. It's not unreasonable to think that for a proposition p to be true at t is for p to have been true when t occurred, for it to be such that p will be true when t does occur, or for p to be true now (if t is occurring). But this way of thinking about truth at a time, on analogy with truth at a world-state, ignores an apparent asymmetry between the two. Apart from propositions expressed by utterances explicitly mentioning a world-state, most propositions are non-specific, or world-state neutral, while being evaluable for truth at different world-states. Can the same be said about propositions and times? The answer is controversial. The traditional answer – given by Gottlob Frege, G.E. Moore, and Richard Cartwright – is that propositions are always time-specific, and so have their truth values eternally.³ On this view, an utterance at t of 'John is shopping' expresses *the proposition that John is shopping at t* , while an utterance of 'John will be shopping' expresses the proposition *that at some time later than t John is shopping then*. Since these propositions are time specific, they don't change truth values when evaluated at different times. This contrasts with the view that the present tense 'John is shopping' is equivalent to the temporally non-specific infinitival clause 'John to be shopping' – which occurs as a subordinate clause in 'Mary expected/expects/will expect John to be shopping'. On this view, 'John to be shopping' and 'John is shopping' both express a "proposition" that predicates shopping of John, with no temporal indication of when John is supposed to have this property. Because of this, it may be true at some times and false at others.

On behalf of traditionalists we may observe that if asked "Is this true -- or do you believe this -- *that a Democrat occupies the White House?*" we have no trouble answering, even though the proposition queried is world-state neutral. But when asked "Is this true -- or do you believe

³ Frege (1918), Moore (1962), Cartwright (1966).

this -- *a Democrat to occupy the White House?*” we are apt to be perplexed. Whereas world-state neutral contents can be evaluated for truth, and are objects of belief and other attitudes, time neutral contents seem to resist this. We can, of course, say that it is true in 2010 that a Democrat occupies the White House. However, to say this, one may hold, is to say that the proposition *that a Democrat occupies the White House in 2010* has the monadic property truth. Similarly, when an infinitival clause occurs as a subordinate clause, “In 2004, Mary believed the Republicans to be the dominant party,” the content of the clause inherits the time specification of matrix – giving us “In 2004, Mary believed the Republicans to be the dominant party, *then*.” Thus, the traditionalist maintains, it doesn’t follow from the claim *that in 2004, Mary believed the Republicans to be the dominant party, while in 2009 she believed them not to be* that in 2009 that she believed something inconsistent with what she believed in 2004.⁴

On the other side of the question, we have David Kaplan’s claim that “if *what is said* is thought of as incorporating reference to a specific time..., it is otiose to ask whether what is said would have been true at another time,” (Kaplan 1989:503) He adds:

Technically, we must note that intensional [temporal] operators must, if they are not to be vacuous, operate on contents which are neutral with respect to the feature of circumstance the operator is interested in. Thus, for example, if we take the content of a [a sentence] S to be [a temporally specific content rather than a temporally neutral one] the application of a temporal operator to such a content would have no effect; the operator would be vacuous.” (503-4)

The underlying argument is this:

- P1. The extension of a temporal operator O like ‘It will be the case that’ maps a semantic value of the sentence S with which it combines onto truth value of $\llbracket O(S) \rrbracket$.
- P2. Since the result of applying O to S is typically non-vacuous, the semantic value of S on which O operates is typically time neutral.
- P3. That value is the semantic content of S relative to the context C – which is *what is said* by S at C -- the proposition S expresses.
- C. So, the proposition expressed by S at C is typically time neutral.

Kaplan’s remarks support P1 and P2, which are correct. What about P3? If it is false, then *the truth value of* $\llbracket O(S) \rrbracket$ at context C and circumstance E, will *not* be a compositional function of the *extension* of O at C, E, and the *content* of S at C. Also, *the content* of the compound

⁴ See Mark Richard (1982) and Nathan Salmon (1989).

sentence – the proposition it expresses at C – won't be compositionally determined from the *contents* of O and S at C. So, if P3 fails, compositionality of content and extension will fail.

But why is this a problem? There is no need for content and extension to be compositional in this sense. The most obvious illustration is quotation. Semantic rules for direct quotation specify the extensions of infinitely many quotation terms by appealing, not to contents of the terms quoted, but to their lexical identity. (Soames 1999, chapter 3; Kripke 2008). Another example is Tarskian semantics for quantification – according to which neither the truth value, nor the semantic content, of a complex formula relative to an assignment is a function of the truth values, or contents, of its constituent formulas. If A assigns variables 'x', 'y' the same object o, then the contents and truth values of 'Rxx' and 'Rxy' are the same, relative to A. If the truth value and content of a complex formula relative to an assignment were compositionally determined from the truth values and contents of its constituent formulas at that assignment, it would follow that ' $\exists x Rxx$ ' and ' $\exists x Rxy$ ' must have the same truth values and contents relative to A. But, this doesn't follow; since if 'R' relates some other object to o, while not relating any object to itself, ' $\exists x Rxx$ ' will express the proposition that *bearing R to oneself* is instantiated, and be false, while ' $\exists x Rxy$ ' will express the proposition that *bearing R to o* is instantiated, and be true -- relative to A. (Salmon 2006) There is nothing problematic about this. What is crucial is that the semantic content of a formula relative to an assignment be determinable from that assignment plus *all significant semantic and syntactic properties of its parts*. When F is a formula containing free occurrences of 'x' and A is the assignment mentioned, the content of $\llbracket \exists x F \rrbracket$ relative to A is the proposition that attributes *being instantiated*, not to the content of F at A, but to the content of $\llbracket \lambda x F \rrbracket$ at A -- roughly, the property *being an object o* such that for any assignment A* differing at most from A in assigning o* to 'x', F is true relative to A**. This is the standard Tarskian semantics we all know. No one thinks it is incoherent or defective because it isn't compositional.

Applying this lesson to Kaplan's argument about temporal modification leads us to expect no technical problem in giving a semantics according to which temporal operators apply to *time*

neutral semantic values of their argument sentences, even though these values are not the time-specific propositions those sentences express. Let the content of an untensed atomic sentence $\lceil Fn \rceil$ at C be a time-neutral matrix consisting of the referent o of n at C (when n is directly referential) plus the property *being F*. Since this matrix doesn't contain a time, it has no truth value at any circumstance of evaluation, which is simply a world-state. Adding present tense yields $\lceil F\text{-present}, n \rceil$. We define a semantic value called *the schedule* of the clause at C. It is a function from times t to the temporally indexed proposition *that o is F at t* , which is the content of the tensed clause *at t and C*.⁵ Its content at C alone is simply the special case in which t is C_T , (the time of C). This is what is asserted when one assertively utters the sentence in C. Next we add the future tense operator, giving us $\lceil \text{It will be the case that } (F\text{-Pres}, n) \rceil$, which is true at C and a world-state w iff for some time t_+ later than C_T , the time-indexed proposition gotten from applying the schedule of $\lceil F\text{-present}, n \rceil$ (at C) to t_+ has the monadic property truth, at w . This sentence “says” that the schedule of the clause (at C) “is true for some times later than C_T ” – in effect, *that some time later than C_T instantiates the property being a time at which o instantiates being F*.

All of this and more is worked out in Salmon (1989). The well-known need for double-indexing of times is accommodated by sealing off clauses governed by temporal indexicals like ‘now’ from the influence of temporal operators external to the clause. This is done by taking the proposition assigned to an arbitrary time t by the schedule (at C) of $\lceil \text{It is now the case that } (F\text{-Pres}, n) \rceil$ to be the proposition that the schedule of the argument clause assigns to C_T – thereby insuring that the schedule of the ‘now’-clause (at C) is a constant function. Thus, the propositions expressed at C by these two sentences -- one with ‘now’ and one without -- are trivially equivalent, even though one embeds non-vacuously under temporal operators, whereas the other doesn't.⁶

⁵ ‘F’ is a metalinguistic variable; ‘F’ is the corresponding schematic letter.

⁶ If we wished, we could make the content of the ‘now’-sentence *identical* to that of the present-tense sentence by taking ‘now’ to be a predicate operator that combines with $\lceil F\text{-Pres} \rceil$ to form $\lceil F\text{-Pres-now} \rceil$ (rather than a

The resulting system captures the traditional view of propositions as time-specific bearers of eternal truth values, while accommodating the technical distinctions captured by standard treatments of temporal operators. That it does so while violating P3 of Kaplan's argument shows that P3 can't be taken for granted and the conclusion isn't established. The technical demands on the semantics of temporal operators tell us *nothing* about whether the semantic contents of sentences – the propositions they express – are time-neutral, or time-specific. That issue must be resolved on independent philosophical grounds.

These lessons apply to Cappelen's and Hawthorne's discussion an argument -- called the "Operator Argument" -- that applies to classes R of sentences the assessment of which for truth requires one to specify a value along some parameter P -- a time, the tastes or values of agents, their epistemic position, etc. At issue is whether this parametric value is part of the proposition expressed or the circumstances for evaluating the proposition. The Operator Argument is used to eliminate the former option, thereby requiring truth to be relativized to the parameter. Here is my statement of argument.

The Operator Argument

- OP1. Sentences in R combine with O to form compound sentences $[O(S)]$ the truth values of which are determined by truth values of S along parameter P.
- OP2. Since the result of applying O is (typically) non-vacuous, the semantic value of S on which O operates is (typically) P-neutral.
- OP3. This semantic value is (or is determined by) the semantic content of S at C -- which is the proposition S expresses at C.
- C. So the proposition S expresses at t is (typically) P-neutral. Since S can't be assessed for truth without specifying a value for P, truth at a circumstance must be relativized to P.

The lesson of temporal modification is that OP3 is unsupported, and perhaps unsupportable. Even if one can establish, for some class of target sentences, that assessing their truth value requires specifying a parametric value, and that OP1 and OP2 are true, this is *not* enough to establish the relativist's conclusion C. Cappelen and Hawthorne do a good job of raising other problems for attempts to establish C. My point is that OP3 can *never* be accepted without ruling out an analysis of the operator as acting on a semantic value other than (and not determined by) the semantic content of its operand (at the context). As we have seen in the temporal case, formal

sentential operator).

accounts of this sort aren't difficult to construct. Consequently, this route to relativism seems unpromising.

This point doesn't come through in the book as clearly as it might because the Operator Argument is stated in a non-optimal way that includes two assumptions: (71)

Uniformity: S has the same semantic type when it *occurs* alone as when it combines with O.

Vacuity: O applies vacuously when combined with a sentence that semantically supplies a parametric value.

When it is observed that O's application isn't vacuous, *Vacuity* is used to conclude that an *occurrence* of S in $\lceil O(S) \rceil$ doesn't supply a parametric value, and *Uniformity* is used to conclude that S doesn't have such a value when used on its own, and so expresses a proposition that is parameter-neutral. However, this argument contradicts the standard operating assumption in formal semantics that *expressions*, not their occurrences, are assigned semantic value. Given this, *Uniformity* is a non-issue, and *Vacuity* is groundless -- when it is presupposed that for S to *semantically supply a parametric value* is for the semantic content of S to determine it.

Things change if semantics assigns values to *occurrences*. Since an occurrence of an expression in the scope of an operator sensitive to it is different from an occurrence that isn't, there is no reason to accept the thought (supposedly justified by *Uniformity*) that the contents of *the two occurrences* must be the same. As Salmon shows, the contents of *occurrences of expressions* that are parts of compound expressions *often differ* from the contents of those expressions themselves, or of occurrences of them on their own. This means that the content of *an occurrence of S on its own* may include a parametric value, even though the content of *an occurrence of S in* $\lceil O(S) \rceil$ -- that which it contributes to the content of $\lceil O(S) \rceil$ -- doesn't. In short, the authors' statement of the Operator Argument derives its air of plausibility from confusing standard expression-based semantics with non-standard occurrence-based ideas. The initial impression that *Uniformity* is correct is due to the pull of expression-based semantics. The impression that *Vacuity* is correct is due to a failure to appreciate the resources of expression-based semantics, and a tendency to confuse thoughts about expression occurrences with those

about expressions. Once these are sorted out, the Operator Argument loses its force.

This should strengthen the authors' already formidable case. As for relativism itself, I have raised two challenges. First, some route other than the Operator Argument must be found to parameter-neutral propositions. Second, if one is found, truth at a parameter must be explained in a way that parallels the explanation of truth at a world state -- where p is true at a world-state w just in case *were w to be instantiated, then p would have the monadic property truth*. Without such an explanation, we have no way of relating conditions under which a sentence is true at a parameter to meaning and representation, in which case it is an illusion to think that we have a semantic theory at all.

References

- Bach, Kent (1994), "Conversational Implicature," *Mind & Language* 9, 124-162.
- Cartwright, Richard (1966), "Propositions," in *Analytical Philosophy*, R. Butler, ed., first series, Oxford: Basil Blackwell, 81-103.
- Frege, Gottlob (1918), "Der Gedanke," *Beitrage zur Philosophie des deutschen Idealismus*, 1; "The Thought" by A. and M. Quinton, in *Mind* 65, 1956, 289-311.
- Kaplan, David (1989), "Demonstratives," in Joseph Almog, John Perry, and Howard Wettstein, eds., *Themes from Kaplan*, New York: Oxford University Press, 481-563.
- Moore, G. E. (1962), "Facts and Propositions," in *Philosophical Papers*, New York: Collier.
- Richard, Mark (1982), "Tense, Propositions, and Meanings," *Philosophical Studies*, 41, 337-351.
- Salmon, Nathan (1989), "Tense and Singular Propositions," in Joseph Almog, John Perry, and Howard Wettstein, eds., *Themes from Kaplan*, New York: Oxford University Press, 331-392.
- _____, (2006), "A Theory of Bondage," *Philosophical Review*, 15, 415-448.
- Soames, Scott (1999), *Understanding Truth*, New York: Oxford University Press.
- _____, (2002), *Beyond Rigidity*, New York: Oxford University Press.
- _____, (2003), "Understanding Deflationism," *Philosophical Perspectives*, 17, 369-383.
- _____, (2010) *Philosophy of Language*, Princeton and Oxford: Princeton University Press.