Propositional Complexity and the Frege-Geach Point

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Abstract. It is almost universally accepted that the Frege-Geach Point is necessary for explaining the inferential relations and compositional structure of truth-functionally complex propositions. I argue that this claim rests on a disputable view of propositional structure, which models truth-functionally complex propositions on atomic propositions. I propose an alternative view of propositional structure, based on a certain notion of simulation, which accounts for the relevant phenomena without accepting the Frege-Geach Point. The main contention is that truth-functionally complex propositions do not include as their parts truth-evaluable propositions, but their simulations, which are neither forceful nor truth-evaluable. The view makes room for the idea that there is no such thing as the forceless expression of propositional contents and is attractive because it provides the resources for avoiding a fundamental problem generated by the Frege-Geach Point concerning the relation between forceless and forceful expressions of propositional contents. I further argue that the acceptance of the Frege-Geach Point mars Peter Hanks’ and François Recanati’s recent attempts to resist the widespread idea that assertoric force is extrinsic to the expression of propositional contents. Rejecting this idea, I maintain, requires a deeper break with the tradition than Hanks and Recanati have allowed for.

Keywords: Frege-Geach Point, force/content distinction, assertion, proposition, embedding, force cancellation, Peter Hanks, François Recanati, Wittgenstein’s Tractatus

1 Introduction

The distinction between force and content, already emphasized by Frege, has been a cornerstone of post-war philosophy of language. On a widespread construal, it goes like this. It is one thing to entertain in thought or express in language a propositional content, i.e. the sort of content that is true or false. It is another thing to entertain or express a propositional content and do so with judgmental or assertoric force, i.e. to entertain or express it while also committing oneself, either merely in thought or also in words, to its truth. The mere entertainment or expression of a propositional content is forceless: it is only an ingredient of something forceful. One may combine the
entertainment or expression of the same propositional content with different kinds of force—not only assertoric, but also interrogative, imperative, etc. So, for example, when one asserts that Socrates is wise and asks whether Socrates is wise, one expresses in both cases the same propositional content, that Socrates is wise, but combines the expression of this content with different forces.

There are different considerations that can seem to support this widespread construal of the force/content distinction. There is the possibility of making hypotheses in order to test whether they are true, or of making assumptions for the sake of argument, or of imagining something in order to see how one would feel about it: in each instance, it would seem, one merely entertains the thought that something is the case without committing oneself to its being the case. There is the possibility of staging an assertion, as actors do, where the staging can seem to concern the force but not the content of what one is saying, for after all we do understand what the stager pretends to be asserting. There is the possibility of taking sentences expressing propositional contents and embedding them in certain kinds of more complex sentences (e.g. material conditionals, certain modal sentences, and propositional attitude reports), where the embedded sentences can seem to retain their propositional content but lack assertoric force. And then there are certain formal relations between different sorts of speech acts or mental acts—such as the fact that an assertion answers a certain question and states the conditions of satisfaction of a certain command—which can seem to presuppose the common forceless expression of propositional contents.

In spite of its widespread acceptance, the force/content distinction has had its discontents. In recent years, Peter Hanks (2007, 2011, 2015, 2019) has offered a sustained critique of the distinction. Even though in some early writings Hanks
nominally advocates for a wholesale rejection of the distinction (2007, p. 143), he is actually concerned with rejecting only some aspects of the widespread construal of the distinction outlined above. He accepts the core of the distinction, namely the idea that the same propositional content can be judged or asserted as well as entertained or expressed without force. What he rejects are two aspects of the common elaboration of this idea. First, the view that the expression of the same propositional content may be common to speech acts as diverse as assertions, questions, and commands, as well as to the analogous mental acts. (This is a reformulation of what Hanks dubs the “taxonomic version” of the force/content distinction; 2015, p. 9). In place of this view, Hanks posits three general kinds of “propositional content,” corresponding to the three main grammatical moods (indicative, interrogative, and imperative) and having different sorts of satisfaction conditions. Secondly, Hanks rejects the view that judgments and assertions result from the addition of an extra ingredient to the conceptually prior forceless entertainment or expression of a propositional content. (This is a reformulation of what Hanks dubs the “constitutive version” of the force/content distinction; 2015, p. 9). Against this view, Hanks argues that judgments and assertions are conceptually prior to forceless entertainments or expressions of propositional contents: the latter should be construed as conceptually derivative phenomena, namely as judgments or assertions whose force has been cancelled.

François Recanati (2019) has recently made similar points, developing some of his own early work on the force/content distinction (1987, 2013).

This paper is at once more and less ambitious than Hanks and Recanati. It is more ambitious, because it argues for a wholesale rejection of the force/content distinction. We should abandon the very idea of the forceless entertainment or expression of propositional contents. I will give a two-part argument against the idea.
The first part aims to establish that there is no room for a position like Hanks’ and Recanati’s, which seeks to allow for the forceless entertainment or expression of propositional contents while vindicating the conceptual priority of judgments and assertions. Once we grant the possibility of the forceless entertainment or expression of propositional contents—contents that can also be judged or asserted—we inevitably construe judgments or assertions as composite phenomena consisting of two ingredients: the conceptually prior expression or entertainment of a propositional content, plus something conferring judgmental or assertoric force. But when we do so—and this is what the second part of my argument aims to show—we generate a philosophical mystery: the mystery of what could possibly turn the forceless entertainment or expression of a propositional content into a judgment or assertion. Since we have no idea of what could count as a solution to this mystery, and since the mystery is generated by the force/content distinction, we have good reason to abandon the distinction.

Of course, even if we grant that abandoning the force/content distinction would have a considerable advantage—namely that of blocking the generation of a philosophical mystery—this does not mean that we can abandon it. In order to show that the distinction is dispensable, we need to give an alternative account of the vast array of phenomena that seem to require it. This takes me to the way in which this paper is less ambitious than Hanks and Recanati, since it deals systematically only with one of those phenomena, namely embedding in truth-functional contexts. This is the phenomenon that Peter Geach focused on in his seminal essay “Assertion” (1965). That essay is about what Geach dubbed “the Frege Point,” which is a rather restricted and minimal formulation of the force/content distinction (restricted, because it mentions only assertoric force, and minimal, because it does not state explicitly some
of the commitments that are part of the common construal of the force/content distinction). After Geach, the point has become known as “the Frege-Gzech Point,” even though the label is often employed to refer not only to the Frege Point as Geach characterized it, but also to the arguments that Geach gave for it. Geach argued that we need the point in order to make sense of nothing less than propositional logic. Specifically, we need it in order to account for the inferential relations and compositional structure of truth-functionally complex propositions. My main goal in what follows is to show that Geach’s arguments rest on a questionable assumption, and to provide an account of truth-functional embedding that does not rely on any version of the force/content distinction. In the final section, I will indicate some strategies that I believe are worth exploring for giving alternative accounts of some of the other phenomena that are often taken to demand the force/content distinction.

The main move of this paper is to connect two issues that can appear at first quite unrelated: the force/content distinction, and the question of propositional complexity. I maintain that Geach’s arguments are based on a view of the complexity of truth-functionally complex propositions that models it on the complexity of atomic proposition. Such a view, however, is not inevitable. I propose an alternative view, based on a certain notion of simulation, which posits a sharp distinction between the way sub-propositional expressions “occur” in atomic propositions and the way propositions “occur” in truth-functionally complex propositions. The view, I argue, explains the behavior of truth-functionally complex propositions without any appeal to the force/content distinction.

I will begin by looking at Geach’s original formulation of the Frege Point. This will tighten the terminology and frame the following discussion. The paper as a whole is organized as a close discussion of Geach’s article. I hope it will emerge that
this way of proceeding is not due to some kind of antiquarian fetishism, but is justified by the sharpness with which Geach’s article anticipates the dialectic of the ensuing literature, including the recent contributions by Hanks and Recanati.

2 The Frege Point

Geach states the Frege Point as follows:

A thought may have just the same content whether you assent to its truth or not; a proposition may occur in discourse now asserted, now unasserted, and yet be recognizably the same proposition. (Geach 1965, p. 449)

What is meant here by “proposition” and “thought”? Geach is explicit about the former: “When I use the term ‘proposition’ […] I mean a form of words in which something is propounded, put forward for consideration” (p. 449). A proposition, as he uses the word, is a linguistic entity. It is a meaningful stretch of language of a certain sort: one which “serves,” as he puts it elsewhere, “to express a complete thought, to say what is or is not so” (1975, p. 139). This usage, Geach notices (1965, p. 449), was once widespread in philosophy, but differs from the one adopted by many of his contemporaries, who employ the term to refer to entities that are supposed to constitute the contents of what Geach calls “propositions.” Today, this non-Geachean use of the word, which has an important source in Russell, is dominant. In light of this fact it would be advisable, in order to avoid confusion, to use some other expression to refer to what Geach calls “propositions”—such as, perhaps, “declarative sentence.” But since I am going to engage at length with Geach’s essay, I will stick to his terminology and always use the term “proposition” in his sense, unless otherwise specified.
Unfortunately, Geach is not as explicit about what he means by “thought” when he formulates the Frege Point. The explicit Fregean background of the essay may suggest that he means what *Frege* meant by it—namely an entity belonging to the Third Realm that constitutes the content of propositions and of certain mental acts, such as acts of thinking and judging. At first, this looks like a plausible reading of Geach, since a Fregean *Gedanke* is certainly supposed to remain unchanged “whether you assent to his truth or not”—i.e., in Fregean terms, whether you judge it or not. But there are several reasons for resisting this interpretation. First, it is hard to square with the skepticism that Geach voices (in the context of his polemic against the more recent use of the term “proposition”) toward “a supposed realm of timeless abstract ‘intentional’ objects, whose principle of individuation has thus far eluded capture in any clearly formulable criterion” (1965, p. 449). Why voice this skepticism, if the existence of those abstract objects were presupposed by the very thesis that he proposes to defend? Secondly, Geach speaks of a thought as having content (“A thought may have just the same content…”); but from a Fregean perspective, this is a rather puzzling phrase, since a *Gedanke*, for Frege, *is* a content—the content of sentences, assertions, and various sorts of mental acts. Thirdly, I take it to be clear that the Frege Point is meant to be the same point applied at two different levels: the level of language, and the level of “thought.” Propositions, we are told, may occur in discourse now asserted, now unasserted, without change of content. But what would be the analogous phenomenon in the realm of Fregean *Gedanken*? To wit, the idea that a *Gedanke* may “occur” in the Third Realm now asserted, now unasserted, without change of content. But this would involve a non-psychological notion of assertion that operates in the Third Realm and has nothing to do with human activities. A notion of this sort is not unheard of (cf. Russell 1903, §38), but is alien
to Frege’s framework, and we wouldn’t expect Geach to introduce it without comment. For these reasons, I take it that when Geach formulates the Frege Point, he means by “thought” a certain sort of mental episode, i.e. an episode of *thinking that something is the case*. (In Frege’s framework, this would be the *thinking of a Gedanke*, as opposed to the *Gedanke* itself.) These episodes of thinking occur in reasoning just as propositions occur in discourse.

Thus the Frege Point may be rephrased as follows: An episode of thinking that something is the case may occur with or without judgmental force without change of content—just as a form of words which says that something is the case may occur with or without assertoric force without change of content. Perhaps less technically: We may *merely think* ("entertain the thought") that something is the case, or also *judge* that something is case, while continuing to think exactly the same thing—just as we may *merely say* ("put forth the thought") that something is the case, or also *assert* that something is the case, while continuing to say exactly the same thing.

The Frege Point does not explicitly state—and according to Geach (1965, p. 457), does not entail—that there can be *isolated* episodes of thinking devoid of judgmental force and *isolated* propositions devoid of assertoric force. For Geach, the point is compatible with the view that such forceless items may occur only when embedded in larger, forceful wholes. We’ll come back to this issue. For the moment, let’s look at the arguments that Geach gives for the Frege Point.

### 3 Geach’s arguments

We may distinguish two main arguments in Geach’s essay. The first and most familiar one is the *argument from the validity of Modus Ponens* (1965, pp. 452, 463).
Consider an instance of Modus Ponens, where the premises and the conclusion are asserted:

(1) \( p \supset q \)

\[ \begin{array}{c}
  p \\
  \hline
  \therefore q
\end{array} \]

Geach’s argument may be reconstructed as follows:

i) The propositions “\( p \)” and “\( q \)” must have the same contents on all of their occurrences, or else the inference would be vitiated by equivocation.

ii) In the second premise and the conclusion, “\( p \)” and “\( q \)” are asserted; but in the first premise, they are not. (In asserting that \( p \supset q \), one is not thereby asserting either that \( p \) or that \( q \).)

iii) Therefore, we must allow that propositions may have the same content whether or not they also carry assertoric force.

The second argument offered by Geach is the argument from “the doctrine of truth-functional connectives” (1965, pp. 452-453). We may refer to it as the argument from truth-functional compositionality. Let’s consider, following Geach, a disjunctive proposition, which may or may not be asserted:

(2) \( p \lor q \)

The argument runs like this:
i) The truth-value of “p ∨ q” is a function of the truth values of the propositions that occur as its parts.

ii) “p” and “q,” as they occur in “p ∨ q,” are not asserted, even if we suppose that the whole proposition is asserted. (In asserting that p ∨ q, one is not thereby asserting either that p or that q.)

iii) Therefore, we must allow that propositions, understood as truth-evaluable items, may occur unasserted.

(A “truth-evaluable” item, as I use the term in this paper, is an item that is true or false.) Contrary to what Geach suggests (p. 452), even if this argument were sound, it would not establish the Frege Point, but only an important part of it, namely the idea that a proposition can be true or false even when it is not actually asserted. What would remain to be proved, in order to establish the Frege Point in its full extent, is that asserting a proposition does not alter its truth-evaluable content. This aspect of the Frege Point would only be established by the soundness of the first argument.

Once we straighten out this issue about the scope of the second argument—which is a relatively trivial matter—the two arguments may easily appear inescapable. But I am going to argue that this is not the case, because their initial premise can be questioned.¹

¹ Another strategy for resisting Geach’s arguments—which I am not going to pursue—is to reject their second premise. One can maintain that e.g. the antecedent of a conditional is asserted, even though in asserting the whole conditional one is not thereby asserting the antecedent.

This approach—call it the Alternative Strategy—takes assertion to compose on the model of Fregean reference rather than Fregean sense. For Frege, the sense of a part of a complex expression is part of the sense of the whole expression. The sense of “Sweden,” for instance, is part of the sense of “The capital of Sweden.” But the reference of a part of a complex expression is not necessarily part of the reference of the whole. Sweden is not part of Stockholm. “Sweden” contributes to determine the reference of “The capital of Sweden,” but doesn’t do so because its reference is part
4 Geach’s implicit assumption

The first premise of each argument involves this apparently innocent assumption:

*Uniform View of Logical Occurrence*: Propositions occur in truth-functionally complex propositions *in the same way* in which propositional parts occur in atomic propositions—namely, by being *part* of them.

To begin with, let’s look at how this assumption underlies the initial premise of the first argument. Consider this inference from predicate logic:

\[(1*) \forall x (Fx \supset Gx)\]

\[Fa\]

\[------\]

\[Ga\]

of the reference of the whole (see Frege 1997, p. 365; Johnston 2011, p. 62, connects this distinction to the problematic of assertion). Similarly, according to the Alternative Strategy, the assertion expressed by the antecedent of a conditional contributes to determine the assertion expressed by the whole conditional, but is not *part* of that assertion: in asserting the conditional, one is not thereby asserting, *inter alia*, the antecedent. As we shall see in §9, some passages in Hanks (2015, 2019) can be taken to present a version of the Alternative Strategy, and the proposal advanced in Schmitz (unpublished), as I understand it, shares its core idea.

This is not the place for evaluating the viability of the Alternative Strategy. The aim of this paper is to offer a way of resisting Geach’s arguments, not to establish that it is the only possible one. But it is worth mentioning that the Alternative Strategy faces a problem that doesn’t seem to arise in the case of reference. The view appears to entail that asserting e.g. a conditional *requires a change of mind*. When one utters the antecedent and the consequent, one *asserts* them, but in uttering the whole conditional, one does *not* assert them. So it seems that the assertion of the whole conditional takes back, or retracts, the assertion of the antecedent and the consequent. And this seems wrong (cf. Hanks 2007, p. 154). By contrast, it does not seem that when we use the phrase “The capital of Sweden” to refer to Stockholm we need to take back the fact that we want to use one if its parts to refer to Sweden.
The validity of this inference, unlike the validity of (1), depends on the internal logical structure of the atomic propositions it involves. Of course, the inference would be invalid—vitiated by equivocation—if “F( ),” “G( ),” and “a” did not mean the same on all of their occurrences. Geach understands the validity of (1) on the model of the validity of (1*). Just as “a” must have the same meaning in “Fa” and “Ga” if (1*) is to be valid (however exactly we want to specify what “having the same meaning” comes to in the case of a name)—so, according to Geach, if (1) is to be valid, “p” must have the same meaning (which, for Geach, amounts to saying the same thing) when it occurs alone as the second premise of the inference, and when it occurs embedded in “p ∨ q.” And this means that the truth-evaluable proposition “p” must occur as a part of “p ∨ q,” just as the meaningful name “a” occurs as a part of “Fa” and “Ga.”

Similar considerations apply to the first premise of the second argument. Consider this atomic proposition:

(2*) Fa

Geach understands the compositional structure of (2) on the model of the compositional structure of (2*). The meaning of “Fa” is a function of the meanings of its parts “F( )” and “a.” Similarly, for Geach, the truth-value of “p ∨ q” is a function of the truth-values of “p” and “q,” as parts of “p ∨ q.”

By endorsing the Uniform View of Logical Occurrence, Geach is a faithful Fregean. In Frege’s mature philosophy, that idea is part of the attempt to reduce much more thoroughly the logical complexity of truth-functionally complex propositions to the logical complexity of atomic propositions by reducing both to the logical
completeness of complex singular terms. For Frege, truth-functional connectives are concepts (2013, §6), and concepts are functions, i.e. functions whose values are always truth-values (2013, §3). Logical combination, he writes, “happens in general by saturating something unsaturated” (1984, 390), i.e. by filling the argument places of functions with appropriate arguments. Thus, the reference of “2 + 2” is determined by the fact that the reference of the function-expression “( ) + ( )” is a function mapping the reference of “2” into the number 4; the reference of “Socrates is wise” is determined by the fact that the reference of the function-expression “( ) is wise” is a function mapping the reference of “Socrates” into The True; and in the same way, the reference of “It is not the case that Socrates is wise” is determined by the fact that the reference of the function-expression “It is not the case that ( )” is a function mapping the reference of “Socrates is wise” into The False. For Frege, we are dealing with three complex singular terms. Supposedly, what changes between the first case and the other two is simply the range of the functions involved, while there is no noticeable difference between the second and the third case. We find complete uniformity in logical structure—albeit of a different sort—also at the level of sense: the sense of any complex expression is a whole composed of the senses of its parts. There is a contrast here with the level of reference, since the reference of a complex expression is not, in general, composed of the references of its parts. But within each level, there is no distinction between the logical complexity of sub-propositional singular terms, atomic propositions, and truth-functionally complex propositions.

Geach acknowledges that parts of this promised paradise of logical uniformity are “highly disputable.” He mentions in this connection Frege’s doctrines “about

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2 Here I am concerned only with Frege’s official view, as derivable from the way he defines concepts and truth-functional connectives. Arguably, there are aspects of his system that are in tension with this official view—such as the special position given de facto to complex names of truth-values whose senses are thoughts.
sense and reference and about propositions’ being complex names of logical objects called ‘truth-values’” (p. 449). He is confident, however, that “[a]dmitting the Frege point does not logically commit us to these doctrines” (p. 449). My claim here is that his arguments for the Frege Point involve the implicit acceptance of at least one further element of Frege’s package—i.e. the Uniform View of Logical Occurrence. Such a view, however, is not inevitable.

5 The Two-Model View

I am now going to present an alternative to the Uniform View of Logical Occurrence. I shall call it the Two-Model View. The view rejects the first premise of Geach’s arguments and purports to account for the inferential relations and compositional structure of truth-functionally complex propositions and thoughts without any reliance on the Frege Point. I will first present it as a view that applies to propositions (construed as linguistic items), and then discuss the assumptions that need to be in place for extending it to thoughts (construed as mental items).

On this view, we should not model the occurrence of a proposition in a truth-functionally complex proposition on the occurrence of sub-propositional expressions in an atomic proposition. Atomic propositions mean what they do in virtue of the meanings of their parts and structural features, and stand in inferential relations to one another in virtue of sharing meaningful parts and structural features. The propositions “Fa,” for example, means what it does in virtue of the meanings of the predicate and singular term of which it is composed, and can figure with “Ga” in a valid inference such as (1*) because the two share a meaningful part—the meaningful name “a.” With truth-functionally complex propositions, however, it is different. The Two-Model View is here committed to two claims I expect to be quite surprising:
**Negative claim:** Propositions, construed as truth-evaluable items, do not occur at all as parts of truth-functionally complex propositions.

**Positive claim:** Truth-functionally complex propositions include as their parts simulations of propositions, which are neither true nor false.

In the sense in which meaningful propositional parts occur in atomic propositions, propositions (understood as truth-evaluable linguistic constructions) do not occur at all in truth-functionally complex propositions. Insofar as they may be said to “occur” in truth-functionally complex propositions, they do so in a very different sense: namely, in virtue of being simulated by expressions that occur as parts of truth-functionally complex propositions. This is a sense of “occurring” that differs from the sense of “occurring as a part.”

For the Two-Model View, the truth-value of a truth-functionally complex proposition depends on the truth-values of the propositions that are simulated by the expressions that occur in it as parts. It does not depend on the truth-value of the simulations—they have none. There is a sense in which truth-functionally complex propositions are compositionally structured: once we have fixed the truth-values of the simulated propositions and the meanings of the truth-functional connectives that figure in a complex proposition, we have thereby fixed the truth-value of the complex proposition. But this sort of compositionality is not reducible to the compositionality
of atomic propositions, whose meanings depend on the meaning of the expressions that occur as their parts.\(^3\)

The Two-Model View acknowledges that the structure of truth-functionally complex propositions bears on their inferential relations. These inferential relations, however, are not determined by the fact that the complex propositions contain truth-evaluable propositions, but by the fact that they contain parts that simulate truth-evaluable propositions. So the inference (1) is valid because of the meaning of “⊃” and because the expressions “p” and “q,” as they occur in “p ⊃ q,” simulate the second premise and the conclusion respectively.

For the Two-Model View, avoiding equivocations is as essential with inferences such as (1) as it is with inferences such as (1*). But what “avoiding equivocation” comes to in the two cases is different. In (1*), equivocation is avoided if the relevant sub-propositional expressions have the same meaning on all of their occurrences. Thus the inference would be invalid if, for instance, the name “a” referred to one object in the second premise and to a different object in the conclusion. In (1), by contrast, equivocation is avoided if the simulating expressions simulate the right truth-evaluable propositions. Thus (1) would be invalid if, for example, the expression “p” that occurs as part of the first premise did not simulate the second premise of the inference, but some other truth-evaluable proposition.

The notion of simulation invoked by the Two-Model View should be taken as a semantic primitive that is not reducible to the Fregean notions of sense and reference. An expression that simulates a proposition does not refer to anything. In particular, it

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\(^3\) Even though Frege distinguishes two models of semantic composition—a part/whole model for sense and function/argument model for reference (see above, note 1)—they both differ from the compositionality that I am ascribing to truth-functionally complex propositions. For Frege, the sense and the reference of a complex expression are both determined by the sense or reference of its parts.
does not refer to a truth-value, or to a proposition, or to a proposition considered only as a linguistic expression in abstraction from its content, or to the content of the proposition in abstraction from its linguistic expression. Nor does it express a thought or part of a thought: in Fregean terms, it has neither propositional nor sub-propositional sense. Its job is not to refer to something, or to express the thought that something is the case, or to express a sub-propositional sense. Its job is to simulate something that says, truly or false, that something is the case. In Fregean terms, its job is not to have sense or reference, but to simulate something that has propositional sense and reference. So, even if we assume that Frege’s theory of sense and reference is applicable at the level of atomic propositions (which is, as Geach noted, a substantial assumption), it does not apply at the level of truth-functionally complex propositions. To object that the simulation of a proposition must have sense and reference, or else the propositions in which it occurs would not have sense and reference, is not really to point out a problem with the Two-Model View, but to beg the question by reaffirming one’s commitment to Frege’s uniform application of the sense/reference distinction across the spectrum of linguistic expressions.

The Two-Model View accounts for the compositional structure and inferential relations of truth-functionally complex propositions without accepting the first premise of Geach’s arguments and without positing unasserted truth-evaluable propositions. By endorsing this view, we can explain those phenomena while maintaining that propositions, qua truth-evaluable items, are intrinsically assertoric—in the very strong sense that there is no such thing as an unasserted and yet truth-
evatable proposition. All we need to posit are simulations of propositions—which have *neither* assertoric force *nor* truth-evatable content.

6 More on simulation

More needs to be said about the notion of simulation I am invoking. So far, we have only seen what a simulation is supposed to do, and how it is *not* supposed to do it. A simulating expression must *specify* the propositions it simulates: someone who understands the simulating expression knows which proposition it simulates. This specification is not achieved by *referring* to the simulated proposition. And it is not achieved by *expressing* the same truth-evatable content of the simulated proposition.

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4 This idea does not follow analytically from the Two-Model View. One may adopt the Two-Model View and still hold that propositions, qua truth-evatable items, are not necessarily assertoric. What the Two-Model View shows is that we do not *have* to admit unasserted truth-evatable propositions in order to account for the compositional structure and inferential relations of truth-functionally complex propositions.

5 The account I have begun to outline bears some similarities with other recent proposals. In appealing to the idea of “simulation,” I follow Recanati (2019), with the crucial difference (further discussed in §10 below) that a simulation for Recanati has the same truth-evatable content of what it simulates. Kimhi (2018) seeks to account for truth-functional embedding through the notion of a “mere display” (as opposed to a “self-identifying display”) of an act of judgment or assertion which might be functionally equivalent to my notion of simulation, depending on whether the “mere display” of a judgment or assertion is meant to have the same truth-evatable content of what it displays. Reiland (2019) proposes a quasi-referential account of truth-functional embedding that agrees with mine in two important respects: it holds that only what is forceful is truth-evatable, and maintains that the items embedded in truth-functional contexts are neither forceful nor truth-evatable. However, Reiland construes the items embedded in truth-functionally complex judgments as “objectual acts” that are *directed at* truth-evatable items, where the paradigmatically objectual act is reference. Reiland is sensitive to some of the difficulties encountered by a purely referential account of truth-functional embedding (see pp. 152-154, and for additional problems, §11 below). The viability of his proposal depends crucially on the possibility of specifying a notion of “objectual act” that differs from reference in all the relevant respects while remaining objectual. Finally, Schmitz (unpublished) maintains (as Reiland and I also do) that only what is forceful is truth-evatable, but holds that the items embedded in truth-functional contexts are both truth-evatable and forceful (see below, note 17).
(for this would take us back to the Frege Point). How, then, is such a specification achieved?

A simulating expression specifies the proposition it simulates by *looking like* it, in the following sense: By linguistic convention, the simulating expression would be the proposition it simulates, if it occurred unembedded and the context were in all other respects the same. Put in other words: A competent and well-informed master of the language would take the simulating expression as the proposition it simulates if she didn’t know that the expression is embedded. In order to “look like” the simulated proposition in this sense, the simulating expression must be a token of the same expression-type (e.g. the same sequence of words), or a systematic grammatical transformation of a token of that type. (A “linguistic expression,” as I am here using the term, is not individuated by its content.) The first option obtains in languages such as English: It is the same expression (except for lack of capitalization) that occurs unembedded in “The street is wet” and embedded in “If it rains, the street is wet.” The second option obtains in languages such as German: The unembedded “Die Straße ist nass” undergoes a change of word order when it is embedded in “Wenn es regnet, ist die Straße nass.” But in either case, we can retrieve the expression that belongs to the simulated proposition from the simulating expression and the additional devices that signal embedding.⁶

Of course, in order to identify the simulated proposition, it is not *sufficient*, at least in general, to know the relevant linguistic conventions and to recognize the expression-type to which the simulating expression belongs, or of which it is a grammatical transformation. Contextual considerations may be essential. But the

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⁶ Recanti holds, similarly, that the simulation of an illocutionary act employs the means that are *conventionally* used to perform the illocutionary act (2019, p. 1411). The crucial difference is that, for Recanatī, the simulation of an assertion shares its truth-evaluable content (see below, §10).
same applies to unembedded propositions. For example, identifying “The street is wet” as an expression of a certain type and knowing the conventional meanings of its parts and the significance of its mode of combination is not enough for knowing which proposition it amounts to—for which street is at issue? The same information is equally insufficient for identifying the proposition that is simulated by an embedded occurrence of “the street is wet.” We need to have, in addition, all the contextual information that would be required for identifying the propositional content expressed by a token of the same expression-type occurring unembedded in the same context.

On the view I am presenting, it is far from an accident that in the canonical formulation of Modus Ponens the same schematic letter “p” appears now as a self-standing premise and now as the antecedent of the other premise. On the contrary, this captures one of the ways in which the aforementioned requirement of simulation is satisfied.

At an appropriate level of abstraction, the requirement is the same as in other cases of simulation. In order to simulate pain, say, I must do something that looks like the expression of pain, in the following sense: Keeping the context fixed, what I do would count as a genuine expression of pain if the elements that make it a simulation (such as the intention to deceive, or the fact that I am acting) were absent. Put in other words: A competent and well-informed reader of basic human emotions would take what I do as a genuine expression of pain if she were unaware of the elements that make it a simulation. The simulation of pain presupposes that there are standard ways of expressing pain, which may be simulated simply by replicating them in the appropriate context (as happens when one pretends to be in pain) or by systematically modifying them in the appropriate context (as happens with non-realistic styles of acting, which are artificial in distinctive sorts of ways).
So far I have presented the Two-Model View only at the level of language. Given the way I spelled out the relevant concept of simulation, there is an issue about how the account can be extended to thoughts (understood, à la Geach, as mental occurrences). Any strictly analogous account seems problematic. For what is going to play the role of linguistic constructions that on some of their occurrences are propositions and on other occurrences simulations of propositions? (Maybe mental images of spoken or written words?) And in which sense would the simulation of a judgment look like a judgment? (And to whom? To the subject and no one else?) Perhaps these questions do not admit of plausible answers and thought cannot be construed as similar to language in the relevant respects. In that case, the account I presented will have to be extended to thought in a less direct way, by holding that thought cannot be modeled on language but is nonetheless derivative on language. (For instance, one may think of judgment as the acquisition of a disposition or capacity to assert.) The relation between language and thought is a very complex issue and here I only want to commit myself to a comparatively weak assumption: Either thought can be modeled on language and the account of simulation I have given can be carried over to it without substantial changes; or thought is a conceptually derivative phenomenon and the account I presented applies to it indirectly by applying directly to the more primitive phenomenon.

7 More on truth-functional embedding

7 For insightful remarks about the asymmetries between judgment and assertion, especially with regard to their temporal structure, see Geach (1971, §23) and Soteriou (2007).
8 For an account of truth-functional embedding that assigns an essential role to language, see Kimhi (2018, Chap. 1, Sect. 4).
Even if we assume that the notion of simulation I introduced is in good standing, the view I am presenting—which combines the Two-Model View with the claim that truth-evaluable items have always assertoric or judgmental character—gives rise to many questions. In this section, I will address three questions concerning the relation between simulation and truth-functional embedding.

One question concerns embedding in truth-functionally complex wholes that entail the embedded clauses. The proposition “p\&q,” for instance, entails “p” and “q.” By the same token, someone who asserts “p\&q” is committed to the truth of “p” and “q.” On the present account, the conjunction includes as its parts simulations of the truth-evaluable propositions “p” and “q,” and someone who asserts it simulates the assertion of those propositions. Such propositions are neither asserted nor judged by someone who asserts the conjunction. Some will find this view counterintuitive. When one asserts a conjunction—they will object—one is thereby asserting the conjuncts (Hanks 2015, pp. 104-105). But such a position is not inevitable. The fundamental fact that we need to vindicate is that someone who asserts “p\&q” is committed to the truth of “p” and “q.” The position I am resisting can be intuitive because it gives an explanation of this fundamental fact: Someone who asserts “p\&q” is committed to the truth of the conjuncts because, in asserting the conjunction, one has already asserted the conjuncts. But this is not the only possible explanation. On the alternative I am proposing, someone who asserts “p\&q” is committed to the truth of “p” and “q” because of the meaning of the conjunction-sign and because the expressions that flank it simulates the truth-evaluable propositions “p” and “q.” I give here the same sort of explanation that I give for the fact that someone who asserts the premises of a Modus Ponens argument is committed to the truth of its conclusion.
Conjunction and similar cases give rise to another worry. According to my proposal, when I assert a conjunction, I only simulate the assertion of the conjuncts, and yet I am committed to their truth. Isn’t there a tension between these two attitudes? Don’t I have to decide whether I merely want to simulate an assertion, or whether I want to commit myself to its truth? If I assert a conjunction and then go on to assert the conjuncts, do I have to retract what I previously did, namely simulating the assertion of the conjuncts? The answer is No. The simulation of an assertion does not bring with it any commitment to the truth or falsity of the simulated assertion. Such commitments are determined by the meaning of the truth-functional connectives. Simulating an assertion may be a way of committing oneself to its truth (as happens, for example, with conjunction), or a way of committing oneself to its falsity (as happens, for example, with negation).

A further question arises in connection with the iteration of truth-functional connectives. It can seem that, with each iteration, we need to posit a higher-order simulation. Consider these three propositions:

3) p
4) ¬p
5) ¬p v q

On the present account, (4) contains an expression simulating (3). Presumably, (5) contains an expression simulating (4). Does this mean that (5) contains an expression that simulates an expression that simulates (3)? In other words, does the “p” that occurs in (5) simulate the “p” that occurs in (4), which in turn simulates (3)? If this were the case, we would need to posit an infinite hierarchy of simulations, which
might be hard to make sense of. But it is not obvious that we need to go any further than first-order simulations. I suggest that the “p” that occurs in (5) simulates directly (3), and while the “¬” that occurs in (4) negates (3), the “¬” that occurs in (5) simulates the negation of (3). So we only need to posit simulations of atomic propositions and simulations of the application of truth-functional operations to atomic propositions.

There is certainly more to say about these issues, and there are more issues worth discussing. Instead of trying to develop the proposal in more detail, I am going to provide some reason for thinking that the project is worth pursuing. In the next section, I’ll focus on the difficulties that come with the Frege Point.

8 Spinoza’s boy and the Hybrid View

As remarked in §2, the Frege Point does not explicitly state that a proposition or thought may occur unasserted in isolation, without being embedded in a more complex proposition or thought carrying assertoric or judgmental force. Geach is sympathetic to a view that combines the Frege Point with the idea that a thought without judgmental force may occur only when embedded in a more complex judgment:

possibly a thought is assertoric in character unless it loses this character by occurring only as an element in a more complicated thought. In Spinoza’s example, the boy whose mind is wholly occupied with the thought of a winged horse, and who lacks the adult background knowledge that rules out there being such a thing, cannot but assent to the thought of there being a winged horse. This would be a neat solution to the problem of how thought is related to judgment, but I do not insist on it; there may be fatal objections. Anyhow, if this theory is true, I need not recant anything I have so far said; it would still be true that a thought may occur now unasserted, now asserted, without change of content. But if I had to choose between this theory and the Frege point, this is what I would reject. (Geach 1965, pp. 456-457)
In a later work, Geach gives a similar (possibly more general) formulation of this view, and seems to be even more optimistic about its viability:

whatever one can judge to be so, one can also conceive to be so without judging it to be so; the internal structure of an assumption (as McTaggart called a non-assertoric thought) is the same as that of a judgment. As regards the relation of assumptions to judgment, I incline to the view of Spinoza—that a thought is by nature assertoric, and is inhibited from being so only by standing in some special relation to a context of other thoughts: only a background of adult convictions keeps a thought of a winged horse from being a judgment that a horse is winged (*Ethics* 11.49, scholium). (Geach 1971, p. xi)

There is a lot to unpack and discuss in these passages, and this will be my task for the rest of this section. I will focus, in particular, on four questions: What exactly is the view that Geach considers here? What problem would it solve? Which view does it oppose? And is it viable? This is a worthwhile exercise because the view considered here by Geach anticipates contemporary discussions of the force/content distinction. In particular, as I will show in the next two sections, the theories of “force-cancellation” proposed by Hanks and Recanati are versions of such a view, and liable to the same sort of criticism.

A preliminary terminological clarification is in order. In the two passages just quoted, Geach uses the term “assertoric” in a generic sense that applies to mental acts of thinking as well as to their linguistic expressions (i.e. propositions). For the sake of simplicity, in the rest of this section I will conform to this usage. Thus I will speak of thoughts as having or lacking assertoric force (rather than judgmental force) and of judgments as asserted thoughts (rather then judged thoughts).
The claim that unasserted thoughts may not occur in isolation, but only embedded in judgments, can be understood in a weaker and a stronger way. According to the weaker construal, the claim is merely empirical. The reason why Spinoza’s boy “cannot but assent to the thought that there is a winged horse” has to do, on this understanding, with some empirical fact—say, with the mechanisms of human psychology. For some contingent reason, whenever we think of something, we also happen to judge it, unless this further step is undone or blocked by the occurrence of the thought in a more complex thought. By contrast, according to the stronger construal, the claim in question is conceptual. The reason why Spinoza’s boy “cannot but assent to the thought that there is a winged horse” would then have to do with a conceptual impossibility. This impossibility would be due to the fact that the notion of a thought has in it the notion of assertion, in the following sense: judgment is the conceptually fundamental notion, while the notion of an unasserted thought is defined in terms of it as a judgment whose assertoric force has been cancelled, where this cancellation is effected by the thought’s “special relation to a context of other thoughts”—or more specifically, as Geach puts it in the first passage quoted, by the thought’s occurrence in the context of a more complicated thought.\(^9\) If judgments have this sort of priority over unasserted thoughts, to think of an unasserted thought is to think of a judgment whose force has been cancelled. And insofar as this cancellation of force is effected by embedding the thought in a more complicated thought, to think of an unasserted thought is to think of a thought embedded in a more complicated thought. On this view, there is simply no such thing as an unembedded

\(^9\) In the second passage I quoted, Geach speaks of the “inhibition” of assertoric force, whereas in the context of a discussion of the linguistic version of the same view, he speaks of its “cancel[lation]” (1965, p. 456). I assume that the terminology here is interchangeable. In both cases, he is describing a sort of context that makes an asserted proposition or judgment lose its assertoric force.
unasserted thought. Spinoza’s boy cannot have it because there is no “it” to be had in the first place.

I take it to be clear that Geach is interested in the stronger, conceptual claim. This is suggested not only by the fact that he speaks of a thought as being “by nature” assertoric, but also by the fact that the view he considers is supposed to provide a “neat solution to the problem of how thought is related to judgment.” Geach does not say which problem he has in mind exactly. But it is reasonable to assume that it is a philosophical as opposed to a merely empirical problem, and it is hard to see how a merely empirical hypothesis could even be a candidate for solving a problem of that sort.

I will call the view that Geach considers in the two passages I quoted the Hybrid View. Such a view seeks to combine two commitments:

The Spinozist Thesis: Judgments (or asserted thoughts) are conceptually prior to unasserted thoughts, which are defined derivatively as judgments whose assertoric force has been cancelled.

The Frege Point (as applied to thoughts): Thoughts may have or lack assertoric force without any change in their truth-evaluable content.

I call the first thesis “Spinozist” because Geach attributes it to Spinoza, not because I think it is actually Spinoza’s (I take no stance on this issue). According to the version of the thesis contained in the first passage, the cancellation of force is effected by embedding a thought in a more complex judgment, whereas the second passage
suggests a more general construal of the sort of context that can render a thought forceless.

Geach does not clearly distinguish the Spinozist Thesis from the Hybrid View as a whole—and consequently, it is not clear whether he attributes to Spinoza only the former or also the latter. His commitment to the Frege Point is so deep-seated that he seems to regard it as a necessary ingredient of any view of the matter worth considering. Even though he holds that Frege “was the first…to make the point clearly and emphatically,” he also thinks that it “may appear so obviously true as to be hardly worth saying” (1965, p. 449). Thus the formulations of the view that he attributes to Spinoza—“a thought is assertoric in character unless it loses this character by occurring only as an element in a more complicated thought,” and “a thought is by nature assertoric, and is inhibited from being so only by standing in some special relation to a context of other thoughts”—appear to be designed to incorporate the Frege Point: it is the same truth-evaluable thought that either has or lacks assertoric force. Accordingly, Geach is confident that even if Spinoza is right, he (Geach) “need not recant” the Frege Point, since “it would still be true that a thought may occur now unasserted, now asserted, without change of content.” On the other hand, Geach presupposes the distinction between the Spinozist Thesis and the Hybrid View when he envisions the possibility of having to choose between the view he attributes to Spinoza and the Frege Point. The choice here must be between the Frege Point and some claim about the priority of judgments over unasserted thoughts that is distinct from, and possibly in tension with, the Frege Point. In any case, the distinction is worth making, because it is not obvious that the Spinozist Thesis is compatible with the Frege Point. Indeed, I am going to argue that there is no room for
the Hybrid View and that the only way to vindicate the Spinozist Thesis is to give up the Frege Point.

Before I argue for this claim, I want to bring out the motivation for a view that incorporates the Spinozist Thesis. Geach thinks that it would provide “a neat solution to the problem of how thought is related to judgment.” What could this problem be? The problem, I suggest, is one that arises if one denies the conceptual priority of judgments over unasserted thoughts and construes judgments as obtained from the addition of a merely external ingredient to a conceptually prior and independent thought—where a thought is something true or false and devoid of assertoric force. Call this construal of the relation between judgments and thoughts the Additive View. The problem is that, if we adopt the Additive View, we need to explain what extra ingredient could possibly turn a thought into a judgment—and it is doubtful that we have the slightest idea of what could do the trick. Let me spell this out.

On the one hand, it is clear that assertoric force cannot consist in another piece of content, since that would merely give us a more complex unasserted thought.\(^\text{10}\) We may then wonder whether assertoric force is due to some psychological phenomenon, such as a feeling or causal disposition, involving the thinker and perhaps also the relevant community. It is crucial here that such phenomena must be specified without any reference, explicit or implicit, to the notion of judgment, since this is precisely the

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\(^\text{10}\) The hopelessness of content-based accounts of assertoric force has not prevented them from being tempting. Some have thought, for example, that assertoric force can be reduced to the content supposedly conveyed by expressions such as “It is true that” or “It is a fact that.” In *Begriffsschrift*, for instance, Frege paraphrases his judgment stroke as “is a fact” and writes that, in his notation, the combination of the judgment stroke and the content stroke—which together he paraphrases as “The proposition that…is a fact”—is the “common predicate for all judgments” (§§2-3, in Frege 1997, pp. 53-54). Others, working in the tradition of Speech Act Theory, have thought that assertoric force can be reduced to the content supposedly conveyed by performative expressions such as “I assert that” or “I judge that” (for a classical discussion, see Levinson 1983, pp. 243-263).
notion that we are trying to vindicate. But arguably, any such phenomenon would be irrelevant, because it would not help explain the consequences of judgment.

We can mention, for the sake of illustration, three such consequences. First, the notion of judgment is essential for making sense of the idea of theoretical inference: in order to infer the conclusion from the premises, the conclusion and the premises must be asserted. “Merely entertaining” the thought that q after “merely entertaining” the thought that p and p⊃q does not amount to an inference. Secondly, we need the notion of judgment in order to make sense of the idea of theoretical irrationality. There is no irrationality in “merely entertaining” the thought that p while also “merely entertaining” the thought that ¬p; irrationality arises only if one judges both propositions without change of mind, or retains one’s commitment to doing so. Third, we need the notion of judgment in order to make sense of practical inference, i.e. inference whose conclusion is intentional action. The “mere entertainment” of the thought that vitamins are good for humans, followed by the mere entertainment of the thought that there is some high-vitamin food in front of me, followed by the act of eating that food, does not amount to a practical inference. In making a practical inference, the agent acts on the basis of what she thinks to be the case, and this means that she must be committed to things being a certain way. In other words, the premises must be judged and not merely entertained.11,12

In each of these three cases, it is hard to see how supplementing the “mere entertainment of thoughts” with feelings or causal dispositions specifiable

11 An analogous point holds for different accounts of the structure of practical inference, such as views that identify the conclusion with an intention rather than an action, or views for which one of the premises must be a desire.

12 My claim is that the notion of judgment is necessary in order to understand the three phenomena that I have mentioned—not that it is sufficient. In the case of theoretical and practical inference, for instance, one also needs the idea that the conclusion is judged or performed on the basis of the premises (see Marcus 2012, chaps. 1 and 2).
independently of the notion of judgment could make any difference. For example, it
won’t do to appeal to a causal disposition to “merely entertain” some other thoughts
or to make other people “merely entertain” certain thoughts—or to a causal
disposition to find oneself saddled with the intention of doing certain things. Accounts
of assertoric force along these lines are not uncommon. But the impression that they
have any plausibility is due either to the fact that they sneak in surreptitiously the
notion of judgment that they purport to reconstruct from independent ingredients—or
to the fact that they ignore the roles that the relevant notion of judgment is supposed
to play.13

Of course, this is not a demonstrative argument to the effect that it is impossible
to explain what could turn the mere entertainment of a thought into a judgment. It is
only the outline of an argument by elimination. But it may suffice to bring out the
attractiveness of a view that defuses the whole problem by rejecting its underlying
assumption—namely, that the notion of a judgment should be reconstructed from the
prior notion of an unasserted thought and some extra ingredient. This is precisely
what the Hybrid View purports to do by incorporating the Spinozist Thesis.
According to that thesis, in fact, the notion of judgment is fundamental and the notion
of an unasserted thought is to be reconstructed in terms of it rather than the other way

13 Consider for example Scott Soames’ recent sketch of a dispositional theory of
what turns a forceless act of predication into a judgment:

To judge is to predicate the property of o [i.e. an object] in an affirmative
manner, which involves forming, or activating already formed, dispositions to
act, both cognitively and behaviorally, toward o in ways conditioned by one’s
attitudes toward things that are so-and-so. (Soames 2015, p. 220; see also pp.
18, 22)

The question is: What is it “to act…toward o in ways conditioned by one’s attitude
toward things that are so-and-so”? If it is to act toward it in ways conditioned by
one’s judging that it is so-and-so, than the account is plausible, but circular. If it isn’t,
it is not clear that the account has any plausibility.
around. If the Hybrid View worked, it would indeed provide a “neat solution” to the problem I have described.

But the Hybrid View does not work. It does not work as a solution to that problem, or to any other problem, because it is inherently unstable. Here is the argument.

On the one hand, the Hybrid View wants to incorporate the Spinozist Thesis. Asserted thoughts are supposed to be conceptually more fundamental than unasserted thoughts, and the characterization of unasserted thoughts as asserted thoughts whose assertoric force has been cancelled (for short, “cancelled asserted thoughts”) is meant to express this order of priority:

<table>
<thead>
<tr>
<th>PRIOR NOTION</th>
<th>DERIVATIVE NOTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asserted thought</td>
<td>Unasserted thought = cancelled asserted thought</td>
</tr>
</tbody>
</table>

On the other hand, the Hybrid View wants to accept the Frege Point. For the Frege Point, there is a truth-evaluable common factor between the asserted and unasserted thought. Moreover, the only difference between the two is that in one case the common factor is asserted, while in the other case it is not. The truth-evaluable common factor is therefore forceless. An unasserted thought is a thought simpliciter, conceived as truth evaluable and forceless, while an asserted thought is a thought, thus conceived, plus assertoric force:

| Asserted thought = thought + assertoric force | Unasserted thought = thought |
So an unasserted thought is characterized, at one and the same time, as a **cancelled asserted thought** and as a **thought**, conceived as truth-evaluable and forceless. Given that an asserted thought is a thought with the addition of assertoric force, this identity can hold only if the cancellation of assertoric force is something that *undoes* the effect of adding assertoric force to a thought. Force cancellation, we can say, can only be the *converse* of force addition. If we take a thought and apply to it force addition, we obtain an asserted thought; if we take a thought and apply to it first force addition and then force cancellation, the two operations cancel each other out and leave us with the original unaltered thought:

<table>
<thead>
<tr>
<th>Asserted thought</th>
<th>Unasserted thought</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{thought} + \text{assertoric force} )</td>
<td>( \text{thought} + \text{assert. force} - \text{assert. force} )</td>
</tr>
</tbody>
</table>

But at this point, there is no room left for the claim that asserted thoughts are conceptually prior to unasserted thoughts. The conceptually fundamental notion is that of an unasserted thought, since the notion of an asserted thought is defined in terms of it rather than the other way around:

<table>
<thead>
<tr>
<th>DERIVATIVE NOTION</th>
<th>PRIOR NOTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asserted thought</td>
<td>Unasserted thought</td>
</tr>
</tbody>
</table>

We are here at the opposite of where we started. By accepting the Frege Point, the Hybrid View gives up its entitlement to the Spinozist Thesis.

Insofar as the Hybrid View retains its commitment to the Frege Point, it is entitled only to the *empirical* construal of the idea that thoughts are “by nature”
assertoric. From a *conceptual* point of view, the notion of a thought, construed as both truth-evaluable and forceless, is in no way dependent on the notion of an asserted thought, which is factorized into two independent components: the unasserted thought, and assertoric force. Given its commitment to the Frege Point, the Hybrid View must concede that even though we happen to be unable to entertain isolated unasserted thoughts, the idea of such accomplishments is perfectly coherent, and actually presupposed by its account of the distinction between asserted and unasserted thoughts.

I can put my objection to the Hybrid View another way. Geach observes that in written or printed natural language, propositions standing by themselves between full stops tend to carry by default assertoric force, unless this is cancelled by some other device, such as their occurrence within the scope of an “if” (1965, p. 456). Now, we can certainly think of a notation—such as Frege’s—in which propositions are by default unasserted, and assertoric force is indicated by a special symbol (such as “⊢”). The question is: Which notation is more perspicuous, and in which respect? The Hybrid View wants to say that natural language is here more perspicuous than Frege’s notation, because it reflects the conceptual priority of asserted propositions. My contention is that the Hybrid View is not entitled to this claim. Given its acceptance of the Frege Point, it is committed to regarding Frege’s notation as reflecting the order of conceptual priority. Natural language can be more perspicuous only with respect to the extent to which it reflects our psychological quirks. The only thing that prevents this aspect of natural language from being an “idiotism of idiom” (Geach’s phrase: 1965, p. 451) is the idiosyncrasy of our psychology.

If my argument is sound, there is no room for the Hybrid View: the Frege Point leads inevitably to the Additive View. And this means that if we accept the
Frege Point, we face the task of solving the mystery of what can turn a forceless truth-evaluable thought into a forceful one. This gives us good reason to reject the Frege Point, if that is at all an option.

A second consequence of my argument is that the internal consistency of the Spinozist Thesis requires a particular construal of the idea of force cancellation that appears in its formulation. The thesis states that judgments (or, equivalently, asserted thoughts) are conceptually prior to unasserted thoughts, which should be construed as judgments whose assertoric force has been cancelled. But the cancellation of assertoric force cannot consist in the removal of an extra ingredient tacked onto an antecedently given thought which plays the role of the forceless truth-evaluable common factor between the judgment and the unasserted thought. For as soon as we admit this common factor—or so I have argued—we deny the conceptual priority of judgments over unasserted thoughts. If the Spinozist Thesis is to be internally consistent, it must mobilize a notion of force cancellation that rejects the existence of a forceless truth-evaluable common factor between judgments and unasserted thoughts. Perhaps the whole terminology of “force cancellation” or “force inhibition,” along with the very contrast between “judgments” or “asserted thoughts” on the one hand and “unasserted thoughts” on the other, is inevitably bound up with the idea of this common factor. If that is the case, the Spinozist Thesis should be reformulated so as to express in some other way the contrast between the conceptually prior and the conceptually derivative notion and the way in which the latter is defined in the terms of the former.

The Two-Model View gives us a less misleading terminology for expressing the conceptual priority of judgments over what we have been calling, following Geach, “unasserted thoughts.” More importantly, by rejecting the Frege Point, it gives
us the resources for vindicating that conceptual priority and for construing a genuine alternative to the Additive View, which effectively preempts the generation of the mystery of the infusion of force.

The Two-Model View does not contrast asserted thoughts with unasserted thoughts, where both kinds of thought are supposed to be truth-evaluable. It contrasts thoughts, which are truth-evaluable, with simulations of thoughts, which merely simulate truth-evaluable thoughts, without being themselves truth-evaluable. There is no truth-evaluable common factor between a thought and a thought-simulation. A thought is not a thought-simulation, conceived as truth-evaluable, plus something else. As the name suggests, it is the notion of a thought-simulation that is defined in terms of the notion of a thought, not the other way around. As I argued in previous parts of this paper, endorsing the Two-Model View allows us to account for the compositional structure and inferential relations of truth-functionally complex thoughts while maintaining that thoughts are intrinsically assertoric, in the very strong sense that there is simply no such thing as a forceless and yet truth-evaluable thought. But if that is the case, the problem of what can turn a forceless truth-evaluable thought into a forceful one cannot arise. If there is no such thing as a forceless truth-evaluable thought, then there is also no question about what can turn it into a forceful truth-evaluable thought. The Two-Model View makes available the “neat solution” promised by the Hybrid View—and manages to do so precisely by putting us in the position to reject the Frege Point.

These considerations bear directly on some contemporary discussions of the force-content distinction. Even though the waters of Lethe have been quite effective, there are today at least two prominent reincarnations of the Hybrid View.
Peter Hanks (2011, 2015, 2019) has recently defended a theory of “force cancellation” that is, on its most plausible reading, a version of the Hybrid View. Hanks’ theory is formulated in terms of “acts of predication,” which are for him the primary truth-bearers. Acts of predications, in his sense, are concrete acts taking place in speech or thought. In the simplest case, they consist in the ascription of a property to an object. “Propositions,” as Hanks uses the term, are types of acts of predication. To express or think a proposition is to produce a token of one of these types. As I understand it, his theory of force cancellation is a reformulation, in terms of this theoretical framework, of the two commitments of the Hybrid View.

On the one hand, Hanks accepts as a matter of course the Frege Point. He speaks, for example, of the undeniable fact that it is possible to utter a declarative sentence, without any change in content, without asserting it. (Hanks 2015, p. 10)

One of the cases in which this happens is “when we use declarative sentences inside conditionals and disjunctions” (p. 10). For Hanks, when we utter assertorically a disjunction, we perform an act of predication which is truth-evaluable and also carries assertoric force. This main act of predication involves subsidiary acts of predication, corresponding to the uttered disjuncts, which are truth-evaluable—they must be so, for Hanks, in order to provide “truth-evaluable inputs for disjunction” (2019, p. 1388)—but also devoid of assertoric force. As Hanks puts it, they are “truth-evaluable and yet neutral, in the sense that they do not commit the subject to the truth of her act of predication” (2015, p. 98). Moreover, each of these subsidiary acts would be exactly the same, qua truth-evaluable item, if it were performed unembedded to make
an assertion: “the act that you perform when you utter ‘a is F’ doesn’t somehow change because the sentence is used inside a disjunction” (2019, p. 1388).

Hanks acknowledges that, as far as the Frege Point goes, he is in no disagreement with Geach (2015, p. 92). The disagreement concerns only the view that, for Hanks, many have derived from that putatively innocent point—namely, the view that “assertion is wholly separate from the propositional content of declarative sentences” (p. 10) or that “assertion is not built into the nature of propositional content” (p. 92). This is a version of what I have called the Additive View; Hanks refers to this view as “the constitutive version of the force-content distinction” (p. 9). The idea is that the notion of an assertion or judgment can be analyzed as the addition of some extra ingredient to the conceptually prior and independent notion of a truth-evaluable item.14

The second commitment of Hanks’ theory of force cancellation is designed to reject this supposedly stronger view, and is a version of the Spinozist Thesis. For Hanks, “[a]cts of predication are intrinsically or conceptually committal and non-neutral” (2019, p. 1387). However, this does not mean that every token act of predication is committal and non-neutral: “Predication is intrinsically and by nature committal, but that does not prevent instances of predication from being non-committal” (2019, p. 1393). The claim, rather, is that in the conceptually fundamental case, predication is committal, i.e. amounts to a judgment or assertion. Cases of predication that do not carry judgmental or assertoric force are conceptually derivative. Hanks calls committal acts of predication “pure” and non-committal ones

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14 For Hanks, “generations” of philosophers, including Geach, followed Frege in inferring this view from the Frege Point (2015, pp. 10, 92). Hanks might be right about Frege and subsequent generations of philosophers, but the passages I discussed in §8 show that he is wrong about Geach. Hanks acknowledges that Geach employs the language of force cancellation, but reads it as a momentary slip (2015, p. 92).
“impure.” Impure acts of predication include predications performed in the course of making disjunctive or conditional judgments or assertions. Hanks states his conceptual priority thesis very clearly in the this passage:

The concept of predication is the concept of an act that can be assessed for accuracy and is committal and non-neutral. The concept of hypothetical predication comes after and builds on this concept of predication. Another way to put this is that an act of hypothetical predication is not a pure act of predication—it is not the sort of clean, unadulterated act that we need in order to investigate the concept of predication. (Hanks 2019, p. 1388)

(The passage concerns explicitly only a particular class of impure acts of predication, i.e. “hypothetical predications,” which include assumptions and hypotheses, but I assume that the point about hypothetical predications is meant to apply to all acts of impure predication.) Hanks goes on to characterizes impure acts of predication as “cancelled” acts of predication. Acts of predication have an “assertoric element” built into them (2015, p. 10), which however is “cancelled” if the predication is performed in “cancellation contexts.” Such contexts include those created by the use of truth-functional connectives such as disjunction and the material conditional.

Hanks’ view has been widely held to be inconsistent (Jespersen 2012, pp. 624-625; Hom & Schwartz 2013, pp. 20-21; Reiland 2013, pp. 242-243; Stokke 2016; Green 2018, pp. 118-120; Pagin forthcoming). The standard criticism can be formulated as a version of the argument I gave in the previous section against the Hybrid View. The problem is that, by accepting the Frege Point, Hanks gives up any entitlement to his conceptual priority thesis. Pure and impure acts of predication share, for Hanks, a truth-evaluable common factor. Moreover, they only differ because pure acts of predication are forceful, and impure ones forceless. The truth-evaluable common factor must therefore be forceless: in the case of “pure acts,” it is
supplemented with force, in the case of “impure acts,” it is not given any such supplementation. Within this framework, force cancellation (however it is supposed to work in detail) can only consist in something that removes or prevents the addition of force to the prior and independent forceless truth-evaluable common factor. But at this point, there is no room left for Hanks’ priority thesis. The conceptually fundamental notion is that of an act that is truth-evaluable and forceless: forceful acts are defined in terms of it rather than the other way around. By accepting the Frege Point, Hanks ends up with the “constitutive version of the fore/content distinction” (or Additive View) that he wants to resist.\footnote{Hanks puts a lot of emphasis on the fact that the difference between pure and impure acts of predication is not due to additional acts, but to the contexts in which the acts of predication are performed. But I agree with Stokke 2016 that this is a red herring.}

In response to his critics, Hanks insists that “[c]ancelled predication is more than predication, not less” (2015, p. 99; see also 2019, p. 1389). There is a question about how to understand this slogan. On the reading that seems to me to fit best with most of what Hanks writes, the slogan is simply a restatement of his conceptual priority thesis. Cancelled predication is “more” than normal predication in the sense in which, say, a fake gun is something “more” than a gun: it is a conceptually derivative phenomenon, whose intelligibility presupposes a prior understanding of the more fundamental phenomenon. So understood, the slogan makes no dialectical progress. Given his acceptance of the Frege Point, Hanks is not entitled to the slogan, for the reasons just given.

But some passages suggest that Hanks means his slogan in a stronger and more literal sense. Right before stating it, he insists that “cancelled predication is not predication minus commitment” (2015, p. 99; see also 2019, p. 1389). This suggests the following picture: A predication remains completely unchanged when it occurs in
a cancellation context; in particular, it remains committal (it continues to carry
assertoric or judgmental force); it is just that something gets added to it; and the effect
of what is added to it is that the subject is not committed to the committal act of
predication she performs. So, when we utter e.g. the antecedent of a conditional, we
perform an assertion, but given the context in which we perform it (this is the added
element), we are not committed to the truth of what we assert.16

This appears to introduce a puzzling distinction between performing an
assertion and being committed to the truth of what is asserted—or between asserting
something and accepting the normal implications of doing so—which is hardly more
than wordplay. It seems to me that the only way to spell out the view with some
semblance of coherence is to claim that assertions compose on the model of Fregean
reference rather than Fregean sense. “The capital of Sweden” refers to Stockholm;
one of its parts, “Sweden,” refers to Sweden, and this contributes to determine the
reference of the whole expression; but Sweden is not part of Stockholm and the
expression as a whole does not refer, inter alia, to Sweden. Similarly, Hanks could
maintain, the “p” that occurs in “p⊃q” expresses an assertion and contributes to
determine the assertion expressed by the whole formula, but the assertion it expresses
is not part of the assertion expressed by the whole formula: the whole formula does
not express, inter alia, the assertion that p.17

16 For this reading of Hanks, see Reiland (2019, pp. 147-148) and Schmitz
(unpublished, pp. 37-38), even though for Schmitz this is at most one strand in Hanks.
This reading was also pressed on me by an anonymous referee: “The whole point of
Hanks 2015 is to say that the extra feature over and above the [truth-evaluable]
common factor [between pure and impure acts of predication] is added not to the
unasserted use in order to make an asserted use but to the asserted use to cancel some
of its implications. Hanks then goes on to argue that while the truth-evaluable
common factor is still there the normal implications of asserting it (like that the
subject believes it to be true and can be called on to justify it) have been cancelled.”
17 On this reading, Hanks proposes a version of the Alternative Strategy (see note
1). Schmitz (unpublished), as I understand it, presents a similar account. For Schmitz,
Assessing the viability of a view of this sort goes beyond the scope of this paper.\(^1\) It should be noted that such a view does not accept the Frege Point, for it rejects the idea that truth-evaluable items might lack, on some occasions, assertoric or judgmental force. A fortiori, it is not a version of the Hybrid View and is not liable to the previous criticism. As a reading of Hanks, it conflicts with his acceptance of the Frege Point (documented above), with his distinction between committal and non-committal predictions (also documented above), and with the claim that “[c]ancelled acts of predication are…truth-evaluable and neutral” (2019, p. 1393). Whether or not there is any solid ground for this alternative reading of Hanks, there is certainly a major strand in his work that is a version of the Hybrid View, and that faces the same problem encountered by Geach.

**10 Recanati on simulation and force cancellation**

We find another reincarnation of the Hybrid View in François Recanati’s recent account of the force-content distinction (2019). The account is presented as an elaboration of Hanks’ idea of force cancellation in terms of notions developed in the clauses of a conditional express assertions, but the whole conditional expresses a “higher-level act” of “conditionalizing” performed on the lower-level acts of assertion which involves no commitment to their truth (pp. 27-35). As with Hanks, it would be uncharitable to take Schmitz to rely on a questionable notion of “non-committal assertion.” Rather, I take him to maintain that acts of assertion compose on the model of Fregean reference rather than Fregean sense: they contribute to determine higher-level acts, but someone who performs the higher-level acts is not necessarily performing, *inter alia*, the lower-level acts. There is however a respect in which Schmitz’s account does not fit my characterization of the Alternative Strategy. On his view, assertions can only be atomic: a conditional, for example, does not express an assertion (pp. 32-35). Thus the assertions expressed by atomic clauses cannot contribute to determine the *assertions* expressed by more complex constructions, for there is no such thing. They can only contribute to determine the higher-level acts expressed by more complex constructions.

\(^1\) I mentioned in note 1 one difficulty encountered by the view. Reiland (2019, p. 148) presents a version of the same objection that applies specifically to the case of negation.
some of Recanati’s earlier work on speech acts (1987, 2013). The proposal hinges on a particular understanding of Austin’s distinction between locutionary and illocutionary acts—one that construes locutionary acts as simulations of illocutionary acts. Like Geach’s and Hanks’ respective versions of the Hybrid View, Recanati’s theory is unstable. Seeing why this is the case is of particular interest for our present purposes because it brings out the difference between Recanati’s notion of simulation and the homonymous notion that figures in the Two-Model View.

Recanati’s account includes clear versions of the two commitments of the Hybrid View. On the one hand, he accepts the Frege Point as an unquestionable datum:

Any theory of content must account for the fact that there are two types of occurrences of indicative sentences expressing a given content: asserted and unasserted, or…forceful and forceless. (Recanati 2019, p. 1411)

Unasserted occurrences of indicative sentences include those within the scope of truth-functional connectives. On the other hand, Recanati wants to give conceptual priority to asserted occurrences of sentences expressing truth-evaluable contents. To make an assertion, for Recanati, is to perform an “illocutionary act.” To use a sentence in order to merely express a truth-evaluable content without asserting it is to perform a “locutionary act,” which consists in merely simulating the performance of an illocutionary act of assertion. One does so by employing a sentence that is conventionally used to perform a certain illocutionary act without actually performing

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19 Recanati notices the verbal similarity between Hanks’ position and Geach’s formulation of the Hybrid View (2019, p. 1406). However, he doesn’t seem to see any substance behind this verbal similarity, because he also takes for granted, with Hanks, that Geach infers from the Frege Point the Additive View (p. 1405).

20 See e.g. his approving rehearsal of Geach’s argument from the validity of Modus Ponens (Recanati 2019, p. 1405n4).
it. In these cases, the assertoric force of the simulated illocutionary act is cancelled. What is crucial, for Recanati, is that the notion of an illocutionary act is primary and that of a locutionary act derivative:

Cancellation results from the fact that the speaker is staging the performance of an illocutionary act, rather than genuinely going through the performance. This falls under the broad concept of simulation. Forceless occurrences are derivative in the sense that they involve the simulation of the illocutionary acts that are performed in the basic cases. (Recanati 2019, p. 1412)

The claim that the concept simulation of $X$ is parasitical on the concept $X$ is hard to question. The problem, however, is that Recanati is not entitled to conceive in this manner the relation between forceless and forceful expressions of truth-evaluable contents. The culprit is, once again, the Frege Point. For Recanati, a locutionary act has the same truth-evaluable content of the assertion it simulates. In one case, the truth-evaluable content is supposed to be asserted, and in the other not. An assertion is therefore analyzed as the expression of a truth-evaluable content, plus some force-conferring extra ingredient. A locutionary act, by contrast, is analyzed as the mere expression of a truth-evaluable content: whatever “simulation” comes to, it is something that results in the absence of the force-conferring extra ingredient. What is conceptually fundamental, here, is not assertion, but the forceless expression of a truth-evaluable content.

Recanati’s account includes many other details. For instance, he holds that whether a speaker merely simulates an assertion or actually performs it depends on her intentions, and argues that this makes his account of force cancellation significantly different from Hanks’ (Recanati 2019, pp. 1413-1414). But these details
serve at best to qualify the particular version of the Additive View to which Recanati is unwittingly committed.21

By contrast, the notion of simulation that figures in the Two-Model View makes room for a stable alternative to the Additive View. While Recanati distinguishes between assertions and simulations of assertions sharing the same truth-evaluable contents, the Two-Model View distinguishes between truth-evaluable items and their simulations, which are not truth-evaluable. Building on the Two-Model View, we can hold that truth-evaluable items are intrinsically forceful in the sense that they can never be forceless. This takes us to the contrast between assertions or judgments and their simulations. Crucially, there is no truth-evaluable common factor between the former and the latter. And this is what entitles us to deny that judgment and assertions consist of an independently intelligible forceless truth-evaluable core plus some force-conferring extra ingredient.

11 Predicates, operators, and the Two-Model View

So far I have argued that the Frege Point—pace Geach, Hanks, and Recanati—leads inevitably to the Additive View (§§8-10). I have also argued that the Additive View is problematic because it creates the mystery of what could possibly turn the mere entertainment or expression of the thought that something is the case into a judgment or assertion (§8). Thus, insofar as this is a serious problem, we have reason to question the Frege Point. I have also argued that the Two-Model View accounts for embedding in truth-functional contexts without any appeal to the Frege Point (§§5-7). If all of this is correct, we have reason to adopt the Two-Model View. Yet, the view

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21 Some of the details may also create additional problems. For instance, it is not clear whether an illocutionary act includes for Recanati—as it does for Austin—a locutionary act. If it does, the illocutionary act would have to include a simulation of itself, which seems to involve a vicious regress.
introduces a deep asymmetry in the logical complexity of atomic and truth-functionally complex propositions and would be very hard to accept if there were no other differences between the two kinds of proposition. In this section, I am going to indicate some other significant differences between atomic and truth-functionally complex propositions. The Two-Model View does not introduce an anomaly in an otherwise uniform landscape: the landscape is already quite heterogeneous. Moreover, I am going to argue that the Two-Model View fits well into a plausible account of these other differences.

There are at least two striking differences between predicates, which are involved in the construction of atomic propositions, and truth-functional connectives, which are involved in the construction of truth-functionally complex propositions. By “predicate” I mean here expressions such as “runs” or “is wise” or “is taller than”: they can be monadic or polyadic, and include the copula, like Frege’s concept-expressions. The two differences I have in mind are both emphasized in Wittgenstein’s Tractatus. First, truth-functional connectives can be meaningfully iterated, while this is not the case for predicates: “¬¬p” makes perfect sense, but “Socrates is wise is wise” does not (TLP 3.333, 5.252). Secondly, truth-functional connectives, unlike predicates, can cancel each other out, in the sense that the addition of appropriate combinations of truth-functional connectives may leave unaltered the truth-conditions of the original proposition. The proposition “¬¬p” has the same truth-conditions as “p”: there is no difference in how the world would have to be in order to make them true (TLP 5.253-5.254). By contrast, “Socrates” and “Socrates is wise is wise” do not have the same truth-conditions, since none of them

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22 These references to the Tractatus presuppose that the Tractarian distinction between “functions” and “truth-operations” lines up with the distinction between predicates (in the sense just defined) and truth-functional connectives. More on this below.
has truth-conditions. Moreover, if the negation sign were a predicate, “¬¬p” could not have the same truth-conditions of “p,” since only one of the two propositions would say something involving the property of negation. The two propositions would in effect be *about* different things and would say, of them, something different: one would be about something called “¬p” and would say, of it, that it has the property of negation (whatever that might be), whereas the other would be about whatever “p” is about (e.g. Socrates), and would say of it whatever “p” says of it (e.g. that he is wise; cf. TLP 5.44).

The *Tractatus* accounts for these differences by contrasting predicates (or signs for “functions,” in its terminology) with signs for “operations” (TLP 5.2-5.254).23 The occurrence of a predicate in a proposition says something about what is picked out by the other parts of the proposition. In “Socrates is wise,” for example, there is an expression that picks out what the proposition is about, and the role of the predicate is to say something about it. Truth-functional connectives, for the *Tractatus*, are not predicates, but signs for operations. An operation takes one or more propositions as “bases” and generates, out of them, another proposition, which is its “result.” An operation sign expresses what has to be done to one or more propositions in order get another proposition out of them. The negation sign, for example, expresses what has to be done to a proposition in order to obtain its negation: namely, *reversing* its truth-conditions, so that the new proposition is true if its basis is false and false if its basis is true. Negation and the other truth-functional connectives are

23 It is uncontroversial that the *Tractatus* conceives of truth-functional connectives as “operations,” but the identification of predicates (in the sense explained above) with Tractarian “functions” requires argument. I cannot provide such an argument here, but it would make use of remarks such as TLP 3.318, 4.1211, 4.126, 4.24, 5.25, 5.5301. Part of what has to be appreciated in order to understand the Tractarian distinction between “functions” and “operations” is that it involves a notion of function that differs deeply from the one invoked by Frege at the level of reference (see Hylton 2005).
specifically *truth*-operations, since the truth-value of their result depends on the truth-values of their bases. The bases and the result of an operation stand in formal relations to each other (for instance, the former may contradict or entail the latter), and we can make these relations perspicuous by writing the result of an operation $O$ for the bases $p_1, \ldots, p_n$ as “$O(p_1, \ldots, p_n)$.” The role of operation signs, unlike predicates, is not to *say* something about what is picked out by other parts of the propositions in which they occur—and the role of the expressions that specify their bases is not to pick out subjects of predication. These are really two sides of the same coin, but both are worth emphasizing. In “$\neg p$,” for example, the negation sign does not serve to *say* something about an item picked out by “$p$”—and the role of “$p$” is not to pick out an item to which some property is ascribed. The logical behavior of the parts of “$\neg p$” is completely different from the logical behavior of the parts of “$Fa$.” We see here that the *Tractarian* account of truth-functional connectives is an aspect of its wider project to vindicate, *contra* Frege, the categorical distinction between propositions and propositional parts.

Now, recall that for the Two-Model View, propositions, construed as truth-evaluable expressions, do not occur at all as parts of truth-functionally complex propositions: only *simulations* of propositions occur as their parts. This would be very strange if truth-functional connectives were predicates. If the role of the negation sign in “$\neg p$” were to ascribe a property to some item, then it would be mysterious why the other part of the proposition (i.e. “$p$”) couldn’t pick out such an item directly, instead of deferring the task to what it simulates. But since we have good reason to think that truth-functional connectives are *not* predicates, this objection does not apply.

The *Tractatus* does not explicitly endorse the Two-Model View. But such a view can be part of a plausible elaboration of the operational account of truth-
functional connectives it proposes. As we saw, according to this account we start with some propositions, do something to them (e.g. reverse their truth-conditions), and obtain in this way other propositions, whose truth-values are functions of the truth-values of the initial propositions. The proposition-looking expressions that figure in the results (such as “p” in “¬p”) serve to specify the bases from which they have been obtained. The Two-Model View supplies an attractive story about how this specification is accomplished: it is accomplished by simulating the bases. This story is superior to the view that the bases are specified by expressions that refer to the bases. Such a view, in fact, would be incapable of explaining why it is nonsensical to combine truth-functional connectives with singular terms. “If Socrates then Plato” makes no sense (unless we interpret it as elliptical), and the same goes for “If the last proposition of Grundlagen, then the first proposition of the Tractatus.” This would be mysterious if the expressions “Socrates is wise” and “Plato is wise,” as they occur in the proposition “If Socrates is wise, then Plato is wise,” referred to propositions. For the Two-Model View, the bases of truth-operations are specified by expressions that simulate propositions, and in order to do so, as I argued in §6, they must look like propositions, not like singular terms.

Of course, the two options just described do not exhaust the space of possibilities. One could accept the operational account of truth-functional connectives and hold that truth-functionally complex propositions do not specify the bases from which they have been obtained by containing expressions that simulate or refer to those bases, but by containing the bases themselves. This third option would preserve the Uniform Model of Logical Occurrence. Considerations of explanatory economy

24 The problem here is analogous the “substitution problem” discussed in the literature on propositional attitude reports (Moltmann 2013, pp. 126-130). For additional objections to a purely referential account of truth-functional embedding, see Reiland (2019).
would make it preferable to the option I am recommending, other things being equal. But it is not obvious that other things are equal. The Two-Model View allows us to resist the Frege Point, and thus also to avoid the mystery of the infusion of force. In order to claim the advantage of explanatory economy, an operational account of the truth-functional connectives that preserves the Uniform Model of Logical Occurrence would have to show that it is equally capable of avoiding, or solving, the mystery of the infusion of force.

12 Beyond truth-functional complexity

As announced in §1, the aim of this paper was to focus on one of the features of language and thought that have seemed to require the Frege Point and the force/content distinction: namely, embedding in truth-functional contexts. I listed there some other phenomena that have often been taken to demand the same distinction. I’ll close with some remarks about how the resources I have developed for responding to Geach’s arguments may be useful for dealing with some of those other phenomena.

Consider first embedding in propositional attitude reports. One can build arguments closely analogous to Geach’s on the basis of inferences of the following sort:

(6) Socrates thinks that Plato is wise. Everything that Socrates thinks is true. 
     ------- 
     ∴ Plato is wise.

One can maintain, à la Geach, that the expression “Plato is wise” carries assertoric force only on its unembedded occurrence, and that the inference wouldn’t be valid if
The expression didn’t express the same truth-evaluable content on its embedded and unembedded occurrence. An alternative worth considering is that the first occurrence of the expression serves to specify the basis of a non-truth-functional operation, where the specification of the basis is achieved by simulating it. On this view, the first premise and the conclusion of the argument do no stand in inferential relations to one another because they share a truth-evaluable part, but because the former has been obtained by applying a non-truth-functional operation to the latter.\textsuperscript{25}

The notion of a non-truth-functional operation, coupled with the idea that the bases of operations are specified by simulations of propositions, might also be useful for dealing with the formal relations between assertions, questions, commands, and other speech acts that are commonly construed as having propositional content. Such relations include, for example, the fact that the first sentence under (7) expresses an answer to the question stated by the second sentence, and states the conditions under which the order expressed by the third sentence is satisfied.

\begin{align*}
(7) & \quad \text{The door is closed} \\
& \quad \text{Is the door closed?} \\
& \quad \text{Close the door!} \\
\end{align*}

According to a widespread view, in order to account for this sort of formal relations we need to posit a forceless truth-evaluable core in each sentence (see e.g. White 2015). Accordingly, the sentences would be more perspicuously written with the help of “force indicators” along the following lines:

\begin{align*}
(7') & \quad \vdash (\text{The door is closed}) \\
& \quad ?(\text{The door is closed}) \\
\end{align*}

\textsuperscript{25} I borrow the notion of a non-truth-functional operation from Diamond (2012), where it is introduced in the context of a reading of the account of propositional attitude reports presented in Wittgenstein’s \textit{Tractatus}. Diamond, however, does not maintain that the bases of such operations are specified by simulations.
!(The door is closed)

On this view, when we ask whether the door is closed, we actually say, truly or falsely, that the door is closed—even though, of course, we do not assert that it is closed. But here is an alternative. We can further extend the notion of an operation so as to include not only operations that have as their values propositions whose truth-value is not a function of the truth-values of their bases, but also operations whose results may be not only propositions, but also questions, commands, etc. So we can think of the question “Is the door closed?” as obtained by applying an operation to the proposition “The door is closed.” We can then partly reinterpret the notation used in (7′) so as to understand the so-called force indicators as signs for non-truth-functional operations, and the proposition-looking constructions that follow those signs as expressions that specify the bases of the operations by simulating propositions. The aspect of the notation that we would need to give up is the idea that any proposition should be written in the form “\( \vdash (p) \),” because this suggests a factorization of propositions into assertoric force and the forceless expression of propositional contents. We could then rewrite (7) as:

\[
(7'') \quad \text{The door is closed} \\
?(\text{The door is closed}) \\
!(\text{The door is closed})
\]

From this perspective, the proposition, the question, and the command do not stand in formal relations to each other because they share the same truth-evaluable component, as the dominant account has it. They do so because the question and the command have been obtained from the proposition by applying operations to it. Even though on this view it would be misleading to write every proposition as “\( \vdash (p) \),” we could still
have uses for the so-called assertion sign, reinterpreted as an operation that has propositions as its results. For instance, we could use it to express an operation that takes a proposition as basis and yields the same proposition as its result. Then “\(\vdash(p)\)” would translate “It is true that p.”\(^{26}\) Or we could use it to express an operation that takes as basis something other than a proposition and yields a proposition as its result. Then “\(\vdash?(p)\)” would translate “Is p true? Yes.”

We should also consider the option of using the notion of non-truth-functional operations whose results are not propositions in order to account for hypotheses and assumptions. These are commonly taken to consist in the forceless entertainment or expression of propositional contents. The alternative would be to treat them as fully forceful items (on a par with propositions, questions, and commands) that do not express any truth-evaluable content and that have been obtained by applying operations (the “hypothesis operation” and the “assumption-operation” respectively) to propositions.\(^{27}\)

I haven’t said anything about the other cases mentioned in §1, such as embedding in modal contexts and staged assertions. Operational accounts might be

\(^{26}\) For an operational reading of (a certain use of) the truth predicate, see Gomułka & Wawrzyniak (2013).

\(^{27}\) These suggestions resemble in one respect the account presented in Schmitz (unpublished). On both accounts, signs that would be traditionally interpreted as force indicators can be embedded. Schmitz, for instance, proposes to express the question “Did you close the door?” as “\(\mathbf{A}(\mathbf{aRb})\)” where “\(\mathbf{A}(\mathbf{aRb})\)” expresses the assertion that \(\mathbf{aRb}\) (p. 22). Similarly, he proposes to express the conditional “\(\mathbf{F}_a\mathbf{G}_b\)” as “\(\mathbf{A}(\mathbf{F}_a)\mathbf{A}(\mathbf{G}_b)\)” (p. 15). There are however at least three important differences between the two accounts. First, Schmitz is committed to a controversial notion of “representation” that is completely divorced from truth and falsity. On his account, “\(\mathbf{aRb}\)” represents a state of affairs, but does not do so truly or falsely; only “\(\mathbf{A}(\mathbf{aRb})\)” represents the states of affairs truly or falsely (pp. 7-12). Secondly, for Schmitz embedded occurrences of “\(\mathbf{A}(\mathbf{aRb})\)” express assertions, which raises the change of mind problem mentioned in note 1. Thirdly, Schmitz holds that only atomic propositions (or, in his terminology, atomic theoretical postures) have truth-conditions (pp. 34-35). So, while the antecedent and the consequent of the conditional “\(\mathbf{A}(\mathbf{F}_a)\mathbf{A}(\mathbf{G}_b)\)” are true or false, the whole conditional is not. The view seems to imply, surprisingly, that “\(p\)” and “\(\neg\neg p\)” do not have the same truth-conditions.
worth exploring for these cases too. We shouldn’t expect, however, that all the phenomena that the force/content distinction purports to explain admit of a single alternative account. Perhaps different drawers require different keys. What I claim to have shown is that we have good reason to do without the force/content distinction; that embedding in truth-functional contexts can be explained without that distinction; and that some of the remaining phenomena might be explained in similar ways.

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**References**


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