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A NATURALISTIC ANALYSIS OF CONTENT ASCRIPTIONS

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SUMMARY: I articulate and defend an analysis of true content ascriptions proposed by Devitt, according to which they predicate worldly semantic properties instead of involving relations to abstract propositions. I develop the metaphysical case against treating contents as abstract propositions, addressing possible replies to Devitt's argument based on the causal-explanatory roles of contents and offering further considerations. I explain how the Devittian analysis of content ascriptions can account for the validity of certain inferences often thought to require a propositional analysis. Finally, I argue that it also circumvents linguistic problems faced by the standard propositional analysis of ascriptions and offers a plausible alternative for capturing their logical form and meaning.

KEYWORDS: attitude reports, Michael Devitt, propositions, causal role of content, naturalistic metaphysics

RESUMEN: Articulo y defiendo un análisis de adscripciones de contenido verdaderas propuesto por Devitt, según el cual éstas predican propiedades semánticas mundanas en lugar de involucrar relaciones con proposiciones abstractas. Desarrollo el caso metafísico contra la idea de tratar los contenidos como proposiciones abstractas, abordando posibles respuestas al argumento de Devitt basado en los roles causal-explicativos de los contenidos y ofreciendo consideraciones adicionales. Explico cómo el análisis devittiano de las adscripciones de contenido puede dar cuenta de la validez de ciertas inferencias que a menudo se considera que requieren un análisis proposicional. Por último, sostengo que también evita problemas lingüísticos a los que se enfrenta el análisis proposicional estándar de las adscripciones y constituye una alternativa plausible para captar su forma lógica y su significado.

PALABRAS CLAVE: reportes de actitudes, Michael Devitt, proposiciones, rol causal del contenido, metafísica naturalista

1. *Introduction*

This paper offers a defense and further development of Michael Devitt's non-propositional analysis of content ascriptions. According to the standard propositionalist analysis (SA), "that"-clauses (TCs) refer to abstract propositions and quantifiers in general ascriptions range over them. Devitt rejects this account on metaphysical grounds

and proposes that particular ascriptions predicate semantic properties of token thoughts or utterances, and that general ascriptions, while apparently quantifying over propositions, can be paraphrased in ways that avoid such commitments. I expand on Devitt's proposal by clarifying its logical forms, strengthening its metaphysical motivation, and showing how it can account for key inferential and linguistic data. I argue that the standard appeal to Platonic propositions is not only metaphysically problematic but also linguistically unmotivated. If ascriptions are to play the explanatory roles we assign to them, their truth must depend on worldly features of token mental or linguistic events. After presenting the standard view (section 2), Devitt's alternative (section 3), and independent linguistic objections to SA (section 4), I take stock (section 5), then develop the metaphysical argument (section 6), assess the structure and commitments of Devitt's analysis (section 7), and examine its linguistic motivations (section 8).

2. *The Standard Analysis*

Propositions are commonly regarded as abstract objects that constitute the contents of utterances and thoughts as well as the primary bearers of truth values. The main argument in support of the existence of such entities relies on SA.

According to SA, *particular* attitude ascriptions of the form "S believes *that p*" or "S said *that p*" assert relations between S and *the proposition that p*, because the TC works as a "referential singular term" standing for that object (Schiffer 1992, p. 506). SA regards particular ascriptions as having the same form as "A loves B", which asserts a relation between A and the *object* referred to by "B" (Richard 1990, p. 5). The logical form of "A loves B" is *Lab*, where *a* and *b* are names and *Lxy* is a two-place predicate. Analogously, the forms of "S believes *that p*" and "S said *that p*" are alleged to be $Bs\langle p\rangle$ and $Ss\langle p\rangle$, where the two-place predicates *Bxy* and *Sxy* symbolize the believing and saying relations, *s* is the name of the believing or saying subject and $\langle p\rangle$ is a singular term referring to *the proposition that p*: the thing that is believed or said. SA is intended to cover ascriptions with all the attitude verbs.

SA is supported by considerations regarding the logical form of *general* ascriptions containing quantifiers and the validity—and soundness—of *inferences* linking them to particular ascriptions. Consider the following inferences:

(1) Copernicus and Galileo believed *that the Earth moves*.

So, *there is something* that they both believed.

(2) Nancy believes *everything* Mary says.

Mary says *that it will rain*.

So, Nancy believes *that it will rain*.

Stephen Schiffer (1992, pp. 504–506) and Paul Horwich (1998, pp. 86–90) argue that the quantifiers in the general ascriptions range over a domain of *objects*—namely, the things that are believed or said—and that the TCs in the particular ascriptions should function as referential singular terms picking out objects in the same domain for the inferences to be valid. They propose that the logical form of (1) is the valid existential generalization:

(1_{SA}) $Bc\langle\text{the Earth moves}\rangle \wedge Bg\langle\text{the Earth moves}\rangle$

$\therefore \exists x\,(Bcx \wedge Bgx)$

and the logical form of (2) is the valid universal instantiation:

(2_{SA}) $\forall x\,(Smx \rightarrow Bnx)$

$Sm\langle\text{it will rain}\rangle$

$\therefore Bn\langle\text{it will rain}\rangle$

If this is correct, what the TCs purport to refer to and the quantifiers purport to range over are propositions. George Bealer (1982), Wolfgang Künne (2003), Jeff Speaks (2014) and many others also argue that inferences like (1) and (2) require analyses like (1_{SA}) and (2_{SA}). This is widely regarded as the main argument for propositions. But the proposed analyses are not enough to establish the existence of propositions. As Horwich (1998, p. 90) points out, this requires granting also that some such inferences are *sound*. Thus, the case for propositions depends not only on SA's suggestion that ascriptions *purport* to refer to and quantify over propositions, but also on there being *true* ascriptions that actually do so.

Advocates of SA typically regard propositions as Platonic abstract objects that exist outside of the world of space and time and are mind- and language-independent (Schiffer 1992, p. 506; Bealer 1998,

p. 1).[1] Concrete objects allegedly cannot be the referents of TCs, since the same clause is supposedly used to refer to the content of different utterances and thoughts: the clause in "S said *that p* and R believes *that p*" presumably refers to a single object that S and R are related to, not to a sentence token uttered by S or a token mental representation in R's head (Balaguer 2025). There are competing views about what sorts of abstract objects are the referents of TCs (which may be taken to be Fregean "thoughts" in a "third realm", sets of possible worlds, abstract structured entities combining individuals and properties, etc.). But the commitment to propositions *qua* Platonic abstract objects shared by such views is problematic.

3. *Devitt's Alternative Approach*

Motivated by metaphysical concerns about treating contents as abstract propositions, Devitt proposes alternative analyses of content ascriptions. He suggests that TCs in particular ascriptions do not refer to propositions, while general ascriptions do quantify over them but function as mere manners of speaking that can be paraphrased to avoid ontological commitment to such entities. The next subsections present his metaphysical objection to propositions, followed by his proposals on how to account for the truths expressed by particular and general ascriptions.

3.1. Metaphysical Problems with Platonic Propositions

Regarding the contents of utterances and thoughts as abstract objects raises difficult questions. A crucial one is: how can they be the contents of concrete utterances and thoughts they cannot interact with, given the causal closure of the physical world? As Devitt argues, "because [Platonic] propositions and the like can play no causal role in mind and language, we have the best of reasons for thinking that they are not part of mental and linguistic reality" (1996, p. 210).

Devitt stresses that the contents of utterances and thoughts play causal roles in the spatio-temporal world. People behave the way they do because of the contents of their beliefs, desires and other mental states. People's mental states and behavior are in turn influenced by the contents of other people's utterances and thoughts. Suppose that Mark believes that it is raining and shares his belief with Nancy by

[1] I follow the contemporary convention of calling abstract objects "Platonic" and the doctrine that such things exist "Platonism". But scholars disagree on whether Plato really regarded "Forms" or "Ideas" as existing in a realm *separated* from the spatio-temporal world. Gail Fine (2003, ch. 11) offers an overview of this debate.

uttering "It is raining". The content of Mark's belief plays a causal role in the explanations of why he picks up an umbrella and of why he utters that sentence, while the content of his utterance plays a causal role in the explanations of how Nancy comes to believe that it is raining—gaining information about the weather if Mark is reliable—and of why she also picks up an umbrella (Devitt 2013, p. 138).

Crucially, our *folk-psychological* explanations of such facts rely on *ascribing contents* to people's thoughts and utterances. As Devitt emphasizes, two of the main purposes for which we use ordinary content ascriptions are to *explain and predict* people's behavior and to account for how their utterances and mental states *serve as guides to reality* (1996, pp. 57–60). According to Devitt, these ascriptions succeed to the extent that they track contents which constitute *causally efficacious* features of the world. So, there are compelling reasons to regard contents as *worldly natural phenomena*:

> A commitment to [...] Platonic propositions would be appropriate [...] only if these propositions do real explanatory work. And it is hard to see how entities that are outside space-time could do any such work. Thoughts and the utterances that express them are parts of the natural physical world. How, then, *could* they be related to entities outside space-time? Even if they could, how *could* their being so related do any work? Our task is to ascribe properties to thoughts and utterances that can explain their causal role in the spatio-temporal world. Relations to objects outside the causal order surely could not do this. (2013, pp. 140–141)

The contents of utterances and thoughts play causal roles in the spatio-temporal world that Platonic propositions cannot play. So, the contents of utterances and thoughts cannot be Platonic propositions.

Since ascriptions are indispensable to our folk-psychological explanations of behavior and cognition, and since those explanations are often *successful*, there is strong evidence—as Devitt argues—that thoughts and utterances really do possess the kinds of contents we ascribe to them (1996, p. 71). But if those contents are *real* and *causally efficacious*, they *cannot* be Platonic propositions—and so the correct account of *true* content ascriptions cannot treat them as about such objects. (Recall that the existence of propositions requires not just SA, but also true ascriptions that actually refer to or quantify over them.) This implies that ascriptions must be able to be either *literally true* and about *worldly semantic properties*, or at

least *non-literally convey* truths about such properties. The challenge is to provide an account of ascriptions that does justice to their explanatory utility and to the naturalistic constraint that contents must be part of the causal fabric of the world.

3.2. A Predicative Analysis of Particular Ascriptions

Motivated by his metaphysical considerations, Devitt suggests an alternative analysis according to which TCs do not refer to propositions. He proposes that particular ascriptions have the same form as "A loves *some* B", instead of "A loves B", so that TCs function as *indefinite singular terms* rather than *referential* ones (1996, p. 56; 2013, p. 149). According to DA, "S *v*'s *that p*" asserts a relation between S and *some* object—a *token thought* or a *token utterance*, depending on the attitude verb "*v*"—which has the representational property or content specified by the *predicative* TC (1996, p. 56; 2013, p. 149).[2] For example, "Nancy believes that it will rain" would be equivalent to "Nancy has a belief which has the content that it will rain". A natural interpretation of Devitt's analogy with "A loves some B" is that the TC functions as the *monadic* predicate "*x* has-the-content-*that-p*"—though he does not explicitly formulate it in these terms.

But Devitt also proposes that the TC specifies a semantic property by means of *synonymy* or *sameness of content* with the sentence it contains:

> The expression 'that *p*', used to ascribe a putative meaning, seems to ascribe that property in virtue of the fact that its content sentence, '*p*', has the property or one very like it. So there always seems to be an "intimate link" between the two properties. However [...] we can abstract from this link, treating [...] 'that *p*' like any arbitrary expression for a property. (1996, p. 82)

This suggests that a particular attitude ascription is true if and only if *some* thought or utterance of S has the *same content* as "*p*".[3] Devitt

[2] Devitt says that the indefiniteness may be located in the TC or in the attitude verb and that he has "no strong views on this subtle syntactic issue", but he suggests that ascriptions without TCs like "Ralph believes Gödel's Theorem" give reason for locating it in the verb (1996, p. 216). Some linguists propose that a quantifier is indeed introduced by the verb (section 8.2).

[3] Devitt (1996, p. 217) employs quotation marks. But perhaps "*p*" is both *mentioned* and non-assertively *used*, since mere mentioning does not require that the speaker understands it (Ludwig and Ray 1998) or that it is in the language of the ascription.

argues that the "intimate link" is usually one of *identity* between the content of the ascribed token thought or utterance and that of the content sentence token (1996, pp. 116, 121, 123)—where the spatio-temporally located tokens involved are *meaningful tokens*, not meaningless tokens stripped of their semantic properties: "By talking of meaningful tokens, we can avoid talk of 'propositions'" (1996, p. 13). This proposal treats the TC as the *dyadic* predicate "*x* has-the-same-content-as *y*", where the second place is ocuppied by a singular term for the content sentence token. For example, "Nancy believes that it will rain" would be true just in case Nancy has a belief that has the same content as the token of "it will rain" embedded in the ascription.[4]

Devitt proposes two versions of DA: a monadic one (DA_M), which gives a coarse-grained account of the predicative role of TCs, and a dyadic one (DA_D), which analyzes *how* TCs specify representational properties. Although Devitt doesn't explicitly mark the distinction, his appeal to *synonymy* points toward DA_D, while his analogy with "A loves some B" and his claim that we can *abstract away* from the intimate link support DA_M.

Part of the appeal of SA stems from particular ascriptions seeming to have the form *Rab*. But, as Devitt notes, "an attitude ascription no more appears to have the logical form of "Iago kissed Desdemona" than it appears to have that of "Iago kissed a woman" and, if DA is correct, ascriptions do not "commit us to [Platonic] propositions" but to "mental states [and utterances] with representational properties" (Devitt 2013, p. 149). Devitt argues that DA is as linguistically plausible as SA, and has the added metaphysical advantage of treating the contents ascribed as *properties* of concrete utterances and thoughts, rather than as *abstract objects*. Given that *true* ascriptions specify contents that play causal roles in the spatio-temporal world, Devitt's analysis offers a plausible way to understand the ascribed contents as *worldly phenomena* that satisfy this naturalistic constraint.[5]

[4] Davidson's paratactic analysis also treats ascriptions as involving *synonymy* or "*samesaying*" with the utterance of the content sentence, but treats them as two *separate* sentences ("S says *that*. P."), with 'that' as a *demonstrative* referring to the utterance of "P" (Davidson 1984, pp. 93–108; Lepore and Loewer 1989). DA avoids these features and aligns with linguistic evidence that 'that' functions as a complementizer (Segal and Speas 1986). A closer proposal by Ludwig and Ray (1998) appeals to synonymy avoiding parataxis and demonstratives. It relies on sentence *types*, however, which are often taken to be abstract objects. Devitt (2010, p. 26) recommends replacing talk of types with talk of tokens to avoid such commitments.

[5] Combining DA with a Platonic account of *properties* as abstract objects would

The contents ascribed uncontroversially include *truth conditions*. For Devitt, however, these are not inherited from abstract propositions but are worldly properties had independently by token utterances and thoughts, including the content sentence tokens embedded in ascriptions. Devitt further argues that the properties ascribed include *modes of reference*, on the grounds that meaningful tokens with the same truth conditions can differ in their explanatory roles. A person may act on the belief expressed by "Mark Twain is at the Town Hall" but not on the belief expressed by "Samuel Clemens is at the Town Hall", even though "Mark Twain" and "Samuel Clemens" co-refer. Devitt (2020, 2012, 2015) takes such differences as evidence that modes of reference expressed in content ascriptions help account for action, and are therefore among the semantic properties ascribed.[6]

3.3. General Ascriptions without Propositions

General ascriptions like (3) and (4) below seem to quantify over *propositions*. But, as Devitt (1996, pp. 212–213) points out, *paraphrases* that serve the same purposes and clearly do *not* quantify over propositions are "readily available". For example, (3) and (4) can be paraphrased as (3′) and (4′), respectively:

(3) There is something that both Copernicus and Galileo believed.

(3′) Some belief of Copernicus had the same content as some belief of Galileo (cfr. Devitt 1996, p. 213).

(4) Nancy believes everything Mary says.

(4′) If Mary assertively utters any sentence, Nancy has a belief with the same content.

(3′) and (4′) quantify over *meaningful tokens*. Yet they serve the same purposes as (3) and (4). For example, (3′) conveys the same information as (3) about the shared content of Copernicus' and Galileo's beliefs. (4′) likewise serves the same explanatory purpose as

not satisfy this naturalistic constraint. This opens space for a variety of non-Platonic accounts of representational properties (section 6.2; Withrington 2023).

[6] Devitt's *modes* differ from Fregean *senses* in not being abstract objects and not necessarily involving descriptions. Given well-known arguments against description theories of reference (Kripke 1980; Putnam 1975), some words and concepts are better understood as having *non-descriptive modes*—constituted by the non-descriptive factors that determine their reference. This view contrasts with *direct reference* theories (Salmon 1986; Soames 2002). For a direct reference reply to Devitt, *see* Braun 2020; for a response, *see* Devitt 2020.

(4) in accounting for Nancy's picking up an umbrella after hearing Mary utter "It will rain"—although it better serves this purpose if (4) is read as quantifying over Platonic propositions, which cannot play a causal role in such an explanation. Notice that the paraphrases *predicate* that pairs of meaningful tokens have the same content. This neatly matches DA_D's reliance on synonymy between tokens to explain how particular ascriptions specify contents.

Despite his non-propositionalist analysis of particular ascriptions, Devitt concedes that general ascriptions like (3) and (4) quantify over *propositions*—and thus regards them as *literally false* (1996, p. 213), given the metaphysical considerations discussed above. Yet because such general ascriptions appear "explanatorily useful" and "generally successful", he suggests that they are mere *manners of speaking* that can be replaced "in the Quinean way" by paraphrases that serve the same purposes "without the objectionable commitment" (1996, p. 213)—that is, without quantifying over propositions, which cannot play the causal roles in virtue of which the ascriptions are explanatorily useful. The original sentences and their paraphrases are equivalent "in *some* sense" but cannot be *synonymous*, since they differ in their ontological commitments (Devitt 2010, p. 25). Stephen Yablo (1998, p. 248n) makes a useful suggestion for such cases: "a paraphrase of *S* expresses in literal terms what *S* says metaphorically", which explains how a "paraphrase 'says the same' as what it paraphrases" when their *literal* meanings differ. This is compatible with the Devittian analysis of general ascriptions (DA_G), which we can thus characterize as follows: paraphrases like (3′) and (4′) express literally what (3) and (4) convey figuratively. DA_G shows how general ascriptions can convey *truths* about worldly semantic properties, thereby preserving their causal-explanatory role in accounting for behavior and cognition.

4. *Linguistic Problems with the Standard Account*

In addition to Devitt's metaphysical concerns, a separate line of criticism has challenged SA on linguistic grounds. Though not part of his case, these objections raise independent doubts about whether SA offers the correct analysis of "that"-clauses and even quantifiers. This section briefly reviews some of the main linguistic problems with SA, which may further motivate the search for alternatives like DA. I then turn to my own contributions: advancing the metaphysical case for a non-propositionalist analysis, developing DA more fully, and strengthening the linguistic case in its support.

4.1. Semantic Substitution Failures

If "*that p*" refers to a proposition, it should be replaceable by "*the proposition that p*" without a change in meaning. But such substitution often fails. (5a) cannot be paraphrased as (5b):

(5a) Nancy fears *that it will rain*.

(5b) Nancy fears *the proposition that it will rain*.

(5b) reports an odd attitude that clearly differs from the one reported by (5a). Similar failures occur with "expect", "mention", and "remember". Such failures seem to provide evidence against SA's claim that TCs are singular terms referring to propositions (Prior 1971; Moltmann 2020; 2013; 2003; Hofweber 2016; Matthews 2022).

A variant of the problem arises in general ascriptions. If the quantifiers in the relevant contexts range over propositions, they should be replaceable with quantifiers explicitly restricted to propositions, again without a change in meaning. But consider:

(6a) Nancy fears *something*.

(6b) Nancy fears *some proposition*.

In the context of an inference from (5a) to (6a), (6a) cannot be paraphrased as (6b), which does not have the same truth conditions and is not entailed by (5a). These failures seem to provide evidence against SA's treatment of quantifiers as ranging over propositions (Prior 1971, p. 16; D'Ambrosio 2023, 2021).[7]

In defense of SA, Jeffrey King (2007, ch. 5) proposes that verbs like "fear" are polysemous: a TC triggers a "content relation" reading, while a noun phrase (NP) like "*the proposition that p*" triggers an "object relation"—even though they co-refer. But this undermines

[7] There are also cases of *syntactic* substitution failure. For example, replacing "fears" with "hopes" in (5a)–(6b) yields ungrammatical variants of (5b) and (6b). Such failures have been argued to undermine SA for TCs (Moltmann 2020; 2017; 2013; 2003; Matthews 2022) and for quantifiers (Rosefeldt 2008, section 4). I doubt these failures pose a real threat to SA, since they are plausibly explained by syntactic selectional restrictions—e.g., "hope" selects for a CP (a clause complement) and resists DP or noun phrase complements, possibly due to constraints on accusative case assignment, as an anonymous reviewer notes. Many verbs (like "fear" or "remember") assign accusative case to noun phrases and take them as direct objects, but "hope" cannot. This restriction may explain why these ungrammatical variants of (5b) and (6b) can be repaired with "hope *for*". Nebel (2019) shows that such repairs are possible, although they may still give rise to *semantic* substitution failures.

the inference from (5a) to (6a), since the NP "*something*" would trigger a different reading than the TC (Hofweber 2016, p. 218).[8] A further problem is that no ambiguity or *zeugma* arises in sentences like "Nancy fears the surgery and that it will be expensive", even though they combine both an NP and a TC as complements (King 2007, p. 219; Nebel 2019, p. 77). Moreover, King's proposal seemingly fails to solve the quantificational variant, since the complements in (6a) and (6b) are both NPs (D'Ambrosio 2021, section 3).

Jacob Nebel (2019) proposes that SA is right about TCs referring to propositions, but that "*the proposition that p*" refers instead to a *function* from situations to propositions—thus explaining substitution failure. As I see it, "*the proposition that p*" plainly purports to refer to a proposition, just like "*the rumor that p*" purports to refer to a rumor. As Nebel (2019, p. 90) himself notes, however, his reasoning entails that "*the rumor that p*" cannot refer to a rumor either! The view also implies that sentences like "The rumor *that p* surprised/hurt S" can never be true, since functions are causally inert (Güngör 2022). Furthermore, it does not seem to solve the quantificational variant, since (5a) would license (6a) as quantifying over propositions, and thus (6b) (D'Ambrosio 2023, section 4).[9]

4.2. Marks of Concreteness

Further doubts about SA arise from a range of linguistic phenomena—including the kinds of predicates that quantifiers and attitude nouns naturally take, the entities these nouns appear to refer to, and the syntactic role of TCs in noun constructions.

Consider "John thought something daring" and "Nancy said something nice". In both cases, the quantifier appears to range over concrete contentful entities—such as a token thought or a particular remark—that are described as *daring* or *nice*, which are not properties plausibly predicated of propositions (Moltmann 2013, pp. 142–143). Other examples involve predicates like "unusual", "surprising",

[8] King (2007, pp. 160–162) suggests that "something" is a *special* NP that can trigger *either* reading of "fear", but this clashes with his claim that the syntactic category of the complement determines the meaning of the verb (Hofweber 2016, pp. 218–219).

[9] Nebel (2019, p. 92) suggests that (6b) may quantify over *functions* from situations to propositions, rather than over *propositions*, thereby blocking the inference from (5a). But as D'Ambrosio (2023, section 4) responds, this seems to conflict with the standard semantic analysis of (6a), which formally specifies its domain of quantification as propositions—something (6b) merely makes explicit in the object language.

"persistent", or "unwelcome". This suggests that general ascriptions may quantify over meaningful tokens—such as thoughts, fears, remarks, or claims—rather than propositions.

Attitude nouns such as "belief", "claim", and "hope" appear to refer directly to such entities. They combine naturally with similar predicates: "John's belief is unusual", "Mary's claim was mean", "Sarah's hope is persistent". Again, these predicates are not plausibly interpreted as applying to abstract propositions, but to concrete mental states or speech acts with content (Moltmann 2013, p. 136).

Moreover, in expressions like "S's belief/claim/fear/hope *that p*", the TC is optional—which suggests that it may not function as an argument (van Elswyk 2023, p. 64). A possible reply is to treat the TC as a singular term in *apposition*—like the name in "my aunt Susy"—so that, even if it is not an argument, it can still be taken to refer to a proposition. But this would require attitude nouns also to refer to propositions, since terms in apposition co-refer—which conflicts with the kinds of predicates these nouns naturally take.

Finally, it is noteworthy that verbal and nominal ascriptions alternate in ways that preserve meaning. "Nancy believes that it will rain" has noun-based counterparts like "Nancy has the belief that it will rain" and "Nancy's belief is that it will rain". Similarly, "Nancy claimed that it will rain" alternates with "Nancy made the claim that it will rain" and "Nancy's claim was that it will rain". In the nominal ascriptions, the TC does not seem to function as an argument and is unlikely to be a singular term for a proposition—if the above considerations are correct. But the verbal and nominal variants appear closely matched in meaning (Moltmann 2017, section 3.3.2; Matthews 2022, section 3), suggesting that, perhaps, the verbal variants do not involve referential TCs in argument positions either.

5. *Taking Stock and Moving Forward*

I have surveyed the standard propositionalist account of content ascriptions (SA) and presented two major lines of criticism: Devitt's metaphysical objection to abstract propositions and a series of independent linguistic challenges. I also reviewed Devitt's alternative analyses of particular and general ascriptions, which avoid ontological commitment to propositions by appealing to causally efficacious features of concrete utterances and thoughts.

Devitt argues that contents must be worldly features of utterances and thoughts—rather than abstract propositions—because they play causal-explanatory roles in behavior and cognition. But do they really

play such roles? And what can a defender of abstract propositions say about this apparent explanatory role of contents? A further question is whether the main independent metaphysical motivation for treating contents as abstract objects—namely, the idea that they are needed to account for how different tokens can have the same content—is compelling.

Devitt proposes an explanation of how the TC specifies a content by appealing to synonymy with the embedded sentence, while also suggesting that we can abstract away from such details. But does a coarse-grained monadic account like DA_M really suffice to avoid commitment to propositions? And even if we adopt a finer-grained dyadic analysis like DA_D based on synonymy, might this not itself presuppose shared abstract contents? Moreover, while Devitt sketches alternative analyses to SA, he does not explicitly articulate their logical forms or explain how they account for the inferential patterns illustrated in (1) and (2)—patterns whose validity is often taken to require SA, which is widely regarded as one of the strongest considerations in its favor. Without addressing these points, the plausibility of DA as a viable alternative remains unclear.

Moving on to the question of which analysis best captures the semantics and commitments of ordinary content ascriptions, Devitt conjectures that DA may provide the correct account of particular ones, though he offers no evidence beyond its apparent parity with SA in those cases. He concedes that quantifiers in general ascriptions like (3) and (4) literally range over propositions, and his DA_G is not meant to capture their literal truth conditions but merely what they non-literally convey. Yet the linguistic considerations reviewed in section 4 seem to cast doubt on SA not only for TCs but also for quantifiers, potentially providing actual support for DA on particular ascriptions and challenging the need for the concession about general ones. These are important questions about the meaning of folk ascriptions, which Devitt does not address.

In what follows, I take up these three challenges in turn. I begin by expanding the metaphysical case against abstract propositions and considering how a realist might respond to the explanatory role of contents, as well as whether accounting for shared contents actually requires positing abstract propositions (section 6). I then turn to the adequacy and structure of DA, making explicit its logical forms, examining whether it can account for the inferential patterns often taken to support SA, and assessing whether its proposed analyses genuinely avoid commitment to propositions (section 7). Finally, I

assess the linguistic motivations for DA by revisiting the evidence surveyed in section 4 and addressing possible propositionalist replies to it (section 8).

6. *Developing the Metaphysical Argument*

Devitt argues that the contents of utterances and thoughts must play causal roles, since this best explains the predictive and explanatory success of folk psychology. This line of argument closely parallels Fodor's (1987) well-known case for realism about mental representations *qua* inner states with semantic properties and causal powers: the most plausible explanation of the success of belief-desire explanations is that they refer to real mental representations. The case remains solid. Indeed, it is strengthened by contemporary cognitive science, which relies on structured, causally efficacious internal states with content to explain both behavior and cognition.

Recent studies in cognitive science suggest that many phenomena—such as inference, belief revision, and motivated reasoning—require positing belief states that both have content and help explain behavior. Quilty-Dunn and Mandelbaum (2018) point to cases where performance depends on how a subject internally represents a task—for instance, sorting cards labeled "spades and clubs" versus "non-diamonds and non-hearts". Even if the instructions are logically equivalent, the form in which they are represented affects how the subject categorizes and acts. In other cases, such as belief revision, the relevance of content is more direct. In dissonance experiments, people who are induced to act against their prior beliefs often revise those beliefs in order to resolve the dissonance, and the change affects how they subsequently behave. Similarly, in the "sleeper effect", subjects may be influenced by information they initially rejected, once the discrediting source is forgotten.

Porot and Mandelbaum (2021) add that belief contents guide what people notice, remember, and infer. For example, when subjects committed to a political view are presented with mixed evidence, they tend to retain and act on the part that matches their prior belief. In all these cases, behavior is shaped not just by having beliefs, but by their specific *contents*. The placebo effect shows the same for non-intentional responses: it is the belief with the content *that the treatment will help* that brings about the physiological change. Content plays a role in how belief states affect behavior, and its

causal relevance is often simply assumed in these studies.[10] Of course, one might argue that it is not the contents themselves, but rather other features of these internal states, that are causally efficacious. This weaker claim would still allow for the states to be semantically evaluable and causally efficacious, while treating their contents as causally inert—a possibility I return to below.

If Devitt is right, contents must be worldly and causally efficacious—not causally inert *abstracta*. This is supported by the success of content-based explanations in folk psychology and cognitive science.[11] But what can defenders of Platonic propositions say in response? Can they accommodate the explanatory role of content without giving up the idea that contents are abstract objects? And are such objects independently required to account for shared contents?

6.1. Propositionalist Replies to the Explanatory Argument

Advocates of Platonic propositions often contend that their opponents are motivated by a general and unjustified aversion to abstract objects as either mysterious, unknowable, or lacking adequate identity conditions (Bealer 1998, pp. 1–2; Schiffer 2008, pp. 283–284; Horwich 1998, p. 90; 2010, p. 33). But even if we grant that positing abstract objects can be justified in some cases—such as the case of sets or numbers—such objects do not play causal roles in the spatio-temporal world. Indeed, most contemporary Platonists agree that abstract objects are causally inert. Yet, advocates of Platonic propositions often do not even address the issue of the causal roles of contents when defending the abstractness of propositions. In his survey of the *main* objections to abstract propositions, Schiffer (2008, pp. 283–284) considers only one concern related to causality: the epistemological worry that we could not know about *abstracta* if we cannot causally interact with them. He rejects the *causal theory of knowledge* that motivates this concern and concludes it is unproblematic that propositions are causally inert. The same point is made by Horwich (1998, p. 90). This does not address the concern about the *causal roles* of contents in the explanation of behavior. The strongest case against Platonic propositions is often simply ignored.

[10] Not all views hold that belief is a causally efficacious state. Dispositionalist accounts treat belief as a pattern of dispositions to act, feel, or assert (e.g., Schwitzgebel 2013). But as Quilty-Dunn and Mandelbaum (2018) argue, such views fail to account for the explanatory patterns and behavioral effects revealed by current empirical work.

[11] I thank an anonymous reviewer for encouraging me to engage with this literature on the cognitive science of belief.

In fairness, Schiffer (2003) does discuss the issue, as I point out below.

One possible reply is to deny that contents, understood as abstract propositions, are causally inert. But this conflicts with the widely accepted *principle of the causal closure of the physical world*, which holds that every physical effect has a fully sufficient physical cause. This principle is supported by physical science, especially by laws like the *conservation of energy*, which appear to exclude non-physical causes. Since abstract objects are not physical, allowing them to play causal roles would require giving up this principle—a move most philosophers, including Platonists, reject.[12]

A second reply is to reject the key premise that contents play genuine explanatory roles in behavior and cognition. But this move undermines the main reason for positing contents at all—namely, the explanatory success of belief-desire psychology. If contents are not doing explanatory work, then it is unclear why we should be *realists* rather than *eliminativists* about them—whether they are conceived as abstract propositions or otherwise. Indeed, the main argument against eliminativism relies on the success of "propositional" attitude explanations (Fodor 1987; Devitt 1996, p. 254).

A third and more sophisticated reply grants that contents play an *essential explanatory role*, but denies that they must therefore be *causally efficacious*. On this view, contents are like numbers in physics: *abstract* entities that help structure our theories and support explanations, even if they do not cause anything. Schiffer (2003, ch. 8), for example, defends a version of this view. Notice that this position is compatible with contentful inner states playing causal roles. What it denies is not the causal efficacy of such states, but the causal role of their contents—taken to be abstract. This distinction is important to keep in mind. Even if we accept that some abstract entities can figure in successful explanations without having causal powers, however, it remains unclear why we should regard them as *real* rather than as *useful fictions*. Fictional or metaphorical constructs *can* aid explanation—for instance, we often talk about the "average taxpayer", or treat bodies as if all their mass were located at a single point—their center of gravity. In such cases, the explanatory utility of the construct does not by itself imply that the entity is *real*. As Yablo (1998, p. 259n) suggests, one of the marks of metaphorical

[12] Yet some philosophers deny causal closure, accepting the metaphysical cost. Proponents of *strong emergence*, for instance, hold that consciousness arises from physical systems yet exerts downward causal influence (O'Connor 2021).

or fictional talk is that it is "oftentimes paraphrasable away with no felt loss of subject matter".

This point is central to debates over abstract entities. Hartry Field (1980), for instance, attempted to paraphrase away references to numbers from physical theory, arguing that mathematical posits might be *useful but dispensable*. Although many doubt that his project can ultimately succeed, the case of propositions is comparatively weaker than the case for numbers. As shown in section 3.2 and section 3.3, both particular and general content ascriptions that are often taken to refer to or quantify over propositions can be paraphrased into variants that are clearly not about propositions, without any apparent loss of subject matter or explanatory power. These paraphrases preserve the explanatory roles of contents while avoiding commitment to abstract entities. While some have argued that numbers and propositions may be useful fictions even if they cannot be paraphrased away (Balaguer 1998a; 1998b), the case of propositions does *not* require such a concession. If ordinary ascriptions do happen to involve reference to or quantification over propositions, their paraphrasability—and the fact that propositions make no causal contribution—at the very least suggests the plausibility of a fictionalist reading, on which propositions are *useful but avoidable* posits, *not* genuine explanatory entities.

These considerations do not amount to a knock-down argument against propositionalism, but they show that Platonic realism is not the only reasonable view—and that there are good reasons to explore alternative frameworks. Moreover, as I explain in section 6.2, Platonic theories face a further metaphysical difficulty: the very idea that concrete thoughts and utterances stand in relations to abstract propositions gives rise to a regress that such theories are ill-equipped to resolve.

6.2. Shared Contents and Abstract Objects

The idea that different utterances and thoughts can share a single content is often taken to support the view that contents are abstract propositions—entities related to each token as its shared meaning. This line of reasoning exemplifies a classical "One over Many" pattern: when several particulars appear to share a property, we are invited to posit a relation to a single abstract object to account for what they have in common. As I have argued elsewhere (Withrington 2023), this reasoning takes for granted a controversial Platonic or

transcendent realist framework and inherits its familiar problem—a regress of relations (Armstrong 1978).

The problem is this. If a token utterance or thought has a given content in virtue of bearing a relation to an abstract proposition, then that relation must itself be part of the explanation. But in virtue of what does the token bear that relation to that proposition? Many tokens are said to stand in the same relation to the same abstract proposition, so we again confront a One over Many: how can these be multiple instances of the *same* relation? The Platonist must appeal to a second, higher-order relation to explain the first—and so on *ad infinitum*. The explanatory strategy of grounding shared contents in relations to abstract objects appears to generate a *vicious regress*—undermining metaphysical explanation, rather than securing it.

Alternative approaches aim to avoid this outcome. *Immanent realism* holds that shared properties are instantiated universals wholly present in each instance; Armstrong (1978) develops a non-relational version of this view to block the regress. *Trope nominalism* avoids transcendent entities by construing properties as particularized tropes, and some authors (e.g., Maurin 2002) have explored whether resemblance among tropes can ground apparent commonalities without triggering a similar regress. Whether such strategies ultimately succeed remains an open question. If they do not, this may suggest that the very demand for a unifying entity is misguided. Perhaps there is no need to posit anything beyond the fact that each instance has the property it has—e.g., each thought and utterance *that p* has the property of representing *that p*. This points to a better explanatory strategy: focusing on what it is for a token to have a property. In some cases, this requires explanation: when the property is not fundamental, it may be reduced to more basic properties (as being water is explained by being composed of H_2O molecules). But once we reach fundamental properties—those not further reducible—there is no metaphysical mystery about what it is for something to have them. If two tokens share such a property, that simply means each has it independently; there is nothing more to explain. As Quine (1961) and Devitt (2010) argue, the "One over Many" problem dissolves once we reject the assumption that shared predications must be explained by positing common metaphysical entities: abstract, immanent, or of any kind.

Devitt himself has not applied this strategy to the case of *contents*, but doing so aligns with his Quinean nominalism about properties. More broadly, any *non-Platonic* approach to *shared contents* treats

them as *worldly* features of *concrete* thoughts and utterances. On such views, content properties are not relations to abstract objects but *concrete* features of individual *tokens*—offering the best prospects for avoiding both the regress of relations and the causal argument.

Of course, representational properties are *not fundamental*. What we seek is not merely to reject *abstracta*, but to understand what kinds of worldly features constitute contents. A naturalized semantics aims to provide such an explanation—one that identifies the *underlying non-semantic properties* in virtue of which a token representation has the content it does. Different proposals appeal to the *informational* or *causal links* of representations (Fodor 1990), their *functional* or *inferential roles* (Horwich 2005), or their *etiological functions* (Millikan 2017; Neander 2017). This is not the place to engage with the issue, but it is worth noting that several promising proposals have been developed in recent years.[13]

7. *Logical Form, Concealment, and Inferential Validity*

The considerations in the preceding section support the view that content ascriptions, if true, must be about *worldly semantic properties* or at least convey truths about them. This motivates taking Devitt's proposal seriously—whether as a literal analysis or as a theory of what such ascriptions non-literally convey. The next step is to make this proposal precise and assess its *adequacy*.

I begin by making explicit the logical forms implicit in Devitt's analyses of *particular ascriptions—monadic* (DA_M) and *dyadic* (DA_D)—and his analysis of *general ascriptions* (DA_G). I then examine whether DA_M, DA_D, and DA_G genuinely avoid propositional commitments, or whether they merely conceal them. Finally, I examine whether these analyses can account for the inferential patterns often taken to support the standard propositionalist account (SA), and show how such patterns can be validated on DA given additional assumptions.

7.1. Making Explicit the Logical Forms

To assess the adequacy of Devitt's analyses, we must first make explicit the logical forms they imply. In the case of *particular content ascriptions*, Devitt offers two proposals.

[13] These include recent work in *teleosemantics*, which explains content in terms of etiological functions—for example, Martínez 2013, Shea 2018, and Artiga 2021. For my own contribution, *see* Withrington 2024.

The *monadic analysis* draws directly on the analogy between particular ascriptions and "A loves some B". The logical form of the latter is the existentially quantified $\exists x\,(Lax \wedge Bx)$, where B functions as a *monadic predicate*. Similarly, DA_M treats the TC as a one-place predicate expressing a content property. For instance, the logical forms of "S believes *that p*" and "S said *that p*" are $\exists x\,(Bxs \wedge Px)$ and $\exists x\,(Uxs \wedge Px)$—where $\exists x$ ranges over thought or utterance tokens, Bxy and Uxy symbolize "x is-a-token-belief-of y" and "x is-a-token-assertive-utterance-of y", respectively, and Px symbolizes "x has-the-content-*that-p*".

On the *dyadic analysis*, the content is specified by synonymy with the *content sentence token*. According to DA_D, the logical forms capturing the truth-conditions of "S believes *that p*" and "S said *that p*" are $\exists x\,(Bxs \wedge SCx\text{«}p\text{»})$ and $\exists x\,(Uxs \wedge SCx\text{«}p\text{»})$—where $SCxy$ symbolizes "x has-the-same-content-as y" and its second place is occupied by a singular term for the content sentence token (*not* for a proposition or a sentence type), symbolized by enclosing it in guillemet quotation marks.

For *general ascriptions*, Devitt proposes paraphrases that avoid quantification over propositions by quantifying instead over meaningful tokens and predicating sameness of content among them. According to DA_G, "There is *something* S and R believe" is paraphrased as "*Some* belief of S has the *same content* as *some* belief of R", with the logical form $\exists x \exists y[(Bxs \wedge Byr) \wedge SCxy]$, while "S believes *everything* R says" becomes "If R assertively utters *any* sentence, S has *a* belief with the *same content*", with the form $\forall x\,\{Uxr \rightarrow [\exists y\,(Bys \wedge SCxy)]\}$—where all variables range over meaningful tokens.

Devitt does not articulate these forms explicitly, but they follow naturally from his paraphrases and ontological commitments. They aim to show how content ascriptions can be analyzed in terms of the semantic properties of concrete tokens, without invoking abstract propositions. Whether these forms succeed in avoiding propositional commitments—or merely disguise them—is the next question.

7.2. Predicative Propositionalism, Synonymy, and the Concealment Problem

A monadic predicational analysis like DA_M may appear to avoid commitment to propositions. However, this appearance can be decep-

tive.[14] Even if the TC functions as a predicate, the property it predicates may still involve a relation to a proposition. This raises what I call the *Concealment Problem*: the possibility that reference to propositions is merely hidden behind the surface form of a predication.

Consider an analysis according to which "S believes *that p*" asserts that there is some x such that x is a belief of S and x has as its content *the proposition that p*. This analysis has the form $\exists x\,(Bxs \wedge Cx\langle p\rangle)$—where Cxy symbolizes "x has y as its content" and $\langle p\rangle$ refers to a proposition. This is a *predicational version of propositionalism* (PP) that abandons SA and differs from DA_D only in the nature of its second dyadic conjunct. While DA_D appeals to synonymy with the content sentence token, PP predicates a relation to a proposition. Notice that we could *abstract away* from the predicated relation by treating "x has-as-its-content-*the-proposition-that-p*" as a monadic predicate Px. The resulting logical form of the ascription would be $\exists x\,(Bxs \wedge Px)$—the same form ascribed by DA_M!

A serious concern is that by treating TCs as monadic predicates, a non-propositional analysis may only mask reference to propositions. Because of this *Concealment Problem*, DA_M does not suffice to avoid commitment to propositions. The availability of DA_D to provide a non-propositional account of how the TC specifies a semantic property is crucial. While PP suggests that the semantic property is a relation to a proposition, DA_D proposes that it is specified by a relation of synonymy with the content sentence token. The risk extends to any predicational analysis that purports to avoid propositions but is coarse-grained or monadic.

Tobias Rosefeldt (2008, p. 320) discusses PP, and Hüseyin Güngör recommends it as an alternative to SA: "*that*-clauses are not singular terms that refer to propositions—they are predicates denoting relations between contentful entities and propositions" (2022, section 5).[15] Yet the difficulty this view poses for non-propositionalist analyses is rarely addressed explicitly.

Devitt suggests that we can "abstract from" the "intimate link" between the content ascribed and that of the content sentence token. But this is mistaken: such abstraction leads to a monadic predicate that no longer guarantees avoidance of propositional commitments.

[14] I am grateful to Ricardo Mena for pressing me to think more carefully about whether treating TCs as predicates truly avoids commitment to propositions.

[15] Güngör (2022, section 5) analyzes "S v's that p" as true iff S stands in a relation to a contentful entity x whose content is *the proposition that p*. While x is plausibly a token utterance in some cases, he oddly suggests that in "S fears that p" it may be the *possibility that p*—which does not clearly bear content.

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His genuinely non-propositional analysis of particular ascriptions is thus DA_D, not DA_M.

Finally, it may be objected that DA_D and DA_G do not truly avoid propositions, since they rely on *synonymy* and *sameness of content* presupposes a relation to a proposition. This would amount to another form of the *Concealment Problem*. As argued in section 6.2, however, once we reject the problematic assumptions underlying this One over Many line of reasoning, synonymy can be treated as a worldly relation among tokens, not one mediated by an abstract object.

7.3. Accounting for the Inferences

DA owes an account of inferences like (1) and (2). I here show that their validity can be accounted for by combining DA_D with DA_G. (I set aside DA_M, since it faces the Concealment Problem.) DA suggests the following paraphrases of (1) and (2):

(1′) Some belief of Copernicus had the same content as "The Earth moves" and some belief of Galileo had the same content as "The Earth moves". So, some belief of Copernicus had the same content as some belief of Galileo.

(2′) If Mary assertively utters any sentence, Nancy has a belief with the same content. Some sentence assertively uttered by Mary has the same content as "It will rain". So, some belief of Nancy has the same content as "It will rain".

(1′) and (2′) seem intuitively valid. But to account for their formal validity, two issues must be addressed.

One issue is that the inferences rely on the fact that having the same content is an *equivalence relation*: it is symmetric, transitive and reflexive. When translating (1′) and (2′) into first-order logic, an extra premise must be added to define $SCxy$ as symmetric $(\forall x \forall y\,(SCxy \rightarrow SCyx))$, transitive $(\forall x \forall y \forall z\,[(SCxy \wedge SCyz) \rightarrow SCxz])$ and reflexive $(\forall x\,(SCxx))$.

Another issue arises because DA_D employs quotations of *tokens*. Since each quotation in (1′) and (2′) refers to a different token, there are two quotational singular terms in each of the inferences, instead of two tokens of the same singular term, which seems to make the inferences *invalid*. I propose this solution: (1′) and (2′)

are enthymemes that assume the premise that the quoted sentence tokens they contain are synonymous.[16]

Consequently, we can represent (1′) and (2′) as having the following *valid* forms:

(1_{DA}) $\forall x\forall y\,(SCxy \rightarrow SCyx)\wedge\forall x\forall y\forall z\,[(SCxy \wedge SCyz) \rightarrow SCxz]\wedge\forall x\,(SCxx)$

SC«*the Earth moves*»$_1$«*the Earth moves*»$_2$

$\exists x\exists y\,[(Bxc \wedge SCx\text{«}the\,Earth\,moves\text{»}_1)\wedge(Byg \wedge SCy\text{«}the\,Earth\,moves\text{»}_2)]$

$\therefore \exists x\exists y\,[(Bxc \wedge Byg) \wedge SCxy]$

(2_{DA}) $\forall x\forall y\,(SCxy \rightarrow SCyx)\wedge\forall x\forall y\forall z\,[(SCxy \wedge SCyz) \rightarrow SCxz]\wedge\forall x\,(SCxx)$

SC«*it will rain*»$_1$«*it will rain*»$_2$

$\forall x\,\{Uxm \rightarrow\ [\exists y\,(Byn \wedge SCxy)]\}$

$\exists x\,(Uxm \wedge SCx\text{«}it\ will\ rain\text{»}_1)$

$\therefore \exists x\,(Bxn \wedge SCx\text{«}it\ will\ rain\text{»}_2)$

The first premises define *SCxy* as an equivalence relation. The second premises state that the quoted tokens have the same content. Both inferences are invalid if either of these two premises is omitted. Unlike (1_{SA}) and (2_{SA}), the forms derived from DA avoid propositions, which is a theoretical virtue under naturalistic assumptions. While DA succeeds in formally validating the relevant patterns, the question remains whether it offers a plausible analysis of what content ascriptions literally say in ordinary language—or merely of what they non-literally convey.

8. *Developing the Linguistic Case*

The preceding section showed that DA can account for key inferential patterns without invoking propositions. I now turn to the question of whether DA also offers a plausible analysis of the literal truth conditions of ordinary ascriptions. The problems faced by SA may

[16] A similar issue arises in Davidson's analysis. Burge (1986, p. 203) argues it cannot explain the validity of "S said *that*$_1$ *p*. So, S said *that*$_2$*p*.", since the demonstratives refer to distinct *utterances*. Lepore and Loewer (1989, p. 351) reply that the inference is a valid enthymeme assuming the utterances are synonymous—a strategy I adopt here. Ludwig and Ray (1998, p. 148) propose instead to treat quotations as about sentence *types*. But once context-sensitive interpretation is factored in, a synonymy premise may still be needed. In any case, my proposal avoids reliance on *abstracta*, which is preferable on naturalistic grounds.

indicate that DA is better suited to capture their meaning. Even if DA does not capture their literal meaning, however, it would still be significant if it accounted for what they non-literally convey. I begin by addressing some possible replies on behalf of SA to the challenges presented in section 4. I then show how DA avoids these problems—potentially even in the case of general ascriptions, contra Devitt. Finally, I consider how PP fares with respect to the same challenges.

8.1. Replies on Behalf of the Standard Analysis

An initially promising reply to semantic substitution failure concedes that TCs do not always refer to propositions, but to different kinds of entities depending on the verb: propositions in the case of "believes", possibilities or eventualities in the case of "fears" (e.g., "John fears the possibility that it will rain"), and facts in the case of "remembers" (e.g., "Mary remembers the fact that Nancy kissed Peter"). This move limits the scope of SA but preserves it for a core class of propositional attitude verbs. However, even this concessive proposal faces difficulties. First, some *central verbs* still exhibit semantic substitution failure: "John tells Nancy that it will rain" is not equivalent to "John tells Nancy the proposition that it will rain", even though both are well-formed. Second, *Fregean cases* arise with allegedly non-propositional verbs: "Lois fears that Superman will not come" may be true, while "Lois fears that Clark Kent will not come" is false. This suggests that what is ascribed is not a relation to a fact or a possibility, but a particular way the subject represents the situation—something that *contents* capture and facts or eventualities do not.

A possible reply to the marks of concreteness problem is to claim that predicates like "daring" or "surprising" apply to acts or states when quantifiers or attitude nouns are involved, while predicates like "true" or "false" apply to propositions. On this view, verbs like "believe" and "say" are polysemous: in "John believes something unusual", the quantifier ranges over belief states; in "John believes something true", over propositions. A similar ambiguity would be posited for attitude nouns such as "belief" and "claim". But this reply is undermined by the naturalness of *co-predication* (Moltmann 2013, pp. 136–137). In "John's belief that nothing exists is unusual and false", both predicates apply without ambiguity or *zeugma*, even though one is said to apply to a state and the other to a proposition. The same happens with quantifiers: "John said something unusual and true" sounds entirely natural. These cases suggest that the pred-

icates apply to a single concrete bearer of content, such as a belief or a remark—not to distinct readings of an ambiguous term.

A final reply holds that attitude nouns preserve the argument structure of their verbal counterparts by including a null complement—so "John's belief" would be analyzed as "John's belief [0]". This move is meant to explain the optionality of TCs in noun constructions, while preserving the claim that TCs are arguments of the noun. But even with an overt TC, this proposal runs into trouble. In "John's belief that nothing exists is unusual", neither "John" nor the TC seems to denote what is said to be unusual—it is the belief itself. Yet the analysis provides no syntactic position, singular term, or quantified variable for this bearer of the predicate. The problem is even sharper in co-predication cases like "Copernicus' claim that the Earth moves was surprising but true". Both predicates naturally apply to a single entity, with no indication of ambiguity or syntactic doubling. The idea that the dyadic argument structure of SA is preserved in these nominalizations cannot account for how these predications work.

While SA may yet find adequate responses to these challenges, it cannot be assumed as the default account. The search for alternative analyses is warranted.[17]

8.2. Linguistically Plausible Non-Propositionalist Alternative

DA is not only a plausible alternative to SA with clear metaphysical advantages, as Devitt argues. There are also reasons to believe that it may offer a more linguistically plausible account of particular ascriptions. For example, DA avoids SA's problem of semantic substitution failure and provides a principled diagnosis: (5a) cannot be paraphrased as (5b) because TCs are *predicates* specifying representational properties, not *singular terms* referring to propositions. DA thus supports a *uniform* and plausible analysis of ascriptions with *all* attitude verbs. It suggests that the logical form of (5a) is either $\exists x\,(Fxn \wedge Rx)$—where Fxy symbolizes "x is a fear of y" and Rx symbolizes "x has the content that it will rain"—or $\exists x\,(Fxn \wedge SCx\langle\!\langle it\ will\ rain\rangle\!\rangle)$.

Moreover, DA avoids SA's difficulties with TCs complementing attitude nouns. The TCs in "Nancy has the fear that it will rain" and "Nancy's fear is that it will rain" seem not to behave like arguments or singular terms referring to propositions. DA treats such cases as

[17] I am grateful to an anonymous reviewer for suggesting these replies on behalf of the standard analysis.

structurally akin to (5a), where the ascription involves a *fear* and the TC again functions as a predicate rather than an argument. On this view, verb and noun alternatives are not only equivalent in meaning, but have closely related logical forms—just as they appear to.

Recent linguistic work supports this line. Keir Moulton (2015) proposes a "uniform" account on which TCs work as predicates both when combined with "non-argument taking nouns" like "belief" and with verbs like "believes", where they apply to a quantified variable introduced by the verb. On his analysis, the truth-conditions of "S believes *that p*" are that there is an *x* such that *x* is believed by S and *x* has the content *that p* (van Elswyk 2020, p. 2870). Since this *x* corresponds to the same kind of object as the noun "belief", it is natural to interpret it as a *belief* of S.[18] Similarly, Boban Arsenijević (2009) proposes that attitude verb and noun alternatives share the same underlying syntax—e.g., "S believes *that p*" and "S has the belief *that p*" both have the structure $S\ [_{VP}\ have\ [_{NP}\ belief\ [_{CP}\ that\ p]]]$, since "believes" is equivalent to "have-belief" (2009, p. 43)—and suggests that TCs specifying contents do not work as arguments but as relative clauses modifying nouns (2009, pp. 44–46). Relative clauses play predicative roles and are not singular terms.[19]

In light of the linguistic evidence against SA's treatment of quantifiers (section 4 and section 8.1), Devitt's concession that quantifiers literally range over propositions may be open to challenge. The quantifiers seem to truthfully compose with predicates that apply to contentful entities like beliefs or remarks, but not to propositions (Moltmann 2013). In "Copernicus and Galileo thought something *daring* but *true*", what is said to be daring and true are presumably a thought of Copernicus and a thought of Galileo—given their shared content—not a proposition. The quantificational version of semantic substitution failure (Prior 1971; D'Ambrosio 2023) further supports this view. "Nancy fears *everything* Mary fears" cannot be

[18] According to Moulton (2015, p. 15), "the kinds of object nominalization clause-taking verbs form suggest that their internal arguments denote individuals with propositional content"—i.e., the kinds of individuals denoted by the nominalizations.

[19] Carlos de Cuba (2017) opposes treating TCs as relative clauses and suggests that TCs combined with nouns are in close apposition and "co-referential" with each other. This is unlikely to vindicate SA, since the nouns refer to claims, beliefs, fears, etc. (section 4.2). It is noteworthy that de Cuba sympathizes with Moulton's proposal that "*that*-clauses are predicates" of individuals "with propositional content" (de Cuba 2017, p. 31n). Moulton suggests that in "S's *claim*/*belief*/*remark* was *that p*" the TC "denotes" the same entity as the noun; but he points out that it *cannot be a proposition*, since claims can be bold, beliefs can be surprising, remarks can be mean, while propositions "can be none of these" (Moulton 2015, pp. 8–10).

paraphrased as "Nancy fears *every proposition* Mary fears", which is not equivalent in *any* sense. But it does seem equivalent to a Devittian paraphrase like "If Mary has any fear, Nancy has a fear with the same content". So I tentatively suggest that DA_G *may* also capture the *literal* truth-conditions of general ascriptions of shared contents.[20]

8.3. The Linguistic Plausibility of Predicative Propositionalism

It is important to acknowledge that PP also avoids the core linguistic problems of SA. PP avoids the problem of semantic substitution failure. Indeed, Güngör (2022, section 5) argues for his version of PP based on this advantage over SA. PP agrees with DA that (5a) cannot be paraphrased as (5b) because TCs are predicates instead of singular terms. According to PP, the logical form of (5a) is $\exists x\,(Fxn \wedge Cx\langle it\ will\ rain\rangle)$. PP also avoids SA's problem with the seemingly non-argumentative roles of TCs complementing attitude nouns. According to PP, "Nancy has the fear that it will rain" and "Nancy's fear is that it will rain" share the same form as (5a), where the TC works as a predicate instead of an argument. Like DA, PP treats attitude verb and noun alternatives as synonymous.

PP may even avoid SA's problem with the application of predicates like "unusual". In "John's belief that nothing exists is unusual", what is said to be unusual according to PP is a belief whose content is the proposition that nothing exists, not the proposition itself, which cannot be unusual. But PP faces problems with causal predicates. Consider "Bill was hurt by John's claim that he is incompetent". Surely John's claim is said to have hurt Bill in virtue of its content. But a proposition presumably *cannot* causally contribute to the claim having this effect.[21] This is not just a linguistic problem with causal predicates, but also an instance of the metaphysical problems stressed by Devitt. The proponent of abstract propositions can appeal to PP to account for the linguistic data, but must then regard the causal claims we make about contents as strictly speaking *false*. To the extent that such claims seem *true*, DA has an important advantage.

[20] The suggestion is *not* that DA_G captures their syntactic form—which it certainly does not.

[21] Güngör (2022, section 5) claims that "the causal worry does not arise" for his version of PP because contentful entities like statements and rumors "can truthfully compose with causal predicates". This is analogous to what I suggested PP may say about "unusual" and ignores the causal roles of the *contents* predicated of such entities by TCs.

Both DA and PP avoid the core linguistic problems of SA. But insofar as propositions are abstract objects, PP is undermined by the metaphysical consideration that the contents we ascribe play causal roles in the spatio-temporal world—especially in the explanation of intentional behavior. Suppose (5a) is true. If the content ascribed to Nancy's fear were an abstract object, it could not play a causal role in the explanation of her behavior governed by this fear—e.g., of why she is constantly looking at the sky. The advantage of DA is that it treats contents as properties that can play causal roles in the world.

If, however, PP provides the correct analysis of the literal meaning of ascriptions, DA would still offer a plausible account of the truths these ascriptions convey in a non-literal way. It is worth noting that PP enjoys no special linguistic advantage over DA: at best, the two are *tied*, but DA has the *further benefit* of being able to treat ascriptions of content-based causation as *literally true* when they seem so—e.g., "Nancy is looking at the sky because she fears that it will rain". The original rationale for favoring SA—namely, that it best fits the surface grammar of ascriptions—no longer applies in favor of this new propositionalist analysis.

9. *Conclusion*

DA is a viable account that has serious advantages over SA. It avoids problematic commitments to abstract objects by treating contents as properties that play explanatory roles in the world. I have clarified the logical forms of ascriptions suggested by DA, shown how it avoids the linguistic problems of SA, and argued that its appeal to synonymy does not presuppose abstract entities. I have also strengthened the metaphysical case for the causal role of contents, argued that shared contents do not require appeal to abstract propositions, and shown how DA accounts for the validity of inferences often taken to support SA. Unlike SA and PP, DA allows us to take seriously the causal-explanatory role of contents in behavior and cognition while treating them as features of concrete mental and linguistic events.

Before concluding, it's important to note that some recent accounts also challenge the existence of Platonic propositions. On one hand, there are new *non-propositional* analyses of content ascriptions. Some of these proposals, like Moltmann's (2020; 2017) and Matthews' (2022), have significant similarities with DA—such as analyzing TCs as predicates that apply to concrete meaningful entities—and I regard them as largely vindicating the core theoretical framework I have been defending and elaborating it further. On the other hand,

Soames (2014) and Peter Hanks (2015; 2011), attempt to *naturalize propositions*. They suggest that propositions are cognitive event *types* that derive or inherit their representational properties from those of the concrete mental or linguistic events that constitute their tokens. This reverses the Platonic order of explanation, so arguably it should not raise Devittian concerns. In fact, Hanks points out that Devitt's view and his own are similar below the surface: "Devitt officially eschews talk of propositions [...] but he does identify meanings with properties of thought or utterance tokens. If we think of types as properties, then Devitt's view looks broadly similar to the account I am defending [...]" (2011, p. 13n).

Braun makes similar remarks (Braun 2020, pp. 202–203). The extent to which Devitt's representational properties resemble Hanks' and Soames' naturalized propositions is an intriguing question. However, this issue will need to be addressed another time.[22]

REFERENCES

Armstrong, David M., 1978, *Nominalism and Realism: Universals and Scientific Realism, vol. 1*, Cambridge University Press, Cambridge.

Arsenijević, Boban, 2009, "Clausal Complementation as Relativization", *Lingua*, vol. 119, no. 1, pp. 39–50. (https://doi.org/10.1016/j.lingua.2008.08.003)

Artiga, Marc, 2021, "Beyond Black Dots and Nutritious Things: A Solution to the Indeterminacy Problem", *Mind & Language*, vol. 36, no. 3, pp. 471–490. (https://doi.org/10.1111/mila.12284)

Balaguer, Mark, 2025, "Platonism in Metaphysics", *Stanford Encyclopedia of Philosophy*, in Edward N. Zalta and Uri Nodelman (eds.) (Spring 2025 Edition), (https://plato.stanford.edu/archives/spr2025/entries/platonism/) [accessed: 18/08/2025]

Balaguer, Mark, 1998a, *Platonism and Anti-Platonism in Mathematics*, Oxford University Press, New York.

Balaguer, Mark, 1998b, "Attitudes without Propositions", *Philosophy and Phenomenological Research*, vol. 58, no. 4, pp. 805–826. (https://doi.org/10.2307/2653723)

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Bealer, George, 1998, "Propositions", *Mind*, vol. 107, no. 425, pp. 1–32. (https://doi.org/10.1093/mind/107.425.1)
Bealer, George, 1982, *Quality and Concept*, Oxford University Press, New York.
Bianchi, Andrea (ed.), 2020, *Language and Reality from a Naturalistic Perspective: Themes from Michael Devitt*, Springer, Cham.
Braun, David, 2020, "Still for Direct Reference", in Andrea Bianchi 2020, pp. 193–235.
Burge, Tyler, 1986, "On Davidson's 'Saying That' ", in Ernest Lepore (ed.), *Truth and Interpretation: Perspectives on the Philosophy of Donald Davidson*, Basil Blackwell, London, pp. 190–208.
Davidson, Donald, 1984, *Inquiries into Truth and Interpretation*, Oxford University Press, New York.
D'Ambrosio, Justin, 2023, "Prior's Puzzle Generalized", *Philosophy and Phenomenological Research*, vol. 106, no. 1, pp. 196–220. (https://doi.org/10.1111/phpr.12844)
D'Ambrosio, Justin, 2021, "Ramsification and the Ramifications of Prior's Puzzle", *Noûs*, vol. 55, no. 4, pp. 935–961. (https://doi.org/10.1111/nous.12345)
de Cuba, Carlos, 2017, "Noun Complement Clauses as Referential Modifiers", *Glossa: A Journal of General Linguistics*, vol. 2, no. 1, pp. 1–46. (https://doi.org/10.5334/gjgl.53)
Devitt, Michael, 2020, "Stirring the Possum: Responses to the Bianchi Papers", in Andrea Bianchi 2020, pp. 371–455.
Devitt, Michael, 2015, "Should Proper Names Still Seem So Problematic?", in Andrea Bianchi (ed.), *On Reference*, Oxford University Press, Oxford, pp. 108–144.
Devitt, Michael, 2013, "The Myth of the Problematic De Se", in Neil Feit and Alessandro Capone (eds.), *Attitudes De Se: Linguistics, Epistemology, Metaphysics*, CSLI Publications, Stanford, pp. 133–162.
Devitt, Michael, 2012, "Still Against Direct Reference", in Richard Schantz (ed.), *Prospects for Meaning*, Walter de Gruyter, Berlin, pp. 61–84.
Devitt, Michael, 2010, *Putting Metaphysics First*, Oxford University Press, New York.
Devitt, Michael, 1996, *Coming to Our Senses: A Naturalistic Program for Semantic Localism*, Cambridge University Press, New York.
Field, Hartry, 1980, *Science Without Numbers*, Princeton University Press, Princeton.
Fine, Gail, 2003, *Plato on Knowledge and Forms: Selected Essays*, Oxford University Press, New York.
Fodor, Jerry A., 1990, *A Theory of Content and Other Essays*, The MIT Press, Cambridge, Mass.
Fodor, Jerry A., 1987, *Psychosemantics*, The MIT Press, Cambridge, Mass.
Güngör, Hüseyin, 2022, "*That* Solution to Prior's Puzzle", *Philosophical Studies*, vol. 179, no. 9, pp. 2765–2785. (https://doi.org/10.1007/s11098-022-01794-6)

Hanks, Peter, 2015, *Propositional Content*, Oxford University Press, Oxford.

Hanks, Peter, 2011, "Structured Propositions as Types", *Mind*, vol. 120, no. 477, pp. 11–52. (https://doi.org/10.1093/mind/fzr011)

Hofweber, Thomas, 2016, *Ontology and the Ambitions of Metaphysics*, Oxford University Press, Oxford.

Horwich, Paul, 2010, *Truth—Meaning—Reality*, Oxford University Press, New York.

Horwich, Paul, 2005, *Reflections on Meaning*, Oxford University Press, New York.

Horwich, Paul, 1998, *Truth* (second edition), Oxford University Press, New York.

King, Jeffrey, 2007, *The Nature and Structure of Content*, Oxford University Press, New York.

King, Jeffrey, Scott Soames, and Jeff Speaks (eds.), 2014, *New Thinking about Propositions*, Oxford University Press, Oxford.

Kripke, Saul, 1980, *Naming and Necessity*, Harvard University Press, Cambridge, Mass.

Künne, Wolfgang, 2003, *Conceptions of Truth*, Oxford University Press, New York.

Lepore, Ernest and Barry Loewer, 1989, "You Can Say *That* Again", *Midwest Studies in Philosophy*, vol. 14, no. 1, pp. 338–356. (https://doi.org/10.1111/j.1475-4975.1989.tb00196.x)

Ludwig, Kirk, and Greg Ray, 1998, "Semantics for Opaque Contexts", *Philosophical Perspectives*, vol. 12, no. S12, pp. 141–166. (https://doi.org/10.1111/0029-4624.32.s12.6)

Martínez, Manolo, 2013, "Teleosemantics and Indeterminacy", *Dialectica*, vol. 67, no. 4, pp. 427–453. (https://doi.org/10.1111/1746-8361.12039)

Matthews, Robert, 2022, "*That*-Clauses: Some Bad News for Relationalism about the Attitudes", *Mind & Language*, vol. 37, no. 3, pp. 414–431. (https://doi.org/10.1111/mila.12318)

Maurin, Anna-Sofia, 2002, *If Tropes*, Kluwer Academic Publishers, Dordrecht.

Millikan, Ruth Garrett, 2017, *Beyond Concepts: Unicepts, Language, and Natural Information*, Oxford University Press, Oxford.

Moltmann, Friederike, 2020, "Truthmaker Semantics for Natural Language: Attitude Verbs, Modals, and Intensional Transitive Verbs", *Theoretical Linguistics*, vol. 46, no. 3–4, pp. 159–200. (https://doi.org/10.1515/tl-2020-0010)

Moltmann, Friederike, 2017, "Cognitive Products and the Semantics of Attitude Verbs and Deontic Modals", in Friederike Moltmann and Mark Textor (eds.), *Act-Based Conceptions of Propositional Content:*

Contemporary and Historical Perspectives, Oxford University Press, New York, pp. 254–289.
Moltmann, Friederike, 2013, *Abstract Objects and the Semantics of Natural Language*, Oxford University Press, Oxford.
Moltmann, Friederike, 2003, "Propositional Attitudes without Propositions", *Synthese*, vol. 135, no. 1, pp. 77–118. (https://doi.org/10.1023/A:1022945009188)
Moulton, Keir, 2015, "CPs: Copies and Compositionality", *Linguistic Inquiry*, vol. 46, no. 2, pp. 305–342. (https://doi.org/10.1162/LING_a_00183)
Neander, Karen, 2017, *A Mark of the Mental: In Defense of Informational Teleosemantics*, The MIT Press, Cambridge, Mass.
Nebel, Jacob, 2019, "Hopes, Fears, and Other Grammatical Scarecrows", *Philosophical Review*, vol. 128, no. 1, pp. 63–105. (https://doi.org/10.1215/00318108-7213014)
O'Connor, Timothy, 2021, "Emergent Properties", *The Stanford Encyclopedia of Philosophy*, in Edward N. Zalta (ed.) (Winter 2021 Edition) (https://plato.stanford.edu/archives/win2021/entries/properties-emergent/) [accessed: 18/08/2025]
Porot, Nicolas, and Eric Mandelbaum, 2021, "The Science of Belief: A Progress Report", *Wiley Interdisciplinary Reviews: Cognitive Science*, vol. 12, no. 2, e1539. (https://doi.org/10.1002/wcs.1539)
Prior, Arthur, 1971, *Objects of Thought*, Clarendon Press, Oxford.
Putnam, Hilary, 1975, "The Meaning of 'Meaning' ", *Minnesota Studies in the Philosophy of Science*, vol. 7, pp. 131–193.
Quilty-Dunn, Jake, and Eric Mandelbaum, 2018, "Against Dispositionalism: Belief in Cognitive Science", *Philosophical Studies*, vol. 175, pp. 2353–2372. (https://doi.org/10.1007/s11098-017-0962-x)
Quine, Willard Van Orman, 1961, *From a Logical Point of View*, Harvard University Press, Cambridge, Mass.
Richard, Mark, 1990, *Propositional Attitudes: An Essay on Thoughts and How We Ascribe Them*, Cambridge University Press, Cambridge.
Rosefeldt, Tobias, 2008, " 'That'-Clauses and Non-Nominal Quantification", *Philosophical Studies*, vol. 137, no. 3, pp. 301–333. (https://doi.org/10.1007/s11098-006-0002-8)
Salmon, Nathan, 1986, *Frege's Puzzle*, The MIT Press, Cambridge, Mass.
Schiffer, Stephen, 2008, "Propositional Content", in Ernest Lepore and Barry Smith (eds.), *The Oxford Handbook of Philosophy of Language*, Oxford University Press, Oxford, pp. 267–293.
Schiffer, Stephen, 2003, *The Things We Mean*, Oxford University Press, Oxford.
Schiffer, Stephen, 1992, "Belief Ascription", *The Journal of Philosophy*, vol. 89, no. 10, pp. 499–521. (https://doi.org/10.2307/2941005)

Schwitzgebel, Eric, 2013, "A Dispositional Approach to Attitudes: Thinking Outside of the Belief Box", in Nikolaj Nottelmann (ed.), *New Essays on Belief: Constitution, Content, and Structure*, Palgrave Macmillan, London, pp. 75–99. (https://doi.org/10.1057/9781137026521_5)

Segal, Gabriel and Margaret Speas, 1986, "On Saying ð∂†", *Mind & Language*, vol. 1, no. 2, pp. 124–132. (https://doi.org/10.1111/j.1468-0017.1986.tb00322.x)

Shea, Nicholas, 2018, *Representation in Cognitive Science*, Oxford University Press, Oxford.

Soames, Scott, 2014, "Cognitive Propositions", in Jeffrey King *et al*. 2014, pp. 91–124.

Soames, Scott, 2002, *Beyond Rigidity: The Unfinished Semantic Agenda of Naming and Necessity*, Oxford University Press, New York.

Speaks, Jeff, 2014, "What's Wrong with Semantic Theories Which Make No Use of Propositions", in Jeffrey King *et al*. 2014, pp. 9–24.

van Elswyk, Peter, 2023, "The Linguistic Basis for Propositions", in Chris Tillman and Adam Murray (eds.), *The Routledge Handbook of Propositions*, Routledge, New York, pp. 57–78.

van Elswyk, Peter, 2020, "*That*-Clauses and Propositional Anaphors", *Philosophical Studies*, vol. 177, no. 10, pp. 2861–2875. (https://doi.org/10.1007/s11098-019-01343-8)

Withrington, Esteban, 2024, "Frogs Recognize Prey: A Causal-Behavioral Teleosemantics", *Biology & Philosophy*, vol. 39, no. 6, pp. 1–22. (https://doi.org/10.1007/s10539-024-09967-9)

Withrington, Esteban, 2023, "The «One over Many» Argument for Propositions", *Contrastes. Revista Internacional de Filosofía*, vol. 28, no. 1, pp. 61–79. (https://doi.org/10.24310/Contrastescontrastes.v28i1.13979)

Yablo, Stephen, 1998, "Does Ontology Rest on a Mistake?", *Aristotelian Society, Supplementary Volume*, vol. 72, no. 1, pp. 229–261. (https://doi.org/10.1111/1467-8349.00044)

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