Frege and Propositional Unity

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Abstract. This paper identifies a tension in Frege’s philosophy and offers a
diagnosis of its origins. Frege’s Context Principle can be used to dissolve
the problem of propositional unity. However, Frege’s official response to
the problem does not invoke the Context Principle, but the distinction
between ‘saturated’ and ‘unsaturated’ propositional constituents. I argue
that such a response involves assumptions that clash with the Context
Principle. I suggest, however, that this tension is not generated by deep-
seated philosophical commitments, but by Frege’s occasional attempt to
take a dubious shortcut in the justification of his conception of
propositional structure.

Keywords: Frege, propositional unity, context principle, atomism, unsaturatedness

In recent years, there has been a renewed interest in the problem of propositional unity,
and not only among historians of philosophy.¹ Frege is widely credited with an important
attempt to deal with the problem. I am going to argue that we can find in his work two
different and mutually incompatible responses to the problem: one based on the Context
Principle, and the other based on the distinction between saturated and unsaturated
propositional components. Each response has been noticed by various commentators, but
rarely by the same commentators. Among those who have discussed their relation, some
have maintained—as I do—that they are in tension with one another; but the tension they
describe differs from the one I am going to lay out. First of all, let me clarify what I mean
here by ‘the problem of propositional unity’.

¹ See e.g. Gibson 2004; Davidson 2005, chaps. 5-7; King 2007; Searle 2008, chap.
10; Gaskin 2008; Soames 2010, chap. 2; Collins 2011; Hanks 2015, chaps. 2 and 3.
1. Which problem of propositional unity?

The term ‘proposition’, as it occurs in philosophy, is notoriously ambiguous. According to one usage, it designates a kind of linguistic construction, namely a sentence used to say that something is the case. This usage has its roots in the medieval employment of the Latin ‘propositio’ (see Geach 1975, 139; Gaskin 2008, 8-14). It also appears in many influential translations of the works of Frege and Wittgenstein as a rendering of the German ‘Satz’. Today, the general tendency is to employ the term in a more recent sense, originally due to Moore and Russell. In this second sense, the term designates entities that can be true or false, but are located at the level (or levels) of what linguistic expressions in some sense mean. How exactly such entities are construed depends on how the relevant notion of meaning is specified. For example, it is common nowadays to distinguish between ‘Russellian propositions’ and ‘Fregean propositions’ (see Speaks 2016). Russellian propositions, corresponding to what Russell calls ‘propositions’ in the *Principles of Mathematics*, are structured entities composed of the entities designated by sub-sentential expressions. By contrast, Fregean propositions, corresponding to what Frege (after the introduction of the sense/reference distinction) calls ‘thoughts’ (*Gedanken*), are structured entities composed of the *senses* expressed by sub-sentential components, where the sense of a linguistic expression is a ‘mode of presentation’ of its referent.

The phrase ‘problem of propositional unity’ inherits the ambiguity of the term ‘proposition’. It is used sometimes to refer to a problem arising at the linguistic level, and sometimes to problems arising at the level (or levels) of what linguistic expressions mean. The former problem, as traditionally construed, can be formulated by means of the following question (where ‘proposition’ and cognate expressions are employed in their linguistic sense): What makes it the case that the meaningful parts of a proposition constitute a unified whole, which says something intelligible, rather than a mere concatenation of sub-propositional expressions, each of which conveys a sub-propositional content? If one assumes that each sub-propositional expression has a meaning by naming some kind of entity, the problem can also be formulated in this more
familiar way: What distinguishes a proposition, which says something intelligible, from a mere list of entities, which simply mentions one thing after another?

When the problem is taken to arise at a non-linguistic level, it normally concerns Russellian or Fregean propositions. In these cases, it is closely analogous to the aforementioned problem arising at the level of language. The question will be: What makes it the case that the constituents of a Russellian (or Fregean) proposition constitute a unified whole, which is capable of truth and falsity, rather than a mere aggregate of propositional constituents?

One can formulate unity problems concerning the meanings of linguistic propositions by invoking other notions of meaning. But such problems may have a rather different structure. Consider for example Frege’s theory of reference. For Frege, things behave at the level of reference quite differently than they do at the level of sense. The sense of a complex linguistic expression is a whole composed of the senses of its parts. By contrast, the reference of a complex linguistic expression is determined by the references of its parts, but is not (in general, at least) a whole mirroring the part/whole structure of the correlative expression. ‘The capital of Sweden’, Frege points out, refers to Stockholm; it does so because the proper name ‘Sweden’ refers to Sweden and the function-expression ‘The capital of ξ’ refers to a function mapping Sweden into Stockholm; but Sweden is not part of Stockholm. Similarly, according to Frege, ‘Stockholm is a capital’ refers to The True; it does so because ‘Stockholm’ refers to Stockholm and the concept-expression ‘ξ is a capital’ refers to a concept (which is a special kind of function) mapping Stockholm into The True; but Stockholm is not part of The True. So, in so far as we can raise a unity problem concerning the Fregean reference of linguistic propositions, it will have the following form: How can a concept take objects (or appropriate lower-level concepts) as arguments—how can it, so to speak, engage with them—so as to yield a truth-value? Whether or not this is a pressing question, it differs considerably from more traditional formulations of the problem of propositional unity,

2 See Frege 1969, 275 / 1997, 365, and Frege 2004, 87. At one point, Frege does maintain, with some qualifications, that the references of the parts of a linguistic proposition are part of the reference of the whole proposition (Frege 1892a, 35 / 1997, 159). But his later remarks on the topic suggest that this is not his considered view.
which all concern, in spite of their differences, how a number of parts can be appropriately unified into a whole.

The topic of this paper is the problem that we encounter at the linguistic level. Problems arising at non-linguistic levels will be addressed only tangentially, and only in so far as they shed light on the linguistic problem. In what follows, I will reserve for that problem the phrase ‘problem of propositional unity’, and I will use ‘proposition’ and cognate expressions (unless otherwise specified) in the linguistic sense specified above. This policy is to a certain extent arbitrary and has some disadvantages. Some authors, in order to avoid ambiguities, prefer to call the relevant linguistic entities ‘declarative sentences’ and use the term ‘proposition’ only for items located at some level of meaning (see e.g. Gaskin 2008). But speaking of ‘the problem of the unity of the declarative sentence’ can convey the impression that what is at issue is some new sort of question, rather than part of what has been traditionally discussed under the heading of the problem of the propositional unity. Discouraging this impression is the main rationale for my terminological policy.

2. Dissolving the problem through Frege’s Context Principle

Frege is well known for his Context Principle, which says that ‘it is only in the context of a proposition that words have any meaning’ (Frege 1884, §62 / 1980, 73). It is not uncommon among Frege scholars to claim that this principle takes care of the problem of propositional unity. Here is Peter Sullivan:

Frege’s resolution of the problem of propositional unity […] is entirely contained in his context principle. (Sullivan 2010, 111)

Peter Hylton makes the same point in the context of a discussion of the differences between Frege’s and early Russell’s respective philosophical frameworks. Unlike Sullivan, Hylton gives us some details about why he thinks that Frege’s Context Principle resolves the problem:
From within Russell’s early post-Idealist metaphysics the unity of the proposition can be neither avoided nor explained. Frege, by contrast, is not troubled by any analogous problem. For him there is no issue about how judgments are possible, about how concepts and objects unite. […] Let us focus on Frege’s context-principle: ‘it is only in the context of a Sätze that words have any meaning’. This principle, as I understand it, implies that the notions of an object, and of a concept, are not to be understood independently of one other, and of the role that concept-expressions and object-expressions have in forming complete sentences. On this kind of reading, Frege presupposes the notion of judgment as fundamental, and understands both concepts and objects in terms of it. For him there thus can be no question as to how these separate and independent entities can form a unity, since they are not correctly thought of as separate and independent at all. (Hylton 2005, 177)

According to Russell’s atomistic metaphysics, the occurrence of meaningful sub-propositional components in complete propositions, just like the occurrences of the entities designated by those components in complete Russellian propositions, is merely accidental. Given such a framework, Hylton maintains, the ‘unity of the proposition’ becomes a problem that is both unavoidable and unsolvable. Hylton is here using the term ‘proposition’ in Russell’s sense; but it seems safe to assume that he would make the same claim about the unity of the linguistic constructions that are supposed to designate Russellian propositions. By contrast, according to Hylton, Frege’s contextualist framework prevents ‘any analogous problem’ from getting off the ground. There can be no question of how concepts and objects can combine with one another, since they are not ‘separate and independent’ in the first place. As before, it seems safe to assume that Hylton would make the same claim about the possibility of combining concept-expressions and object-expressions into unified propositions. It is clear that, for Hylton, the sort of response to the problem of propositional unity provided by the Context Principle is not a direct solution, but rather a dissolution: the principle prevents the problem from arising by rejecting the assumptions that are required for its formulation.

But how exactly is such a dissolution supposed to work? The formulation of the problem presupposes that we can contrast a unified proposition with a sequence of meaningful propositional components that are not ‘bonded together’ in the required way, but merely juxtaposed. In order to block the problem before it arises, we need to deny that there is such a thing as a sequence of this sort. And in order to do that, we need to
deny that meaningful propositional components can occur in isolation. For as soon as this is granted, it will be possible to collect an appropriate selection of meaningful propositional components in the same order in which they figure in a proposition, and then ask what accounts for the difference between such an ordered collection and the corresponding proposition. So the Context Principle, in order to dissolve the problem of propositional unity, must deny that meaningful propositional components can occur in isolation. The question, now, is how the principle would have to be understood in order to have this implication.

One option is to hold that according to the Context Principle there is no such thing as a meaningful sub-propositional expression, but only meaningful propositions. If there is no such thing as a meaningful sub-propositional expression, then of course there cannot be a sequence of such expressions that fails to constitute a proposition, and the problem of propositional unity cannot arise. As we shall see in Section 6, Frege’s Context Principle has sometimes been read in this way. But under this reading, the principle is outrageously false and conflicts with countless things Frege says or implies throughout his career. Most tellingly, it is incompatible with Frege’s own formulation of the principle, which says that words have a meaning only in the context of a proposition. This extreme reading of the principle, therefore, is not a viable option for dealing with the problem of propositional unity, let alone for understanding Frege’s position.

There is a philosophically and exegetically more plausible reading of the Context Principle that is sufficiently strong to block the problem of propositional unity. It is a reading that seeks to do justice to the letter of the principle, holding on to the idea that words have a meaning only when they occur in meaningful propositions. In this respect, it differs from most readings of the principle, which take it to assert some form of conceptual dependence of meaningful words on meaningful propositions, but maintain that words may be meaningful, at least on some occasions, even when they occur in isolation or in nonsensical combinations.3 While the reading in question posits a very

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3 This applies, for instance, to Richard Gaskin’s reading of the Context Principle (2008, 189, 254-258), which is presented as an elaboration of Michael Dummett’s influential proposal to reconcile the Context Principle and the Principle of Compositionality by holding that propositions are prior ‘in the order of explanation’, whereas words are prior ‘in the order of recognition’ (Dummett 1973, 4). For Gaskin, the
strong dependency of meaningful words on meaningful propositions, it is not obviously incompatible with Frege’s other commitments. In particular, it is arguably fully compatible with Frege’s notorious remarks about the compositional nature of language. As a self-standing philosophical position, it may require emendations, but it can be seen as a good starting point for understanding the relation between the proposition and its parts. I take it to be an elaboration of claims about the Context Principle made by Gilbert Ryle, Cora Diamond, and James Conant, among others, and I have discussed it in detail elsewhere (Bronzo 2015). It is certainly a *controversial* reading of the Context Principle, and defending it on exegetical and philosophical grounds would require a very extensive discussion—much longer than presently possible. However, my aim here is only to show that there is an understanding of the Context Principle that deserves serious consideration and that suffices to dissolve the problem of propositional unity. For this purpose, the following sketch should suffice.

The core idea is that, on the one hand, words typically have a meaning of their own, make a contribution to the meanings of the propositions in which they occur, and may have the same meaning in an indefinite number of different propositional contexts; but on the other hand, words *have* a meaning, in actuality and not merely in potentiality, only on those occasions in which they make a contribution to the meaning of a complete

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Context Principle holds that ‘words are *made for sentences*’ (256, 258). In this sense, propositions are ‘metaphysically prior’ to words (256). But this form of priority is meant to leave room for the occurrence of meaningful words in nonsensical combinations (258). More generally, according to Gaskin the Context Principle does not deny that words may have a meaning, on particular occasions, prior to and independently of the meanings of the particular propositions—if any—in which they occur. For Gaskin, this is what grounds our capacity to understand new sentences on the basis of our prior grasp of the meanings of their parts and their mode of combination, in accordance with the ‘recogntional priority’ of meaningful words over meaningful propositions (257-258).

4 I am thinking especially of Ryle’s suggestion that the ‘difficult but crucial point’ of Frege’s Context Principle is that ‘word meanings…are not propositional components but propositional differences’, ‘distinguishables, not detachables’, ‘abstractables, not extractables’ (Ryle 2009, 61; see also 191-192), and of Diamond’s and Conant’s contention that Frege’s Context Principle, while compatible with linguistic compositionality, is strong enough to rule out the ‘substantial’ or ‘category-clash’ conception of nonsense, according to which meaningful propositional components may be combined in meaningless, logically illegitimate ways—a conception which clearly presupposes that meaningful propositional constituents may occur outside of meaningful propositional contexts (see Diamond 1991, 108-113; Conant 2002, 432n34).
proposition, because for a word to actually have a meaning just is for it to play a certain role in a meaningful proposition. We may identify the semantic potentialities of isolated words, which are fixed by the existing conventions of the language; but such potentialities are actualized only when the words do their job in meaningful propositions. If we just look at the word ‘bank’, for example, we may confidently say that it has in English at least two semantic potentialities: it can mean river-bank, or a kind of financial institution. But it will actually have either of those meanings only when it occurs in complete propositions which say something intelligible about river-banks or financial institutions. The same point applies to non-ambiguous words. Under this construal, the Context Principle is compatible with linguistic compositionality, if by this we understand the fact that the meanings of propositions, in so far as they are semantically articulated, are determined (at least partially) by the meanings of their parts and the way they are put together. It is also compatible with what can be termed linguistic stability: the fact that words, in general, mean on new occasions what they always meant. This is so because the present construal of the Context Principle can be supplemented with the claim that meaningful words, by default, actualize semantic potentialities established by the existing linguistic conventions. In this way, one can account for the capacity of competent speakers to understand propositions that they have never heard before. When we encounter a proposition, the default assumption is that its constituent words work in accordance with the existing conventions of the language. But according to the present understanding of the Context Principle, that assumption is always defeasible: whether a word, on any particular occasion, actualizes a given conventional semantic potentiality is conclusively settled only by whether the word actually contributes in the appropriate way to the expression of a complete propositional content. The Context Principle, so understood, manages to block the problem of propositional unity before it arises because it entails that the meaningfulness of the whole proposition—and thus also its unity—is always already presupposed by the meaningfulness of the parts. There simply is no such thing as a ‘mere list’ consisting of meaningful propositional parts not unified into a proposition, and thus no question about what distinguishes such a list from a unified proposition.5

5 Ruling out the philosophical constructs that I am here calling ‘mere lists’ is not
I have tried to fill out the details of the suggestion, advanced by Sullivan and Hylton, that the Context Principle provides a response to the problem of propositional unity. More specifically, I have tried to explain how the principle would have to be read in order to dissolve the problem. Now I want to look at what Frege actually says about this issue. Even if Sullivan and Hylton are right that the Context Principle takes care of the problem of propositional unity, it does not follow that this is how Frege tried to deal with it. The articles by Sullivan and Hylton from which I have quoted are only incidentally concerned with Frege’s views about propositional unity and do not discuss the passages where Frege explicitly addresses the problem. But when we look at those passages, it is not obvious that they have anything to do with the Context Principle—or even that they are consistent with it.

3. Frege’s actual response

Consider the following passages, where Frege addresses explicitly the problem of propositional unity or the correlative problems arising at the levels of sense and reference:

A sentence such as ‘Two is a prime’ can be analysed into two essentially different component parts: into ‘two’ and ‘is a prime’. The former appears complete, the latter in need of supplementation, unsaturated. ‘Two’—at least in this sentence—is a proper name, its reference is an object […]. The object too appears as a complete whole, whereas the predicative part has something unsaturated in its reference as well. […] This unsaturatedness of one of the components is necessary, since otherwise the parts do not hold together.\(^6\) (Frege 1969, 191-192 / 1979, 177, modified translation)

\[^{N}\]ot all the parts of a thought can be complete; at least one must be unsaturated or predicative; otherwise they would not hold together. (Frege 1892b, 205 / 1997, 193)

\(^6\) For a similar passage, see Frege 1903, 371-372 / 1984, 280-281.
But the question now arises how a thought comes to be constructed, and how its parts are so combined together that the whole amounts to something more than the parts taken separately. [...] It is natural to suppose that, for logic in general, combination into a whole always comes about by the saturation of something unsaturated. (Frege 1923, 36-37 / 1984, 390)

There is no trace, in these passages and their respective surroundings, of any appeal to the Context Principle. Frege’s account of propositional unity hinges on the asymmetry between the ‘saturated’ character of ‘proper names’ and the ‘unsaturated’ character of concept-expressions. (A Fregean proper name is any expression, simple or complex, which refers to a Fregean object; in what follows, I will always use the expression ‘proper name’ in this sense.) Similarly, Frege’s account of the unity of thoughts, i.e. the senses of propositions, hinges on the asymmetry between the saturatedness of the senses of proper names and the unsaturatedness of the senses of concept-expressions. Finally, Frege’s account of how the reference of a concept-expression (i.e. a concept) can take the reference of a proper name (i.e. an object) as argument, so as to yield the reference of a proposition (i.e. a truth-value), hinges on the asymmetry between the saturatedness of objects and the unsaturatedness of concepts. (Even though Frege applies uniformly the contrast between saturated and unsaturated components at the levels of language, sense, and reference, we should keep in mind the structural difference, noted in Section 1, between the unity problems that arise at the levels of language and sense, on the one hand, and the unity problem that arises at the level of reference, on the other.)

I am now going to discuss two interpretations of the previous passages, focusing on Frege’s response to the unity problem arising at the linguistic level.

4. The fully atomistic interpretation

The first interpretation is implicit in the following passage by David Wiggins, in which he formulates an objection to Frege’s account of propositional unity:

[Frege’s theory of the unsaturated nature of concepts] must encourage the protest that, even if there really exists the incomplete sort of thing which
Frege wants, it is still unclear how it can help to distinguish a sentence from a list to say that a sentence is unlike a list in mentioning both a complete thing and an incomplete thing. How is it that he who mentions something complete and then something incomplete thereby gets to say something? Or, in Fregean terminology, how can a designation of something complete followed by a designation of something incomplete combine to constitute a subject matter that can be judged or asserted as a truth? (Wiggins 1984, 324)

This passage has sometimes been taken to contain a knock-down argument against Frege’s account of propositional unity (see Gibson 2004, 5-6). Wiggins’ objection is indeed devastating—but only as an objection to the view he attributes to Frege.

Wiggins ascribes to Frege what I shall call a ‘fully atomistic conception of sub-propositional meaning’. According to this view, both saturated and unsaturated expressions can occur meaningfully in isolation. The view does not maintain that meaningful propositional parts are in no way conceptually dependent on meaningful propositions; the reason I call it ‘fully atomistic’ is that it applies unrestrictedly to all meaningful propositional parts. For Wiggins, Frege’s explanation of the unity of the proposition hinges on the peculiar metaphysical properties of the items atomistically expressed or referred to by its parts. Proper names and concept-expressions express and refer to items of different kinds, which ‘complete’ one another—like the pieces of a jigsaw puzzle. Wiggins is quite right that this sort of appeal to metaphysics is not going to work. Even if the items atomistically expressed or referred to by proper names and concept-expressions were like pieces of a jigsaw puzzle, ‘perfectly fitting into one another’ (in a sense that, at a certain point, would have to be specified in non-metaphorical terms), they would still fail to ‘hold together’ in the relevant sense: they would be merely juxtaposed. By the same token, the correlative linguistic expressions would not add up to a unified proposition, but would simply mention one thing after another. Any appeal to metaphysics, when preceded by the adoption of a semantics that allows for the isolated occurrence of meaningful proper names and meaningful concept-expressions, is bound to come too late.

The interpretation underlying Wiggins’ objection has the advantage of doing justice to the fact that Frege’s explicit response to the problem of propositional unity invokes the distinction between saturated and unsaturated components. But it saddles
Frege with a view that does not work. Moreover, by holding that the meaningful parts of a proposition can occur in isolation, it is inconsistent with Frege’s Context Principle, at least if we stick to its letter. Is there room for a more charitable reading?

5. The partially atomistic interpretation

The second reading I want to consider seeks to combine the advantages of the fully atomistic interpretation with the advantages of the contextualist interpretation discussed in Section 2. It holds that saturated expressions can have a meaning in isolation, while unsaturated expressions have a meaning only when they occur in combination with other meaningful expressions which saturate their ‘empty places’. I call this the ‘partially atomistic interpretation’ because it restricts the capacity to occur in isolation to a particular class of meaningful sub-propositional expressions.

Two remarks are required to clarify the import of this interpretation. First, unsaturatedness belongs for Frege to all function-expressions, of which concept-expressions are special cases. Thus it belongs not only to expressions such as ‘ξ is wise’, but also to expressions such as ‘ξ²’, which do not give rise to meaningful propositions when their argument places are saturated by meaningful expressions. Secondly, not only propositions, but also proper names such as ‘2’ or ‘2²’, count for Frege as saturated. So the partially atomistic interpretation allows for the isolated occurrence of both meaningful propositions and meaningful sub-propositional proper names. Moreover, it does not entail that a concept-expression can be meaningful only when it occurs in a meaningful proposition: it may also occur as part of a sub-propositional proper name. For example, the concept-expressions ‘ξ is a horse’ may combine with the second-level non-conceptual function-expression ‘ε(Φε)’ to yield ‘ε(ε is a horse)’, which is not a proposition, but a transcription of the ordinary language expression, ‘The extension of the concept horse’ (see Frege 1893, §9 / 1964, 44).

Now, how does the partially atomistic interpretation help to make sense of Frege’s response to the problem of propositional unity? In virtue of its atomistic ascriptions, it explains why that response should involve an appeal to the asymmetry between saturated and unsaturated expressions. If one can make sense of the isolated
occurrence of a meaningful proper name, one can also make sense of the attempt to combine meaningful proper names with one another. But any such attempt is going to fail and the explanation of this failure lies in the saturated character of proper names: since proper names are saturated, they do not ‘hold together’. The attempt to combine meaningful proper names with one another results simply in a sequence of proper names, each of which does what it does when it occurs in isolation, without engaging in a semantically relevant way with the other elements of the sequence. Proper names give rise to unified wholes only when they are combined with appropriate unsaturated expressions. At the same time, in virtue of its contextualist ascriptions, the partially atomistic interpretation renders Frege’s account immune to Wiggins’ objection. According to this interpretation, meaningful unsaturated expressions are discernible but inseparable features that meaningful saturated wholes can have in common with one another. Thus there can be no such thing as a combination of meaningful expressions, one of which unsaturated, which fails to be a unified whole. The unity of the whole is always already presupposed by the occurrence of a meaningful unsaturated expression. When the expressions that saturate the unsaturated expression are of the appropriate kind, the resulting whole will be a meaningful proposition, as opposed to a meaningful sub-propositional proper name. But the case envisioned by Wiggins, of concatenations of saturated and unsaturated expressions merely mentioning one thing after another, is not going to arise.

Given my present purpose, which is to examine the compatibility of Frege’s Context Principle and his explicit response to the problem of propositional unity, it is enough to treat the partially atomistic interpretation as a theoretical possibility. But it can in fact be connected with the existing literature. Peter Geach’s reading of Frege’s contrast between saturated and unsaturated expressions, for example, shares some of its central tenets. For Geach, proper names are ‘separately displayable and quotable’ expressions, whereas function-expressions (which include concept-expressions) are really ‘patterns’, or structural features, displayed by linguistic constructions. So what designates Caesar in the proposition ‘Caesar died’ is the proper name ‘Caesar’; but what designates the concept predicated of Caesar is the pattern that the proposition has in common, say, with ‘Socrates died’ and ‘Plato died’. We may exhibit this common pattern, following Frege,
by means of an expression such as ‘ξ died’; but this is visibly not part of the linguistic constructions that share the pattern.\textsuperscript{7} It seems therefore that according to Geach’s interpretation, unsaturated expressions occur essentially in complex complete expressions, whereas saturated expressions—i.e. simple or complex proper names—may occur in isolation, as maintained by the partially atomistic interpretation. This impression is strengthened by this passage:

> It is […] slightly misleading, on Frege’s own principles, for him to speak of a general term as standing for a concept; what represents the concept is rather the structure of a clause with a singular subject and with that general term as predicate. (On the other hand, the way a singular term stands for an object is in no way dependent on that name’s occurring in a special sort of clause). (Geach and Anscombe 1961, 155; my emphasis)

Concept-expressions, standing for concepts, cannot occur in isolation, because they are not separable expressions at all, but structural features of certain complex expressions. By contrast, a name standing for an object is ‘in no way dependent’ on its occurring ‘in a special sort of clause’—and thus, presumably, can occur in isolation. The contrast is drawn here between proper names and concept-expressions; but it is difficult to see why Geach wouldn’t want to endorse its more general form, involving proper names on the one hand and function-expressions on the other. Now, the partially atomistic interpretation aims to explain the role of Frege’s distinction between saturated and unsaturated expressions in his response to the problem of propositional unity, which arises at the level of language. To my knowledge, Geach does not discuss explicitly this connection. But Geach holds that the distinction between unsaturated and saturated \textit{senses} explains the unity of the thought expressed by a proposition, and his reading of that distinction is analogous to his reading of the distinction between saturated and

\textsuperscript{7} See Geach and Anscombe 1961, 143-155; Geach 1975, 147; Geach 1976a, 59-60. The idea that Frege conceives of unsaturated expressions as patterns that can only be singled out through abstraction from complete linguistic constructions has also been made familiar by Michael Dummett, for whom however this form of unsaturatedness belongs only to ‘complex predicates’, as opposed to ‘simple predicates’ (Dummett 1973, 27-33; 1981, 392-422)—a distinction that Geach rejected as ‘false and unFregean’ (Geach 1976b, 445). For a primary text that bears on these issues, see Frege 1879, §9 / 1997, 65-8.
unsaturated linguistic expressions (see 1975, 149-50; 1976b, 445). Given the structural similarities between the problem of propositional unity and the problem of the unity of thoughts, it can be reasonably assumed that Geach would be happy to hold that his interpretation of the difference between proper names and function-expressions explains the unity of the proposition.

Let’s now resume the main thread of the argument and assess the advantages and disadvantages of the partially atomistic interpretation. Like the fully atomistic interpretation, it has the merit of accounting for the fact that Frege invokes the distinction between saturated and unsaturated expressions as an explanation of propositional unity. It is more charitable than the fully atomistic one, because it renders Frege’s account immune to Wiggin’s devastating objection, and this may be regarded as an additional exegetical payoff. But like the fully atomistic reading, it ascribes to Frege a conception of sub-propositional meaning that is incompatible with his construal of the Context Principle. The explicit formulations of the principle that occur in Grundlagen refer to ‘words’ in general and contain no intimation that the principle is meant to apply exclusively to concept-words and other function-expressions. Moreover, Frege emphasizes that the Context Principle applies to number-words, which are for him proper names:

The self-subsistence which I am claiming for number is not to be taken to mean that a number word signifies something when removed from the context of a proposition, but to preclude the use of such words as predicates or attributes, which appreciably alters their meaning. (Frege 1884, §60 / 1980, 72)

Number-words, being proper names, are saturated expressions; but they don’t have a meaning when they are removed from the context of a proposition. So the partially atomistic interpretation, like the fully atomistic one, comes at the price of attributing to Frege a strong inconsistency.

6. An unresolvable tension
I submit that the tension attributed to Frege by both the fully atomistic interpretation and the partially atomistic interpretation is unavoidable. Such interpretations manage to explain why Frege’s account of propositional unity hinges on the asymmetry between saturated and unsaturated expressions precisely because of the atomistic commitments they attribute to Frege, which clash with any understanding of Frege’s Context Principle that is consistent with its letter. I see no room for an interpretation that can satisfy, at one and the same time, the two following desiderata: (a) vindicate the fact that Frege appeals to the doctrine of saturated and unsaturated expressions as an explanation of propositional unity; and (b) refrain from ascribing to Frege the view that meaningful propositional parts can occur outside propositional contexts. By invoking ‘the saturation of something unsaturated’ as an explanation of propositional unity, Frege is eo ipso envisioning the possibility of a contrasting case: namely, the juxtaposition of a selection of meaningful propositional constituents that are unsuited to combine with one another into a unified proposition. But this is precisely the sort of scenario that is ruled out by Frege’s construal of the Context Principle, since it involves the occurrence of meaningful sub-propositional expressions outside propositional contexts. Conversely, by maintaining that words have meaning only in the context of meaningful propositions, Frege has already dissolved the problem of propositional unity, and his doctrine of saturated and unsaturated expressions is not going to supply any explanation of that unity. Frege is entitled to hold that any meaningful proposition consists of an unsaturated expression whose empty places are saturated by proper names or appropriate lower-level unsaturated expressions. But this view about propositional structure—in so far as it is construed in a manner that renders it compatible with the Context Principle—does nothing more than describing one of the features of meaningful propositions: it contributes as little to an explanation of their unity as, say, the view that all meaningful propositions are composed of meaningful parts, or the view that all meaningful propositions express a thought.

I want to emphasize and expand on some aspects of the point I am making that distinguish it from similar claims already present in the literature.

1) The tension I ascribe to Frege does not presuppose the extremely strong reading of the Context Principle mentioned in Section 2, according to which the principle rejects the very notion of sub-propositional semantic unit and treats meaningful
propositions as semantic monoliths devoid of internal articulation. In this respect, my interpretation differs from the one advanced long ago by Michael Resnik (1967, 1976). Resnik argued that the Context Principle and the saturated/unsaturated distinction provide two mutually incompatible responses to the problem of the unity of the judgeable contents or thoughts expressed by propositions. Transposed to the level of propositions, this is also what I have suggested. But Resnik takes the Context Principle to hold, at the level of language, that ‘sentences but not words have meaning’ (1976, 128; see also 1967, 358, 361), and at the level of the content of linguistic expressions, that ‘there are no genuine parts to a judgeable content’ (1976, 137; see also 1967, 358). This is how, according to Resnik, the principle takes care of the problem of the unity of propositional contents: ‘if the context principle implies—as I have suggested—that there are no genuine parts to a judgeable content, then the question of how it forms an organic whole never arises’ (1976, 137; see also 1967, 358). Of course, problems of unity cannot arise if we are dealing with unstructured wholes; and this holds for judgeable contents as well as for the propositions that express them. By contrast, my contention is that Frege’s invocation of the saturated/unsaturated distinction as an explanation of propositional unity is incompatible with any construal of the Context Principle that allows for the isolated occurrence of meaningful propositional parts—even if it allows, as it certainly should, for the existence of meaningful propositional parts.

2) My contention is that the Context Principle, under any interpretation that does justice to its letter, is incompatible with the saturated/unsaturated distinction, in so far as this distinction is used to explain propositional unity. I have treated as self-evident that Frege, in the passages quoted in Section 3, invokes the distinction for this purpose, or for dealing with more or less analogous unity problems. But I have not maintained, and I do not believe, that this is the only function—or, indeed, the main function—that Frege assigns to the distinction. So I agree with Richard Gaskin when he writes that ‘[t]here is no doubt that Frege regarded the distinction between saturatedness and unsaturatedness at the level of sense as subserving an account of the unity of the Thought’ (2008, 131); but I disagree with him when he goes on to make the stronger claim that ‘the whole point of the doctrine of unsaturatedness […] is to subserve an account of unity’ (155, my emphasis). I take it that the more central function of the doctrine of unsaturatedness in
Frege’s work is to elucidate the logical difference between proper names and function-expressions, which is a pillar of his logical system. This claim is supported by the fact that Frege invokes sometimes the contrast between saturated and unsaturated components without any mention of unity problems, but in the context of clarifying the difference between proper names and functional-expressions, or the correlative differences at the levels of sense and reference (Frege 1976, 164 / 1997, 81; 1893, §1 / 1997, 211-212). Further evidence for the previous claim is given by the passage from §60 of Grundlagen already quoted in Section 5. In that work, Frege characterizes objects as ‘self-subsistent’ (selbständig, §§55-62) and concepts as ‘not self-subsistent’ (unselbständig, §106), and in the passage from §60, he emphasizes that ‘[t]he self-subsistence [Selbständigkeit] that [he is] claiming for numbers’—which for him are objects—‘is not to be taken to mean that a number word signifies something when removed from the context of a proposition, but to preclude the use of such words as predicates or attributes, which appreciably alters their meaning’ (my emphasis). Predicates and attributes, for Frege, are concept-expressions. The passage shows, therefore, that the purpose of characterizing objects as self-subsistent, in Grundlagen, is not to serve an account of unity, but to prevent the violation of what Frege presents as the third fundamental principle of his inquiry: ‘never to lose sight of the distinction between concept and object’ (Frege 1884, x / 1980, xxii). It is true that Frege refers here to the Selbständigkeit of objects (variously translated as their ‘self-subsistence’ or ‘independence’), and not to their saturatedness (Gesättigkeit). But this is plausibly a merely verbal difference. Frege uses in this connection a variety of expressions, evoking slightly different metaphors, in clearly equivalent ways (cf. Gaskin 2008, 180n236; Heck and May 2013, 833-841). For example, in ‘Function and Concept’ he characterizes a function interchangeably as ‘incomplete’ (unvollständig), ‘in need of supplementation’ (ergänzungsbedürftig), and ‘unsaturated’ (ungesättigt), and an object (or the expression that refers to it) as ‘saturated’ (gesättigt) and as ‘a whole complete in itself’ (ein in sich abgeschlossenes Ganzes) (Frege 1891, 6, 7, 27 / 1997, 133, 134, 146). In Grundlagen, a concept is said to be not only ‘not self-subsistent’ (unselbständig), but also ‘in need of supplementation’ (ergänzungsbedürftig, §70). And in the 1882 letter to Marty, where he first characterizes a concept as ‘unsaturated’ (ungesättigt), he also says that it ‘cannot exist on its own’ (kann nicht für sich allein bestehen) and that it does not
have ‘independent existence’ (*selbständiges Bestehen*) (Frege 1976, 164 / 1997, 81). The metaphor of self-subsistence (independence) and lack of self-subsistence (dependence), therefore, seems to be just a stylistic variant of the metaphor of saturatedness and unsaturatedness, or of the metaphor of completeness and incompleteness. If this is correct, §60 of *Grundlagen* is explicitly saying that the purpose of all this metaphorical talk is to elucidate the logical distinction between proper names and concept-expressions and the correlative distinction between objects and concepts. Even though Frege does sometimes appeal to the saturated/unsaturated distinction in order to explain propositional unity, this is not the only function he assigns to that distinction.

3) The tension I attribute to Frege arises when he invokes the saturated/unsaturated distinction as an explanation of propositional unity, because *this invocation involves the assumption that meaningful sub-propositional expressions may have a meaning outside the context of meaningful propositions*. I do not believe that Frege commits himself to any such assumption when he uses the saturated/unsaturated distinction for elucidating the difference between proper names and function-expressions. Accordingly, I don’t take this latter use of the saturated/unsaturated distinction to be incompatible with the Context Principle. This brings out two further differences—in addition to the one mentioned in the previous paragraph—between my account and Gaskin’s. Gaskin has argued that Frege’s Context Principle doesn’t fit with his official account of propositional unity, which is based on the distinction between saturated and unsaturated sub-propositional expressions (2008, ix, 188-193). At this level of abstraction, I agree with Gaskin. But in the first place, for Gaskin it is not the employment of the saturated/unsaturated distinction for explaining propositional unity that generates the tension with the Context Principle, but *any* application of that distinction at the sub-propositional level. Characterizing some sub-propositional expressions as saturated and others as unsaturated is already, for Gaskin, in conflict with the Context Principle. As he writes, ‘*[t]he whole tactic of differentiating between subsentential components in point of saturatedness or unsaturatedness is undermined by the context principle*’ (192). In the second place, the grounds of the conflict, for Gaskin, have nothing to do with the violation of the idea that meaningful sub-propositional expressions may only occur in propositional contexts. Gaskin holds that Frege’s Context
Principle, when appropriately understood, does not involve that idea, which he regards as obviously untenable (see above, note 3). The conflict arises, for Gaskin, because the Context Principle ‘requires us to regard all components of the proposition as, alike, unsaturated, if any are’ (ix). Why? Gaskin takes the Context Principle to vindicate the asymmetry between complete propositions, which ‘can “make a move in the language-game” (say something true or false)’, and all meaningful sub-propositional expressions, whose role is ‘to contribute to the making of this move, but not themselves to make it’ (192). At the same time, he assumes that the only legitimate application of the metaphor of saturation and unsaturation to language is to mark this asymmetry: ‘The only way to make coherent use of Frege’s chemical metaphor [of saturation and unsaturation] is to count sentences as saturated, and semantically significant sub-sentential components as uniformly unsaturated’ (ix). Given this assumption, it follows that according to the Context Principle, as Gaskin understands it, all meaningful sub-propositional expressions should be considered equally unsaturated. Now, Gaskin’s understanding of the metaphor of saturation and unsaturation is a sensible one; but I don’t think it is Frege’s—or that it is ‘the only way to make coherent use’ of the metaphor. The passage from §60 of *Grundlagen* that I have already discussed is, I believe, a direct piece of textual evidence that Frege (at least in that work) does not understand the metaphor as Gaskin assumes it must be understood. If what I argued above is correct and Frege’s talk of ‘self-standingness’ in that passage is a stylistic variant of his talk of ‘saturation’, Frege is explicitly warning the reader that his use of the metaphor should not be taken to comment on the difference between propositional wholes and propositional parts emphasized by the Context Principle (‘[t]he self-subsistence that I claiming for numbers is not to be taken to mean that a number word signifies something when removed from the context of a proposition’), but rather on the difference between proper names and concept-expressions (‘but to preclude the use of such words as predicates or attributes, which appreciably alters their meaning’). Proper names and concept-expressions behave for Frege in fundamentally different ways, and he seeks to explain that difference by using the metaphor of saturation and unsaturation. It is not obvious why this should involve any incoherence. Admittedly, Frege’s use of the metaphor does not help to understand the difference between propositional wholes and mere propositional parts, and can even be
misleading in that respect. But this is just a limit of Frege’s metaphorical talk—a limit of which Frege is aware and about which he warns his readers.

As pointed out by an anonymous referee, one might wonder whether my argument, rather than establishing that there is a tension in Frege, is actually a reductio of the premise that Frege appealed to the saturated/unsaturated distinction in order to give a positive solution to the problem of propositional unity. Certainly, the passages I quoted in Section 3 appear to show that Frege invoked the saturated/unsaturated distinction in order to solve the problem of propositional unity or correlative problems arising at the levels of sense and reference. But given the outcome of my argument, the objection continues, this appearance cannot be taken at face value: we need some independent evidence that Frege was worried by the problem of propositional unity and believed it required a positive solution. My response is that this objection has little force unless we have some alternative account of what is going on in the passages I quoted in Section 3, and I don’t know what such an account could possibly look like. I have myself insisted that Frege does not always appeal to the saturated/unsaturated distinction in order to explain propositional unity. But when we come to the passages quoted in Section 3, I don’t see what else he could be doing with that distinction other than using it for explaining propositional unity.

The tension I attribute to Frege could be easily relieved—if not eliminated—by adopting the not uncommon view that Frege quietly abandoned the Context Principle after *Grundlagen*. The passages where Frege most clearly appears to use the saturated/unsaturated distinction in connection with the problem of propositional unity occur in works written after *Grundlagen*. Thus, even if Frege held inconsistent views, as my argument maintains, it would still follow that he held them at different times (cf. Resnik 1967, 1976). Whether Frege ever abandoned the Context Principle is a very controversial issue. Here I can only indicate that I don’t find the developmental thesis persuasive, for two main reasons. First, even though Frege did not repeat verbatim the Context Principle after *Grundlagen*, he made statements that can be taken to express closely related views (see Sluga 1987, 86; Conant 1998, 232; Heck and May 2013, 849). Secondly, the main consideration adduced in favor of the developmental thesis is the alleged incompatibility between the Context Principle and the compositionality of
language, which receives greater emphasis in Frege’s later writing. But as I have already argued, it is open to question that there is any incompatibility here.

7. Diagnosis of the tension

It is sensible to find the tension I have ascribed to Frege rather surprising. If he holds a version of the Context Principle that is sufficiently strong to block the problem of propositional unity before it arise, why does he go on to propose a positive solution to that problem, thereby committing himself to an atomistic conception of sub-propositional meaning that clashes with his contextualist commitments? I shall conclude with an answer to this question. My diagnostic proposal proceeds in three steps.

First, I submit that Frege has no independent interest in the problem of propositional unity: his discussion of the problem is entirely subservient to the justification of his conception of propositional structure—i.e. to the view that every proposition, in so far as it is logically articulated, consists of a function-expression with one or more argument places filled by proper names or appropriate lower-level function-expressions. This contention is supported by the fact that when Frege, towards the end of his career, tries to sum up the main results of his work, he lists (among other things) the doctrine that concepts are functions, the doctrine of the unsaturatedness of functions, and the recognition of the ‘true nature’ of concepts and functions, but does not mention the solution of any unity problem (Frege 1969, 200 / 1979, 184). This omission would be very strange if part of what motivated Frege to embrace those doctrines had been the desire to address an independent worry about unity. Further support for the previous contention comes from the dialectical context of the passages where Frege addresses explicitly the problem of propositional unity or correlative problems at the levels of sense and reference. We can focus, for the sake of illustration, on the first of the three passages quoted in Section 3. The passage occurs in a posthumous piece that is preceded by a list of the topics that Frege planned to discuss in it. The first few items of the list read: ‘Concept and object, / *nomen appellativum, nomen proprium*. / Analysis of a sentence, predicative nature of a concept’ (Frege 1969, 191 / 1979, 176). It is manifest that these items relate to the initial paragraphs of the piece, where we find the discussion of unity.
This strongly suggests that the discussion of unity is here fully instrumental to the presentation and justification of his conception of propositional structure.

Secondly, I submit that Frege presents his account of propositional unity in the form of a transcendental argument which aims to deduce his conception of propositional structure from the possibility of unified propositions. That Frege is giving a transcendental argument is rather clear from the wording of some passages (‘This unsaturatedness of one of the components is necessary, since otherwise the parts do not hold together’; ‘[N]ot all the parts of a thought can be complete; at least one must be unsaturated or predicative; otherwise they would not hold together’), and I suggest that other passages should be read in the same manner. The core of Frege’s transcendental argument can be spelled out as follows:

1) Logically articulate propositions can be unified only if they consist of an unsaturated expression whose empty places are filled by saturated expressions or by expressions that are unsaturated in an appropriately different way.
2) But logically articulate propositions are unified.
3) Therefore, logically articulate propositions consist of an unsaturated expression whose empty places are filled by saturated expressions or by expressions that are unsaturated in an appropriately different way.

From here, if we assume that only proper names and function-expressions are saturated and unsaturated in the relevant sense, we reach the desired conclusion that every logically articulate proposition consists of a function-expression whose argument places are filled by proper names or appropriate lower-level function-expressions.

The last step of my proposal is that by giving this transcendental argument, Frege is trying to take a justificatory shortcut: he is trying to do quickly, and problematically, what is accomplished by his logical system as a whole and by detailed discussions that appear elsewhere in his work. Frege’s function/argument analysis of propositional complexity is supported by the power of his quantificational account of generality; and his claims about the categorical distinction between proper names and function-expressions, or between function-expressions of different levels, is supported by his
elucidations of their respective logical behavior—for instance, by his remarks about the different kinds of question that it makes sense to ask about concepts and objects (see Frege 1884, §51 / 1980, 64). By contrast, the justificatory shortcut that Frege is trying to take when he appeals to the transcendental argument from propositional unity is very dubious. It seems perfectly possible, in fact, to block the problem of propositional unity before it arises by endorsing an anti-atomistic conception of sub-propositional meaning that accords with Frege’s Context Principle, without also adopting Frege’s particular account of propositional structure—or any particular account of propositional structure. We may avoid the problem of propositional unity by denying that words have a meaning in isolation, without having to decide whether we should adopt Frege’s model for the analysis of the proposition, or one of the many alternative models that have been proposed throughout the history of philosophy—say, a model that distinguishes logically between singular and general terms and assigns a crucial role to the copula, or a model that construes the proposition as an immediate concatenation of singular terms. Thus we may not deduce Frege’s specific views about propositional structure from the unity of logically articulate propositions. Frege’s shortcut is not only systematically problematic (since, as I have argued, it generates a tension with his Context Principle), but also intrinsically unconvincing.

My suggestion, therefore, is that the tension I have attributed to Frege does not spring from fundamental philosophical commitments, but from the hasty choice of an infelicitous—but dispensable—argumentative strategy. A consequence of this diagnosis is that Frege’s explicit account of propositional unity, whatever its intrinsic merits, is a very misleading entry into his philosophy.

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8 For a discussion of several non-Fregean models of propositional structure, see Gaskin 2008, 131-143.
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