

Context, Compositionality and Nonsense in Wittgenstein's *Tractatus*

Silver Bronzo

The University of Chicago

bronzo@uchicago.edu

02/24/08

*Understanding without contextuality is blind;
understanding without compositionality is empty.*

DIEGO MARCONI¹

This paper aims to show that the *Tractatus* can be coherently committed, at one and the same time, to a strong version of the context principle (sufficiently strong to entail the austere conception of nonsense) and to a version of the principle of compositionality. It is quite natural to interpret these two semantic principles in a manner that renders them mutually incompatible. Taking my cue from some remarks in the *Tractatus*, I will try to develop alternative understandings of the two principles according to which they are compatible with one another and indeed positively interdependent. I hope to show that (1) there is good reason to attribute to the *Tractatus* the alternative understandings of each of these principles that I will develop below, and that (2) these alternative ways of understanding the two principles are philosophically superior to those that render them mutually incompatible.

I

¹ Unpublished paper, quoted in Conant, "The Method of the *Tractatus*", p. 432, endnote 34.

In order to get an overview of the textual problem that we will be addressing in this paper, it will help first to take a brief glance at three sets of quotations from the *Tractatus*.

In the *Tractatus* we find seemingly clear formulations of both the context principle and the principle of compositionality. It is a standard practice to attribute the earliest formulation of the context principle to Frege's *Grundlagen*.² “Never to ask for the meaning of a word in isolation, but always in the context of the proposition”;³ “Only in the propositions have the words really a meaning. [...] It is enough if the proposition taken as a whole has a sense; it is this that confers on its parts also their contents”.⁴ The *Tractatus* appears to repeat this quite faithfully. This brings us to our first set of quotations:

It is impossible for words to occur in two different ways, alone and in the proposition. (2.0122)

[...] [O]nly in the context of the proposition has a name meaning. (3.3)

An expression has meaning only in a proposition. [...] (3.314)

These quotations have struck many commentators as providing textual support for the attribution of the context principle to the *Tractatus*.

The principle of compositionality—which is also generally attributed to Frege⁵—is usually taken to state that the meaning of a sentence is a function of the meanings of its

² Some authors, however, trace the earliest formulation of some relevant version of the context principle back to Bentham. See, most notably, Quine, “Two Dogmas of Empiricism”, p. 39; “Epistemology Naturalized”, p. 72 ; Hacker, “The Rise of Twentieth Century Analytic Philosophy”, p. 259. Quine and Hacker attribute to Bentham the idea that “sentences are the primary vehicles of meaning”, the “minimal move[s] in the language game” (compare, in relation to this claim, Bentham, *The Works of Jeremy Bentham*, Vol. VIII, pp. 188, 321-322, 333). They also stress the importance of Bentham's use of “paraphrastic” definitions for terms naming “fictitious entities”; Quine explicitly attributes to Bentham the introduction of contextual definitions (compare Bentham, *Works*, Vol. VIII, pp. 126-127, 246-247). Given the limited ambitions of this paper, I won't try to access the relations between these areas of Bentham's work and the context principle as it appears in Frege and the *Tractatus*.

³ Frege, *The Foundations of Arithmetic*, p. x.

⁴ *Ibid.*, p. 71.

⁵ For recent discussions of such attributions, see Pelletier, “Did Frege Believe the Context Principle?” and Janssen, “Frege, Contextuality and Compositionality”. The fact that the two principles (or some versions of them) are both present in Frege's work raises exegetical problems that are similar to those that are addressed in this paper in connection with the *Tractatus*. Some commentators have tried to account for this problematic aspect of Frege's work by adopting a developmental approach: the early Frege endorsed the context principle, the mature Frege changed his mind and embraced the principle of compositionality. (Janssen's paper is a clear example of this approach, with the sole qualification that, according the author, Frege was never able to make the *final step* toward compositionality and *completely* reject the context

constituent words and their mode of combination. The *Tractatus*, again, seems to insist on this point. Hence our second set of quotations:

The proposition is articulate. (3.141)

I conceive the proposition—like Frege and Russell—as a function of the expressions contained in it. (3.318)

[...] One understands it if one understands its constituent parts. (4.024)

The translation of one language into another is not a process of translating each proposition of the one into a proposition of the other, but only the constituent parts of the propositions are translated. [...] (4.025)

It is essential to propositions, that they can communicate a *new* sense to us. (4.027)

A proposition must communicate a new sense with old words. [...] (4.03)

A characteristic of a complex symbol: it has something in common with *other* symbols. (5.5261)

Commentators differ as to how mutually compatible these respective apparent commitments of the *Tractatus* are—and thus as to how mutually compatible these two sets of quotations are. To some, it has seemed that the possibility of their reconciliation becomes further threatened if the *Tractatus* is taken to be committed to a very strong version of the context principle. Moreover, the attribution of some very strong version of this principle would appear to be an inescapable consequence of the interpretation of the *Tractatus* endorsed by New Wittgensteinian or Resolute readers. Thus, to some it has seemed as if these interpreters of the *Tractatus* deprive us of the possibility of making coherent sense of the work as a whole.

Proponents of this interpretation have argued that the work as a whole is committed to an austere conception of nonsense, as opposed to a substantial conception.⁶ According to a substantial conception, there are two logically distinct kinds of nonsense: *mere*

principle. See also Resnik, “The Context Principle in Frege Philosophy”. I am myself suspicious of this strategy. Such a strategy, in any case, is not available for the *Tractatus*, because, as we are going to see, both principles are there present *within the same book*. The *Tractatus* pushes the question of the compatibility of the two principles beyond the reach of a developmental approach. I suspect that at least some of the results of the present discussion of the *Tractatus* (pointing out the essential interdependence of the two principles) can also be applied to the interpretation of Frege’s philosophy; but this is not something I can try to establish in this paper.

⁶ The following sketch of the distinction between the two conceptions of nonsense draws especially on Conant, “The Method of the *Tractatus*”, pp. 380-381, Diamond, *The Realistic Spirit*, 95-113; Conant & Diamond, “On Reading the *Tractatus* Resolutely”, pp. 47-49.

nonsense, which obtains when we utter words to which we have assigned no determinate meaning (such as “*Piggly Wiggle Tiggly*”); and *substantial* nonsense, which obtains when a sentence is composed of meaningful words put together in a way that violates the requirements laid down by a theory of sense. Different theories of sense will define different classes of substantially nonsensical propositions. A particularly clear example of such theories is the theory of logical syntax often attributed to the *Tractatus*.⁷ According to this theory, words have meaning in isolation; moreover, even when occurring in isolation, they belong to a determinate logical category: proper names, first order one-place predicates, first order relations, etc. The rules of logical syntax determine which words, belonging to which category, can be legitimately combined. A sentence such as “Socrates is wise”, for instance, is a permissible formula because it combines a proper name with a first order one-place predicate. “Socrates is identical”, on the other hand, illegitimately combines a proper name with the sign of identity, and is therefore nonsensical—nonsensical in a more interesting or substantial way than a sentence such as “Socrates is *frabble*”, which is nonsensical merely because it contains a word to which no meaning has been assigned.⁸ According to the austere conception, on the other hand, there is no such thing as a theory of sense—no such thing as substantial nonsense deriving from the transgression of the limits drawn by such a theory. The only kind of nonsense there is is mere nonsense. We utter nonsense when we have not decided, or not made clear to ourselves, in which way we want to use our words. Some passages in the *Tractatus* seem to advocate quite straightforwardly this latter conception of nonsense. This brings us to our third set of quotations:

[...] A possible sign must also be able to signify. Everything which is possible in logic is also permitted. (“Socrates is identical” means nothing because there is no property which is called “identical”. The proposition is nonsensical because we have not made some arbitrary determination, not because the symbol is *itself* impermissible.)

⁷ See, for instance, Hacker, “Wittgenstein, Carnap and the New American Wittgensteinians”.

⁸ The history of the interpretation of Wittgenstein’s philosophy offers plenty of other examples of theories of sense. He has been taken to hold, at different stages of his career, that some sentences are nonsensical because they are not verifiable, or because they lack bipolarity, or because they violates the rules of logical grammar, or because they violate the rules that determine their correct context of utterance. For a discussion of this history, see Conant, “Why Worry About the *Tractatus*?”.

In a certain sense we cannot make mistake in logic. (§5.473)

We cannot give a sign the wrong sense. (§5.4732)

Frege says: Every legitimately constructed proposition must have a sense; and I say: Every possible proposition is legitimately constructed, and if it has no sense this can only be because we have given no meaning to some of its constituent parts.

(Even if we believe that we have done so) [...] (§5.4733)

The foregoing three sets of quotations, taken together, suffice to show that there are at least *prima facie* reasons for thinking that the *Tractatus* simultaneously endorses the context principle, the principle of compositionality, and the austere conception of nonsense. The question that will guide our inquiry will be the following: Is there *room* to read Wittgenstein as simultaneously incurring all three of these commitments without *eo ipso* turning the *Tractatus* into an incoherent book? Or, in other words: *Can* the context principle, the principle of compositionality and the austere conception of nonsense fit together into a coherent picture?

There is a deep tendency to assume that the answer to this question must be negative. It is not unnatural to think that the two principles enunciated in our first two sets of quotations are equivalent to the following two philosophical views—views that result when our two principles are elaborated, as they are below, so as to be *necessarily* incompatible with one another:⁹

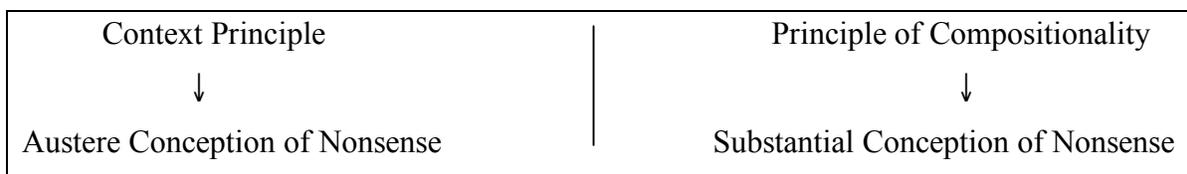
Contextualism. The meaning and the understanding of a sentence are *prior* to the meaning and the understanding of the parts of the sentence. *First* we understand the whole sentence, and *then* we segment it to obtain the meanings of its parts. The meaning of a word is obtained from the segmentation of the meaningful proposition, the content of which must be given *in advance*.

⁹ As I further clarify below, in this paper I will use the term “priority” and its cognates to designate an asymmetrical relation: if A is prior to B, B cannot in turn be prior to A. On the other hand, I will use the term “interdependence” to designate a symmetrical relation: if A and B are interdependent, A depends on B and B depends on A. Moreover, I will not discuss the attempt to reconcile the two semantic principles by distinguishing different orders of priority, so that the meaning of sentences would be prior in *one* order, while the meaning of words would be prior in a *different* order. (Compare Dummett, *Frege: Philosophy of Language*, p. 4, where it is notoriously argued that sentential meaning is prior in the “order of explanation”, whereas sub-sentential meaning is prior in the “order of recognition”.) In this paper I am only concerned to argue against priority claims on behalf of either of these principles in the asymmetrical sense specified in the first sentence of this footnote.

Compositionalism. The meaning and the understanding of the parts of the sentence (of words) is *prior* to the meaning and the understanding of the whole sentence. First we grasp the meanings of each word, and then, by looking at the way they are put together, we grasp the sense of the whole sentence. The meaning of a sentence is constructed out of the meanings of its words, as a wall is constructed out of building blocks.

Now, Contextualism quite clearly entails the austere conception of nonsense. If the meaning of a word consists in its contribution to the meaning of the sentence, and is indeed obtained through the segmentation of the meaning of the sentence in which it occurs, then there simply is no such a thing as combining meaningful words in meaningless ways. If the sentence is meaningless (nonsensical), its words are meaningless too. According to Contextualism we have no independently given “building blocks” to combine with one another in a way that transgresses the combinatorial rules of logical syntax or any other prescription issued by a “theory of sense”. The words of a nonsensical sentence are logically inert, mere marks on the paper or waves in the air. Compositionalism, on the other hand, seems to entail the possibility of forming instances of substantial nonsense. If words have meaning in isolation, why shouldn’t we be able to combine them, with their meanings, in both meaningful and nonsensical ways?

The conclusion towards which the preceding paragraph would appear to tend is the following: the only way to maintain a coherent conception of propositional meaning and understanding is to choose between the right-hand or the left-hand side of the following diagram:



Either we endorse the context principle, which entails a commitment to austerity, *or* we endorse the principle of compositionality, which entails a commitment to the substantial conception. I will assume that, if the context principle and the principle of compositionality are equivalent to Contextualism and Compositionalism respectively, as outlined above, this dilemma is unavoidable. My aim, in what follows, is to see if it is

possible to arrive at understandings of the context principle and the principle of compositionality respectively such that they are (1) compatible with one another, (2) compatible with the austere conception, and thus (3) entail the falsity of the substantial conception. (This means that one of my aims in what follows is to see if we can arrive at an outline of a coherent reading of the *Tractatus* as it stands.) To make good on the first of these three conditions will involve us in the long-running debate regarding whether it is possible to reconcile our two semantic principles. The second and third conditions place a constraint on possible strategies of reconciliation.

I will begin with an examination of a tentative reconciliation that does *not* satisfy the austerity-requirement I have imposed. In order to find what we are looking for, it is sometimes helpful to be clear about what we are *not* looking for.

II

In a recent article Hans-Johann Glock has offered a critical examination of Wittgenstein's views about nonsense, the context principle and compositionality.¹⁰ He argues that the context principle, under a "strict" or "literal" interpretation, entails the austere conception of nonsense;¹¹ and that there are passages, in both the *Tractatus* and the later work, in which Wittgenstein endorses quite unambiguously the context principle, "strictly" understood, as well as the austere conception of nonsense.¹² However, according to Glock, these are both implausible positions. The context principle flies in the face of the fact that words do have meanings in isolations, for example in dictionary entries;¹³ moreover, such a principle rules out the compositionality of language, which is necessary for accounting for the basic facts that sentences are complex and that we understand new sentences made up of familiar words.¹⁴ The austere conception of nonsense, Glock maintains, is utterly counter-intuitive: there are many kinds of nonsense, one of which is "combinatorial nonsense", i.e. nonsense derived by combining meaningful words in

¹⁰ Glock, "All Kinds of Nonsense".

¹¹ *Ibid.*, p. 225.

¹² Cf. *ibid.*, pp. 224, 225, 227 for the claims about the *Tractatus*, and pp. 229, 237 for the claim about Wittgenstein's later work.

¹³ *Ibid.*, p. 226

¹⁴ *Ibid.*, pp. 226-227.

illegitimate ways.¹⁵ According to Glock, Wittgenstein was aware, in both his earlier and later works, of the shortcomings of these positions. Wittgenstein acknowledged, already in the *Tractatus*, the compositionality of language, and he allowed for substantial or “combinatorial” nonsense, especially in the *Investigations*.¹⁶ According to Glock, there is indeed a tension between the right hand side and the left-hand side of the diagram illustrated in the previous section—a tension that permeates Wittgenstein’s work, both early and late.¹⁷ The tension can be eliminated by adopting a “weak” or “non-restrictive” interpretation of the context principle. Consequently, Wittgenstein’s view can be made coherent if we find sufficient reasons for attributing to him such a weakened version of the context principle.

The weak version of the context principle that Glock proposes differs from the restrictive one in the following way: according to the restrictive version, a word has meaning only when it *actually* occurs in a significant proposition, whereas according to the liberalized version a word has meaning only if it is *capable* of occurring in significant propositions:

[Words] must be *capable* of occurring in a proposition. [...] A proposition is the minimal unit by which a move is made in the language-game; only propositions can *say* something. [...] There is a *general* dependency of words on sentences in that the practice of explaining words is a preparation for their employment in sentences. On the other hand, any *particular* sentential employment presupposes that the component words have a meaning in advance, on account of an antecedent practice.¹⁸

There is general dependency between the meaning of a word and the use of the word in propositions. Its *function* is to contribute to the expression of *thoughts*, to the *saying* of something. Its meaning is “determined by how it can be used within sentences”;¹⁹ this is, according to Glock, the “kernel of truth” in the context principle.²⁰ But a word can have a determinate function without *actually* fulfilling it, as “a person [...] can have a role

¹⁵ *Ibid.*, pp. 222, 229-230.

¹⁶ *Ibid.*, pp. 222-223, 228, 229, 231, 235.

¹⁷ Glock seems reluctant to stress this conclusion about the coherence of Wittgenstein’s thought. I am sympathetic with the reluctance, but that’s the conclusion that follows from his claims.

¹⁸ *Ibid.*, p. 229

¹⁹ *Ibid.*, p. 229.

²⁰ *Ibid.*, 229.

without actually *fulfilling that role* at any given instant”.²¹ A word can have the function of contributing in such-and-such a way to the content of meaningful propositions without actually making such a contribution—either because it is not occurring in a proposition at all, but in isolation, or because it is occurring in a (substantially) nonsensical proposition. The weakened version of the context principle is therefore compatible with the substantial conception of nonsense. It is also compatible with a qualified version of Compositionism: the meaning of words is *prior* to the meaning of each *particular* sentence of which they are parts; they contribute to their content in accordance with the building-blocks picture; the qualification consists only in the fact that we must acknowledge as a necessary precondition the *general capacity* of words to occur in significant propositions.

Hence, Glock reconciles the context principle and the principle of compositionality by proposing interpretations of these principles that question their respective identifications with Contextualism and Compositionism. Both principles are shown to be to some extent *weaker*, or more qualified, than Contextualism and Compositionism. But this cannot be the form of weakening or qualification that we are after, if we wish to pursue our guiding question. In that case, we need the context principle to be “strong enough” so as to exclude the substantial conception of nonsense; and we need the principle of compositionality to be “weak enough” so as not to entail the substantial conception. Only in this way can we hope to find a coherent interpretation of Wittgenstein’s work that takes at face value—as Glock doesn’t²²—his explicit and repeated endorsements of the “strict” version of the context principle and of the austere conception of nonsense.²³

²¹ *Ibid.*, p. 228.

²² Glock is bound to hold that we should simply *bracket* as temporary slides, or submit to a sanitizing reinterpretation, all the passages that do not fit with the weak version of the context principle that he is attributing to Wittgenstein.

²³ Glock’s formulation of the “weak” version of the context principle is reminiscent of what Dummett described as the “trivial truth” in the dictum proposed by Quine as an interpretation of Frege’s context principle, that “the sentence is the primary unit of significance” (Dummett, *Frege: Philosophy of Language*, p. 3). Cora Diamond has criticized Dummett’s discussion of Quine’s dictum, arguing for a much less trivial way of understanding it: its bite comes from the exclusion of substantial nonsense. This is, according to Diamond, the non-trivial way in which Frege and Wittgenstein understood the principle (Diamond, *The Realistic Spirit*, pp. 108-109). Ed Dain has applied Diamond’s criticism of Dummett to Glock’s discussion in “Contextualism and Nonsense”, pp. 92-96, and “Wittgenstein, Contextualism and Nonsense”, forthcoming.

III

Our initial exegetical impasse originated from the identification of the two semantic principles with Contextualism or Compositionism, which are incompatible because they assign priority either to words or to propositions. The assumption lying behind such forms of identification is that there must be a priority along these lines to be found here, somewhere. I am going to question this assumption. I will adopt a sort of *reductio* procedure, by taking Contextualism and Compositionism at face value, and then asking: Do either of these positions provide an *intelligible* notion of *language*? I'll try to show that the answer is negative. No priority can be given to either the contents of propositions or to the meanings of words, if we don't want to lose sight of the phenomenon of language altogether. The context principle and the principle of compositionality, properly construed, articulate two necessarily interconnected aspects of language. On a proper construal, they are not only compatible, but positively interdependent. The *Tractatus*, I will suggest, can help us to achieve such an understanding. Moreover—I will attempt to suggest—the *Tractatus* holds that the resulting form of interdependence is one that rules out substantial nonsense.

First of all, we need to be clear about what kind of priority Compositionism and Contextualism each respectively place on either the meanings of words or the meanings of propositions. Many of the expressions that tend to occur in formulations of these positions suggest that the priority is temporal: “*first* we understand the proposition, *then* we segment it into its constituents parts”; “*first* we grasp the meanings of words, and *then* we proceed to put them together and obtain the meanings of propositions”; “words must have meaning *in advance* of the propositions in which they occur”, etc. But how do we know what we understand first? By introspection? Or through psychological experiments? It doesn't seem that each of the two rival positions wants to make an empirico-psychological claim of this kind. The priority they invoke is conceptual rather than temporal. They are interested in the conditions of possibility—or, as I prefer to say, the conditions of intelligibility—of the phenomenon that they want to explain in term of the conceptually prior item. The relation of conceptual priority has this in common with the relation of temporal priority: it is asymmetrical. The conceptually “posterior” term

depends, for its possibility or conceivability, on the conceptually prior term, and not the other way around. This means the prior term is intelligible *by itself*, without *any* reference to the dependent term. So Contextualism would appear to be committed to holding that the meanings of complete sentences are intelligible without any reference to the meanings of the words composing them; those meanings are indeed *explained* in terms of the meanings of sentences, which must therefore be already given. Compositionism, on the other hand, would appear to be committed to holding that that the meanings of words are intelligible without any reference to the meanings of the sentences in which they occur; the latter sort of meaning is indeed *explained* in terms of the meanings of words, which, again, must be given in advance. Is either Contextualism or Compositionism right in advancing either of these priority claims? In this and the next section I will deal with Contextualism; later I will dwell on Compositionism.

In order to test the claim of Contextualism, I propose that we try to imagine a *completely non-compositional language*. Such a language would consist in sentences whose meaning is grasped as a whole, without any articulation: they don't have distinguishable parts that contribute through *their* meanings to the meaning of the whole. Richard Heck, in a recent paper,²⁴ has proposed an illuminating way of trying to conceive such a language. What follows is a modification of Heck's example.²⁵ Let's imagine, for the moment, that we have a language consisting of a finite numbers of sentences, say 3000. Let's suppose that a natural number is associated with each sentence and that each sentence, with the associated number, is written down in a book. Each speaker carries with her a copy of the book and communicates with other people by uttering numerals. I see you in the street and shout: "31!" You look it up in the book and find the correspondence: "31=It's a nice day today". You then look for the sentence "You are right!" and shout to me the corresponding number: "28!" We smile to each other and walk past.

²⁴ Heck, "What is Compositionality?". I should warn from the beginning that I am making a somewhat devious use of Heck's paper. Heck develops a series of examples for *illustrating* the idea of a non-compositional language, regarding the intelligibility of which Heck raises no doubts. I think, on the contrary, that his examples work very nicely for *problematizing* the idea of a non-compositional language.

²⁵ Heck's original (purported) example of non-compositional language is a language consisting entirely of numerals, where each numeral denotes a Gödel-number associated with a formula of arithmetic. The suggestion is that this would be a non-compositional language that can express all arithmetical propositions.

Now, it is clear that, in the peculiar situation I have described, some communication has taken place: the speakers made themselves understood to each other. Moreover, the sentences by means of which they communicated are non-compositional: even though the numerals “31” and “28” are phonetically or graphically complex, they are devoid of logical or semantic articulation. It is not that the utterance “31!” means what it does in virtue of what the signs “3” and “1” mean. There is no correspondence between the phonetic and graphic parts of the utterance and the parts of the thought it expresses. The point I want to make is the following: the speakers in the situation I have described are merely using a *code*, whose expressive capacity is completely parasitic on the existence of a *language* that *is* compositional.

I am appealing to a slightly different version of the distinction between codes and languages that has been formulated by Wilfrid Sellars in the following passage:

[A] code, in the sense in which I shall use the term, is a system of symbols each of which represents a complete sentence. Thus [...] there are two characteristic features of a code: (1) Each code symbol is a unit; the parts of the code symbol are not themselves code symbols. (2) Such logical relations as obtain among the code symbols are completely parasitical; they derive entirely from logical relations among the sentences they represent. [...] Thus if ‘Ω’ stands for ‘Everybody on board is sick’ and ‘Δ’ for ‘Somebody on board is sick’, then ‘Δ’ would follow from ‘Ω’ in the sense that the sentence represented by ‘Δ’ follows from the sentence represented by ‘Ω’.²⁶

The symbols of the code that Sellars describes in this passage are *units* devoid of semantic structure. (I will ignore the fact that such symbols are unstructured units even from a graphic or phonetic point of view.²⁷) Moreover, they are mere “flags” for the English sentences they represent. All their semantic properties—most notably their inferential relations—derive from the semantic properties of the English sentences they stand for. “Δ” follows from “Ω” only because the English sentence represented by “Δ” follows from the English sentence represented by “Ω”. The same, I am suggesting, is true

²⁶ Sellars, *Empiricism and the Philosophy of Mind*, p. 26.

²⁷ In this respect, the code described by Sellars is different from the system of communication I have described above. The symbol ‘Δ’ is not even a graphic or phonetic part of the symbol ‘Ω’ or of any other symbol of Sellars’ code. On the other hand, the numeral ‘3’, which is itself a meaningful symbol in the system I have described, is also a graphic or phonetic part of other symbols belonging to the system. However, the crucial similarity between the two cases is that, in each system, no symbol is a *semantic* part of other symbols.

of the expressions of the system of communication that I described above. “28!” is an appropriate answer to “31!” only because the English utterance represented by the first symbol is an appropriate answer to the English utterance represented by the second symbol. The speakers I asked you to imagine communicate with one another by means of a code-book consisting of *translations*; and the sentences into which the code formulae are translated belong to a language (i.e. English) that *does* exhibit compositional structure. It might perhaps be the case that they communicate *only* by means of the code; but they *think* in a compositional language, and understand each other because they know the translations of the code formulae into the *compositional* language they master.

It would not be sound to object that the case I constructed is irrelevant because I supposed the code to contain only a *finite* number of formulae. An infinite number of formulae doesn't turn a code into a language. We can suppose that the code book is a magic one, a sort of infinitely long dictionary containing a translation of *all possible* thoughts; or that the code-book, by happy coincidence or divine predisposition, happens to contain a translation of all the thoughts in which the person who owns it actually traffics over the course of her lifetime.²⁸ Moreover, the situation does not change if we suppose that the speakers in the example I constructed memorize the code, so that the translation of the code formulae comes immediately and automatically to their mind. That would simply make them into very skillful readers and users of the code.

Our first attempt to imagine a completely non-compositional language has therefore failed. We tried to follow a suggestion from Richard Heck; but what we ended up with was a mere code, which can serve as a vehicle for communication only because the people who use it have already mastered a compositional language.

Michael Dummett, in the context of his criticism of the position that Hans Sluga attributes to Frege, arrives at similar conclusions by discussing a structurally similar example. Sluga—at least as presented by Dummett—takes Frege to hold a view that incarnates Contextualism as I described it pretty faithfully. Propositions are first grasped as unarticulated wholes; the subsequent segmentation is a mere notational device for representing the logical relations between sentences—logical relations that the

²⁸ There are indeed difficulties in making such suppositions (Does it make sense to talk of the set of all possible thoughts? Or of the set of thoughts a person had in her life? How many thoughts did I have in the last five minutes?); but I think they can be bracketed for the purposes of the present discussion.

unarticulated sentences have anyway.²⁹ Dummett asks us to imagine the following case. He doesn't know a word of Basque; he hears a Basque sentence (presumably he guesses that it is Basque from the context, or someone tells him that it is) and is told *what the sentence means*, say "The pigeons have returned to the dovecote". Dummett can't segment the sentence into parts and recognize the same parts as occurring in other sentences with the same meaning, as in the sentence "There are two *pigeons* over there". Someone might want to claim that Dummett has non-compositional understanding of the Basque sentence, and use this case as a starting point for making sense of the idea of non-compositional languages. But Dummett comments: "I should not be said to *understand* the sentence: this is a case where the notion of understanding an expression comes apart from that of knowing what it means".³⁰ The point is that he knows what the Basque sentence means as the speakers in our previous example know, with the help of the code-book, what the code formulae mean. Dummett makes clear that the situation does not change if we suppose that he doesn't need a translator, because he has internalized a "translation-book" which gives, in English, the meaning of each complete Basque sentence:

Suppose, now, that, in a way I cannot account for, I find that, whenever I hear a sentence of Basque, it comes to me what it means as a whole, without my gaining any insight into how it splits up into words or how they go together; and, equally, that when I am prompted to say something to a Basque speaker, it comes to me what sounds to utter, again without any idea of the structure of the sentence. View from the outside, I manifest an ability to speak the language; but it is natural to say that I do not really understand or know Basque.³¹

Dummett's non-compositional mastery of Basque sentences does not amount to genuine understanding of them and to genuine knowledge of Basque. Moreover, such a mastery is completely parasitical on the (compositional) understanding of the English sentences that they encode:

²⁹ See Dummett, *The Interpretation of Frege's Philosophy*, p. 295. Dummett is referring to Sluga, "Frege and the Rise of Analytic Philosophy".

³⁰ Dummett, *The Interpretation of Frege's Philosophy*, p. 308.

³¹ *Ibid.*, p. 309.

[I]n saying that I knew that a certain Basque sentence meant that the pigeons had returned to the dovecote, we should be saying only that I knew that it meant the same as ‘The pigeons have returned to the dovecote’, so that my ‘understanding’ of the Basque sentence was parasitic on my understanding of the English one.³²

The merely parasitical character of Dummett’s “understanding” of the Basque sentences becomes apparent if we attend the nature of his “understanding” of their logical relations: Dummett can see that the Basque sentence for “There are pigeons in the dovecote” follows from the Basque sentence for “The pigeons have returned to the dovecote” only because he can see that the former English sentence follows from the latter English sentence.

The moral I would like to draw from these examples is that Contextualism is wrong in maintaining that we can conceive a language devoid of compositional structure. As the *Tractatus* says, “The proposition is articulate” (3.141)—meaning *essentially* articulate, and *logically* (rather than merely phonetically or graphically) articulate.

However, someone might think that it is too early to draw this conclusion and to recommend the *Tractatus*’ conception of the constitutively articulate nature of language. The two examples I discussed were intended to show that when we try to imagine a completely non-compositional language we end up imagining, at best, a code, whose meaningful employment is parasitical on the knowledge of a genuine language. But perhaps the opposition between compositional languages and parasitical non-compositional codes was simply built into the examples. The charge, in other words, is that our failure to imagine a completely non-compositional language was simply a symptom of our lack of imagination and of our preconceived ideas about what can count as a language. A good starting point for correcting these preconceptions—our objector might suggest—is to look at the *later* Wittgenstein, who was notoriously a severe critic of the “dogmatism” of the *Tractatus*.³³ Let’s look, for example, at the opening sections of the *Philosophical Investigations*. Wittgenstein asks us to conceive the language-game of the builders, which consists *only* of four words or “calls” (i.e., “block”, “pillar”, “slab”,

³² *Ibid.*, p. 309.

³³ See Waismann, *Wittgenstein and the Vienna Circle*, pp. 182-186. For an account of the dogmatism of the *Tractatus* as the tendency to lay down philosophical requirements on what language *must* be instead of *looking* at the actual phenomenon of language, see Diamond, *The Realistic Spirit*, pp. 19-36.

beam”), as a “complete primitive language”.³⁴ Wittgenstein warns us that we shouldn’t think of the calls of the builders, say “Slab!”, as elliptical versions of longer English sentences, say “Bring me a slab!”, anymore that we should conceive of “Bring me a slab!” as a *lengthening* of “Slab!”.³⁵ So Wittgenstein seems to be claiming that the builders have a *language* in the proper sense of the term, even though quite primitive—a language that is non-compositional if anything is. Moreover, this primitive non-compositional language would *not* be a mere code. Unlike the characters in our previous examples, the builders do not use their “calls” as signals standing for articulate sentences of a compositional language they master. The four calls are *all* the builders have. There is no *other* language standing behind their calls. The calls *are* their language. And such a language is non-compositional.

I think, however, that we should not be so hasty in jettisoning the Tractarian suggestion about the essential articulateness of language. A number of commentators such as Rush Rhees, Stanley Cavell and Warren Goldfarb have questioned the possibility of *really* imagining the language-game of the builders as a *complete* language.³⁶ These authors stress that if the four calls really were *all* what the builders have to say, then they would appear more similar to marionettes or automata than to creatures who use a language. To imagine a language, as we are told in the *Investigations*, is to imagine a form of life.³⁷ In order to attribute a language to the builders we need to make sense of their life, to make it intelligible to ourselves. And this is *difficult* if we are asked to assume that they use words *only* for uttering the four calls on the building arena—they don’t use words to rehearse, at the end of the day, what they have done, or to make plans, to express joy or tiredness, to refer to facts or tell stories. It seems uncontroversial to say that the builders use *signals*. We are told, similarly, that some monkeys use a small number of vocalizations for alarming the group about the presence of different sorts of predators: one signal for “eagle”, one for “snake” and one for “leopard”. The point I am

³⁴ Wittgenstein, *Philosophical Investigations*, §§ 2, 6.

³⁵ *Ibid.*, § 19.

³⁶ See Rhees, *Wittgenstein and the Possibility of Discourse*, pp. 45, 128, 129, 192; Cavell, “Notes and Afterthoughts on the Opening of Wittgenstein’s *Investigations*”, pp. 273, 275, 278, 279, 289, 290; Goldfarb, “I Want You to Bring Me a Slab”, pp. 269-272.

³⁷ Wittgenstein, *Philosophical Investigations*, § 19.

questioning is whether we could conceive of a *language* that consists *exclusively* of signals—signals that are never put together to form complex, articulate sentences.³⁸

When we try to use Wittgenstein's builders to make sense of the idea of a completely non-compositional language we face a dilemma. Either (a) we describe their life in such a poor way that the four calls are really *all* they have—in which case, as the cited commentators have pointed out, we will be strongly reluctant to attribute to them the mastery of a language and mindedness altogether; or (b) we will “enrich” their form of life to the point where we can make sense of them as fully minded creatures; we will be able, therefore, to credit them with beliefs, desires and intentions as we do the rest of us. We can very well postulate that, for some strange reason, they express such propositional attitudes by means of unarticulated expressions; but it is clear that, at that point, we will have simply fallen back into the case of the code. Our civilized and humanized builders think in a compositional language, and encode what they want to say in non-compositional expressions.

We speakers of language often make use of expressions, signals and gestures that are more or less clearly devoid of compositional structure. These are a motley of different things, which range from shouting “Hey!” to a person walking down the street in order to get her attention, to gestures of greeting, injure and disdain, to single-word sentences such as calls (“Silver!”) and commands (“Stop!”). The contrast I have been drawing between codes and genuine language might give the impression that I am committed to assimilate all these different kinds of “monolithic” communicative acts to the employment of codes. The *Tractatus* might indeed be committed to such a view. The book says, for example, that “[e]ven the proposition, ‘Ambulo’, is composite” (4.032). And it might be willing to say, in a similar vein, that *either* the order “Stop!” contains

³⁸ It might be objected that monkeys are really different from automata and marionettes, and that it is not clear that they don't speak some form of language and that they enjoy some form of mindedness. I am perfectly sympathetic with this idea. Monkeys, like us, come into the world and die, are hungry and cold and excited and terrified, enjoy sex and lying in the morning sun, take care of each others and of their offspring. It is in virtue of these and many other facts that we regard their signals as much more akin to language, and much more expressive of mindedness, than the signals released by automata or thermometers. The idea that monkeys have a form of life is far more intelligible to us than the idea that automata or marionettes have one—for the latter don't even seem to *have* a life. If one wishes to grant that monkeys do have a language, then my claim above amounts to the following: *all we can get* without compositionality is the form of mindedness and the form of “language” that monkeys—and other non-human animals—have. That is, we don't get a language in the full and proper and uncontroversial sense of the term.

“hidden variables” and is therefore articulate, despite appearances, *or* that it is a mere flag for the articulate English sentence: “I order you to stop doing that” (or, more precisely, a flag for the corresponding *perfectly* articulated sentence that can be given in a proper Begriffsschrift). My suggestion, however, is that we can endorse the Tractarian insight about the essential articulateness of language without endorsing these problematic conclusions. All we need to do is recognize the *parasitical* character of our non-compositional forms of communication. This does not mean that all such forms of communication are parasitical on the mastery of a compositional language *in the same way* in which *codes* are parasitical. It means, instead, that those forms of communication, *like* the expressions of a code, stop being recognizable as what they are when we subtract from the background of their significant employment the mastery of a compositional language. Recognizing their parasitical nature will be *sufficient* for dissolving the inchoate impression that they could serve as starting points for making sense of the idea of a completely non-compositional language.

IV

I have criticized Contextualism for maintaining that the meanings of sentences are conceptually prior to the meanings of words. This amounts to claiming that logical articulation is a merely contingent and, at least in principle, dispensable feature of sentences. Taking my cue from the *Tractatus* (3.141), I argued that, on the contrary, exhibiting a compositional structure—i.e., being articulated into logical parts—is a constitutive feature of language. (Apparent counterexamples, such as code-formulae and single-word sentences, are really parasitical cases.) This argument against Contextualism is, at one and the same time, a motivation for a certain understanding of the principle of compositionality: language must be compositional (i.e., logically articulate), if it is to be recognizable as language at all.³⁹ My aim, in this section, is to show how different this *conceptual* motivation for the principle of compositionality is from a standard style of argument in support of the compositionality of language. Such standard arguments concede to Contextualism the conceptual point. They concede—and indeed assume—that

³⁹ The criticism of Contextualism I developed is *not*, however, a motivation for the particular interpretation of the principle of compositionality given by Compositionism, according to which the meanings of sub-sentential elements are conceptually *prior* to the meanings of sentences (see Section V).

it *makes sense* to talk of completely non-compositional languages, and then go on to argue, from some more or less plausible empirical hypotheses, that *human* language must be compositional.

The following passage by Donald Davidson, which is a *locus classicus* in the literature on compositionality, can be taken as a representative example of what I called “standard arguments” for the compositionality of language:

When we regard the meaning of each sentence as a function of a finite number of features of the sentence, we have an insight not only into what there is to be learnt; we also understand how an infinite aptitude can be encompassed by finite accomplishments. For suppose that a language lacks this feature; then no matter how many sentences a would-be speaker learns to produce and understand, there will remain others whose meanings are not given by the rules already mastered. It is natural to say that such language is *unlearnable*. This argument depends, of course, on a number of empirical assumptions: for example, that we do not at some point suddenly acquire an ability to intuit the meanings of sentences on no rule at all; that each new item of vocabulary, or new grammatical rule, takes some finite time to be learned; that man is mortal.⁴⁰

The mastery of a natural language is, for Davidson, an “infinite aptitude”: a speaker of language has the capacity to form and understand an infinite number of sentences. Compositionality is required for explaining such an aptitude only on the background of some *empirical assumptions* about human beings. According to Davidson, there seems to be *nothing incoherent*—nothing defying conceivability—in the idea of a non-compositional language in which the meaning of each sentence is given by a specific rule. Mastery of such language would require an infinite number of accomplishments: we would need to learn as many rules as the sentences that can be formed, i.e., infinitely many rules. Since our mind and life is finite, and we lack magical powers, this is not possible. Our capacity to master a language must then be explained compositionally: we learn a finite number of linguistic rules that exhibit a compositional structure (say semantic and syntactic rules, i.e. a lexicon and a grammar), and this suffices to give us the capacity to understand an infinite number of sentences.

According to Davidson, compositionality is motivated only for finite, non-magical creatures like us. By contrast, in the previous section I argued that the very idea

⁴⁰ Davidson, “Theories of Meaning and Learnable Languages”, p. 8.

of a non-compositional language is problematic. It is not clear what we are asked to imagine when we are told of sentences whose meaning is given non-compositionally by specific rules. The best I could do, in this respect, was to imagine deciphering rules for the formulae of a code.

Davidson's argument has been the object of various criticisms. But the motivations for compositionality emerging from many of these criticisms can still count as standard arguments in the sense I have explained. Some authors have argued, for instance, that Davidson's assumption about our capacity to form and understand an *infinite* number of sentences is questionable, and that the real motivation for the compositionality of natural languages does not depend on such an assumption.⁴¹ Here are two possible ways of motivating the compositionality of natural languages that do not depend on Davidson's assumption, but that equally belong to the class of the standard arguments:

- i) The sentences of a natural language, even though finite in number, are still *too many* to be mastered by a human mind in a non-compositional way. Our mind could not learn and store as many semantic rules as the possible sentences of a natural language.
- ii) Even if it were possible for our mind to learn and store a rule for each possible sentence of a language that we are able to understand, that is not what *actually* happens. Natural languages, as is sometimes said, are productive. When we hear a sentence, or want to form a sentence, we don't apply a specific linguistic rule; we simply apply our knowledge of the lexicon and of the grammar of the language.

These two arguments for compositionality presuppose, like Davidson's, the intelligibility of a contrasting case: a non-human and extremely powerful mind that supposedly can master completely non-compositional languages.

Given what else happens in the book, there are reasons for supposing that the author of the *Tractatus* would not find the implicit contrast case here to be an intelligible one. Even if we bracket the details of the *Tractatus*' conception of language, there is

⁴¹ See for instance Grandy, "Understanding and Compositionality", pp. 558-561.

therefore good reason to attribute to the *Tractatus* the conceptual argument for the compositionality of language rather than the standard one. Moreover, if we lift the bracket, a further reason is to be found in the *Tractatus*' insistence on the articulate character of the proposition—which, I suggested, we should read as a *constitutive* claim. And yet a further reason is to be found in the *Tractatus*' (closely related) discussion of our capacity to understand new sentences without the need of specific rules or, as the *Tractatus* says, specific “explanations”. According to a standard argument, this is a remarkable fact about human language. According to the *Tractatus*, it is a constitutive fact about language. When Wittgenstein says,

I understand the proposition, without its sense having been explained to me (4.021)

he is not just pointing to, as it were, a fortunate coincidence: he is not remarking that it *had better be so*, because we would otherwise need a specific explanation for each sentence we encounter—a pretty inconvenient situation. Equally, when he writes,

It is essential to propositions, that they can communicate a *new* sense to us (4.027)

or,

A proposition must communicate a new sense with old words (4.03)

he is not pointing out theoretical *desiderata* that must be met *if* we want to account for our linguistic capacity without appealing to implausible empirical assumptions. Wittgenstein is rather unfolding here the concepts of “proposition” and “understanding a proposition.” A string of signs whose sense had to be explained to us, would not be a *proposition* in the proper sense of the word, nor would we *understand* it as we understand a genuine articulate proposition. A system of communication in which the understanding of each sentence requires the mastery of a specific rule would have the features, and the parasitical character, of a code.

We might say that, according to the *Tractatus*, it is *necessary* that we understand propositions without their sense being explained to us. But we need to be clear about the

force of the necessity here involved. The necessity is not conditional on the fact that we want to exclude implausible empirical assumption such as magic, divine intervention or the capacity to learn and store an infinite or extremely large number of rules. The idea that there is an alternative here—the magical understanding of propositions as unarticulated wholes—is the very idea that the *Tractatus* is problematizing.⁴² The necessity involved in the passages that I have quoted concerns the very applicability of our concepts of “proposition” and “understanding a proposition.”⁴³

V

I have contested the claim, advanced by Contextualism, that the meanings of sentences are conceptually prior to, and therefore conceptually independent of, the meanings of the words of which they are composed. I have also tried to show how the criticism I articulated amounts to a conceptual motivation for a certain understanding of the principle of compositionality—i.e., for the idea that sentences are logically articulate and that we understand them when we see how each of their parts gives its own semantic contribution to the expression of the complete thoughts that they convey. I am now going to criticize Compositionism, which champions a different understanding of the principle of compositionality: the meanings of words, it is claimed, are conceptually *prior* to, and therefore conceptually *independent* of, the meanings of the sentences that they compose.

My criticism of this claim will be brusque. According to Compositionism, the fact that words are used to make up sentences is related in a merely *contingent* way to the words’ meaningfulness (as in Contextualism the fact that sentences are segmented into logical parts is related in a merely contingent way to the sentences’ meaningfulness).

⁴² Compare, by contrast, Heck’s insistence, in the paper I already referred to, that “magic is always a possibility”.

⁴³ In some passages Frege seems to regard compositionality as a *constitutive* feature of language and thus to sit in the same camp where I have suggested we should place the *Tractatus*. For example, in the “Letter to Jourdain, Jan 1914” (*The Frege Reader*, p. 320), he argues that, without compositionality, the expression of every thought would require the adoption of a specific convention, so that “language in the proper sense would be impossible”. Other passages are more delicate: they will place Frege in the Tractarian camp or in the opposite Davidsonian camp according to whether we see Frege as arguing, respectively, for the compositionality of *language as such*, or (merely) for the compositionality of *human* languages. See for instance *Posthumous Writings*, pp. 225, 243; *Logical Investigations*, pp. 55-56.

Compositionism appears therefore to be committed to the conceivability of the following scenario:

The crude compositionistic scenario: We can have a list of words to which a *meaning* has been assigned; but such words are not part of a language—i.e., of a system of signs for the expression of complete *thoughts*. Equivalently, we can encounter a creature to which we attribute *knowledge* of the lexicon of a language, even if it clearly is not a *speaker* of the language—it lacks the capacity to combine words to *say* something, to perform complete linguistic acts.

It doesn't seem very difficult to show that such a scenario is only apparently coherent. Suppose an archeologist claims to have discovered a find containing the lexicon of an ancient language, of which she purports to give a translation. To each symbol contained in the find, the archeologist associates an English word or an English turn of phrase. But—here comes the curious part of the story—she denies to have gathered evidence that the symbols she claims to have translated were ever used to form complete sentences. But this is outrageous. On *what basis* does she translate a given symbol with, say, the English word “fish”, if she has no evidence that such a symbol was ever used to express *thoughts* about fishes—e.g. the thought that eating a fish makes you no longer hungry, or that there are many fishes in such-and-such a lake, or that the theft of a fish is punished in such-and-such a way? What is her basis for claiming that the signs she has “identified” and “translated” are *meaningful semantic units* at all, rather than decorative motifs? Similarly, let's suppose that an ethologist claims to have taught her parrot the English lexicon. Take any English word you want, her parrot knows what it means. However, she immediately concedes that the parrot is unable to understand *any* sentence composed out of the words of which “it knows the meaning”. Again, it would be difficult to take the person making this claim about the parrot's knowledge of the meanings of words seriously.⁴⁴

⁴⁴ It might also be helpful to reflect on the following question: When do we say that a person has learnt the meaning of a word? The obvious answer seems to be: When she has acquired the capacity to form and understand appropriate *sentences* containing the word. Dictionaries, by the way, are designed precisely to help to confer such a capacity.

Given such paradoxical implications, it can seem mysterious how Compositionism might ever appear as an attractive position. Indeed, those who are aware of these implications and want at the same time to preserve the general approach of Compositionism will try to rule out the possibility of the crude scenario by means of appropriate qualifications. The account offered by Glock is a good example of such a strategy: by acknowledging the *general* dependence of the meanings of words on the meanings of sentences, he effectively rules out the possibility of the crude compositionistic scenario, while purporting to preserve the crucial tenets of Compositionism. I'll come back on Glock's position in Section VI. For the moment, I would like to point out two factors that initially tend to push philosophers towards Compositionism—even in its crudest and unqualified form—when they fail to be sufficiently clear about its paradoxical implications.

One factor is our impulse to search for a reductive account of our linguistic capacity. Compositionism appears to be in a position to promise a reductive, bottom-up explanation of our capacity to understand and form sentences, and indeed of the very acquisition of language. The picture underlying this appearance is that of the meanings of words as independently conceivable building blocks: we understand the sentences we hear because we have the *antecedent* capacity to identify the semantic building blocks of which they are composed; our capacity to understand the meanings of sentences *presupposes* our capacity to understand the meanings of words, *and not the other way around*. Hence the appearance of the availability of a noncircular explanation. Reflection on the real implications of Compositionism—which I tried to condense in the crude compositionistic scenario—should lead us to question our impulse to look for an explanation of this kind.

A second factor that accounts for the appeal of Compositionism is our tendency to think of natural languages on the model of the mathematical constructions that we call “formal languages”. When we build a formal language, say the language of predicate logic, we start by specifying recursively the terms of the language (the “vocabulary”) and a semantic function that assigns an interpretation, or semantic value (a “meaning”), to each term. But it is clear that this can be done even though we *never* go on to give a recursive definition, and an interpretation, of the well-formed formulae of the language

(the “sentences”). Nothing seems to rule out the possibility that we may simply stop at Stage 1 (interpreted terms) without ever proceeding to Stage 2 (interpreted well-formed formulae). Stage 1 seems conceptually independent from Stage 2. Again, reflection on the paradoxical implications of Compositionism should lead us to question the assumption that formal languages are (in this respect, at least) good models of natural languages. Such mathematical constructions tend to distort, rather than illuminate, what it is for a word to have a meaning.

VI

Compositionism may be described (to borrow a term from the philosophy of perception) as a “factorizing” conception of our linguistic capacity.⁴⁵ The user of language is presented as a sort of two-headed creature: we have knowledge of the meanings of words, and, in addition, we have knowledge of how to use those words to express complete thoughts. When we perform successful linguistic acts we simultaneously exercise both kinds of knowledge. When we utter words in isolation or instances of substantial nonsense, we exercise the first, but not the second, kind of knowledge. The second kind of knowledge is presented as dependent on the first one; but nothing seems to exclude that it is, at least in principle, merely *optional* in relation to it.

The alternative conception that I want to attribute to the *Tractatus*, on the other hand, can be described as a form of “disjunctivism”. According to epistemological disjunctivism, either something is a perceptual experience by being a disclosure of how things are in the world, or it is at most the *illusion* of a perceptual experience. There is no epistemic highest common factor between veridical perceptual experience and perceptual illusion. Similarly, according to what we might label “semantic disjunctivism”, *either* words are used in a meaningful way by being employed for the expression of meaningful propositions, *or* they are not used in a meaningful way at all—they are used at most with the *illusion* that we are using them meaningfully. There is no logical or semantic common factor between the use of words in the expression of thoughts and the use of words outside the context of significant propositions. The capacity to use a word with a meaning, and the capacity to use it in the expression of thoughts, are linked by a

⁴⁵ See for instance McDowell, “Knowledge and the Internal”.

necessary, internal relation. Something is not recognizable as an exercise of the first capacity without it also drawing on our competence to exercise the second capacity.

The *Tractatus*, I am suggesting, rejects Compositionism by acknowledging the conceptual dependence of the meanings of words on the meanings of sentences. It does so, by adopting a strong version of the context principle entailing the austere view of nonsense: words have meaning *only* in the context of significant propositions. Moreover, as I argued in previous sections, the *Tractatus* is also characterized by a simultaneous and symmetrical rejection of Contextualism: it acknowledges the conceptual dependence of the meanings of sentences on their logical articulation. For the *Tractatus*, the exercise of the capacity to understand and form complete sentences is, at one and the same time, the exercise of our capacity to use *sub*-sentential elements in the expression of thoughts. The dependence goes both ways, and is therefore an interdependence. The two capacities (of making *sense*, and of using sub-sentential *words* for making sense) come in one single package. Instead of speaking of two necessarily interconnected capacities it would perhaps be more appropriate to speak of two aspects of a single capacity—the capacity to speak and understand a language.

This is the picture of our linguistic capacity that I want to attribute to the *Tractatus*. It is also the picture I would want to recommend in my own voice, with two amendments: (a) we should speak of “complete linguistic acts” instead of “propositions”, in order to do justice to, among other things, non-constative uses of language; and (b), as I argued at the end of Section III, we should allow for various kinds of non-compositional uses of language (such as single-word sentences) as parasitical cases.⁴⁶ To properly explore the implications of these amendments would take us well beyond the scope of the present paper (into later Wittgenstein’s criticisms of the *Tractatus*).

⁴⁶ According to the amended view I am suggesting, the capacity to make sense still *depends on* the capacity to meaningfully employ sub-propositional elements, but some of its exercises are not *direct* exercises of the second capacity: they merely indirectly draw on that capacity. For example, when I direct at you the order “Stop!” I am making sense, but I am not directly exercising the capacity to make logically articulated sense. (Early Wittgenstein, as noted above, would have to deny this: he would not be able to recognize “Stop” as a complete meaningful linguistic unit, unless he took its surface form to disguise a further underlying multiplicity of logical structure.) However, the capacity to make articulate sense is still operative: I would not be performing the same linguistic act if, for example, I could not use sentences containing the word “stop” as a sub-sentential element. The amended view I am recommending is compatible, I think, with the criticisms that the later Wittgenstein came to level against his former view about the essentially articulate nature of the proposition. See *Philosophical Investigations*, §§ 19-20; *Philosophical Occasions*, pp. 54-55.

I have tried to show that the Tractarian picture, by acknowledging the interdependence between the meanings of words and the meanings of sentences, is philosophically superior to both Contextualism and Compositionism. I have not claimed, however, to have shown that it is the *only* alternative to both Contextualism and Compositionism.

All the arguments I have offered thus far leave room for a position like Glock's—which I would describe as a *hybrid* position. Glock's adoption of a weak or “non-restrictive” version of the context principle is sufficient for ruling out the crude compositionistic scenario. He acknowledges a conceptual dependence (even though of a *general* sort) between the meanings of words and the meanings of the sentences in which they can occur. As we have seen, he claims that the meaningfulness of a word presupposes the existence of the general practice of using the word for the expression of complete propositions. Words, he maintains, must be *capable* of contributing to the sense of propositions; the meaning of a word “is determined by *how* it can be used within sentences”, by “the role that the word *would* play [but does not *need* to play] in propositions”.⁴⁷ On the other hand, Glock's position, like Compositionism, is a factorizing conception of our linguistic capacity.⁴⁸ The weak version of the context

⁴⁷ Glock, “All Kinds of Nonsense”, p. 229.

⁴⁸ It is perhaps worth remarking that Glock's hybrid position and the disjunctive conception, in spite of occasional similarities in verbal formulation, in fact make quite different appeals to the capacity to use words in meaningful propositions. According to Glock, when we utter substantial nonsense, we *presuppose* the capacity to use words in meaningful contexts; however, we don't *draw on* that capacity—because, *ex hypothesis*, we are not *actually* making sense. That capacity is required to be in the background any time we utter a word with a meaning; but it doesn't play any actual role in our succeeding to use the word with that meaning on a particular occasion; the background is semantically inert. This comes out vividly if we consider an alleged instance of substantial nonsense containing an obviously ambiguous word, say “The bank is a prime number”. The word “bank”, according to Glock, is used with its usual meaning. But *which* one? Does the meaningful employment of the word presuppose the capacity to use it in the expression of thoughts about financial institutions or about riverbanks? In Glock's view, the issue can be settled only by appealing to the bare psychological fact of the speaker's linguistic intention to use the word this way rather than that. So, according to him, it is actually the nature of this intention that fixes the meaning of the word: our capacity to use a word with a particular meaning in certain (substantially nonsensical) contexts depends, in fact, on nothing more than this intention—the successful exercise of the one capacity (to mean something by the word apart from the character of its context) proceeds quite apart from any effort to engage the other capacity (to use it in a manner in which its sense contributes to the sense of the proposition as a whole). According to the disjunctive conception, on the other hand, we could not exercise the capacity to use words with meanings if we did not also *bring into operation* the capacity to use those words in a manner that contributes to the sense of meaningful propositions. So when Glock says things like “Words must be *capable* of occurring in propositions” and “[the meaning of a word] is determined by *how* it can be used within sentences”, he in fact means something quite different (and much weaker) by these dicta than what is required by semantic disjunctivism.

principle he adopts leaves room for words to have meaning outside the context of significant propositions (and to retain that intrinsic meaning that they have acquired even when imported into an allegedly nonsensical propositional context). Glock *wants* a semantic highest common factor between the use of a word in the expression of complete thoughts and the employment (or *non-employment*?) of the word in isolation or in substantially nonsensical combinations. The user of language is still presented as a two-headed creature: one head can speak (the one that knows the meanings of words), even though the other head (the one that knows how to use words to express thoughts) remains silent. The difference between Glock's hybrid position and Compositionism is that, according to Glock, the second head must always be present—even though in silence—behind the speech of the first head; it must always be *capable* of speaking in unison with its twin companion. The crudity of Compositionism lies in the fact that, unlike Glock's view, it does not exclude the eventuality that the first head may keep speaking even when the second head has been cut off, or never grew.

Now, it is clear that the verdict between the disjunctive picture I have been recommending and attributing to the *Tractatus* and Glock's hybrid position (which acknowledges a merely general dependence of the meanings of words on the meanings of sentences by endorsing a non-restrictive version of the context principle) will depend, crucially, on the appraisal of the independent reasons that respectively support the restrictive conception of the context principle and the austere conception of nonsense. I will not enter into such a discussion here.⁴⁹ I will just try to show how the materials present in the preceding discussion can lead us to question some of the apparent motivations of Glock's position. My aim here is not to *refute* this position, but (more modestly) merely to reduce its attractiveness.

⁴⁹ Such a discussion would have to cover topics such as the following: 1) What does it mean for a word to occur in isolation? Are dictionary entries, for example, instances of words occurring meaningfully in isolation? 2) Does the substantial conception of nonsense rely on a plausible conception of linguistic intentions? Is there no limit to what I can mean by means of my words? 3) Does the substantial conception of nonsense rely on a plausible picture of necessity—as constraining the use of language from the outside, rather than being constitutive of it? 4) Does the substantial conception offer a plausible account of Wittgenstein's anti-metaphysical aims? When Wittgenstein claims that a certain metaphysical-looking statement is nonsensical, is he emitting a *verdict* that follows from a "theory of sense" that he is endorsing? Some of these topics have already been discussed at length by New Wittgensteinian or Resolute Readers.

1) One of the reasons Glock offers for rejecting the restrictive version of the context principle is that it allegedly has the unattractive consequence that, if we endorse it, we would have to deny that “sentences are complex signs”, that “their meaning depends on the meaning of their constituents”, and that “understanding the components and mode of combination of a sentence is a necessary condition for a genuine understanding of the whole sentence”.⁵⁰ But we have seen that these denials are implications of Contextualism, not of the restrictive version of the context principle. We can maintain, quite literally, that words have meaning only in the context of meaningful propositions, and that propositions are essentially articulate. All we have to do is reject the claim that the meanings of sentences are conceptually prior to the meanings of their constituent words.

2) We have seen that a deep motivation of Compositionism is the promise of a reductive, bottom-up explanation of our capacity to speak and understand a language. Sometimes Glock makes it seem as if the weak version of the context principle he favors allows for a fulfillment of this promise. He maintains, for example, that “any *particular* sentential employment presupposes that the component words have a meaning in advance, on account of an antecedent practice [i.e., the practice of explaining the meanings of words]”. The meanings of sub-sentential components, being available “in advance”, seem to provide an *explanation* of our capacity to understand the sentences that they compose. However, Glock endorses a weak version of the context principle and holds, accordingly, that the meanings of the component words presuppose, in turn, their *general* employment in propositions; the practice of explaining the meanings of words presupposes, in turn, the practice of using words to perform complete linguistic acts. If it is a reductive explanation that we are looking for, we will already be disappointed by this apparent circularity; moreover, it is hard to see how the distinction between the “particular” and the “general” level of the dependence might help to show that the circularity is only apparent. Glock’s hybrid position—*like* the disjunctive picture I have recommended—is *not* in a position to promise the satisfaction of our desire of a reductive explanation of the capacity to speak a language. Glock therefore misrepresents the

⁵⁰ Glock, “All Kinds of Nonsense”, pp. 226-227.

dialectical situation to the extent that he suggests that his view, unlike the disjunctive conception, leaves room for an explanation of this kind.

3) At this point, we may start to become suspicious about the motivation for the hybrid position Glock favors. The weak version of the context principle, in Glock's hands, seems to be doing two things at once. In virtue of its being a version of the *context principle*, it acknowledges a conceptual connection between the meanings of words and the meanings of sentences, thus ruling out the crude compositionistic scenario; *and*, in virtue of its being a *weak* version of the context principle, it seems to leave room for a reductive explanation of our linguistic capacity. But it can't do both things at once. By ruling out the paradoxical implications of Compositionism, the weak version of the context principle rejects—to no less an extent than the strong version does—the only framework that seems suitable for satisfying our craving for a reductive explanation of linguistic mastery. The hybrid position seems to be driven by a simultaneous desire to reject the framework (because of its paradoxical implications) and to keep it (because it seems suitable for satisfying our craving). It is a merit of the strong version of the context principle, I submit, that it rejects this framework in a wholehearted way. This can help us to *question* our craving for a reductive explanation, and therefore to achieve a more stable satisfaction. The hybrid position, on the other hand, seems perfectly contrived for the purpose of keeping this craving alive in the face of Wittgenstein's criticism of it: it appears to promise its satisfaction, while anaesthetizing our awareness of the paradoxical implications of the framework that such a satisfaction would require.

VII

In this final section, I sum up the results of the paper and connect them back to the *Tractatus*.

I have argued that the *Tractatus* can endorse, at one and the same time, a strong version of the context principle (entailing the austere conception of nonsense) and a version of the principle of compositionality. It can maintain, quite literally, (1) that words have meaning *only* in the context of significant propositions; and (2) that propositions are essentially *articulate*—which means that their sense is complex, that they are made up of semantic parts that they share with one another, and that we understand them when we

understand how each of their parts contributes to the complete thoughts they express. The *Tractatus* can coherently embrace both of these principles by rejecting the respective ways in which Contextualism and Compositionism seek to interpret them. In order to accomplish this, the *Tractatus* needs to reject—and, I have suggested, *does* reject—both the claim that the meanings of sentences are conceptually prior to the meanings of words, and the claim that the meanings of words are conceptually prior to the meanings of sentences. On this Tractarian understanding of the two principles, the context principle and the principle of compositionality articulate two necessarily interdependent aspects of our linguistic capacity. Nothing is recognizable as an exercise of the capacity to use words (i.e., sub-propositional elements), without its also being recognizable as drawing on the capacity to make sense (i.e., to express propositional senses); and *vice versa*. I suggested that this *Tractarian* picture can be improved, while retaining much of its spirit, by speaking of “complete linguistic acts” instead of “propositions”, and by allowing for non-compositional uses of language as parasitical cases—parasitical, i.e., on the mastery of a compositional language.

I argued that this *Tractarian* picture is superior to both Contextualism and Compositionism. I don't claim to have argued, however, that it is the *only* way to avoid these two problematic positions. The criticisms I mounted against Contextualism and Compositionism leave room for a Glock-style hybrid position, which apparently acknowledges a strong conceptual interdependence between the meanings of words and the meanings of sentences, but in a way that seeks to attenuate the character of this interdependence so as to leave room for substantial nonsense. I have tried to show how the philosophical attractiveness of such a position diminishes once it is placed within the range of alternatives I have distinguished. Finally, I have tried to show that, in any case, it is not a position we can legitimately attribute to the *Tractatus*.

I want to close by giving a quick look at two passages in the *Tractatus* that bring out quite clearly the interdependence between a strong version of context principle and the principle of compositionality. Each of the following passages will appear very puzzling as long as we maintain that the two semantic principles must be equivalent to Contextualism and Compositionism respectively. The first passage runs as follows:

The thing is independent, in so far as it can occur in all *possible* circumstances, but this form of independence is a form of connection with the atomic fact, a form of dependence. (It is impossible for words to occur in two different ways, alone and in the proposition.) (2.0122)

This passage occurs quite early in the *Tractatus*, before the topic of language (as the system of the totality of propositions) is officially introduced. But the second sentence makes clear that what Wittgenstein says about “things” on the ontological level is meant to apply equally to words in their representing relation to the world. Wittgenstein does indeed allow here that a thing is independent. This might be taken to mean that a thing can occur in isolation, without being part of a fact—or, equivalently, that a word can have meaning in isolation, without being part of a proposition. But if this were what Wittgenstein is saying, how could he maintain, at the same time, that the independence of the thing/word is “a form of dependence” on the fact/proposition in which it occurs? The air of paradox disappears when we take Wittgenstein as saying that things essentially occur in facts, as meaningful words essentially occur in propositions. Facts and propositions are necessarily complex, articulate: they are made up of parts, and such parts can occur in *other* facts or in *other* propositions. The parts, therefore, are independent from any *particular* complex in which they occur; but they must occur in *some* fact or other, in *some* proposition or other. They would not be what they are—that is items that can make up a fact or a proposition—if “they could occur in two different ways, alone and in the proposition.”

The second passage I want to consider clarifies what Wittgenstein means by “logical articulation” and shows how both the context principle and the principle of compositionality are built into this notion:

The proposition is not a mixture of words (just as the musical theme is not a mixture of tones).

The proposition is articulate. (3.141)

A proposition is not a blend of words. (*Notebooks*, 5.4.15)

Nor is a tune a blend of notes, as all unmusical people think. (*Notebooks*, 11.4.15)

Words and tones, as marks on the paper or waves in the air, can surely occur in isolation. We can put such items together and obtain sequences of words and sounds. Surely these are (in a sense) complex phenomena and are (in a sense) made up of parts. However, they

don't exhibit *articulation*. Articulation is not mere complexity, or, if you like, it is a special sort of complexity. A proposition or a musical theme are "complex", and have "parts", in a different sense in which "mixtures of words" and "mixtures of tones" are complex and have parts.⁵¹ A proposition has unity: it expresses a thought; a melody also has unity: it expresses a *musical* thought. Only what exhibits this kind of unity can be articulate in the *Tractatus* sense. A proposition, as I have tried to argue, is necessarily articulated into parts, and the same might be said of a melody. (Can we conceive of melodies consisting of a *single* note?) The parts of a proposition contribute to the articulation of its content, and make the same contribution to the articulation of the contents of other propositions. Analogously, the parts of a melody (i.e., its notes) contribute to the expression a musical thought, and make the same contribution to (have the same "musical meaning" in) other melodies. But if we deprive these words and these tones of their significant context, they become mere marks and sounds, devoid of meaning. Conversely, if we start with words and tones as they are given to us in isolation, we will through their mere concatenation never be able to achieve unified wholes, but rather always only mere agglomerations. The kind of "component" a word or a tone is, and the kind of "context" that a proposition or a melody is, are here seen to be interdependent notions that stand on the same level. This is just what Compositionism and Contextualism, in their opposite ways, each deny, thereby obstructing our understanding of the ways in which the author of the *Tractatus* wishes jointly to affirm both a version of the principle of compositionality and a version of the context principle.

References

BENTHAM, J., *The Works of Jeremy Bentham*, ed. J. Bowring, Edinburgh: W. Tait, 1843.

CAVELL, S., "Notes and Afterthoughts on the Opening of Wittgenstein's *Investigations*", in *The Cambridge Companion to Wittgenstein*, ed. H. Sluga and D.G. Stern, Cambridge: Cambridge University Press, 1996, pp. 261-295.

⁵¹ Cf. *Philosophical Grammar*, Part I, § 1, where Wittgenstein remarks that there is a *difference in kind* between the sense in which a meaningful proposition have "parts" and the sense in which, say, a loaf of bread is made up of "parts".

CONANT, J., “Why Worry about the *Tractatus*?”, in *Post-Analytic Tractatus*, ed. B. Stocker, Burlington: Ashgate Press, 2004, pp. 167-192.

——— and Diamond, C., “On Reading the *Tractatus* resolutely”, in *The Lasting Significance of Wittgenstein’s Philosophy*, ed. M. Kölbel and B. Weiss, London: Routledge, 2004, pp. 46-99.

——— “The Method of the *Tractatus*”, in *From Frege to Wittgenstein: Perspectives on Early Analytic Philosophy*, ed. Erich H. Reck, Oxford: Oxford University Press, 2001, pp. 374-462.

DAIN, E., “Contextualism and Nonsense in Wittgenstein’s *Tractatus*”, *South African Journal of Philosophy*, Vol. 25, No. 2, 2006, 91-101.

——— “Wittgenstein, Contextualism and Nonsense: A Reply to Hans-Johann Glock”, forthcoming in *Journal of Philosophical Research*.

DAVIDSON, D., “Theories of Meaning and Learnable Languages”, in *Inquiries into Truth and Interpretation*, 2nd edn, Oxford: Clarendon Press, 2001, pp. 3-15.

DIAMOND, C., *The Realistic Spirit: Wittgenstein, Philosophy and the Mind*, Cambridge (Mass.): MIT Press, 1991.

DUMMETT, M., *Frege: Philosophy of Language*, 2nd edn, Cambridge (Mass.): Harvard University Press, 1981.

——— *The Interpretation of Frege’s Philosophy*, Cambridge (Mass.): Harvard University Press, 1981.

FREGE, G., *The Foundations of Arithmetic*, trans. J.L. Austin, 2nd edn, Evanston: Northwestern University Press, 1953.

——— *Posthumous Writings*, ed. H. Hermes, F. Kambartel, and F. Kaulbach, trans. P. Long and R. White, Oxford: Basil Blackwell, 1979.

——— *The Frege Reader*, ed. M. Beaney, Oxford: Blackwell Publishing, 1997.

——— *Logical Investigations*, ed. P.T. Geach, trans. P.T. Geach and R.H. Stoothoff, Oxford: Blackwell Publishing, 1977.

GLOCK, H-J, “All Kinds of Nonsense”, in *Wittgenstein at Work: Method in the Philosophical Investigations*, ed. E. Ammereller and E. Fisher, London: Routledge, 2004, pp. 221-245.

GOLDFARB, W., “I Want You to Bring Me a Slab: Remarks on the Opening Sections of the *Philosophical Investigations*”, *Syntheses*, Vol. 56, No. 3, 1983, 265-282.

GRANDY, R., "Understanding and the Principle of Compositionality", *Philosophical Perspectives*, Vol. 4, 1990, 557-572.

HACKER, P.M.S., "Wittgenstein, Carnap and the New American Wittgensteinians", in *The Philosophical Quarterly*, Vol. 53, No. 210, 2003, 1-23.

———"The Raise of Twentieth Century Analytic Philosophy", in *The Rise of Analytic Philosophy*, ed. H-J Glock, Oxford: Blackwell, 1997, pp. 243-268.

HECK, R., "What is Compositionality?", unpublished.

JANSSEN, T.M.V., "Frege, Contextuality and Compositionality", *Journal of Logic, Language and Information*, Vol. 10, 2001, 115-136.

MCDOWELL, J., "Knowledge and the Internal", in *Meaning, Knowledge and Reality*, Cambridge (Mass.): Harvard University Press, 1998, pp. 395-413.

PELLETIER, F.J., "Did Frege Believe the Context Principle?", *Journal of Logic, Language and Information*, Vol. 10, 2001, 87-114.

QUINE, W.V., "Two Dogmas of Empiricism", in *From a Logical Point of View*, Cambridge (Mass.): Harvard University Press, 1953, pp. 20-46.

———"Epistemology Naturalized", in *Ontological Relativity and Other Essays*, New York: Columbia University Press, 1969, pp. 69-90.

RESNIK, M.D., "The Context Principle in Frege's Philosophy", *Philosophy and Phenomenological Research*, Vol. 27, No. 3, 1967, 356-365.

RHEES, R., *Wittgenstein and the Possibility of Discourse*, Cambridge: Cambridge University Press, 1998.

SELLARS, W., *Empiricism and the Philosophy of Mind*, Cambridge (Mass.): Harvard University Press, 1997.

SLUGA, H., "Frege and the Rise of Analytic Philosophy", *Inquiry*, Vol. 18, 1975, 137-143.

WAISMANN, F., *Wittgenstein and the Vienna Circle: Conversations Recorded by Friedrich Waismann*, ed. B. McGuinness, trans. J. Shulte and B. McGuinness, Oxford: Basil Blackwell, 1979.

WITTGENSTEIN, L., *Tractatus Logico-Philosophicus*, trans. C.K. Ogden, London: Routledge and Kegan Paul, 1922.

———*Philosophical Investigations*, trans. G.E.M. Anscombe, 2nd edition, Oxford: Blackwell Publishers, 1958.

———*Philosophical Grammar*, ed. R. Rhees, trans. A. Kenny, Oxford: Basil Blackwell, 1974.

———*Notebooks 1914-1916*, ed. G.H. Wright and G.E.M. Anscombe, trans. G.E.M. Anscombe, 2nd edn, Chicago: The University of Chicago Press, 1979.

———*Philosophical Occasions 1912-1951*, ed. J.C. Klagge and A. Nordmann, Indianapolis: Hackett Publishing Company, 1993.