Jody Azzouni
Tufts University
jodyazzouni@mindspring.com
Forthcoming in Michael Glanzberg (ed.) *Oxford Handbook on Truth*, Oxford University Press

Entry: *Deflationist Truth*[1]

1.

Consider the following statements:

(QUOTE PLUS)	"2 + 2 = 4," is true.
(PLUS)	That 2 + 2 = 4 is true.[2]
(QUOTE ALBERT EINSTEIN)	"Albert Einstein was born in New Jersey," is false.
(ALBERT EINSTEIN)	That Albert Einstein was born in New Jersey is false.

The grammatical form of such statements makes it natural to think that "true" and "false" are properties of sentences—or something like sentences (propositions, thoughts, etc., see, e.g., Künne 2003, chapter 5). "Something like sentences," both because there can be debates about the references of the items "is true" and "is false" are appended to, and because locutions like

[1] My thanks to Bradley Armour-Garb, Michael Glanzberg and Douglas Patterson for help on earlier versions of this. My thanks to Dan Greco for pointing out that one of my rasher claims needed moderation (oral communication on November 30, 2012)
[2] This can read awkwardly. It's entirely natural-sounding, however, if one stresses "that," and pauses ever so slightly after "4" before stressing (slightly) "is true."

The proposition that Albert Einstein was born in New Jersey is false,

seem to expressly attribute truth and falsity to "propositions."

I'll continue to use the neutral term, "statement," leaving aside the question of what, exactly, the "vehicles" of truth and falsity are. We can still ask: What kind of properties are truth and falsity? Consider the following

(QUOTE TRUISM)	"Snow is white," is true if and only if snow is white.
(TRUISM)	That snow is white is true if and only if snow is white.

These are two versions of only one of the many instances of the "T-schema" in English. Each such instance is generated by substituting some other English sentence for "snow is white" everywhere in QUOTE TRUISM and everywhere in TRUISM. Thus,

(QUOTE WOLVES)	"Wolves are smart," is true if and only if wolves are smart.
(WOLVES)	That wolves are smart is true if and only if wolves are smart.

In the rest of this article, I'll largely focus on the nonquote-versions of the T-schema rather than on the quote-versions. The motivation for this apparently notational choice will emerge shortly.[3]

[3] See footnote 8.

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. Some think that property can be read off from the instances of the T-schema. TRUISM, for example, indicates an identification of the truth-property attributed to the *relata* of "that snow is white," on the left, and the fact expressed by "snow is white," on the right. Some philosophers introduce a "state of affairs" as the right-hand *relata* of "snow is white," or an (ordered) collection of objects and properties as that right-hand *relata*.

Other answers to the question of what property truth is are found in the tradition: e.g., "coherence" and "utility." Given the aims of this article, we won't probe these answers further.[4] What's important is the *kind* of answers these are. True statements are taken to share some property **P** that can be characterized independently of the concept of truth. A description of **P**, therefore, provides necessary and sufficient conditions on a statement being true—necessary and sufficient conditions that don't (even implicitly) involve the concept of truth. I describe such a description of **P** as a substantivalist theory of *truths*. Notice that substantivalist theories of truths are global ones about all truths (e.g., that all truths correspond to facts, Russell 1912). Opposed to these are pluralistic theories of truths—ones that divides the sets of truths into different groups of discourse where the truths in any one such group share a truth property that's different from the truth properties shared by truths in other groups of discourse (see, e.g., Lynch 2004). Finally, there is the deflationist theory of truths. This denies that there can be any useful categorizations of truths in terms of shared substantial truth properties. These different theories of truths will be discussed in section 4. In the meantime, I take up other strands in the *deflationist tradition* in

[4] Although see section 4, especially footnote 21.

order to (eventually) show how they are connected to issues about truth properties and about substantivalist and deflationist theories of truths.

Let's return to the evidence from ordinary usage that started this line of thought about truth-properties. The deflationist tradition draws strikingly different conclusions from that evidence. Consider PLUS again.

(PLUS) That $2 + 2 = 4$ is true.

Many philosophers over the course of the last century have noted that speakers don't have to utter PLUS; they can utter the truncated and more convenient

$$2 + 2 = 4,$$

instead. With other assumptions, this seems to yield (e.g., Frege 1918, Ramsey 1927):

(REDUNDANCY) The statement that a statement S is true comes to nothing more than S itself.

REDUNDANCY is open to a number of interpretations that I'll eventually coalesce into two distinct positions. To begin with, the following claims have been made by one or another deflationistically-inclined philosopher. (1) The instances of the T-schema constitute the full meaning of "true"—together they provide everything needed to understand "true"; (2) a sincere normal assertion of a statement undertakes a commitment to the truth of that statement (and *vice* *versa*); (3) to say that a statement is true is to say no more than the statement itself; (4) "true" is a redundant locution the content of which is fully contained within our utterance-practices (and their norms) with respect to statements in which "true" doesn't appear.

These glosses on REDUNDANCY differ in degrees of philosophical *rashness*. (4)—and (3) for that matter—it may be claimed, are refuted by

(BLIND1) Everything Aristotle wrote about lobsters is false.

(BLIND2) Some of what Claire said yesterday is true.

The instances of the T-schema, prima facie, can't be used to eliminate the uses of "true" and "false" from BLIND1 and BLIND2, and so "true" and "false," prima facie, can't be described as "redundant locutions." No more does it seem that in saying either BLIND1 or BLIND2 is one actually *saying* the statements or negations of such (or conjunctions/disjunctions of which) that Aristotle wrote about lobsters, or that Claire said yesterday. Such interpretations of BLIND1 and BLIND2 seem to misconstrue the evident meanings of these statements. Rather, these locutions—*blind truth and falsity ascriptions*[5]—respectively say exactly what they appear to say, that each statement from among the statements described as what "Aristotle wrote about lobsters" is false, and that at least one statement from among the statements described as "what Claire said yesterday" is true.

[5] For many years I've used "blind" to describe such locutions. Some philosophers now describe them as "opaque," as in "opaque truth ascriptions." I chose "blind" instead of "opaque" to deliberately avoid terminological conflict with the already widely used "opaque" in philosophy of language—e.g., as a characterization of belief contexts.

2.

Those philosophers intent on a deflationist reading of BLIND1 and BLIND2 aren't without resources for a response. It's been noticed that uses of "true" and "false," when appended to quantifiers (ranging over statements) that are coupled to descriptions of such statements, can be captured by a formalism that allows infinitely long statements (e.g., Quine 1970, Leeds 1978, Putnam 1978, Field 2001). Let[6] S_1, S_2, S_3, …, S_n, …, be a list of (all) statements, and suppose we presume a canonical list of sentences of English: s_1, s_2, s_3, …, s_n, …, such that for $i = 1, 2, \ldots, n, \ldots$, each S_i is expressed by s_i.[7] Instead of,

(BLIND1) Everything Aristotle wrote about lobsters is false,

one now says (but only in the fullness of time),

[6] My use of the variables: S_1, S_2, S_3, ..., etc., s_1, s_2, s_3, …, etc., introduced to respectively stand for statements and sentences, implicitly operates like so: A quote mark followed by such a letter followed by another quote mark: —"S_1"—, isn't a name of the subscripted capitalized nineteenth letter of the alphabet, but a name of the statement that this item stands for. So too: —"(S_1 & S_2)"—, is the name of the item: left parenthesis concatenated with the statement the capitalized nineteenth letter subscripted with the numeral "1" stands for concatenated with the ampersand concatenated with the statement the capitalized nineteenth letter subscripted with the numeral "2" stands for concatenated with the right parenthesis. Similar remarks hold of the variables "*A*," "*B*," etc., in section 3, that are to stand in general for statements. I use quote marks to conventionally and informally indicate the presence of semantic ascent; see the discussion of semantic ascent and descent that follows.

[7] This is a major assumption, and it may be ultimately unsustainable—no matter how it is tinkered with. (I actually think it *is* unsustainable. This is one motivation I have for preferring the to-be-described "semantic-descent" deflationism to the currently-under-discussion "T-schema deflationism.") There are issues with context-dependent and singular sentences; there are issues about whether it can be presumed that there are available sentences in the speaker's language that capture through translation the meanings of sentences in other languages; finally, there are issues about how this approach, or any in its neighborhood, can handle the family of "self-referential" statements. I won't discuss this constellation of interconnected challenges now. See Azzouni 2001, 2006 for some discussion of them.

(T-INFINITE1) (If Aristotle wrote about lobsters that s_1, then it is false that s_1) & (if Aristotle wrote about lobsters that s_2, then it is false that s_2) … & ….

Applying an appropriate instance of the T-schema to each clause of T-INFINITE1 gives us (in the fullness of time),

(INFINITE1) (If Aristotle wrote about lobsters that s_1, then $\neg s_1$) & (if Aristotle wrote about lobsters that s_2, then $\neg s_2$) … & ….[8]

Instead of BLIND2, we can similarly write using a corresponding T-INFINITE2,

(INFINITE2) (Claire said that s_1 yesterday & s_1) or (Claire said that s_2 yesterday & s_2) … or ….

INFINITE1 and INFINITE2 can, in turn, be captured by *finitely-long* locutions via the substitutional quantifiers (x), $(\exists x)$, where the substituents are the statements of English. Then we have

(SUBST1) (x)(If Aristotle wrote that x about lobsters, then $\neg x$),

[8] As with PLUS this may seem to read unnaturally. Imagine it this way: "If Aristotle wrote that lobsters are red about lobsters then it is not the case that lobsters are red; and if …." Notice that if we approached BLIND1 via the quote-version of the T-schema, we would have to formulate INFINITE1 in the form: "If Aristotle wrote about lobsters 's_1', then $\neg s_1$) & …," which wrongly attributes the writing of English sentences to Aristotle.

(SUBST2) $(\exists x)$(Claire said that x yesterday & x).

If we systematically replace blind truth and falsity ascriptions with statements like INFINITE1 and INFINITE2, or with statements like SUBST1 and SUBST2, it seems we have shown that "true" and "false" are redundant. Any natural language could have dispensed with such idioms if the language had allowed infinitely-long conjunctions (and disjunctions) or substitutional quantifiers with natural-language sentences as substituents. We can also take the foregoing as an explanation of (i) given that an understanding of "true" amounts to the instances of the T-schema and (ii) given that an understanding of the quantifiers amounts to infinite disjunctions and conjunctions, how it is we can understand blind truth (and falsity) ascriptions.

It may be justly complained that if English *doesn't* allow infinitely-long disjunctions and conjunctions and if it *doesn't* allow substitutional quantifiers, then it can hardly be claimed that "true" and "false" are redundant. Maybe so, but deflationists can retort that it's been made clear by SUBST1, SUBST2, INFINITE1, and INFINITE2, that the concepts involved in blind truth and falsity ascriptions don't—strictly speaking—go beyond the instances of the T-schema when some method of handling reference to indeterminate *numbers* of statements is supplied. A careful statement of the deflationist claim should replace a rash description of the eliminability of "true" and "false" with a more nuanced characterization of the slender conceptual resources needed for the successful understanding of the natural-language role of "true" and "false."

It's appropriate to distinguish between *two* possible deflationist views: *T-schema deflationism* and *semantic-descent deflationism*. The T-schema deflationist claims that

(TRUISM) That snow is white is true if and only if snow is white, and its T-schema brethren (generated by substituting each s_i from the canonical list of sentences for "Snow is white" in TRUISM) constitute partial definitions of "is true" *in the strict sense* that we understand *each use* of "true" in sentences of the form

(PLUS) That 2 + 2 = 4 is true,

(ALBERT EINSTEIN) That Albert Einstein was born in New Jersey is false,

only because we have an appropriate instance of the T-schema that (coupled with negation in the second case) we can use to eliminate "is true" (or "is false"). We understand "That 2 + 2 = 4 is true" *to mean* "2 + 2 = 4." We understand "That Albert Einstein was born in New Jersey is false" *to mean* "It is not the case that Albert Einstein was born in New Jersey." We, therefore, understand

(BLIND1) Everything Aristotle wrote about lobsters is false,

(BLIND2) Some of what Claire said yesterday is true,

only because we recognize that they are (respectively) abbreviations of T-INFINITE1 and T-INFINITE2, and therefore we recognize the uses of "is true" in BLIND1 and BLIND2 to be uses to which instances of the T-schema apply—despite the contrary appearances induced by the abbreviations. Alternatively, we understand BLIND1 and BLIND2 because the truth conditions for these statements are given in terms of substitutions from the canonical sentences of English, and we understand what such substitutions entail only because of our understanding of the instances of the T-schema. If, however, BLIND1 and BLIND2 are taken to be ordinary quantifiers, quantifiers like

Everything Aristotle did to lobsters was extremely cruel,

Some of what Claire ate yesterday made her ill,

then the T-schema deflationist *can't explain* how anyone is to understand BLIND1 and BLIND2. His way of doing so *requires* reconstruing the quantifiers used with the word "true" either as abbreviations of the form T-INFINITE1 and T-INFINITE2, or as substitutional quantifiers with the canonical list of English sentences as substituents.

Many T-schema deflationists claim that "true" is a device of generalization (e.g., Horwich 1998). It cannot be so construed, even given the assumptions of such deflationists: On their view, it's a word elucidated on a case-by-case basis (via each instance of the T-schema) by an identification of the statement expressed by the sentence—when sandwiched between "that" on the one side, and "is true" on the other—with the statement expressed by that sentence. Hardly a device of generalization! But perhaps that T-schema deflationism requires the reconstruction of the quantifiers occurring in blind truth and falsity ascriptions invites the "device of generalization" mischaracterization of the word "true."[9]

[9] Another explanation for this misconstrual of "true" may be that if one has certain generalizing devices—e.g., resources for stating infinite disjunctions and conjunctions—then "true" isn't needed: one can handle blind truth ascriptions directly, as INFINITE1 and INFINITE2 do. One

It should be noted that what's required of T-schema deflationism is that *all* the generalized quantifiers are required to be reconstrued in infinitary fashion. Consider:

(MOST) Most of what Claire said yesterday is true.

This can be managed with an infinitary statement, that is, a disjunction of the form:

(Claire said yesterday that s_1 & said s_2 & said s_3 & s_1 & s_2) or (Claire said yesterday that s_1 & said s_2 & said s_3 & s_1 & s_3) or …

coupled with an infinite conjunction of the form:

¬(Claire said yesterday that s_1 & $\neg s_1$ & Claire said yesterday that s_1 and said s_2 & $\neg s_1$ …).

Similar maneuvers are needed for other quantifier expressions such as , "Exactly three," "Four times as many," "Roughly half," and so on.[10]

can then see the reintroduction of "true" (in BLIND1 and BLIND2) as the introduction of an abbreviation-device for these disjunctions and conjunctions (see, e.g., Field 2001). But this too misreads what "true" is doing in BLIND1 and BLIND2: it's the *quantifiers* in those statements that have the generalization role while the defined "true" functions purely in a semantic descent role.

[10] My thanks to Dan Greco for pointing out the disjunction strategy for "most." Although he didn't mention the needed closure conjunction clause, I assume it's part of his strategy. Notice, though, that if we say "Most of what God said yesterday is true," and we allow God the capacity to utter infinitely many statements in a day, the cardinality of the disjuncts (and conjuncts) goes unpleasantly continuum-many. One advantage of *quantifiers* is their ability to represent cases without having to explicitly code cardinality beyond how it arises explicitly in the quantifiers themselves.

The semantic-descent deflationist, by contrast, urges a deflationism that doesn't require melding the understanding of the truth idiom in blind truth ascriptions case-by-case to instances of the T-schema and the evaporation of all the quantifiers into infinite statements of various sorts. She, correspondingly, denies that the instances of the T-schema are partial definitions of "true." She takes "true" to be a device of semantic descent: it correlates statements with nominalizations—descriptions or names—*of* those statements, so that statements containing the latter descriptions or names *can stand stead for the statements themselves*. This, she notes, is *stated* by the instances of the quote-T-schema *only with* respect to quote names, and with the T-schema *only with* respect to nominalizations of the form: that *s*. That the same is true of other names of such statements or of descriptions of (collections of) statements is because of co-referring substitution conventions for names, and because of similar conventions for descriptions. The instances of the T-schema, therefore, indicate how "true" functions as a device of semantic descent for a certain class of statements: they fix the statements that "that"-phrases (and quote-names) appended with "is true" are to stand stead *for*.

Apart from denying that instances of the T-schema are abbreviatory partial definitions of "true," but instead *illustrate* "true" as a device of semantic descent, the semantic-descent deflationist is also official that devices of generalization are *quantifiers* (although infinite sentences can sometimes do the same job). Some devices of generalization obviate the need for a device of semantic descent—a truth predicate. This is true if a language has the resources to state INFINITE1 and INFINITE2, or SUBST1 and SUBST2. Semantic descent is explicitly handled by INFINITE1 and INFINITE2 via the canonical *list*—in conjunctions and disjunctions—of those statements mentioned and then used; semantic descent is handled by SUBST1 and SUBST2 by substitutional quantification within and without "that"-phrases. Even better ways of incorporating semantic descent into devices of quantification are possible—by allowing quantifiers to govern variables occurring *simultaneously* in sentential, and in singular term, positions.[11]

If a device of generalization itself handles semantic descent, then “true” and “false” aren’t needed. “True” and “false” are essential to natural languages at least because natural-language quantification over statements does *not* involve quantification devices that themselves handle semantic descent: quantification in natural languages is coupled with descriptions that mention such statements, but don’t use them. The truth predicate in natural languages, therefore, is a *predicate*—a genuine predicate—that enables us to describe these statements in a way that can stand stead for (in the sense indicated by the instances of the T-schema) using them.

Most truth deflationists—and importantly, most critics of truth deflationism—claim that truth deflationism *requires* of the quantification devices, used to replace the combination in natural languages of the truth predicate and ordinary quantifiers, that they must be devices of infinite disjunction and conjunction, or must be abbreviations for such. This misapprehension is based on those philosophers either overlooking the possibility of semantic-descent deflationism, or failing to distinguish it clearly from T-schema deflationism (e.g., as in many of the articles in Blackburn and Simons 1999 or Schantz 2001).

One reason to prefer semantic-descent deflationism over T-schema deflationism is that it’s the *truth predicate* that’s the target of the philosophical analysis engaged in by truth deflationists (generally), and not the accompanying quantifier that ranges—however it does so—over statements. It’s a serious liability of *any* position to require an *ad hoc* reconstrual of the

[11] See the discussion of anaphorically unrestricted quantifiers in Azzouni 2001, 2006. One reason anaphorically unrestricted quantifiers are better than substitutional quantifiers is that they dispense with the need for a canonical list of sentences to function as substituents. Recall footnote 7.

quantifiers that occur in blind truth and falsity ascriptions. For—at least as far as ordinary languages are concerned—such quantifiers appear to be exactly the same ones that appear elsewhere in English, and to be ones that belong to a more general family of quantifiers that are similar in their semantics. This places a heavy empirical demand on the T-schema deflationist.

A related obstacle facing T-schema deflationism is that such a view describes the instances of the T-schema as indicating their left sides simply amount to their right sides. But this obscures the evident resemblance between LEFT TRUISM

(LEFT TRUISM) That snow is white is true,

and

(HARD) That snow is white is hard to believe.

HARD and LEFT TRUISM are about the same item, although they make different claims about it. “Snow is white,” on the other hand, doesn’t talk about that item at all.

It’s natural to ask: Are there philosophical advantages to T-schema deflationism that the semantic-descent deflationist is giving up? One apparent advantage is that T-schema deflationism tells a particularly simple story about the understanding of “true.” One’s understanding stems solely from the instances of the T-schema. The semantic-descent deflationist instead reads our understanding of the truth predicate directly from its semantic descent role. She notes that Tarski’s definition of truth, for example, directly utilizes descriptions of the sentences of a language to axiomatize (or, in some cases, to define) the needed descent device. The T-schema instances then emerge naturally as *corollaries* on Tarski's approach. In cases where the generalizing devices themselves are such that a truth predicate can be defined from them,[12] an understanding of the truth predicate follows from an antecedent understanding of those generalizing devices. Correlatively, recognition of the truth of the instances of the T-schema follows from an antecedent understanding of these generalizing devices rather than that understanding of such generalizing devices (as they are used in blind truth ascriptions) following from an understanding of the instances of the T-schema.[13]

Some truth deflationists—and many critics of truth deflationism—claim that the deflationist view of truth is (must be) that "true" is a "device of endorsement": we have such a term because of a need to endorse propositions indirectly. Although "true" is often *used* to indirectly endorse other statements, it's no more (and no less) a "device" of endorsement than *any* statement is a "device" of endorsement for its own content. Characterizing a truth predicate as a device of endorsement is failing to recognize that the way a piece of language is often—or even typically—*used* needn't be what it *is*. (That "true" and "false" are devices *for* blind truth and falsity ascriptions doesn't make them devices *of* blind truth and falsity ascription.) Were a

[12] For example, if a substitutional quantifier, as above, is available, one can axiomatize a truth predicate like so: (x)(True*thatx* iff x), where "*thatx*" is a nominal expression bound by the quantifier. A definition of the truth predicate, therefore, is easily within reach.

[13] T-schema deflationism gives a "bottom-up" characterization of the understanding of truth: one starts with a grasp of the instances of the T-schema and tries to inflate that into a full understanding of the role of the truth predicate in every sentential context. Semantic-descent deflationism employs a "top-down" characterization of understanding truth: one starts with a semantic descent grasp of truth *in tandem* with one's grasp of one or another generalizing device, and one's grasp of the instances of the T-schema follows as a corollary.

This point is worth adding: Quantifiers and logical connectives can't *all* be defined. Some set or another of them must be taken as primitive. Their being taken as primitive is manifested by a characterization of one's understanding of them in formulations that utilize them (e.g., in truth-conditional meta-language statements). This is the case with "true" as well. It may be taken either as a primitive notion (and therefore to be axiomatized), or it may be defined from other notions—quantifiers of some sort.

truth predicate *just* a device of endorsement, it would be impossible to use “true” in pretence, as when an actor says: “It’s true that there are unicorns.” By saying this, the actor *would* endorse the claim that there are unicorns. So too, it would be impossible to use the statement

(PLUS) That $2 + 2 = 4$ is true,

as an *example* (as I’ve just done). For in doing so, the statement “$2 + 2 = 4$” would be *automatically* endorsed, and would thus fail to be a *mere* example.

The judicious deflationist claim (again) should be this: “true” and “false” function as devices of semantic descent. When coupled with quantifiers and descriptions, they can, of course, be *used* to endorse (or repudiate) statements indirectly. The judicious deflationist could claim that the *reason* why “true” and “false” occur in natural languages is to enable the expression of blind truth and falsity ascriptions such as BLIND1 and BLIND2. But it’s a mistake to *add* that “true” and “false” *are* devices of blind truth and falsity ascription. They are not. Its their role as devices of semantic descent that enables them to be used (with other resources) to express blind truth and falsity ascriptions.

Call the foregoing description of the semantic descent role of “true,” and “false,” and how it can be extended to blind truth ascription, “the semantic-descent deflationist theory of truth.” It’s a theory of a piece of ordinary language—“true,” and of the other idioms that can stand in for “true” in ordinary language. So perhaps it’s better described as “the semantic-descent deflationist theory of ‘true’,” and I’ll do so from now on. This theory of “true” explains one thing that this particular piece of language is needed for, and what rules govern our understanding of this role it has. The resulting theory, therefore, can be quite weak. We know, for example, that the moon is not true; we also know, presumably, that the conjunction of two statements is true if and only if both conjuncts are true; the semantic-descent deflationist theory of “true” needn’t be strong enough to prove either. As far as *it* is concerned, these claims could be false. That’s not a problem. That “true” is a device of semantic descent, and even when that characterization of it is further coupled with the characterization of a quantifier, the result shouldn’t necessarily give us details about *truth vehicles* (about what the quantifiers in fact range over), or other details of the logic that both devices are used with (e.g., whether it’s classical, intuitionistic, or whatnot, *contra* Gupta 1993, Ketland 1999). All of this is to be supplied by supplementary theories that only in tandem with the characterization of “true” and the quantifiers may yield results such as that the conjunction of two statements is true if and only if both conjuncts are true (if that, in fact, *is* true), or similarly, that the moon isn’t true (if, in fact, the moon isn’t even a sentence). It’s *also* compatible with the claim that the natural-language idiom “true” has other roles—as in a “true” friend.

The semantic-descent deflationist theory of “true,” therefore, is—and should be—modest. In particular, perhaps only (2) of (1)-(4) from section 1 is acceptable to it: a sincere normal assertion of a statement undertakes a commitment to the truth of that statement (and *vice versa*).

3

As I stated at the end of section 2, the semantic-descent deflationist theory of “true” is modest. This makes natural the question: How does this theory bear on the original question raised in section 1? For concreteness, let’s pose it this way: Exactly how does the fact that “true” and “false,” as utilized in blind truth and falsity ascriptions, can be replaced *tout court* with substitutional quantifiers or with infinite conjunctions and disjunctions bear on our original question about what properties, if any, “true” characterizes statements as possessing? The answer is: In no way at all. That “true” and “false” can be replaced in their role by generalizing devices that themselves can handle the semantic descent undertaken by “true” and “false” in ordinary language doesn’t mean that a predicate “true” can’t be defined from those generalizing devices, as I indicated in footnote 12. And once such a predicate is available, one can ask (i) whether all and only the statements that fall under that predicate “have something in common”; (ii) whether that something in common can be characterized in some way that’s independent of the use of the word “true,” that’s independent, for that matter, of the generalizing device that “true” is defined in terms of. It should be obvious that an answer to this question isn’t by itself dictated by the deflationist theory of “true.” Notice this point holds of either version of the deflationist theory of “true”: T-schema deflationism or semantic-descent deflationism.

Some philosophers, however, have raised the following worry. There are two ways, they claim, that a concept (and the idioms used to express that concept) can occur in statements. The first is for it to play a purely “expressive” role: It’s employed *only* because it’s needed to express something the expression of which without it is otherwise too awkward or time-consuming. For example, according to T-schema deflationism,

(BLIND2) Some of what Claire said yesterday is true,

expresses the infinitely long

(INFINITE2) (Claire said yesterday that s_1 & s_1) or (Claire said yesterday that s_2 & s_2) … or ….

Other uses of an idiom, however, aren't expressive, but instead are "substantive": they *really involve* the attribution of a truth-property to a class of statements.

How does one tell when the use of an idiom in a statement—"true" for example—is expressive (as opposed to substantive)? No "bright yellow line" is offered by philosophers who raise this issue. Rather, a number of examples are given where "true" is described as playing an "explanatory role." It's this "explanatory role" that indicates that "true" involves the attribution of a genuine "truth-property" to a statement or to several of such. Here are some examples where "true," it may be suggested, is playing an explanatory role that requires it be read in a property-attributing fashion:

(CONJUNCTION) For all statements, "*A*" and "*B*," "(*A* & *B*)" is true if and only if "*A*" is true and "*B*" is true.[14]

(CONSEQUENCE) All the consequences of true statements are true.

(BELIEF) We should strive to make our beliefs true.

(SUCCESS) The success of a true scientific theory can only be explained by its truth.[15]

---

[14] I'm adopting the quote-mark approach rather than the use of "that"-clauses for this characterization of conjunction for reasons of familiarity and naturalness. Nothing essential to the points to be made is affected. Recall the conventions described in footnote 6.

[15] A related example is this: It's because John knew that S was true that John was able to avoid trouble with P. When it comes to scientific theories, more qualified statements are usually offered, e.g., "The success of a scientific theory can only be explained by its approximate truth." "Approximate truth" brings up a *number* of complications that deserve a paper of their own; I

If a philosopher denies that the ascription of "true" to a statement is ever used to attribute a genuine property to that statement, call him a *truth-ascription deflationist*. His opponent is a *truth-ascription substantivalist*: she claims that there are truth-ascriptions to statements that do attribute (one or another) truth-property to those statements. One last kind of truth deflationism should be distinguished. This is the earlier mentioned deflationist theory of *truths*. The proponent of the deflationist theory of truths claims that—regardless of whether or not we sometimes utilize truth-ascriptions as the truth-ascription substantivalist claims we do—there is (nevertheless) no genuine property that all truths (or even interesting subcollections of truths, e.g., the truths of empirical science or moral discourse or mathematics, etc.) have in common. These various kinds of deflationism importantly differ in their implications, and should not be confused with one another. In the rest of this section, I explore truth-ascription deflationism and truth-ascription substantivalism. Then, in section 4, I turn to deflationist and substantivalist theories of truths.

Notice, to begin with, the independence of the success of either T-schema deflationism or semantic-descent deflationism from the question of whether these other deflationist theories are true or not. Because CONJUNCTION, CONSEQUENCE, BELIEF, and SUCCESS are blind truth ascriptions, they can be recast (utilizing, for example, substitutional quantifiers) without the truth predicate. CONJUNCTION, CONSEQUENCE, and BELIEF take the follow forms[16]:

(CONJ) $(x)(y)(x \,\&\, y$ if and only if x and $y)$,

can't undertake a discussion of it now.

[16] I take up SUCCESS in section 4.

(CONS) $(x)(y)$(If "y" is a consequence of "x," then, if x then y).[17]

(BEL) We should strive for: (x)(Believe*thatx* then x).

Although CONJUNCTION, CONSEQUENCE and BELIEF being recastable as CONJ, CONS and BEL doesn't all by itself show that the truth-ascription deflationist is right, he can still try to use these latter formulations to show that "true" doesn't have (in these statements or in the originals) the explanatory role that the truth-ascription substantivalist thinks it has. He can try to show, that is, that the truth of CONJ, CONS and BEL don't turn on there being a substantial property (of any sort) that true sentences have. That is, he can try to show truth-ascription deflationism by showing that whether CONJ, CONS and BEL are true or not doesn't turn on whether the deflationist theory of truths is itself correct or not.

To illustrate how the debate between the truth-ascription deflationist and the truth-ascription substantivalist can go, consider

(JOHN) Everything John said is true.

Here, the truth-ascription deflationist can argue, "true" is only being used to indicate an endorsement of what John said: that is, the focus of JOHN is on endorsing the statements said by John. And so this use of "is true" fits truth-ascription deflationism. But contrast this example with CONJUNCTION, the truth-ascription substantivalist may retort. In CONJUNCTION "true"

[17] For the sake of naturalness, as with CONJUNCTION, I'm utilizing a quotation-style nominalization rather than a "that"-clause nominalization. In either case, the substitutional quantifier must bind a variable appearing within the nominalization.

is instead playing a “constitutive role” in the characterization of the logical connective “&.” It isn’t a matter, that is, of “true” being used to point to a collection of statements that are being endorsed. Instead, CONJUNCTION explains how the ampersand operates on the truth values of the statements that flank it: it yields the value true if and only if each statement is itself true.

The objection to truth-ascription deflationism is, perhaps, even more threatening in the case of BELIEF. Our understanding of belief (many argue) crucially involves its being governed by the *norm* of truth. We strive to make our beliefs *true*. That’s why it’s incoherent to say sincerely: I believe *p*; but *p* isn’t true. It’s hard, so the truth-ascription substantivalist says, to see how the truth-ascription deflationist view of “true” can capture the role of truth as a norm: How is truth as a norm of belief supposed to come to *nothing more* than its semantic-descent role—its allowing the endorsement of collections of statements? And if it does indicate the special endorsement of *some* collection of statements—“the true ones”—it seems that an extremely important property is being attributed to this particular collection, a property that the truth-ascription deflationist hasn’t taken account of because it’s a property (had by only the true statements) that grounds the truth of BELIEF.

Contrast the role of the true statements in BELIEF with the role of “true” in JOHN as the truth-ascription deflationist describes it. When a speaker assents to

(JOHN) Everything John said is true,

her use of “true” helps provide an endorsement of those statements said by John. But these don’t have to be *true* statements. It’s simply that the statements John said are endorsed by the speaker of JOHN. The statements indicated by BELIEF, however, have to be taken to be *true* statements.

Furthermore, these true statements seem to have an important property: one that will explain the reason we should strive to make our beliefs true. But how can the truth-ascription deflationist allow such a property to be relevant to the truth of BELIEF?

The truth-ascription substantivalist has argued that it's not possible to *interpret* CONJUNCTION and BELIEF without understanding "true" as corresponding to a (substantial) property. But the truth-ascription deflationist can meet this challenge.

Consider again,

(CONJUNCTION) For all statements, "*A*" and "*B*," "(*A* & *B*)" is true if and only if "*A*" is true and "*B*" is true,

and its substitutional sibling:

(CONJ) (*x*)(*y*)(*x* & *y* if and only if *x* and *y*).

Semantic ascent, so obviously present in CONJUNCTION, is absent from CONJ, as indicated both by the vanishing of the "is true" locution, and by the vanishing of the quote marks. Nevertheless, everything crucial to CONJUNCTION recurs in its substitutional sibling: the interplay between the ampersand and the "and." In CONJUNCTION the ampersand is talked about, and the "and" is used, and in CONJ (true to the nature of substitutional quantification) both are now used. CONJ, as a result, has a decidedly trivial air that's somewhat—but only somewhat—missing from the original. Appearances of triviality lapse, however, when it's realized that both CONJUNCTION and CONJ (recursively) link two different classes of expressions: those with “&” and those otherwise identical but with “and” replacing “&.”

What this shows, the truth-ascription deflationist claims, is that “true” is *not* playing a constitutive role in the characterization of “&.” What’s playing that role (and all that’s playing that role) is “and.” “True” is needed (in CONJUNCTION but not in CONJ) only because a recursive characterization of “&,” when utilizing one kind of quantifier, needs a semantic descent device. But this is inessential to the recursive characterization of “&”—it’s an artifact of the choice of quantifier, as CONJ indicates. Therefore, it’s not mandatory to invoke truth-properties (truth “values”), that all statements have, to interpret what CONJUNCTION is telling us: CONJUNCTION is only recursively linking the assertability of &-statements to that of and-statements. This shows, contrary to the claims of many philosophers (e.g., Dummett 1959, Kalderon 1999, Collins 2002) that there is no *incompatibility* between deflationism and truth-conditional theories of meaning.

The truth-ascription deflationist has offered an interpretation of CONJUNCTION differing from the one offered by the truth-ascription substantivalist. If the burden of proof is on the substantivalist, then the truth-ascription deflationist has won. But what grounds do we have for claiming that the substantivalist has the burden of proof? And if she doesn’t, why doesn’t the debate over CONJUNCTION end in a draw? Why can’t, that is, the truth-ascription substantivalist (despite the cogency of a deflationist reading) continue to read CONJUNCTION (and CONJ) as many in fact continue to read them: as describing how the truth-properties of the conjuncts of a statement relate to the truth-properties of the statement itself?

Indeed, the truth-ascription substantivalist can so read

(JOHN) Everything John said is true.

It was claimed earlier by the truth-ascription deflationist that when a speaker assents to JOHN her use of "true" provides an endorsement of those statements said by John. And it was claimed that in so endorsing them, they didn't have to be true statements. But this is a misdescription of the situation, so the truth-ascription substantivalist can claim, that the discussion of the "endorsement" view of truth at the end of section 2 already exposed. JOHN can be *used* to endorse everything John said not because *it* is an endorsement of everything John said but only because if everything John said is true then JOHN is true as well. And certainly such a link between JOHN and the statements it is about can be interpreted in accord with truth being a substantial property. If every statement that John said is indeed true (has the substantial truth-property) then so too is (has) JOHN. So there is a stalemate on JOHN as well.

Now consider BELIEF and BEL, here repeated.

(BELIEF) We should strive to make our beliefs true.

(BEL) We should strive for: (x)(Believe*thatx* then x).

How, the truth-ascription deflationist asks (rhetorically), does BEL go beyond truth-ascription deflationism? It's hard to see how it *could*. After all, what BEL is relying on is the intuition that statements like

I believe that snow is white; but snow isn't white, are inappropriate. But what makes such statements inappropriate needn't have anything particularly to do with whether or not truth is a property. The inappropriateness of such statements turns, instead, on a misfit between the assertion of a belief with a simultaneous denial of the content of that belief. Indeed, that "truth is a norm of belief" is *itself* a treacherous expression in English that involves a blind truth ascription namely: If someone believes *x*, then he should strive that *x* be true. But this *is* BEL. The conclusion is this: there *is* a norm governing belief. And, in English, we state that norm using "true," just as we state *all* blind truth ascriptions using "true." But the norm is an internal one about the consistency of assertions of beliefs and assertions of their content; it has nothing to do one way or the other with a presupposition that truth is a property.

The truth-ascription substantivalist can agree with this diagnosis of the norm governing belief (and so, she can agree that she has not shown, as she earlier suggested, that the norm governing belief requires a substantial property that truths share and that grounds that norm). She can still claim, however, that nothing in what the truth-ascription deflationist has said about BELIEF and BEL shows that truth *doesn't* correspond to a property.

Finally, let's turn to

(CONSEQUENCE) All the consequences of true statements are true,

and its substitutional sibling:

(CONS) $(x)(y)$(If "y" is a consequence of "x," then, if x then y).[18]

Perhaps this case can provide some traction, one way or the other, in the debate between truth-ascription deflationism and truth-ascription substantivalism.

Many philosophers describe deduction—when characterized syntactically, as involved with such and such rules—as "explained" by a semantic notion of validity that's based on the concept of truth. Thus, they will describe a rule, *modus ponens* say, as "truth-preserving," and mean this expression to single out *modus ponens* in a way that does *not* single out the syntactic rules of a nonclassical logic. Such philosophers suggest that they are saying something informative about the classical logical principles they accept when they describe them as "truth-preserving." Such philosophers may even claim that this is where the real difference between truth-ascription substantivalism and truth-ascription deflationism arises. The truth-ascription substantivalist is interpreting CONJUNCTION and CONSEQUENCE as offering explanations of conjunction and the consequence relation in terms of truth. The truth-ascription deflationist, by contrast, isn't really offering an explanation at all, but only a repetition of what needs explaining (conjunction, consequence) in other language.[19] In response, I want to claim that employing truth properties in this way in an explanation is only to offer a bogus explanation.

Consider a language with an *arbitrary* set of syntactic rules SY for deductions, apart from one constraint (to be mentioned in this paragraph). If *B* follows from *A* via SY, then the speakers of such a language license themselves as having the right to assert *B* given their right to assert *A*

[18] Again, for the sake of naturalness, I'm utilizing a quotation-style nominalization rather than a "that"-clause nominalization. In either case, the substitutional quantifier must bind a variable appearing within the nominalization.
[19] My thanks to Michael Glanzberg for posing the substantivalist objection in this particular form.

(I'll write this as: $A \vdash B$). Now also imagine that they have a notion of "true" for which True$A \vdash A$, and $A \vdash$ True$A$ hold. It follows immediately that if A SY B, and True$A$, then True$B$.

The point is this: Given *any* consequence relation (defined by an arbitrary set of syntactic rules), if, for any statement S, True$S$ is a consequence of S (and *vice versa*), then that consequence relation is "truth-preserving." Conclusion: Reading CONSEQUENCE as the truth-ascription substantivalist wishes no more singles out *modus ponens* (and explains it) then it does any *arbitrary* inference rule.

This refutation of the claim that substantivalist readings of CONSEQUENCE and CONJUNCTION in terms of truth properties provide better explanations than deflationist readings of them, however, leaves unaffected the possibility of nevertheless giving them a substantivalist reading. That is, the truth-ascription substantivalist can agree that considerations of truth-transmission (validity) don't force the choice of any particular logic. Granting that, however, and granting a particular consequence relation SY, she can claim that such a consequence relation between statements describes how the possession of a (substantial) truth-property by certain statements relates to the possession of that property by other statements. It may indeed be the case that certain truth-properties that can be specified may prove to be incompatible with certain consequence relations. But this hardly shows that CONSEQUENCE *must be* read as the truth-ascription deflationist wants to read it. We again have a stalemate.

I said earlier that there being equally acceptable readings of any particular locution containing the word "true" yields a draw in the debate between truth-ascription substantivalism and truth-ascription deflationism only if there is no burden of proof on the truth-ascription substantivalist. One may suggest, however, that there is such a burden of proof, although its force doesn't emerge until it becomes likely that every locution can be read compatibly either with truth-ascription deflationism or with truth-ascription substantivalism. Now that a truth-ascription deflationist reading has been given for CONJUNCTION, JOHN, CONSEQUENCE and BELIEF, the following challenge can be issued to truth-ascription substantivalism. If *every* occurrence of "true" in any locution is compatible with either a deflationist reading *or* a substantivalist reading, why should anyone believe that there is a substantial property that's being attributed to truths? *In general*, that the use of a kind term holding of something corresponds to an ascription of a substantial property to that something surely requires the purported substantial property to play a role in the evaluation of the truth or falsity of at least *one* statement in which that kind term appears. If this demand (on substantial property attributions) is right, the truth-ascription substantivalist has the burden of proof: at least one statement S in which "true" appears must have a truth value that turns on whether the statements "true" is attributed to by S have the substantial property in question. Luckily for the truth-ascription substantivalist, there is such a statement (more than one, actually), as I now show. In doing so, I show in what follows how issues about truth ascriptivisms connect to issues about deflationary and substantivalist theories of *truths*.

4.

Consider SUCCESS, here repeated,

(SUCCESS) The success of a true scientific theory can only be explained by its truth.

SUCCESS involves complications both because scientific theories aren't mere collections of statements, and because the idiom of explanation requires nominatives. We say, for example, The movement of the tides is explained by the orbit of the moon,

and not

The tides move (in such and such ways) is explained by the moon orbits the Earth (in so and so ways).

For illustrative purposes, however, I idealize scientific theories as collections of statements, and I similarly introduce a conception of “is explained by”—parasitic on the ordinary notion of explanation—that grammatically operates as a sentence connective. Having done so, the semantic-ascent deflationist (or the T-schema deflationist) can handle SUCCESS as CONJUNCTION was handled:

(SUC) (x)(If “x” is a true scientific theory, then: “x” is successful is explained by x).

Both SUCCESS and SUC have a trivial feel to them that seems to rule out the possibility of their being true. SUCCESS tells us that it’s the fact that true scientific theories are true that explains why they’re successful. But it’s hard to see why a truism—*true* scientific theories are *true*—should explain *anything*. (Putnam 1978 first raised the issue of the role of truth in the explanation of scientific truths. See Davidson 1990, Field 1986, 1994, and Kitcher 2002, among others, for further discussion.)

What seems to provide the needed explanation is something that neither SUCCESS nor SUC talk about: the correspondence relations between the terms of true scientific theories and the objects those theories are about. Consider, for example, a theory MO of molecular biology, one that enables biologists and their technical assistants to manufacture new organisms. Surely the success of such biologists and their assistants is due to MO being true, where its being true is its being true *of* items that the biologists and their assistants manipulate with the aid of MO. What seems to be missing from SUC and SUCCESS is a description of the needed correspondence of MO with the objects in question that biologists have been so successful with.

SUCCESS and SUC only seem to focus on this: There is a set of statements that are true. Call these "the truths" (TR). SUCCESS and SUC claim that it's because the statements of a successful true scientific theory are contained in TR that such a theory is successful.

Here's another example of how the focus of SUCCESS and SUC seems to fall short. Imagine that FUR is a collection of ordinary statements about the arrangement of furniture in a room. TR, also imagine, contains a description of the *actual* arrangement of furniture in a room. If FUR describes the location of the furniture in that room correctly, if the sentences of FUR are *in* TR, then in using FUR, we'll maneuver successfully about the room; if FUR isn't true, we won't maneuver successfully about the room.[20]

With both MO and FUR, it's not just a set of truths being contained in another set of truths that seems to be providing the needed explanation of success, it's that the truths in

[20] One important complication is being set aside. SUCCESS is misleading because it gives the impression that *all* that's relevant to the success of a true theory is the theory itself. But that's *never* true. MO enables biologists to manufacture certain biological entities successfully not just because *it* is true, but because of other truths about biologists, their tools, and how these can be brought to bear on the entities that MO is about. So too, those who maneuver about a room filled with furniture do so successfully not only because of the truth of FUR but (among other truths) those truths about their own bodies and truths about the relations of their bodies to furniture in the room. Taking account of these subtleties won't change the course of the argument.

question *describe* particular correspondence relations that provide the needed explanation of success. But this latter fact seems to go beyond the content of SUC and SUCCESS.

One can try to counter the triviality charge with this idea: whether SUCCESS and SUC are true (or false) of a set of true statements turns on *how* those statements are true, and how that relates to whatever their success comes to. If a statement's being true *amounts to* how it describes the layout of furniture, and if the success of that theory turns directly on how well it guides us as we maneuver around the furniture, then this *is* stated by SUC and SUCCESS because the success of any true scientific theory turns directly on what the theory *says*, and on what it says being so. Thus, what MO and FUR say *does explain* their success.

Nevertheless, the feel of triviality (*true* scientific statements are contained in the set of *truths*) is hard to shake off. And because of this apparent triviality, the explanation of success provided by SUCCESS (and SUC), therefore, seems to be available for *any* set of true sentences whatsoever. After all, *any* set of true statements is contained in the truths. This is the key to why the explanation in question isn't trivial: a set of true statements being contained among the truths *doesn't* explain the success of *every* set of true statements. There are cases where, even though a set of truths is contained in the set of truths (as they must be), the success of that set of truths must be explained in some other way.

Here is an illustration. Consider the following nominalist picture of mathematical truth. There are no mathematical objects, but mathematical statements are true (and false) nevertheless. On this view, what *makes* true mathematical statements true is their (permanent) indispensability, say, to scientific practice. If this nominalist+indispensabilist description is the correct picture of mathematical truth, then the versions of both SUC and SUCCESS (when "scientific" is replaced with "mathematical") are *false*. It isn't the *content* of true mathematical theories (what they apparently *say* about mathematical entities) that explains the success of those theories; what explains the success of true mathematical theories are the details of how and why they are permanently indispensable to scientific practice. The (permanent) indispensability of any such true mathematical theory is also *why* such a mathematical theory is true. But its truth therefore *doesn't* explain its success. For mathematical theories, where correspondence is absent, instead of SUCCESS, we have

(SUCCESS*) The success of a true mathematical theory can only be explained by its (permanent) indispensability.

What is the upshot of the somewhat complicated dialectic that's been pursued in this section and the last one? First, SUCCESS and SUC are statements *the truth of which requires a correspondence between the truths they are about and objects in the world*. The way SUC and SUCCESS manage this, when neither speaks explicitly of a correspondence, is that it's only when a statement *does* involve a correspondence that its *mere* truth can explain its success. This is the lesson that SUCCESS* teaches: if mathematical truths are unaccompanied by correspondence, *something else* is needed to explain what makes mathematical truths successful.[21] This means the truth-ascription substantivalist is right and the truth-ascription deflationist is wrong.

[21] This makes correspondence truth different from the other truth properties: coherence, utility, etc. The latter truth properties require explanations of success in terms other than truth itself. Only when a true statement describes items that its terms correspond to can mere truth play an explanatory role in that statement's success (apart from, of course, the points made in footnote 20—ones that every explanation of the success of a set of statements must take account of).

Recall from section 3 the distinction between "expressive" and "substantive" uses of "true." Expressive uses of "true," recall, are ones where "true" is purportedly being employed only because relinquishing its use results in otherwise awkward or time-consuming expressions. Substantive uses of "true" really involve the attribution of a truth-property to a class of statements. The distinction between the uses of "true" that can be eliminated and those that can't is a distinction that many philosophers have supposed to match the distinction between uses of "true" compatible with truth-ascription deflationism and uses that aren't—but we can see now that these distinctions don't match at all.

(SUCCESS) The success of a true scientific theory can only be explained by its truth,

involves an expressive use of "true": SUCCESS can be replaced by

(SUC) (x)(If "x" is a true scientific theory, then: the success of "x" is explained by x).

Nevertheless, both of these claims do attribute a correspondence property to true scientific theories. Consequently, there is a statement in the neighborhood of SUCCESS that in turn poses a direct threat to the deflationary theory of truths, the denial that there is a property **P** that all truths have. Consider

(GLOBAL SUCCESS) The success of *any* set of true statements can only be explained by the truth of those statements.

If GLOBAL SUCCESS is true, then the deflationary theory of truths is false. If nominalism, as earlier described, is true then GLOBAL SUCCESS is false: to explain the success of true mathematical theories, one must employ something like SUCCESS*, which is *not* a specification of GLOBAL SUCCESS to collections of true mathematical statements.

In any case, what these considerations about SUCCESS, SUCCESS* and GLOBAL SUCCESS show is that there are statements we can formulate whose truth or falsity turns on the *particular* truth-property they attribute to a set of true statements. If a set of true statements involves (say) referring terms the *relata* of which are described by those true statements, and if various sorts of success induced by the use of those true statements are directly linked to our utilization of the descriptions of the *relata* given by those statements, then a *specification* of GLOBAL SUCCESS to the collection of those statements is true. If, however, the property that a set of true statements has is one that's like the suggested property of true mathematical statements given earlier—e.g., that such are permanently indispensable to such and such epistemic practices of ours, then a specification of GLOBAL SUCCESS to them is false; instead, something like SUCCESS* is true of them.

In what ways, of course, indispensability in turn connects to truth is open to further analysis. I've offered as a suggestion that, in the case of (pure) mathematical statements (if they are as the nominalist describes them), permanent indispensability yields truth:

(INDIS TRUTH) A permanently indispensable mathematical statement is true.

Notice that INDIS TRUTH may be expressed by substitutional quantifiers:

(INDIS) (*x*)(If "*x*" is mathematical, and permanently indispensable, then *x*).[22]

5.

Many philosophers in the last decades of the twentieth century thought that a description of the role of "true" in ordinary language impels the conclusion that truth ascriptions aren't attributions of a property to the statements so ascribed. But the distinctions of section 3 between deflationist theories of "true," truth-ascription deflationism, and the deflationist theory of truths show that this discussion-area must be reconfigured. Although semantic-descent deflationism is correct, its truth doesn't bear on either truth-ascription deflationism or on the deflationist theory of truths. In point of fact most, but not all, truth ascriptions can be construed either in accord with truth-ascription deflationism, or against it. Some statements, however, such as SUCCESS attribute a correspondence-property to (sets of) truths, contrary to truth-ascription deflationism.

Finally, whether in fact all true statements do share some property such as a correspondence property (whether or not, that is, a deflationist theory of truths is correct) 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.

Mathematical nominalism is a live issue to be decided in part on metaphysical grounds.[23] If it's right, then the truth of mathematical statements does indeed turn out somewhat

[22] Some philosophers have argued for:

(ASYMMETRY) It is true that S because S, but not vice versa.

My analysis of ASYMMETRY parallels my analysis of SUCCESS. ASYMMETRY is true of a statement S when the terms of S (all) involve correspondence relations to objects, but not otherwise.

[23] In part, because the soundness of the Quine-Putnam Indispensability argument is also a live issue that the status of mathematical nominalism turns on.

“epistemic” in character: it’s the permanently indispensable role of mathematical statements in our science that forces their truth. This isn’t solely a matter of “how the world is,” but is equally a matter of the nature of the statement-vehicles we must use to describe that world. On the other hand, such a claim needn’t extend to all statements we (provisionally) take to be true. Some statements may indeed be true only because of a correspondence between the way they describe things as being, and the way those things themselves are. The conclusion to be drawn is that the deflationist theory of truths is right, not because “true” is never used to ascribe a property to statements, but because different statements are true for different reasons. 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”).

Some philosophers have drawn a different conclusion (e.g., Wright 1992, Lynch 2004): we engage in different kinds of discourse, for example, about mathematics, about empirical objects, about fictions, and about morality. These discourses are segregated from one another; and these philosophers claim that the truth predicate, when applied to statements in any of these discourses, corresponds to a truth-property shared by the statements in that discourse, but not necessarily shared by statements from other discourses. For example, although the truth predicate, in an empirical-object discourse, can involve a correspondence-truth-property, when that truth predicate is instead attributed to mathematical discourse, it will not.

This pluralist view of truth-properties, however, faces a severe difficulty because of the simple fact that we do *not* engage in different kinds of discourse. Moral discourse, for example, involves statements that mix together moral and empirical vocabulary; indeed, it’s scarcely possible to imagine the point of statements containing only moral vocabulary. In the same way, one finds mathematical vocabulary occurring in statements along with empirical vocabulary: our most indispensable and valuable empirical statements routinely contain both mathematical and empirical vocabulary. Even ordinary statements about fiction inextricably involve nonfictional vocabulary:

> Mickey Mouse was invented by Walt Disney.

The truth-property pluralist correctly notices that the terms of true statements vary: some refer and some don't. If a true statement contains only referring terms, it looks like a correspondence-truth view applies; if a true statement doesn't contain referring terms, no. The truth pluralist is wrong, however, in thinking that statements can be segregated according to "subject matter" in different discourses. At best what's true is that terms can be so segregated; but this is cold comfort for those philosophers committed to there being various truth *properties* because truth properties must be applicable to whole sentences. This is too crude because the vast majority of valuable sentences are each composed of terms from several different vocabulary areas.

6.

There is one loose end the discussion of which illustrates some of the lessons of this article. Some philosophers have brought certain formal results to bear on the debate between truth-property deflationists and truth-property substantivalists (e.g., Shapiro 1998, Ketland 1999). If a standard formal language can express a small amount of arithmetic, then no sufficiently-rich consistent theory in that language can express a truth predicate for it. Instead, if, in TH_2 (in another language) we characterize the syntax of TH_1 (in the first language), and define a truth predicate for TH_1, we can express more and prove more in TH_2 than we can in TH_1. This result is Tarski's.

A related result is this: Consider an axiomatization *A* of a small bit of arithmetic that includes the principle of induction. Now consider a new axiomatization *A** that includes *A* plus a truth predicate for *A* that can occur within the induction schema. *A** is strictly stronger than *A* in the following sense. There are sentences in the language of *A* which can be proved from *A** but not from *A*.

How do these results bear on the debate between truth-property deflationists and truth-property substantivalists? What, that is, is the connection between "true" failing to be conservative in formal contexts, and "true" therefore having to correspond to a "substantial" property? We have to speculate because those raising the relevance of these formal considerations have never explicitly argued for the connection. Here is a suggested "argument." If "true" *just is* a device of endorsement, then its conceptual content can't come to more than the statements it's used (on an occasion) to endorse. How, then, *could* adding such a predicate to an axiomatization about numbers add content so that new results about those numbers could be proved that couldn't be proved before? These considerations impel the conclusion that "true" can't merely be a device of endorsement, and therefore that "true" must correspond to a substantial property, some concept of which supplies the content that explains why adding it to an axiomatization of numbers isn't conservative.

We now see several mistakes in this line of thought. I'll indicate some. There is first the mistaken assimilation of how a truth predicate is used (even when such utility is the reason for the presence of the device in ordinary language) with what its properties actually are. A truth predicate isn't a device of endorsement, direct or indirect, although it's commonly used that way.

What it is a device of semantic descent. A device of semantic descent *needn't* be proof-theoretically conservative, nor should that be expected. Gödelian and Tarskian results turn directly on what can and can't be expressed in a formalism, and those results also turn on how expressive resources are and aren't segregated in different languages. A device of semantic descent (roughly speaking) moves those expressive resources from one language to another, and this is why such a device—in the right circumstances—won't be conservative.

I've speculated on a particular line of thought connecting the nonconservativeness of the truth predicate in certain formal settings to a challenge to truth-property deflationism. But *any* such approach to a challenge to truth-property deflationism must turn on assuming that it isn't possible for a truth predicate to have genuine content that it can contribute to an axiomatization (i.e., that it's a device of semantic descent) and yet for such to fail to implicate a property. There is a failure, that is, to distinguish the very different claims of a deflationist theory of "true" from that of truth-property deflationism and from a deflationist theory of truths. Keeping clear the distinctions between these very different kinds of deflationist theories "about" truth is the most important lesson of this article. For in this way one can understand why a device of semantic descent that's a predicate is *open* to either corresponding to a substantial shared property or not so corresponding.[24] Being a device of semantic descent, and being nonconservative in formal contexts as a result, raises no challenge to deflationist positions about truth.

7.

[24] In particular, understanding "true" *purely* as a device of semantic descent is quite compatible with an interpretation of (certain) Gödel sentences as *true* on the grounds of a correspondence interpretation of what they say.

In this article, I've made a number of important distinctions that have been—to various degrees—confounded in earlier literature. I've distinguished two versions of deflationist theories of "true," and distinguished these in turn from a deflationist theory of truth-*ascription,* as well as from a deflationist theory of *truths*. I've further suggested that the semantic-descent deflationist theory of "true" and the deflationist theory of truths are both correct, although the considerations that must be brought to support or attack these different deflationist theories are largely independent of one another. I've denied, however, the view that our attributions of "true" to collections of statements are invariably ones that *don't* attribute (say) a correspondence property to those truths. (Some statements do attribute such a property, I've claimed, and I've claimed further that statements that are suitably restricted with respect to the statements they attribute this property to are *correct*.)

A careful understanding of deflationist theories of "true" requires recognizing certain roles of "true" and "false" in ordinary language; this in turn requires distinguishing how these words are useful from what linguistic properties they have. "True," in particular, is not a device of endorsement or a device of generalization. A similarly careful understanding of the deflationist theory of truths requires recognizing that any such theory is about truths and not about the properties of, nor the use of, the word "true" in ordinary language or in formal languages. Whether truths share some relational property or other—e.g., correspondence, coherence, etc.—or whether they don't, turns on issues about the nature of the grounds of truths: What it is, if anything, that *makes* statements true.

The word or concept "true" can have substantial conceptual content without that content being an attribution of a substantial property in the sense that the old philosophers (who debated over whether truth involved correspondence to a "mind-independent reality," or instead involved inextricable “epistemic content”) had in mind. To recognize “true” is a device of semantic descent is certainly to attribute conceptual content to *it*. But that content does *not* implicate the further content that what is true must share some substantial property or other.

Bibliography

Azzouni, Jody. 2001. Truth via anaphorically unrestricted quantifiers. *Journal of Philosophical Logic* 30: 329-354.

Azzouni, Jody. 2006. *Tracking reason: Proof, consequence, and truth*. Oxford: Oxford University Press.

Blackburn, Simon and Keith Simmons (ed). 1999. *Truth*. Oxford: Oxford University Press.

Collins, John. 2002. Truth or meaning? A question of priority. *Philosophy and Phenomenological Research* 65: 497-536.

Davidson, David. 1990. The structure and content of truth. *Journal of Philosophy* 87: 279-328.

Dummett, Michael. 1959. Truth. In his *Truth and other enigmas*. Oxford: Oxford University Press (1978), 1-24.

Field, Hartry. 1986. The deflationary conception of truth. In (G. Macdonald and C. Wright (ed.) *Fact, science and morality*. Oxford: Oxford University Press.

Field, Hartry. 1994. Deflationist views of meaning and content. *Mind* 103 (411): 249-84.

Field, Hartry. 2001. *Truth and the absence of fact*. Oxford: Oxford University Press.

Frege, Gottlob. 1918. Thoughts. In his *Logical investigations*. Oxford: Blackwell (1977).

Gupta, Anil. 1993. Minimalism. *Philosophical Perspectives* 7: 359-369.

Horwich, Paul. 1998. *Truth*, 2nd edition. Oxford: Oxford University Press.

Kalderon, E. 1999. The transparency of truth. *Mind* 106: 475-97.

Kitcher, Philip. 2002. On the explanatory role of correspondence truth. *Philosophy and Phenomenological Research* 64:2, 346-364.

Leeds, Stephen. 1978. Theories of reference and truth. *Erkenntnis* 13: 111-29.

Lynch, Michael P. 2004. Truth and multiple realizability. *Australasian Journal of Philosophy* 82(3): 384-408.

Ketland, Jeffrey. 1999. Deflationism and Tarski's paradise. *Mind* 108(429): 69-94.

Künne, Wolfgang. 2003. *Conceptions of truth*. Oxford: Oxford University Press.

Putnam, Hilary. 1978. *Meaning and the moral sciences*. London: Routledge & Kegan Paul.

Quine, W.V. 1970. *Philosophy of Logic*. Englewood Cliffs, N.J.: Prentice Hall.

Ramsey, F.P. 1927. Facts and propositions. Proceedings of the Aristotelian Society, 7 (Supplementary): 153-170.

Russell, Bertrand. 1912. *Problems of philosophy*. Oxford: Oxford University Press.

Schantz, Richard (ed.) 2002. *What is truth?* Berlin: Walter de Gruyter.

Shapiro, Stewart. 1998. Proof and truth: Through thick and thin. *The Journal of Philosophy* XCV, 10: 493-521.

Tarski, Alfred. 1983. The concept of truth in formalized languages. In (ed. J. Corcoran) *Logic, semantics, metamathematics*, 152-278. Indianapolis, Ind.: Hackett.

Wright, Crispen. 1992. *Truth & objectivity*. Cambridge, Mass: Harvard University Press.