The linguistic basis for propositions

Peter van Elswyk, University of Wisconsin–Milwaukee

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Propositions are traditionally regarded as performing vital roles in theories of natural language, logic, and cognition. This chapter offers an opinionated survey of recent literature to assess whether they are still needed to perform three linguistic roles: be the meaning of a declarative sentence in a context, be what is designated by certain linguistic expressions, and be the content of illocutionary acts. After considering many of the relevant theoretical choice-points, I suggest that there remains a linguistic basis for propositions, but not for some of the traditional reasons.

1 Introduction

Proposition is a theoretical term. It names an entity whose existence is inferred as opposed to a kind that is directly observed.[1] Theories of natural language, logic, and cognition require an entity to fulfill (R1) - (R8).

(R1)	Be the meaning of a declarative sentence	LINGUISTIC ROLES
(R2)	Be the designation of a linguistic expression	
(R3)	Be the content of illocutionary acts	
(R4)	Be the relata of entailment relations	LOGICAL ROLES
(R5)	Be the bearer of alethic properties	
(R6)	Be the bearer of modal properties	
(R7)	Be the objective of cognitive attitudes	COGNITIVE ROLES
(R8)	Be the content of perception	

Not everybody agrees that all of the roles above are required by a successful theory to have some entity or other fill them. Perhaps (R7) is dispensable because our best theory of cognition does not require an object for attitudes

[1] A question to raise is whether we should be realists about propositions as unobserved entities. See Simchen (forthcoming) for a defense of instrumentalism about structured propositions, Armour-Garb and Woodbridge (2012) for a pretense-based fictionalism, and Ball and Rabern (2018, §1.2.2) for a survey of anti-realist attitudes towards meanings generally. In §3, I identify some initial problems with non-realist views.

like belief. Nevertheless, *proposition* names the kind of entity which performs or is suited to perform roles like those enumerated.

The roles above are the primary roles. On that assumption that one entity performs all or most of them, secondary roles are derivable from what must be true of whatever entity performs the primary roles. For example, propositions must be abstract objects that are not spatially located. They might be temporally located depending on what it takes for them to come into existence and persist.

Let's call this the FUNCTIONAL CHARACTERIZATION.[2] Beginning with theoretical roles is a standard way propositions are motivated. Many justify their use of the label *proposition* according to whether their subject matter fulfills the roles. Horwich (1998, 82), for example, writes that "it is a matter of stipulation to call the entities to which [*that*-clauses] refer, 'propositions'." After or before considering various roles, Schiffer (2003, 14) summarizes, "From all this we may conclude… that things believed are what philosophers nowadays call *propositions*" and Merricks (2015, 21) writes "I conclude that we should apply the label 'propositions'."

By itself, the functional characterization clarifies little about what propositions are. They may be *sui generis* representational entities, or something more ontologically familiar like a fact, property, set, or abtract type. What propositions explain within our theories is not clarified either. Maybe we require propositions for (R2) but propositions are otherwise explanatorily idle. However, what is highlighted by characterizing propositions functionally is how to evaluate whether there are any propositions: *by considering their putative roles in leading theories*.

In this chapter, I provide an opinionated survey on the linguistic roles. For each of (R1), (R2), and (R3), I consider two questions: whether the role is required by a successful linguistic theory, and whether a proposition is still needed to perform the role. Having a linguistic basis for propositions requires an affirmative answer to both questions. I explore whether, as matters presently stand, we have continued cause to posit the existence of propositions in explanations of natural language. Though I will suggest that there remains a linguistic basis for propositions, the reader will see it is not for many of the traditional reasons.

Along the way, various non-propositionalisms about the roles will be encountered. I distinguish EASY from HARD NON-PROPOSITIONALISM.[3] Easy non-propositionalists are spooked by propositions for metaphysical and/or epistemological reasons. They regard the spookiness of propositions as enough to do

[2] See Crawford (2014) for a nearby distinction between conceptions of propositions that are METAPHYSICALLY LIGHTWEIGHT as opposed to METAPHYSICALLY HEAVYWEIGHT.

[3] The easy/hard distinction is borrowed from Colyvan (2010) who draws a similar distinction about the metaphysics of mathematical objects.

without them. As a result, they do not bother to show how explanations involving the theoretical roles can be developed without positing propositions. In contrast, hard non-propositionalists do attempt to show how such explanations can be developed. I often ignore easy non-propositionalisms in what follows. Absent an explanation for why the roles are no longer necessary and/or an illustration for how other entities perform the roles, the lingusitic basis for propositions remains.

A fews caveat are owed before the survey begins. First, I occasionally opine more than argue. Theoretical choice-points relevant to whether a role provides a basis for propositions will be identified, a choice will be suggested, and yet I will not offer much motivation for my suggestion. Second, I survey quickly. Since I canvass many views, exposition will not run as deep as it would if I were just focusing on one view. Finally, I make omissions. For example, I will not say much about dynamic semantics.[4] Each limitation is a consequence of the chapter's modesty. I do not intend to settle whether propositions are required for the linguistic roles. I aim to highlight the choice-points at stake for the benefit of future work on the basis for propositions, and identify a plausible path through the choice-points.

2 The meaning of a declarative

2.1 Assigning entities

A semantic theory explains MEANING FACTS. Some meaning facts are particular. You cannot felicitously use *that* to refer to an object you are holding in your hands—you have to use *this* instead. Other meaning facts are general. The following principle illustrates generality.

> PRINCIPLE OF COMPOSITIONALITY
> The meaning of a complex expression e in a language $\mathcal{L}$ is determined by the meanings of e's parts and the way they are combined according to $\mathcal{L}$'s syntax.

The success of semantic theories can be compared by how well they explain particular or general meaning facts. A semantic theory, for example, which explains

[4] Such an omission might irritate some readers because dynamic theories provide rich resources for rethinking (R1), (R2), and (R3) along with the logical roles. Though what I will say below has bearing on whether propositions persist as entities for which a dynamic semantics requires existence, an adequate discussion is not conducive to the survey nature of this chapter. To my knowledge, no such discussion has been offered that covers all of the pertinent theoretical roles. For a discussion of truth in dynamic semantics, see Stokke (2014). Stojnic (forthcoming) attends to how to understand propositional content in a dynamic semantics. Murray and Starr (2018) consider to understand illocutionary force alongside dynamic semantics.

the meanings of complex expressions in a manner that violates compositionality is a non-starter. It fails to explain an important fact.

We can divide semantic theories into ENTITY-ASSIGNING and ENTITY-FREE THEORIES. Both explain how expressions have meaning. They differ in whether to have meaning is to have a meaning. Accoringly, entity-assigning theories reify meanings. For an expression *e* to have meaning is for *e* to have a particular entity assigned as its meaning by the semantic theory. In contrast, entity-free theories are ontologically austere. For an expression *e* to have meaning is for *e* to be characterizable in a certain way by the semantic theory where such characterization does not require the existence of an entity to be assigned. Whether (R1) is necessary as a role depends on whether our leading semantic theories are entity-assigning or not.

A historically important entity-free approach is the TRUTH-THEORETIC SEMANTICS inaugurated by Davidson (1967). On this approach, the meaning of a sentence $\mathcal{S}$ is characterized by the conditions under which $\mathcal{S}$ is true in the semantic theory. Such characterizing is done with the biconditional (T) where $\mathcal{S}$ is replaced with a sentence in the object language, and *p* is replaced with a sentence in the metalanguage of the semantic theory. Following Davidson, we can call what does the characterizing an AXIOMATIC TRUTH THEORY.

(T) $\mathcal{S}$ is true if and only if *p*.

Though an axiomatic truth theory does not explain meaning, Davidson's proposal was that putting constraints on one does. Truth-theoretic semantics therefore pose a challenge to an (R1)-based reason for positing propositions. Were we to adopt a semantic theory like Davidson's, there would be no need for propositions because we have no need for any entity to perform (R1).

Truth-theoretic semantics faces significant explanatory limitations. Many meaning facts are not explainable with truth or related notions. There are clause types other than declarative that do not have a meaning assessable for truth or falsity (*e.g.* interrogatives, imperatives, exclamatives), and words or morphemes with meaning that do not contribute a declarative's truth-conditions (*e.g.* slurs, honorifics, discourse markers). No similar limitation is faced by a semantics which freely assigns entities. The difference between clause types, for example, can be captured by assigning different entities to them. The dedicated defenders of truth-theoretic semantics are aware of these limitations and have made limited attempts to overcome them.[5] But it would be a stretch to classify truth-theoretic semantics as being equal to or greater than entity-assigning theories in explanatory success.

[5] See Lepore and Ludwig (2007, Ch.12), for example. But even that dynamic Davidsonian duo does not agree on how to capture non-declaratives. See Starr (2014) for some recent discussion of the problem with a truth-theoretic approach to mood.

Another entity-free theory to mention is INTERNALIST SEMANTICS. It departs from the externalism familiar from Putnam (1975) and Burge (1979) on which meanings have extensions that are determined externally. Though such departures take many shapes, internalist semantics, as I have in mind, originates with the skepticism towards reified meanings found in the work of Noam Chomsky.[6] A particularly forceful defense of it is given by Pietroski (2018). Meanings are, for him, instructions for building or accessing concepts. The instructions remain fairly simple in the process of semantic composition by being massively conjunctive. Importantly, concepts are not entities that are assigned as meanings to words or phrases.

As with truth-theoretic semantics, internalist semantics ensures that propositions are not needed to perform (R1) because nothing is required for the job. However, it importantly differs from truth-theoretic semantics in its explanatory promise. Where truth-theoretic semantics is limited to explaining meaning with notions based or oriented around truth, internalist semantics faces no such limitation. Clause types other than declaratives, for example, can be given instructional meanings as Lohndal and Pietroski (2011) show for interrogatives.

In this chapter, I do not have much more to say about the philosophical viability of internalist semantics partly because it would take us too far afield into the philosophy of mind.[7] But there is a sociological point to make. Few philosophers and linguists explain meaning facts with an entity-free semantics. Most advances made in the last 50 years in understanding the meaning facts of natural languages were overwhelmingly made while assigning entities of some kind. It might be, of course, that these advances could have been made with an entity-free semantics, or that such advances can be mimicked with one. As a matters stand, entity-assigning theories have considerably more explanatory coverage of meaning facts.

2.2 Assigning propositions

But what entity performs (R1)? Contemporary semantic theories are overwhelmingly model-theoretic.[8] The meaning of an expression is given by an interpretation function $[\![\cdot]\!]$ that assigns an entity from a model to an expression of natural language. Those entities are drawn from a domain that consists of basic and non-basic entities. Basic entities are individuals like you, me, and truth-values. Non-basic entities are typically complex functions to and from either

[6] Such skepticism can be found in many of Chomsky's writings, but see especially Chomsky (1995) and Chomsky (1996).

[7] For a recent defense of externalism, though, see Yli-Vakkuri and Hawthorne (2018).

[8] Accordingly, advocates of truth-theoretic semantics often take issue with model-theoretic semantics. See Lepore (1983) and Glanzberg (2014) for discussion.

basic entities or other non-basic entities. Within model-theoretic semantics, the meaning of a declarative is therefore a proposition if a proposition is assigned by $[\![\cdot]\!]$.

Within a standard INTENSIONAL SEMANTICS, the meaning of a sentence is an intension: a function from worlds or world/time pairs to truth-values. Many therefore follow Montague (1974) and use *proposition* to name those sets of worlds which value sentences to true.[9] Others ocassionally use *proposition* to name whatever entity is assigned by $[\![\cdot]\!]$ to a declarative. These different uses can cause confusion. In adopting a functional characterization, I have reserved *proposition* for what is apt to fulfill the primary roles (R1) through (R8). But, for the purpose of this section, I will assume that a proposition is a set of worlds or a similar entity.

Following Rothschild (2013, 49-50), various non-propositionalisms can be distinguished. There is BLANKET NON-PROPOSITIONLISM that assigns an entity other than a proposition to every declarative. Then there are non-propositionalisms that are more selective. DOMAIN-DRIVEN NON-PROPOSITIONALISM maintains that declaratives in a specific domain of discourse do not have propositions for meanings. Declaratives about what is morally right or wrong, for example, might express speaker attitudes as opposed to have propositions for meanings. Finally, LINGUISTIC-DRIVEN NON-PROPOSITIONLISM holds that declaratives containing certain expressions cannot be assigned propositions because of facts local to the expressions.

At this particular point in the history of semantics, non-propositionalisms of both blanket and selective variety abound. One merely has to open the latest issue of a semantics journal like *Journal of Semantics* or *Natural Language Semantics* to find a proposal where $[\![\cdot]\!]$ doles out entities that are arguably unfit to perform the other theoretical roles. From such pluralism about entity assignment, it is reasonable to draw the conclusion that successful semantic theories do not need to have propositions perform (R1). An array of entities can be assigned, and it will not get in the way of explaining various meaning facts. Let's call this the PLURALISM PROBLEM for basing the existence of propositions on (R1).

Note that blanket propositionalism does not need to be true for (R1) to provide a reason to posit propositions. As long as some declaratives still have propositions assigned by $[\![\cdot]\!]$, a reason remains. At best, domain-driven and linguistic-driven non-propositionalisms only weaken the need for propositions. Blanket non-propositionalisms pose the most serious challenge. But at least two variants of (R1) might be true even if blanket propositionalism is not.

[9] An intensional semantics can be set-up in a different way that allows propositions to be something else. For example, see Thomason (1980), Muskens (2005), and Pickel (forthcoming). Pollard (2015) offers a hyperintensional semantics which is able to remain agnostic on what propositions are.

(R1) Be the meaning of a declarative sentence

(R1*) Be a component of the final meaning of a declarative

(R1**) Be an essential part of the meaning of a declarative

(R1*) makes room for the meaning of a declarative to be a complex entity that includes a proposition as one of its components. The next variant is (R1**). It makes room for the meaning of a declarative to be something other than a proposition but something which mandatorily composes with a proposition.

Let's see some examples of each variant role. There are many semantic theories that do not require propositions for (R1) but do for (R1*). Using p as a variable for whatever a proposition is by the light of the semantic theory, there are theories where the meaning of a declarative is $\{p\}$, a singleton proposition, and theories where what is assigned by $[\![\cdot]\!]$ is $\langle p, \ldots \rangle$, an ordered pair with a proposition as a coordinate.[10] Strictly speaking, theories such as these do not require propositions to be the meaning of a declarative sentence. But it is as not as if propositions have disappeared. They merely surfaced elsewhere in the semantic theory.

One example of the many theories that retains (R1**) is the COMMITMENT STATE SEMANTICS of Krifka (2015). In such a theory, the meaning of a declarative is a proposal to change what the speaker's commitments are. What is assigned as a meaning to a declarative is then a complex function from one state of commitments to another. But that entity essentially involves a proposition because what a speaker is committed to are propositions. So in the semantic composition an operator takes a proposition to convert it into a function that behaves as a proposal to add that proposition to the speaker's commitments. Propositions are unnecessary yet again for (R1), but remain indispensable to perform (R1**).[11]

In some cases, selective non-propositionalism may also retain a variant role. Simplifying for our purpose, declaratives syntactically decompose into a tense phrase that can be dominated by an array of additional phrases. Suppose a proposition is the meaning of a tense phrase. Then the meaning of a declarative will be a proposition if and only if no phrase dominating the tense phrase hosts an element that converts the proposition contributed by the tense phrase into

[10] For example, see multidimensional semantic theories in the style of Kartunnen and Peters (1979), Potts (2004), and McCready (2010).

[11] Retaining (R1**) is also common to theories that move to blanket non-propositionalism from linguistic-driven non-propositionalism. For example, Moss (2018) regards declaratives with epistemic vocabulary as requiring probabilistic content even though other declaratives do not. To have a unified semantic theory, she introduces a type-shifter that converts a proposition had by the meaning of an epistemic-free declarative to a set of probability spaces. Strictly speaking, the meaning of every declarative is therefore a set of probability spaces but (R1**) lingers for the sentences that lack epistemic vocabulary.

a different entity. In this light, consider non-propositionalism about epistemic modals. The meaning facts surrounding words like *might* and *must* have led many to adopt theories where the meaning assigned to a declarative like *Durian might be pungent* is not a proposition. But epistemic modals are hosted by a phrase that usually dominates the tense phrase (Cinque, 1999). For many semantic theories of epistemic modals, modals convert the proposition contributed by the tense phrase into a different entity. Such theories falsify (R1) for declaratives with modals, but retain (R1**) given what is assigned.

Here's the upshot. In considering semantic theories that are non-propositional across the board, it is important to assess whether (R1*) and/or (R1**) linger as roles. If they do, the need for propositions has minimally wavered. A proposition may not be the meaning that is assigned to a declarative by a leading semantic theory, but, whatever entity is assigned, propositions are still essential to that entity's identity. By itself, pluralism therefore carries no consequence for whether an explanation of a declarative's meaning requires the existence of propositions. What would dispense with propositions would be a blanket non-propositionalism that leaves no roles behind and which has explanatory coverage unrivaled by even a partially propositional theory. I submit that no such theory presently exists.

A thorough examination of the pluralism problem would require us to compare propositional and non-propositional theories side-by-side with respect to how they explain general and particular meaning facts. I do not offer that here. Side-by-side comparisons can be found elsewhere for meaning facts related to a few particular expressions.[12]

3 The designation of a linguistic expression

3.1 Designating propositions

I turn now to (R2). In my discussion I have to take some side or other about how to explain meaning facts. Accordingly, I assume a textbook entity-assigning semantics in the tradition of Montague (1974).

Let's call the underlined terms ENTITY TERMS and the sentences in which they occur ENTITY SENTENCES.

(1) <u>What was said by Andrew</u> is true / believable. FREE RELATIVE

(2) Andrew believes <u>that durian is pungent</u>. *THAT*-CLAUSE

[12] Consult King (2007) and Ninan (2012) for a discussion of how propositional and non-propositional semantic theories handle tense. Among numerous others, see Yalcin (2007), Moss (2018), Stojnic (forthcoming), and Mandelkern (2019) for representative perspectives on how different theories explain the facts surrounding epistemic modality.

(3) Brad thinks so too. ANAPHOR

(4) The proposition that durian is pungent is true / believable. DEFINITE

(5) Logicism is true / believable. NAME

The existence of propositions can be argued for with a few assumptions about both entity terms and sentences. The traditional case relies upon the loaded notion of a SINGULAR TERM. Singular terms reference a single individual. They contrast with general terms that pick out many individuals and non-terms like predicates. True sentences containing singular terms require the existence of what the terms reference. Accordingly, if there are true entity sentences featuring singular terms for propositions, propositions earn existence. Variants of this reasoning are available. True sentences containing an existential quantifier require the existence of a witness. Entity terms could be quantifiers that only take propositions as witnesses. Similarly, one might maintain that the entity terms contribute a universal quantifier with a non-empty domain that consists exclusively of propositions.

I follow King (2002, 342) in using DESIGNATION to name how entity terms are putatively related to propositions. As he defines it,

> An occurrence of expression e in sentence $\mathcal{S}$ designates o iff this occurrence of e is via some semantic mechanism associated with o and as a result $\mathcal{S}$, in virtue of containing this occurrence of e, expresses a proposition P whose truth or falsity at a circumstance depends on the properties of o and the relations it stands in at that circumstance.

Talk of designation allows us to bypass how precisely an entity term contributes to the truth-conditions of a sentence such that those truth-conditions depend on an entity being a certain way. Accordingly, it enables us to avoid discussion of singular termhood. I take that to be a benefit. The entity terms in (1) through (5) cross-cut a variety of syntactic categories. For example, the names and descriptions are determiner phrases, but *that*-clauses are complementizer phrases and free relatives behave like determiners but are not. Contemporary diagnostics for identifying singular terms such as those developed by Hale (1994, 1996) only work expressions of a particular syntactic category. They do not work for us.

What I call the ENTITY ARGUMENT assumes (A1)-(A3). (A1) and (A2) gets us (R3), and (A3) solidifies that propositions fulfill it.

(A1) There are true entity sentences.

(A2) Entity terms designate.

(A3) Propositions are what entity terms designate.

I will not discuss whether (A1) is true. It is difficult to take serious the claim that no entity sentences are ever true. My focus in this section is whether (A2) and (A3) are true. Both are claims about the meanings of the entity terms. The truth or falsity of either is motivated by considering meaning facts and what a compositional semantics of the terms needs to be to explain such facts.

Earlier, I said I would only take hard non-propositionalisms seriously. Somewhat alarmingly, non-propositionalist discussions of (R2) frequently take the easy road. Let me offer examples. Armour-Garb and Woodbridge (2012) offer a pretense-based view of (R2). Propositions do not exist, but pretending they do enables speakers to make "claims about certain complex use-features of mental and linguistic items, and for expressing certain generalized claims about these features that we could otherwise not express (647)." They advertise that their view is a semantic view in that it is neither pragmatic nor merely paraphrase. It connects sentences to truth-conditions without requiring users of the language to be aware of the pretense.

So what are complex use-features? Their answer is that they are LONG-ARM CONCEPTUAL ROLES such that "specifications and attributions of these use-features would inevitably be extremely long, complicated and technical (650)." When it comes to particular entity terms, schematic answers only are given. For example, a *that*-clause stands in for whatever is the long-arm conceptual role that the speaker associates to the clause. But this falls short of taking the hard road. We are never told what such use-features are even for a simple example. Nor are we ever given an entity-assigning semantics on which these use-features are provided as the designation of entity terms. So their view is a mere promissory note.

I offer an additional example. Jubien (2001) aims to do away with propositions as the intermediary between a subject and what a proposition represents. So what plays the theoretical roles are the individuals, properties, and relations that a proposition would represent if there were any propositions. Such a collection of things is held together—*glued*, to use Jubien's metaphor—by the intentionality of an agent. The objects of thought for *Durian is pungent* is something like the Platonic property of pungentness and the natural kind designated by *Durian*. When it comes to *that*-clauses, Jubien claims that they involve plural quantification over the relevant individuals, properties, and relations. But he demurs that he "can't go into details of plural quantification here (57)" and never returns to give them. Without the details, though, we do not have an explanation of the meaning facts surrounding *that*-clauses. Perhaps the easy non-propositionalisms canvassed can be developed to be explanatory

hard non-propositionalisms. Count me skeptical.

3.2 The case for (A2)

3.2.1 Free relatives

Relative clauses fronted with a *wh*-expression like *who* or *what* are free if they do not attach to a noun. Instead, they constitute an independent constituent. Free relatives involving *what* are frequently used to to designate proposition-like entities introduced in a conversation.

(6) What was $\left\{\begin{matrix}\text{said}\\ \text{uttered}\\ \text{believed}\end{matrix}\right\}$ is $\left\{\begin{matrix}\text{true}\\ \text{thought}\\ \text{believed}\end{matrix}\right\}$.

Though there is disagreement over their underlying syntax and how their final meanings are compositionally determined, consensus has formed that free relatives have a quantificational semantics. A free relative like *what was said* is thought to have the same semantics as either a definite like *the thing(s) that was said* or an indefinite such as *a thing that was said*. When it composes with *-ever* to form *whatever was said*, it is widely regarded as having the semantics as a universal quantifier like *everything that was said*.[13] Free relatives satisfy (A2).

3.2.2 *That*-clauses

A traditional view is that the *that*-clauses in sentences like (7) and (8) are name-like terms for propositions.

(7) Andrew believes that durian is pungent.

(8) That durian is pugnent is true.

There are two standard reasons for regarding *that*-clauses as designative expressions. The first is what I dub the EVIDENCE FROM RELATIONAL ATTITUDES.[14] On a traditional analysis of attitudes, verbs like *hope* or *believe* are two-place relations between a subject and a proposition. Since a *that*-clause is the apparent complement to an attitude verb, it must designate a proposition. Another reason is based on what I will call the EVIDENCE FROM VALID INFERENCES.[15] Many maintain that regarding *that*-clauses as referential allows us to explain inferences like (9) and (10).

[13] See Berman (1991) for an indefinite analysis, Jacobson (1995) for a definite analysis, and Dayal (1997) for a universal analysis of *-ever* free relatives. A helpful introduction to their semantics is provided by Šimík (forthcoming). [14] See Schiffer (1972) and Stalnaker (1987). [15] Consult Schiffer (1972) and Bealer (1998).

(9) Andrew believes that durian is pungent.
Brad believes that durian is pungent.

There is something that Andrew and Brad both believe.

(10) Andrew believes everything said by Brad about durian.
Brad said that durian is pungent.

Andrew believes that durian is pungent.

In recent years, however, both of these bits of evidence for *that*-clauses being designative have been called into question.[16]

An increasingly discussed problem for *that*-clauses being designative involves substitution. It is widely thought that two co-referring terms can be substituted for one another without altering grammaticality or truth in an extensional context.[17] But *that*-clauses arguably cannot. If we assume that descriptions like *the proposition that durian is pungent* designate propositions, then we can produce substitution failures with *that*-clauses and descriptions.

(11) (A) Andrew fears that durian is pungent.
(B) Andrew fears the proposition that durian is pungent.

(12) (A) Andrew hopes that durian isn't pungent.
(B) # Andrew hopes the proposition that durian isn't pungent.

In (11B), it appears that the meaning changes after substitution. Unless Andrew is a committed non-propositionalist, (11B) can be false while (11A) is true. A loss of grammaticality is shown in (12B) after substitution.

Three primary responses are offered. First, take the failures as evidence against *that*-clauses designating propositions.[18] Second, explain the failures as a grammatical quirk owed to the environment in which substitution fails.[19] For example, King (2002) notes that the grammatical object of *hope* must be a complementizer phrase. Since proposition descriptions are determiner phrases, the loss of grammaticality in (12B) can be explained on independent grounds. Third, deny altogether that proposition descriptions have the same meanings as *that*-clauses.[20] That way, substitution failure can be blamed on a meaning difference between the terms.

[16] See Bach (1997), Hofweber (2007), Rosefeldt (2008), and van Elswyk (forthcoming) for very different diagnoses of how the evidence is not probative goes awry.

[17] For discussion of intersubstitutibility, see Wright (1998), Dolby (2009), Trueman (2012, 2018), and Nebel (2019). [18] See especially Moltmann (2003). [19] See King (2002) and Nebel (2019) for different versions of this response. [20] Nebel (2019) provides this rejoinder rather forcefully.

Even if the second or the third response succeeds, the traditional is not out of the woods. It is often overlooked that *that*-clauses compose with lexical categories other than verbs.

(13) Now <u>that Andrew had arrived</u>, we smelled durian. ADVERB

(14) Andrew has the belief <u>that durian is pungent</u>. NOUN

Such productivity is difficult to explain if *that*-clauses are designative. Unlike verbs such as *believe* that are traditionally thought to require an argument in the form of a *that*-clause, the expressions from other lexical categories do not take arguments. Accordingly, the *that*-clause is entirely optional. (13) is especially interesting because it is surprising that *now* composes with a clause.

A semantics with more promise for explaining the productivity of *that*-clauses treats them as predicates. In (14), for example, the clause is a predicate of the noun *belief* that specifies the content of the belief. The details differ from one predicativist semantics to the next.[21] To illustrate the semantics owed to Moulton (2015), which I favor, consider *that*-clauses with verbs. On his view, they are not arguments to verbs. Instead, they are a predicate of an argument slot that other expressions can fill like propositional anaphors. In response, some might be tempted to argue that the *that*-clauses found in (13) and (14) have a different meaning from those found in (7) and (8). The earlier clauses are referring while the latter clauses are predicates. Without independent evidence for ambiguity, however, saving referentiality through ambiguity is unmotivated. I presently know of no such evidence.[22]

3.2.3 Propositional anaphors

An anaphor is a context-sensitive expression that designates a prominent individual. The paradigm example of an anaphor is a pronoun like *she*, *he*, or *they*. A pronoun has a few different uses besides an anaphoric use, but when it is used anaphorically it designates an individual introduced earlier in the discourse. We can observe as much with *he* in sentence (15).

(15) Andrew had arrived. He smelled of durian.

[21] For various proposals, see Kratzer (2006), Arsenijevic (2009), Moulton (2009, 2015, 2017), and Moltmann (2018).

[22] One line taken by predicativists like Arsenijevic (2009) is that all *that*-clauses are relative clauses. But de Cuba (2017) notes that various languages use different clause-linking expressions for relative clauses and *that*-clauses composing with nouns. However, this does not provide evidence for the right kind of ambiguity. What is needed is evidence that postnominal and postadverbial *that*-clauses are different from postverbal ones.

Many natural languages are taken to have anaphors exclusively for propositions. The most widely accepted example is the expression *so*.[23] Though it has other uses, it behaves like a designative expression in a postverbal position. The example below shows how it patterns with *it* and *that*.

(16) (A) Andrew believes durian is pungent.
(B) I believe $\left\{\begin{array}{c}\text{it}\\ \text{so}\\ \text{that}\end{array}\right\}$ too.

Other expressions regarded as propositional anaphors include the response markers *yes* and *no*.[24] Such terms express speaker agreement or disagreement with a prominent proposition from the discourse. Like *so*, response markers can be the argument to a verb.

(17) I $\left\{\begin{array}{c}\text{said}\\ \text{think}\\ \text{guess(ed)}\end{array}\right\}$ yes.

The propositional anaphors distinguish themselves from *that*-clauses by not being able to surface in postadverbial or postnominal positions. Ungrammaticality is produced in the earlier (13) and (14) if the *that*-clauses are replaced with anaphors. (18) and (19) show as much.

(18) # Now so, we smelled durian.

(19) # Andrew has the belief so.

See van Elswyk (forthcoming) for a detailed discussion of how substitution failures between *that*-clauses and anaphors provide additional reason to maintain *that*-clauses are predicative as opposed to designative.

An alternative proposal found in the syntax literature is that response markers are not anaphoric because their anaphor-like behavior is owed to the fact that they are obligatorily followed by an elided tense phrase.[25] Where the crossed out text below represents ellipsis, the proposal is that a marker made in response to (20A) is trailed by elided material.

(20) (A) Durian is pungent.
(B) Yes, ~~durian is pungent~~.

[23] See Kiparsky and Kiparsky (1970), Cushing (1972), Cornish (1992), Needham (2012), Sailor (2012), and van Elswyk (2019, forthcoming).
[24] See Krifka (2013) and van Elswyk (2019).
[25] See Kramer and Rawlins (2012), van Craenenbroeck (2010), Holmberg (2013), and Authier (2013) for this alternative.

As van Elswyk (2019) argues, an ellipsis explanation of the response markers cannot explain their embedding behavior in conditional antecedents or as the argument to verbs where the non-elided variant is ungrammatical. The balance of evidence therefore favors an anaphoric explanation on which (A2) is satisfied because they are designative expressions.

3.2.4 Proposition descriptions

Descriptions like *The proposition that durian is pungent* have figured in discussions of (R2) mostly because they fail to be intersubstitutible with *that*-clauses. But they are worth considering independently because they plausibly belong to a broader family of descriptions that include *The claim that durian is pungent* and *The evidence that durian is pungent* and which have been taken to designate propositions. Let CONTENT DESCRIPTIONS name this broader family of descriptions.

Content descriptions presumably have whatever semantics definites have. But data provided by Nebel (2019, 81) suggests that they are CONCEALED QUESTIONS. A concealed question is a determiner phrase that has a question-like meaning. His evidence involves the verb *explains*. It only accepts complements that are determiner phrases if they are interpreted as concealed questions.

(21) Andrew explained the $\left\{\begin{array}{c}\text{claim}\\ \text{evidence}\\ \text{proposition}\end{array}\right\}$ that durian is pungent.

Such data is importantly limited, however. That *explains* only selects for determiner phrases that are concealed questions does not mean that such phrases are always concealed questions. It just means that the content description is a concealed question in (21). Since determiner phrases that can be interpreted as concealed questions can be interpreted as normal definites in most other contexts, content descriptions might still have whatever semantics definites usually have.

Nebel's final proposal is that content descriptions are individual concepts. An individual concept is the intension of an individual, or a function from a circumstance of evaluation like a possible world to an individual (Montague, 1974). His proposal naturally fits with a view of concealed questions where they are also individual concepts.[26] Descriptions like *The proposition that durian is pungent* are constant functions that designate the same proposition in every world. They contrast with descriptions like *The evidence that durian is pungent*. They are variable functions to a proposition that depend on what the evidence is at the world of evaluation.

[26] See Frana (2017) for a recent defense of such a view.

His final proposal will not do, however. Moltmann (2013, 135) notes of content descriptions that they compose with causal predicates. For example, *caused astonishment* is predicated of a claim in (22). However, propositions nor individual concepts, if abstract, the kinds of entities that can enter into causal relations. And yet, Nebel's semantic proposal predicts as much.

(22) The statement that durian isn't pungent caused astonishment.

The flat-footed understanding of content descriptions is that the designate an entity of the kind identified by the noun. In (22), for example, the description designates a statement. A statement is an event, an event in which a speaker uses a sentence to express a content in a context. That event can be a cause.

One might try the line that content descriptions are ambiguous. But Moltmann (2013, 137) notes that truth or falsity and causal relations can simultaneously be predicated of whatever content descriptions designate. Were they ambiguous, (23) would be strange sounding.

(23) The obviously false statement that durian isn't pungent caused astonishment.

The lesson to draw is that proposition descriptions are markedly different from content descriptions. Whatever content descriptions designate, the latter do not designate propositions. Accordingly, they fail to satisfy (A3).

However, proposition descriptions should be eliminated from our discussion of an (R2)-basis for propositions too. Descriptions like *The proposition that durian is pungent* are a peculiar bit of philosopher's English. Native speakers rarely, if ever, use *proposition* to identify what philosopher's mean by the term. It is typically used to identify a policy or proposal being considered by a decision-making body. So looking to propositions descriptions for independent evidence that propositions are needed for (R2) is far from compelling.

3.2.5 Proposition names

Like descriptions, *-ism* names like *logicism* or *Marxism* presumably have whatever semantics names do. They satisfy (A2) insofar as names do. But, unsurprisingly, Nebel proposes they are individual concepts. The *explain* data replicates in that *-ism* names can effortlessly be the argument to *explain* but other names cannot unless unusual contexts are imagined to enable their interpretation as concealed questions. However, my earlier remark about the data's limitation still holds.

Nebel (2019, 93) has another line of data. He notes that (25) is natural in comparison to (24).

(24) ? Logicism is (# identical to) that arithmetic reduces to logic.

(25) Logicism is (identical to) the $\left\{\begin{array}{c}\text{claim}\\ \text{evidence}\\ \text{proposition}\end{array}\right\}$ that arithmetic reduces to logic.

His explanation appeals to *-ism* names being individual concepts. They can figure in identity statements with content descriptions because content descriptions are also individual concepts. They cannot figure in identity statements with *that*-clauses because the latter are referential. Though Nebel's explanation assumes that *that*-clauses are referential, no help is found if we regard *that*-clauses as predicates. A predicative statement like (26) is grammatical.

(26) The $\left\{\begin{array}{c}\text{claim}\\ \text{evidence}\\ \text{proposition}\end{array}\right\}$ is that arithmetic reduces to logic.

But, as (24) showed us, *logicism* cannot pattern with descriptions like *The claim / evidence / proposition* in (24) to receive a *that*-clause as a predicate. Tentatively, then, I endorse the conclusion that *-ism* names are individual concepts that take us to a proposition-like entity.

3.3 The case for (A3)

Having considered which entity terms satisfy (A2), let's consider whether those terms designate propositions as opposed to other entities. I eliminated *that*-clauses and descriptions from the running. What remains are free relatives, names, and propositional anaphors. I will group names and free relatives together because they evidence that they designate propositions comes from the predicates they compose with. In contrast, the evidence that the anaphors designate proposition mostly comes from the way they are licensed in a context.

3.3.1 Names and free relatives

We can motivate that names and free relatives designate propositions by noticing that they combine with natural language predicates corresponding to the various roles enumerated earlier. Consider (R7), for example. Whatever proposition names and free relatives pick out, (27) shows that it is the kind of entity which can be believed and known. Or consider the logical roles (R4), (R5), and (R6). Whatever proposition names and free relatives designate, (28) shows it is also the kind of entity that can be entailed, true, or possible.

(27) $\left\{\begin{array}{c}\text{Logicism}\\ \text{What was said}\end{array}\right\}$ is $\left\{\begin{array}{c}\text{believable}\\ \text{known (by Andrew)}\end{array}\right\}$.

$$(28)\ \left\{\begin{array}{c}\text{Logicism}\\ \text{What was said}\end{array}\right\}\ \text{is}\ \left\{\begin{array}{c}\text{true}\\ \text{possible}\\ \text{entailed (by logicism)}\end{array}\right\}.$$

Other roles can be captured by adjusting the verb in the free relative. Consider (R3), which we will discuss independently soon. Relatives like *what was guessed* presumably concern the content of illocutionary acts.

Insofar as a proposition is an entity which performs or is suited to perform (R3) through (R7), the truth of sentences like (27) and (28) evinces that propositional names and free relatives designate propositions. Let's call this the EVIDENCE FROM PREDICATES. To deflate the evidence, two strategies present themselves. The first is to argue that the adjectives in (27) and (28) are not predicates. Not wanting to reify truth as a property, many have argued that *true* does something else.[27] A survey of such proposals is beyond the scope of this chapter. Suffice it to say that skepticism is an appropriate attitude if such theories do not consider *true*'s distribution in a variety of constructions.[28] Nevertheless, the first strategy has not been taken for any of the other adjectives. It is difficult to see how it could be undertaken without rethinking the canonical relationship between adjectives and predicates. As matters stand, the first strategy poses little threat to the evidence from predicates.

The second strategy is to maintain that names and free relatives designate entities other than propositions and that these other entities can also perform roles like (R3) through (R7). As I discussed at the start of this section, most taking this second strategy adopt an easy as opposed to hard non-propositionalism. An exception is Friederike Moltmann who has prolifically worked out an alternative with what she calls ATTITUDINAL OBJECTS, or, for brevity's sake, what I will call A-OBJECTS. I will briefly consider her alternative view as it is presented in her 2013.

An A-object is what is designated by a descriptions like *The belief that durian is pungent* and phrases such as *Andrew's belief that durian is pungent*. When it comes to their metaphysics, A-objects are a special kind of trope or particularized property. That is, they are quasi-relation tropes that an agent instantiates and which consist of (*a*) an attitude mode and (*b*) the propositional constituents to which an attitude is to be related. For example, Moltmann (2013, 158) represents the A-object designated by *The belief that Mary likes Bill* as λx.[believe[x; LIKE, Mary, Bill]]. Two A-objects are identical if and only if they have the same mode and constituents. To illustrate, the A-object designated by

[27] See Grover et al. (1975), Brandom (1994), and Moltmann (forthcoming).

[28] I have in mind interaction with different subjects (*e.g.* free relatives, names, quantifiers, anaphors, sentential subjects), tenses other than the present, epistemic verbs like the *seems* in *logicism seems true*, and adverbs like *probably*. No such semantics has yet to be undertaken by anyone offering a non-predicative semantics.

The belief that Mary likes Bill is different from the one designated by *The hope that Mary likes Bill* because their modes differ.

A-objects differ from propositions because they are not abstract. As tropes, they are instantiations of properties in space and time. To defend their concrete status, Moltmann (2013, §4.1.3) notes that all sorts of properties can be predicated of A-objects which require them to be concrete. Reconsider *The statement that durian is pungent caused astonishment*, which was presented earlier as (22). Insofar as only concreta can enter into causal relations, the sentence's felicity shows that the A-object designated by the *The statement* is concrete as opposed to abstract. However, A-objects are like propositions in that they are apt to perform most of the theoretical roles. Or, so Moltmann alleges. Consider having truth-conditions. That A-objects are true or false is witnessed again by linguistic evidence. We can form sentences like *Andrew's belief that durian is pungent is true* to predicate truth of an A-object.

Moltmann's proposal is difficult to assess. We are told that A-objects crucially involve attitudinal modes as constituents or parts or what-have-you. However, Moltmann neither explains what such modes are nor how particular modes are associated with a particular A-object. Attitudinal modes are somehow associated with the noun in descriptions. But then the specter of circularity surfaces. If descriptions like *The hope that Mary likes Bill* designates an A-object with the attitudinal hope mode, then we travel in a circle if the attitudinal hope mode is merely the mode that figures in the A-object designated by a description like *The hope that Mary likes Bill*.

The linguistic evidence that Moltmann cites to motivate her core claims about A-objects is also questionable in various ways. For example, Moltmann (2013, 134) appeals to the infelicity of sentences like (29) as evidence that attitudinal modes partially determine identity.

(29) ??? John's claim that it will rain is his hope that it will rain.

But such infelicity strikes me as pragmatic. It is difficult to imagine a context in which (29) would be uttered. Other sentences that do seem to identify A-objects with different modes are felicitous.

(30) John claimed what he hoped for—that it will rain.

(31) John expressed his hope through the claim that it will rain.

It is even easier to construct felicitous instances of cross-attitudinal identifications if the identifications involve different subjects and we use *about*-phrases to specify content as opposed to *that*-clauses.

(32) John's hope for what will happen is the same as Bill's belief about what will happen.

(33) What John permitted is the same as what Bill required.

(34) John's thought about what should be required is the same as what Bill commanded.

Since Moltmann bases her individuation claim exclusively on linguistic evidence like (29), the availability of evidence like (30) through (34) shows that constituents and attitudinal modes are not enough for individuation.

But there is a bigger problem. Such data is very difficult to explain without propositions. With propositions, it is naturally explained if what is being identified is the propositional content of attitudes. There is nothing unusual about saying that the content of John's hope is the same as the content of Bill's belief. On a picture where there are attitudes and propositions at which those attitudes are directed, two attitudes can differ as relations but be related to the same proposition. But when we try to do without propositions, matters become very unusual. The felicity of (30) through (34) appears to saddle Moltmann with the false conclusion that different attitudes had by different agents are somehow the same A-object.

Setting aside the general issues with her proposal, it does not facilitate a non-propositional explanation of *-ism* names. Though it plausibly extends to free relatives because they contain a verb like *said* or *guessed* that can be associated with an attitudinal mode, proposition names like *logicism* do not involve attitudes. Note too that when we metalingustically introduce *-ism* names through stipulations like *Let CANNOT-BE-RIGHTISM be the view that there are no propositions or A-objects*, we only have an attitude toward the name through the act of baptism. No attitude by anyone ever needs to be taken to the content that was named. Attempts to somehow associate every *-ism* name with a particular attitudinal mode are slated to fail.

For these reasons, I do not think the second strategy, as taken by Moltmann, is effective for resisting the evidence from predicates. For both free relatives and propositional names, but especially for names, the evidence suggests that (A3) is satisfied: the entity terms designate propositions.

The next bit of evidence is a variant of the evidence from relational attitudes. It originally aimed to conclude that *that*-clauses refer to propositions because attitude verbs are relations between a subject and a proposition and *that*-clauses are arguments to attitude verbs. But abandoning the view that *that*-clauses designate propositions, which I suggested above in favor of the view that they are predicates, does not require us to ditch the view that attitude verbs are relations between (at least) a subject and a proposition as the attitude's object. Accordingly, we can find similar evidence with other terms.

(33) Andrew believes $\left\{\begin{array}{c}\text{logicism}\\ \text{What was said}\end{array}\right\}$.

On the assumption that attitudes like *believe* relate a subject to a proposition, which is the linguistic reflex of role (R7), the capacity of propositional names and free relatives to be the apparent argument to that verb provides a reason why these terms designate propositions.

3.3.2 Propositional anaphors

Whether with *so* or the response markers *yes* and *no*, the evidence from relational attitudes can be re-run again for propositional anaphors. The earlier examples (16) and (17) showed that they can be the arguments to attitudes like *believe*. As I discuss elsewhere (van Elswyk, 2019, forthcoming), the reasons for thinking *that*-clauses are predicates do not apply to the anaphors. For example, the anaphors are not intersubstitutible with postnominal *that*-clauses.

(34) The belief that durian isn't pungent is false.

(35) # The belief $\left\{\begin{matrix}\text{so}\\ \text{yes}\\ \text{no}\end{matrix}\right\}$ is false.

Accordingly, the evidence from relational attitude starts us off with a reason why propositional anaphors satisfy (A3).

But it is not the only reason. The reason given in van Elswyk (2019) depends on how the anaphors are licensed. Anaphors of any kind cannot be felicitously used in a context without an antecedent expression introducing an entity of the proper kind to be available for reference. A sentence like *It is pungent* is infelicitous, for example, unless a non-animate entity like durian has recently been made available for the pronoun *it* to reference. The propositional anaphors are typically licensed by tense phrases.[29] On the assumption that a proposition is a representation of an entity being a certain way, tense phrases have a proposition for their meanings in a context because they are the smallest part of a sentence in which one finds such a representation of an entity. Let's call this the EVIDENCE FROM LICENSING.

The evidence from licensing, as I have framed it, implicitly answers a concern from Asher (1993) about using propositional anaphora as evidence for the existence of propositions. With a variety of examples involving *it* and *that* being used to anaphorically designate propositions, he concludes that the licensing for *it* and *that* being used as propositional anaphors is very messy. Accordingly, were we to use facts about whether *it* and *that* can be used as propositional anaphors

[29] See Snider (2017) for defense of the broader claim that they are licensed by operators that take propositions as arguments. His generalization already assumes that propositions can be assigned as meanings to sentences or constituents thereof. So it is not useful to our present purpose of independently defending (A3).

as an indicator of whether a proposition is introduced into the conversation, we would likely conclude, as Asher (1993, 135) does, that the individuation of propositions is "highly context-sensitive and interest-relative." From there, Asher motivates what he calls a CONCEPTUALISM about propositions. Propositions come and go as we need them to be designated in discourse, but they otherwise do not independently exist.

Importantly, though, the licensing of *so* and the response markers is not messy. For example, the proposition that is the meaning of tense phrase in the main clause of a declarative can always be designated by any of them. There are zero exceptions. The dedicated anaphors, as I called them in van Elswyk (forthcoming), therefore provide a much stronger basis for (R3) than the expressions *it* and *that* which must be flexibly recruited to be propositional anaphors.

The most straightforward way to resist the evidence from licensing is to deny that *so* and the response markers are anaphors. I discussed earlier the alternative that they are non-anaphoric terms that are mandatorily followed by an elided tense phrase. The only other non-propositional alternative that has been proposed is owed to Lebens (2017). Applying a proposal of Wettstein (2004), he suggests that propositional anaphors facilitate SENTENTIAL DISPLAY. To (re-)display a sentence, is to present it and its linguistic properties for consideration. Such a proposal falls into the category of an easy non-propositionalism. A worked out theory of display is never detailed that explains the relevant meaning facts surrounding the anaphors. Whatever display amounts to, it will need to accommodate how anaphors are constrained by the meaning of the tense phrase. Such an observation becomes important with context-sensitive expressions like the indexical *I*.

(36) (A) Andrew thinks that I smell of durian.
(B) Brad thinks so too.

The meaning of (36B) is that Brad also thinks that the speaker of (36A) smells of durian. The *I*, in other words, refers to the speaker in (36A) and that contribution to the meaning of the tense phrase in the embedded clause is what *so* reproduces. Such data is easy to explain if the expressions are treated as anaphors for propositions. The indexical in a context contributes to a proposition and that proposition is what is available for anaphoric for reference. In contrast, sentential display might run the risk of merely displayed the embedded clause such that the indexical *I* refers to the speaker of (36B) as opposed to (36A).

4 The content of illocutionary acts

4.1 Force/content distinction

A speaker's use of a sentence in a context constitutes an action. To understand the interior of a speech act, Frege (1918/1956) distinguished between the act's FORCE and CONTENT. The content of the act is the meaning expressed by the sentence. The act's force is what the speaker does with the content.

With regards to speech acts performed by using a declarative, the force/content is often presented in a manner that assumes (R1). There is the proposition that is the meaning of a declarative in context. Then there is what speakers illocutionarily do with that content. However, the distinction does not presuppose that propositions perform (R1). In recent years, numerous arguments have been given that the meaning of a declarative in a context—its semantic value—is not a proposition where a proposition is understood to be an entity like a set of worlds.[30] Instead, it is a different entity. These authors therefore draw a distinction between a declarative's semantic value and its illocutionary content. It is because (R1) and (R3) are different theoretical roles with different requirements for the entities occuping them that the semantic value of a declarative is thought to not be a proposition. For these authors, to get from a semantic value to a content is a postsemantic process.[31]

I do not wade into this particular dispute over the meanings of declaratives. It is worth flagging, though, not just as another obstacle to an (R1)-basis for propositions, but also because it helps to illustrate that theoretically (R3) can be understood in a manner that does not presuppose (R1).

Some deny the force/content distinction in working out a theory of propositions. Hanks (2007, 2015) is front-and-center here. On the Fregean conception of content, we can think of predication as a neutral act that is prior to a cognitive or illocutionary act like judging a predication as true. Hanks argues there is no neutral act of predication. To predicate is to simultaneously perform a cognitive or illocutionary act. The force/content distinction therefore needs to be abandoned to facilitate a theory of propositions as cognitive act types.

I am not convinced. The distinction remains useful for explaining various facts about communication. To start, I think precisely because there is a neutral act of predication that is prior to judgment, force and content need to be distinguished. For a response to Hank along these lines, see Green (2018). Additionally, the force/content distinction is useful for explaining how different

[30] See Stanley (1997), Ninan (2010, 2012), Rabern (2012), and Yli-Vakkuri (2013). Earlier versions of this argument are found in Dummett (1973) and Lewis (1980).

[31] See Yalcin (2014), Stojnic (2016), and Rabern (2017) for recent discussion of such postsemantic processes.

speech acts can have the same content. Frege (1918/1956) initially made this point with declaratives and polar interrogatives like the pair below.

(37) Durian is pungent.

(38) Is durian pungent?

For him, they had the same content but different illocutionary force. I think a nearby point holds true. Since I take a proposition to be the meaning of a tense phrase in a context, both (37) and (38) contain the same tense phrase. Supporting evidence comes from propositional anaphors. Consider how *Yes, it is* or *I think so* are both felicitous responses to (37) and (38).

But the point can be without the assumption about the meaning of tense phrases. Recall my earlier examples in §3.3.1 of cross-attitudinal identifications. We can tweak these examples to be about speech act reports by using corresponding verbs like *assert* and *guess*.

(39) Andrew asserted what Brad merely guessed—that durian is pungent.

The natural interpretation of (39) is that it identifies the content of two speech acts with difference force. If force and content are not distinguished, it is difficult to understand how sentences like (39) could be true let alone what they could mean. Finally, distinguishing force and content allow the two aspects to be explained differently. Content is determined by semantic convention plus a postsemantic process or two. The distinction allows force to be non-conventional. It can be produced by speaker intentions, social norms, constitutive rules, and more. Without the distinction, however, force must be conventional. Though I myself take the minority view that much of what we think of as force is semantic (van Elswyk, 2018), it cannot all be. For example, the social practices of holding speakers liable to blame or censure for insincerity is traditionally regarded as an aspect of force and that aspect is not owed to semantic conventions.

4.2 Assertion

As tradition has it, there are many distinct speech acts which can be performed by using a declarative in a context. I focus on the speech act of assertion in particular because it is the typical speech act performed with a declarative. Theories of assertion come in many different varieties.[32] Following Benton and van Elswyk

[32] See Cappelen (2011) and MacFarlane (2011) for recent taxonomies.

(2018), I distinguish theories between those that are REPRESENTATIONAL and NON-REPRESENTATIONAL. A representational theory, at least in part, characterizes assertion as an act in which the speaker expresses or represents her epistemic position towards illocutionary content. In contrast, non-representational theories do not characterize assertion with reference to the speaker's epistemic position.

Many different theories fit the description of representational. I highlight two. The first is a norm-based theory of the kind popularized by Williamson (2000). On this approach, assertion is characterized by a norm requiring the fulfillment of an epistemic condition $\mathcal{C}$.

> NORM-BASED THEORY SCHEMA
> One must: assert that p only if $\mathcal{C}$.

Candidate conditions include knowledge, justified belief, and truth. The second approach is an effects-based theory of the kind popularized by Stalnaker (1978). This approach characterizes assertion according to what it does. For Stalnaker, the characteristic effect of assertion is a proposal to update the common ground of a context. The COMMON GROUND is the set of propositions that the conversational participants are mutually believing or accepting in the context.

Both of these accounts straightforwardly assume the existence of propositions. But we can abstract away from this assumption to focus more generally on the requirements they place on illocutionary content. For both, illocutionary content is something towards which a speaker has a cognitive attitude. On a norm-based theory, to assert is to be governed by a norm requiring the speaker to take an attitude like knowledge or belief to illocutionary content. Likewise, to assert is to change what participants take an attitude like belief or acceptance towards. We therefore have good reason to link (R3) with (R7). Given a representational theory, whatever is the object of cognitive attitudes is what the content of assertion is.

It is not a stretch to conclude from the linking of (R3) and (R7) that a proposition is what fulfills both because a proposition, on a functional characterization, is what does or is apt to perform the roles. I dub this the EVIDENCE FROM ASSERTION. However, there are at two familiar ways to counter that it is a stretch. The first is to plumb for a non-representational theory of assertion that does not thereby require us to link (R3) with (R7). I do not regard non-representational theories of assertion as being as explanatory and have argued as much elsewhere.[33]

The second counter is to argue that another entity plays the linked roles or there is a way to proceed with them. Lebens (2017) takes up this challenge by reviving a MULTIPLE RELATIONS THEORY OF JUDGMENT (MRTJ) initially proposed by Russell (1910). On an MRTJ, judgment is not an unary relation between a

[33] See Benton and van Elswyk (2018) and van Elswyk (2018).

subject a proposition. It is a polyadic relation to what the proposition represents. Where a propositionalist would say that the judgment that durian is pungent is judgment towards a proposition, Lebens says that we are related to durian and pungentness such that the latter is judged to be the former. Lebens thereby explains an attitudinal notion like the common ground in terms of being similarly judging. Where a propositionalist would say that a proposition enters the common ground if accepted, Lebens says grounding happens when conversational participants both stand in the acceptance relation, a kind of judgment, to various objects and properties ordered in the same way.

The MRTJ or something like it does not pose a viable alternative. Beyond the broader worry that Lebens's revival of MRTJ does not overcome the initial problems that plagued Russell's version, it obliterates the force/content distinction. Lebens takes judgments to be the bearers of truth and falsity as opposed to contents to which judgments are related. As subkinds of judgment, speech acts are therefore true or false. Given MRTJ, there cannot then be speech acts like assertions and guesses that differ in force but share the same content.

5 Conclusion

For those who deny their existence, propositions are creatures of darkness only countenanced because theorizing got carried way (Quine, 1960). Others may admit their existence, but worry, as Lewis (1986, 54) aptly does, that "the conception we associate with the word *proposition* may be something of a jumble of conflicting *desiderata*." Whether such reactions are justified depends on whether there are roles for propositions to play in our leading theories.

This chapter has surveyed some of the details pertinent to whether propositions are needed for the linguistic roles. Given the theoretical choice-points we have considered, the linguistic basis for propositions remains. But not as the basis is usually championed. When it comes to (R1), positing propositions is not necessary. Other entities can be and are assigned as the meanings of declaratives in leading semantic theories. But the propositionalist receives a consolation prize. Though other entities can and do supplant propositions in successful theories, theories often retain one or more theoretical roles for a proposition. When it comes to (R2), I have suggested that propositions are plausibly needed. They are needed to explain what certain expressions of natural language designate. Importantly, though, *that*-clauses do not make this list. The list includes propositional anaphors, free relatives, and names. Finally, when it comes to (R3), I have more tentatively suggested that leading theories of assertion require illocutionary content to be a proposition.

My own view on the place of propositions fits well with this conclusion. I

take propositions to be the meanings of tense phrases in a context.[34] Whether or not propositions fulfill (R1), propositions therefore perform the auxiliary role (R1**). Since tense phrases are what license the use of propositional anaphors, (R1**) and (R2) are tightly connected. The availability for propositional anaphora is a necessary condition for whether content is assertoric or not. In other words, there is no situation in which th object of assertion cannot be targeted with anaphors. So there is a tight connection between (R1**), (R2), and (R3) as well.

However, the connectedness of the roles is not mandatory. Of particular independence from the rest is (R1). Independence can be illustrated by imagining different ways to reject that propositions are needed to perform (R1) while accepting that they are still needed for some role. One might adopt a truth-thereotic semantics and thereby not assign propositions as the meaning of any declaratives or phrases within one. And yet, propositions might still be countenanced to explain what propositional names and anaphors designate in a context. Or, one might regard the semantic value of a declarative as being a different entity entirely, but still appeal to a postsemantic process to convert that entity into a proposition to be assertoric content. Accordingly, there are many ways to break with tradition or my opinionated survey and still find cause to posit propositions.[35]

[34] Taking propositions to be the meanings of tense phrases is a familiar enough assumption in semantic theories. However, independent evidence comes from the distinction between tense phrases and small clauses, language acquisition, and propositional anaphora. See Glanzberg (2011), Roeper (2011), and van Elswyk (2019) for discussion. [35] Thanks are owed to Andrew Bailey and Joshua Spencer for comments or conversation.

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