

# Propositional Truth - Who Needs It?

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## SUMMARY

On a deflationary view of truth the truth predicate does not ascribe a property of any explanatory significance to statements. The truth predicate is merely a device of semantic ascent, by means of which we talk about a statement rather than assert that statement. Such a device is useful for blind truth ascriptions to statements which we cannot explicitly state. Such a view is compatible with truth as correspondence and so does not imply postmodern antirealism, since statements directly asserted are descriptive of the world as it actually is. Getting rid of propositional truth has the advantage of ridding us of abstract truth-bearers, which are uncreated by God.

## PROPOSITIONAL TRUTH - WHO NEEDS IT

Central to biblical theism is the conception of God as the only self-existent being, the Creator of all reality apart from Himself. God alone exists *a se*; everything else exists *ab alio*. God alone exists necessarily and eternally; everything else has been created by God and is therefore contingent and temporally finite in its being.

Classical theism's doctrine of divine aseity faces its most significant challenge in the form of platonism, the view that there are uncreated, indeed, uncreatable, abstract objects, such as mathematical objects, properties, and propositions. Absent the formulation of a defensible form of absolute creationism, which has not to date been forthcoming, the orthodox theist will want to rid his ontology of such abstract objects. [1]

One of the most difficult to avoid will probably be propositions. The orthodox theist is committed to there being objective truths about the world such as "God exists," "The world was created by God," "Salvation is available only through Christ's atoning death," and so on. Any post-modern or nihilistic denial of truth is theologically unacceptable. But if there are objective truths, then there must, it seems, be something that is true. But what could this be? The anti-platonist can happily admit the existence of sentence tokens as truth-bearers, for these are clearly created, concrete objects. But what about a statement like "No human beings exist?" Wasn't that true during the Jurassic Period? But how could it be true if there were no sentence tokens at that time? And what about necessary truths like "No bachelor is married?" Isn't that true in every possible world, even worlds in which God alone exists? Tarski's T-schema stating a material condition on any theory of truth

T. “S” is true iff S,

though stated for a language  $L$ , cannot reasonably be thought to take sentence tokens of  $L$  as substituends for  $S$  because the right-to-left implication of the Tarski bi-conditionals seems clearly false: it is not the case, for example, that if the Tyrannosaurus at time  $t$  and place  $l$  is eating a Trachodon, then it is true that “The Tyrannosaurus at  $t$ ,  $l$  is eating a Trachodon,” where what is true is a sentence token. Considerations like these might prompt us to postulate abstract propositions as our truth bearers.

A neutralist view of quantification and reference can help us to resist any ontological implications such a move might appear to have. [2] Neutralism challenges the traditional criterion of ontological commitment of Quinean provenance according to which the values of variables bound by the first-order existential quantifier or referents of singular terms in sentences taken to be true must exist. Neutralism undercuts the traditional Indispensability Argument for abstract objects by denying that quantifying over or referring to *abstracta* in true sentences commits their user to the reality of such objects.

Neutralism thus removes much of the rationale for platonism with respect to abstract objects. For a neutral theory of reference allows us to assert truths about things that do not exist, that is to say, to assert statements featuring singular terms to which no corresponding objects exist, for example,

1. Next Wednesday is the day of the faculty meeting.
2. The whereabouts of the Prime Minister are unknown.
3. My misgivings about the plan remain unallayed.

So even if we take that-clauses like “that snow is white” to be singular terms referring to entities to which truth is ascribed, as in “It is true that snow is white” or alternatively, “That snow is white is true,” [3] we have not thereby committed ourselves to the reality of propositions. The neutralist can help himself with equanimity to statements like “It was true during the Jurassic Period that no human beings exist” and “That no bachelor is married is necessarily true.”

It has been thought that a neutral theory of reference implies a denial of a correspondence theory of truth. For example, neutralism’s most prominent proponent Jody Azzouni thinks that affirming that mathematical sentences are true even though mathematical objects do not exist entails rejection of a view of truth as a correspondence property. On a nominalist view, he thinks, since there are no mathematical objects, there can be no correspondence between mathematical truths and the world. So the success of mathematical theories as well as their truth must be due to something other than their correspondence with the world. He maintains that “There is no property—relational or otherwise—that can be described as what all true statements have in common (other than, of course, that they are all

'true')." [4]

But is that, in fact, the case? It seems to me that taking truth to be the property of *corresponding with reality* does not require the sort of word-world relation that Azzouni assumes. [5] Far too many philosophers, I think, are still in the thrall of a sort of picture theory of language according to which singular terms in true sentences must have corresponding objects in the world. [6] I have argued elsewhere that such a view is quite mistaken. [7] The unit of correspondence, so to speak, need not be thought of as individual words or other subsentential expressions. [8] Rather correspondence may be taken to obtain between a sentence as a whole (or the proposition expressed by it) and the world. Such holistic correspondence is given by the Tarski bi-conditionals. A deflationary view of truth, such as is affirmed by Azzouni, need understand no more by the notion of truth as correspondence than that "*that S*" is true (or corresponds to reality) if and only if *S*. That is all there is to truth as correspondence, and it is wrong-headed to seek correlates in reality for all of the singular terms featured in *S*. [9]

Correspondence, so understood, need not commit one to the view that truth is a substantial property possessed by truth-bearers, even given its universal applicability to true statements. The key to this claim is obviously the adjective "substantial." It is easy to think of insubstantial properties which all true statements have in virtue of being true, for example, *being believed by God*. As an omniscient being, God has the property of knowing only and all truths, so that every true statement has the property *known by God*. But that need not be taken to be a substantial property of true statements in the sense that it does any explanatory work. Similarly, every true statement has the property of corresponding with reality in the sense mentioned above, but that hardly seems a substantial property of such statements. It is trivial that it is true that *S* if and only if *S*. In light of a neutral theory of reference, it seems to me that Azzouni needs to supplement his deflationary view of truth with an equally deflationary view of correspondence.

Similarly, on a neutral logic, quantifying over objects in a postulated domain is not ontologically committing. For example,

4. There have been 44 U.S. presidents.

does not, on this view, commit us to a tenseless theory of time according to which past objects exist as really as present objects. Nor does the truth of

5. Some Greek gods were also worshipped by the Romans, though under different names.

commit us to the reality of gods. Nor does the truth of

6. There's a hole in your shirt.

commit us ontologically to another object in addition to the shirt, namely, the hole in it.

From the fact that, for some proposition  $p$ , it is true that  $p$ , the neutralist is happy to infer that, therefore, "Some proposition is true" or "There is at least one true proposition," for these existential generalizations do not carry ontological commitment. Similarly, the neutralist can affirm that "There are true propositions" and "Some propositions have never been expressed in language" without thereby committing himself to an ontology that includes propositions.

So neutralism about quantification and reference goes a long way toward removing any rationale for platonism about propositions. Still, the neutralist who is an orthodox theist, if pressed by an ontologist to state what he thinks about the existence of propositions in a fundamental sense [10] will confess that he thinks that propositions do not exist, that there really are no propositions. Therefore, there really are no true propositions. How shall we understand such a denial in light of his previous affirmation that some propositions are true?

Here I think we may profit from attending to Rudolf Carnap's distinction between what he called "internal questions," that is to say, questions about the existence of certain entities asked within a given linguistic framework, and "external questions," that is, questions concerning the existence of the system of entities posed from a vantage point outside that framework. [11] Carnap does not explain what he means by a linguistic framework, but he characterizes it as "a certain form of language" or "way of speaking" which includes "rules for forming statements and for testing, accepting, or rejecting them." [12] Accordingly, a linguistic framework may be taken to be a formalized language (or fragment thereof) with semantic rules interpreting its expressions and assigning truth conditions to its statements. [13] It is a way of speaking which assumes the meaningful use of certain singular terms governed by rules of reference.

Carnap illustrates his distinction by appeal to what he calls the "thing" framework or language. Once we have adopted the thing language of a spatio-temporally ordered system of observable things, we can meaningfully raise internal questions like "How many things are there on my desk?" or "Is the Moon a thing?" From such internal questions we must distinguish the external question of the reality of things. Someone who rejects the thing framework may choose to speak instead of sense data and other merely phenomenal entities. When we ask about the reality of things in a scientific sense, we are asking an internal question in the thing language, and such a question will be answered by empirical evidence. When we ask the external question about whether there really is a world of things, we are, Carnap insisted, asking a merely practical question whether or not to use the forms of expression featured in the thing framework.

Carnap next applies his distinction to systems of a logical rather than empirical nature, that is to say,

frameworks involving terminology for abstract objects like numbers, propositions, and properties. Consider, for example, the system of natural numbers. In this case our language will include numerical variables along with their rules of use. Were we to ask, "Is there a prime number greater than 100?" we should be posing an internal question, the answer to which will be found, not by empirical evidence, but by logical analysis based on the rules for the new expressions. Since a sentence like "5 is a number" is necessarily true, and by Existential Generalization, implies "There is an  $n$  such that  $n$  is a number," the existence of numbers is logically necessary within the number framework. No one who asked the internal question, "Are there numbers?" would seriously consider a negative answer. By contrast, ontologists who ask this question in an external sense are, in Carnap's view, posing a meaningless question. No one, he claims, has succeeded in giving cognitive content to such an external question. The same would be said of questions concerning propositions and properties: in an external sense such questions are devoid of cognitive content. For Carnap, the question of realism vs. nominalism is, as the Vienna Circle agreed, "a pseudo-question." [14] Whether one adopts a given linguistic framework is just a matter of convention.

Virtually no one today would embrace the verificationist theory of meaning which motivated Carnap's claim that external questions are devoid of cognitive content. Conventionalism about abstract objects is not in any case an option for the classical theist. For there just is no possible world in which uncreated, abstract objects exist, for God exists in every possible world and is the Creator of any reality *extra se* in any world in which He exists. Therefore, it is a metaphysically necessary truth that no uncreated, abstract objects exist. Hence, there is, indeed, a fact of the matter whether abstract objects of the sort that concerns us exist: they do not and cannot exist. Thus, conventionalism about existence statements concerning abstract objects is necessarily false.

This negative verdict on a conventionalist solution does not, however, imply that Carnap's analysis is without merit. For despite the widespread rejection of conventionalism, Carnap's distinction between external and internal questions continually re-surfaces in contemporary discussions and strikes many philosophers as intuitive and helpful. [15] Linnebo puts his finger on Carnap's fundamental insight when he writes,

In fact, many nominalists endorse truth-value realism, at least about more basic branches of mathematics, such as arithmetic. Nominalists of this type are committed to the slightly odd-sounding view that, although the ordinary mathematical statement

(1) There are prime numbers between 10 and 20.

is true, there are in fact no mathematical objects and thus in particular no numbers. But there is no contradiction here. We must distinguish between the language *LM* in which mathematicians make their

claims and the language *LP* in which nominalists and other philosophers make theirs. The statement (1) is made in *LM*. But the nominalist's assertion that (1) is true but that there are no abstract objects is made in *LP*. The nominalist's assertion is thus perfectly coherent provided that (1) is translated non-homophonically from *LM* into *LP*. And indeed, when the nominalist claims that the truth-values of sentences of *LM* are fixed in a way which doesn't appeal to mathematical objects, it is precisely this sort of non-homophonic translation she has in mind. [16]

Statements made in *LM* correspond to Carnap's internal questions; statements made in *LP* correspond to external questions. External questions are now to be regarded as meaningful and as having objective answers, but those answers may be quite different than the answers to homophonic questions posed internally. Linnebo unfortunately limits the range of nominalist positions unnecessarily by stipulating that the external questions sound different (are non-homophonic) in comparison to the relevant internal questions. Linnebo has in mind Geoffrey Hellman's translations of mathematical statements into counterfactual conditionals, [17] so that the mathematical truths affirmed in *LP* will look or sound quite different than those truths as stated in *LM*. That leaves out of account nominalisms like fictionalism, [18] which affirms truth-value realism but regards statements in *LM* as fictionally true and homophonic statements in *LP* as false. If the claim "There are propositions" is expressed in *LM*, then anti-platonists could accept the claim as stated in *LM* while denying, in *LP*, that there are propositions.

Now since properties as well as propositions are abstract objects, the anti-realist will also affirm, when not speaking within the linguistic framework that includes talk of properties and propositions, that, from an external vantage point, not only are there no propositions, but there are no properties either. Therefore, there really isn't such a property as truth. This isn't as alarming as it may sound. For there is still the truth predicate "is true," and predications need not be understood as literal ascription of properties. The truth predicate is simply a device of semantic ascent which enables us to talk about a proposition rather than to assert the proposition itself. For example, rather than say that God is triune, we can ascend semantically and say that it is true that God is triune. Similarly, whenever the truth predicate is employed, we can descend semantically and simply assert the proposition said to be true. For example, rather than say that it is necessarily true that God is self-existent, we can descend semantically and simply assert that, necessarily, God is self-existent. Nothing is gained or lost through such semantic ascent and descent.

Seeing the truth predicate as a device of semantic ascent is the key to Arvid Båve's deflationary nominalistic theory of truth, which is a purely semantic theory of truth. [19] The challenge he addresses in formulating a Deflationary Theory is how to generalize the particular fact that it is true that snow is white iff snow is white. Båve opts for a metalinguistic solution whose basic thesis is

D. Every sentence of the form "It is true that *p*" is S-equivalent to the corresponding sentence "*p*,"

where any two expressions  $e$  and  $e\phi$  are S-equivalent iff for any sentence context  $S( )$ ,  $S(e)$  and  $S(e\phi)$  are mutually inferable. [20] For example, “It is true that snow is white” implies and is implied by “Snow is white,” so that these sentences are S-equivalent. Båve’s theory does not need a truth property at all but simply lays down a rule of use for the truth-predicate. The one purpose of the truth predicate, says Båve, is the expressive strengthening of language gained by semantic ascent.

Båve emphasizes that (D) satisfies the nominalist constraint

NC. There must be no quantifying over, or referring to, propositions and no use of notions primarily defined for propositions.

For (D) neither quantifies over nor refers to propositions but merely claims an equivalence between certain forms of sentences. [21] Moreover, (D) does not *use* but merely *mentions* truth-related notions, so that it does not run afoul of (NC).

Båve’s postulation of (NC) makes it evident that his theory presupposes something close to the traditional criterion of ontological commitment, which those sympathetic to neutralism, like me, reject. [22] A neutralist need have no qualms about quantifying over or referring to propositions, unless some ontologist stipulates that an existentially loaded or metaphysically heavy sense is intended. On Båve’s view, despite the fact that propositions do not exist, propositional truth-ascriptions may still be true because (i) singular terms (like “that”-clauses) need not refer in order for sentences featuring them to be true (*e.g.*, true sentences about the average American), and (ii) quantification over propositions should be construed substitutionally, not objectually. [23] A neutralist perspective makes both of these moves superfluous, since reference and quantification are ontologically neutral.

Why is a device of semantic ascent useful or needed in natural language? Why not just embrace a Redundancy Theory of truth, which treats the truth-predicate as superfluous? The answer is that the truth-predicate serves the purpose of blind truth ascriptions. In many cases we find ourselves unable to assert the proposition or propositions said to be true because we are incapable of rehearsing them due to their sheer numerosity, as in “Everything I told you has come true,” or because we are ignorant of the relevant propositions, as in “Everything stated in the documents is true.” In theory even blind truth ascriptions are dispensable if we substitute for them infinite disjunctions or conjunctions like “Either  $p$  or  $q$  or  $r$  or . . . .” While such infinite disjunctions and conjunctions are unknowable by us, they are known to an omniscient deity, so that God has no need of blind truth ascriptions. Hence, He has no need of semantic ascent and, hence, no need of the truth-predicate.

So in answer to our question, “Propositional Truth—Who Needs it?” the answer is: certainly not God! Indeed, we don’t need propositional truth either. All we need to truly describe the world as it is is the truth-predicate, and that will not saddle us with platonistic commitments.

## Footnotes

### [1]

For an articulation of absolute creationism, a.k.a. theistic activism, see the seminal work by Thomas V. Morris and Christopher Menzel, "Absolute Creation," *American Philosophical Quarterly* 23 (1986): 353-362. Morris and Menzel did not clearly differentiate their absolute creationism from a non-platonistic form of realism which we may call divine conceptualism, which substitutes concrete mental events in the mind of God for a realm of abstract objects. For a defense of divine conceptualism with respect to propositions and possible worlds, see Greg Welty, "Theistic Conceptual Realism," in *Beyond the Control of God? Six Views on the Problem of God and Abstract Objects*, ed. Paul Gould, with articles, responses, and counter-responses by K. Yandell, R. Davis, P. Gould, G. Welty, Wm. L. Craig, S. Shalkowski, and G. Oppy (Bloomsbury, forthcoming). *N.B.* that even the divine conceptualist, though a realist, wants to rid his ontology of abstract objects.

### [2]

For a neutralist view of quantification see Jody Azzouni, "On 'On what There Is'," *Pacific Philosophical Quarterly* 79 (1998): 1-18; idem, *Deflating Existential Consequence: A Case for Nominalism* (Oxford: Oxford University Press, 2004). For a neutralist account of reference see Arvid Båve, "A Deflationary Theory of Reference," *Synthese* 169 (2009): 51-73.

### [3]

The reification of a "that" clause seems to me a prime example of an empty nominalization. See A. N. Prior, *Objects of Thought*, ed. P. T. Geach and A. J. P. Kenny (Oxford: Clarendon Press, 1971), pp. 16-30, who rejects "the whole game of 'nominalizing' what aren't really names of objects at all." Prior points out that when we say that John fears that so-and-so, we do not mean that John fears a proposition. Rather expressions like "\_\_\_\_ fears that \_\_\_\_" have the function of forming sentences from other expressions, the first of which is a name and the second of which is a sentence. They are, as Prior nicely puts it, predicates at one end and sentential connectives at the other. So an expression like "It is true that \_\_\_\_" is a sentential connective, not a property ascription to an object. Mackie notes the resemblance of Prior's solution to substitutional quantification, for whereas in Tarski's schema "*p* is true iff *p*", the first occurrence of *p* is in the object language and the second in the metalanguage, for Prior in "It is true that *p* iff *p*" both occurrences are in the object language (J. L. Mackie, *Truth, Probability, and Paradox*, Clarendon Library of Logic and Philosophy [Oxford: Oxford University Press, 1973], pp. 58-61; cf. William P. Alston, *A Realist Conception of Truth* [Ithaca, N. Y.: Cornell University Press, 1996], pp. 28-9). For a Prior-esque take on truth ascriptions to "what is said" see C. J. F. Williams, *What Is Truth?* (Cambridge: Cambridge University Press, 1976), pp. 32-60.



[4]

Jody Azzouni, "Deflationist Truth," in *Handbook on Truth*, ed. Michael Glanzberg, (Oxford: Wiley-Blackwell, forthcoming), sec. VI.

[5]

For a particularly clear statement of this assumption see Michael Devitt, *Realism and Truth*, 2d ed. (Oxford: Blackwell, 1991), p. 28:

"Consider a true sentence with a very simple structure: the predication 'a is F.' This sentence is true in virtue of the fact that there exists an object which 'a' designates and which is among the objects 'F' applies to. So this sentence is true because it has a predicational structure containing words standing in certain referential relations to parts of reality and because of the way that reality is. Provided that the reality is objective and mind-independent, then the sentence is *correspondence*-true: its truth has all the features that we have just abstracted from classical discussions."

*Cf.* Michael Devitt, *Designation* (New York: Columbia University Press, 1981), p. 7; Michael Devitt and Kim Stanley, *Language and Reality: An Introduction to the Philosophy of Language* (Oxford: Basil Blackwell, 1987), pp. 17-18; *Routledge Encyclopedia of Philosophy*, s.v. "Reference," by Michael Devitt. According to Devitt, a sentence *x* has correspondence truth iff sentences of type *x* are true in virtue of (i) their structure, (ii) the referential relations between their parts and reality; and (iii) the objective and mind-independent nature of that reality. Remarkably, Devitt seems to think that that some sentences, e.g., ethical statements, are true even though they do not have correspondence truth (idem, *Realism and Truth*, 2d ed. [Oxford: Blackwell, 1991], p. 29), which seems to trivialize the question of whether sentences with singular terms lacking corresponding real world objects have correspondence truth.

[6]

Searle takes the picture theory to be based on a misconstrual of a correspondence theory of truth, "a classic example of how we are misled by the surface grammar of words and sentences" (John R. Searle, *The Construction of Social Reality* [New York: Free Press, 1995], p. 214; *cf.* p. 205). John Heil observes that while most analytic philosophers would agree that the picture theory—the core idea of which is that the character of reality can be "read off" our (suitably regimented) linguistic representations of reality—is hopeless, it remains widely influential (John Heil, *From an Ontological Point of View* [Oxford: Clarendon Press, 2003]. pp. 5-6). Such thinkers have not digested the protest of J. L. Austin,

“There is no need whatsoever for the words used in making a true statement to ‘mirror’ in any way, however indirect, any feature whatsoever of the situation or event; a statement no more needs, in order to be true, to reproduce the ‘multiplicity,’ say, or the ‘structure’ or ‘form’ of the reality, than a word needs to be echoic or writing pictographic. To suppose that it does is to fall once again in to the error of reading back into the world the features of language” (J. L. Austin, “Truth,” in *Philosophical Papers* [Oxford: Oxford University Press, 1979], p. \*\*\*).

See also Heather Dyke, *Metaphysics and the Representational Fallacy*, Routledge Studies in Contemporary Philosophy (London: Routledge, 2008, p. 21).

## [7]

“A Nominalist Perspective on God and Abstract Objects,” *Philosophia Christi* 13 (2011): 305-18.

## [8]

Gottlob Frege maintained that only in the context of a sentence does a word refer to something. But I want to suggest that not even in the context of a (true) sentence must a word (or singular term) refer to something, *i.e.*, have a real world referent. This may not be all that different from Frege’s view, if a lightweight platonist like Michael Dummett is correct. For according to Dummett, Frege’s Context Principle required in effect merely that only in the context of a sentence do certain words become singular terms, so that “the substance of existential affirmation finally appears to dissolve altogether” (Michael Dummett, “Platonism,” in *Truth and Other Enigmas* [Cambridge, Mass.: Harvard University Press, 1978], p. 212; cf. *idem*, “Nominalism,” in *Truth and Other Enigmas*, pp. 38-41; *idem*, “Preface,” in *Truth and Other Enigmas*, pp. xlii-xliv). Dummett is right, I think, that the real issue is the truth of mathematical statements, not the referents of mathematical terms—not because truth conditions might be given to such statements without use of such terms, but because the truth of a sentence need not require that there be objects corresponding to all of a sentence’s singular terms. See further Bob Hale, “Realism and its Oppositions,” in *A Companion to the Philosophy of Language*, ed. Bob Hale and Crispin Wright, Blackwell Companions to Philosophy 10 (Oxford: Blackwell, 1997), pp. 271-308.

## [9]

Azzouni himself recognizes that “Some philosophers use the instances of the T-schema to argue that the truth-property is a correspondence property. There are many theories, however, about what truth-as-correspondence comes to” (Azzouni, “Deflationist Truth”). Some, he notes, construe the right hand side of the bi-conditionals to describe a fact or a state of affairs. These theories are, at least, examples of less wooden understandings of correspondence than the word-object construal. Later in the same piece Azzouni muses, “whether in fact all true statements do share some property such as a

correspondence property. . . turns on the kinds of considerations that an earlier tradition in philosophy presumed were involved: the nature of the relata (if any) of the terms of the statements described as true and false” (Ibid, sec. V). Simon Blackburn and Keith Simmons observe that nobody denies the platitude that a true proposition corresponds with the facts or tells it like it is; the issue is the kind of thing a fact, a proposition, or correspondence is (Simon Blackburn and Keith Simmons, “Introduction,” in *Truth*, ed. Simon Blackburn and Keith Simmons, Oxford Readings in Philosophy [Oxford: Oxford University Press, 1999], pp. 1, 7). R. C. S. Walker notes that while a correspondence theory can construe truth as a relation between a proposition and something in the world, there is no reason to say anything more than that a proposition is true iff things are as it says they are, which does not commit one even to an ontology of facts. Such an “unexciting” correspondence theory is quite consistent, he points out, with a redundancy theory of the truth predicate (Ralph C. S. Walker, “Theories of Truth,” in *Companion to the Philosophy of Language*, pp. 313, 321-3, 328).

#### [\[10\]](#)

See Theodore Sider, *Writing the Book of the World* (Oxford: Clarendon Press, 2011), pp. 170-2. Sider assumes “fundamental ontological assertions to be quantificational.” He recognizes that this is stipulative. “Ontological realism should not claim that ordinary quantifiers carve at the joints, or that disputes using ordinary quantifiers are substantive. All that’s important is that one can introduce a fundamental quantifier, which can then be used to pose substantive ontological questions.” When one does so, one is no longer speaking ordinary English, but “a new language—‘Ontologese’—whose quantifiers are *stipulated* to carve at the joints.” It should be noted that for Sider understanding “there is/are” to have a fundamental sense does not imply that the objects said to exist are themselves taken to be fundamental in the sense of irreducibility. It is merely to identify existence claims with quantificational claims. “On my conception, to accept an ontology of tables and chairs is not to say that tables and chairs are ‘fundamental entities’, but rather to say that there, in the fundamental sense of ‘there are’, tables and chairs.” Such a view would allow that non-fundamental entities also really exist.

#### [\[11\]](#)

Rudolf Carnap, “*Meaning and Necessity: A Study in Semantics and Modal Logic* (Chicago: University of Chicago Press, 1956), p. 206.

#### [\[12\]](#)

Ibid., pp. 208, 214.

#### [\[13\]](#)

See Scott Soames, "Ontology, Analyticity, and Meaning: the Quine-Carnap Dispute," in *Metametaphysics: New Essays on the Foundations of Ontology*, ed. David Chalmers, David Manley, and Ryan Wasserman (Oxford: Clarendon, 2009), p. 428.

[\[14\]](#)

Carnap, "*Meaning and Necessity*," p. 215.

[\[15\]](#)

See, e.g., Thomas Hofweber, "Ontology and Objectivity," (Ph.D. dissertation, Stanford University, 1999), §§1.4-5; 2.3.1; Stephen Yablo, "Does Ontology Rest on a Mistake?" *Proceedings of the Aristotelian Society* 72 (1998): 229-61; Arvid Båve, *Deflationism: A Use-Theoretic Analysis of the Truth-Predicate*, Stockholm Studies in Philosophy 29 (Stockholm: Stockholm University, 2006), pp. 153-4.

[\[16\]](#)

*Stanford Encyclopedia of Philosophy*, s.v. "Platonism in the Philosophy of Mathematics" by Øystein Linnebo, (July 18, 2009), §1.4. <http://plato.stanford.edu/entries/platonism-mathematics/>.

[\[17\]](#)

See Geoffrey Hellman, *Mathematics without Numbers* (Oxford: Clarendon Press, 1989). For an entertaining narrative of Hellman's progress toward his modal structuralism see idem, "Infinite Possibilities and Possibility of Infinity," in *The Philosophy of Hilary Putnam*, ed. R. Auxier (La Salle, Ill.: Open Court, forthcoming), pp. 1-5.

[\[18\]](#)

See, e.g., Mark Balaguer, *Platonism and Anti-Platonism in Mathematics* (New York: Oxford University Press, 1998); *Stanford Encyclopedia of Philosophy*, s.v. "Fictionalism in the Philosophy of Mathematics," by Mark Balaguer, April 22, 2008, <https://plato.stanford.edu/entries/fictionalism/>). Strictly speaking, Balaguer is not himself a fictionalist because he thinks that the case for fictionalism and the case for platonism are of comparable weight.

[\[19\]](#)

Defended in Båve, *Deflationism*. Båve has recently broached a non-nominalistic deflationary theory of truth involving the traditional schema

(Q) (Pp)((p)is true iff p),

where “P” is a propositional quantifier and instances of  $\langle p \rangle$  are that-clauses referring to propositions (Arvid Båve, “Formulating Deflationism,” *Synthese* [forthcoming]). Since instances of (Q) have singular terms referring to propositions, Båve takes it that the theory commits us to the reality of propositions. But see note 22 below. Båve rejects his earlier metalinguistic theory because (D) does not permit us to infer instances of Tarski’s T-schema for truth (nor was it intended to). Whether that is a serious shortcoming depends on one’s desiderata for a truth-theory. The nominalist rests content with a theory for use of the truth-predicate.

[\[20\]](#)

Båve, *Deflationism*, p. 128.

[\[21\]](#)

Ibid., pp. 150-2.

[\[22\]](#)

It is ironic that Båve himself later articulated a Deflationary Theory of Reference which undercuts the rationale for (NC). See Arvid Båve, “A Deflationary Theory of Reference,” *Synthese* 169 (2009): 51-73.

[\[23\]](#)

Båve, *Deflationism*, pp. 158-80.