

On Frege's *Sinn* and Langacker's *Construal*: A Preliminary Survey of Their Compatibility

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Abstract

Whereas Frege's impact on modern semantics (and pragmatics) is uncontroversial, it is generally assumed that the scope of the Fregean framework is confined to formal semantics (and pragmatics) as opposed to cognitive semantics, or more broadly, cognitive linguistics. The purpose of this paper is to explore to what extent Frege's notion of sense/thought (*Sinn/Gedanke*) is compatible with Langacker's notion of construal. Appearances notwithstanding, it turns out that the two frameworks are largely compatible. As regards singular terms like "the morning star" / "the evening star", the compatibility of the two models is indisputable; the sense/construal of a singular term corresponds to a particular way of thinking or viewing its reference. Even though Frege's position on predicates like "horse" / "steed" is not so straightforward, his model can be, based on some textual evidence, construed in such a way as to be no less fine-grained than Langacker's. The parallel between sense and construal finally collapses, however, when grammatical constructions appear on the scene. Although he detects differing meaning in pairs of truth-conditionally equivalent sentences, Frege relegates it to the realm of the tone, a realm which belongs to "what is beautiful in language" or "poetic eloquence". If, despite Frege's notorious dichotomy between science/logic and fiction/poetry, the integration of the tone with the sense is feasible, then Frege may count as one of the founders, albeit a marginal one, of cognitive linguistics, in that he explicitly provided, more than one century ago, detailed descriptions of those aspects of meaning that cognitivists are pursuing today.

1. Introduction

Gottlob Frege (1848-1925) is indisputably one of the founders of modern semantics and pragmatics. His *Begriffsschrift* (1879) innovated logic by introducing the technique of multiple quantification. After laying down what is now called the context principle in *Die Grundlagen der Arithmetik* (1884), he proposed in "Über Sinn und Bedeutung" (1892a) and in "Über Begriff und Gegenstand" (1892b) a number of theoretical notions frequently evoked in the current debate on (the interface between) semantics and pragmatics. Among the topics discussed in the papers are, put in the current terminology, sense/reference, truth-value, presupposition, conventional implicature, conversational implicature,

pragmatic modulation (or free enrichment), illocutionary force, polysemy, synonymy, translation, and so forth. As Iida (1987: 95-96) points out, his last paper, “Gedankengefüge” (1923), anticipates what Chomsky (1965: 6) calls “the creative aspect of language use”.

It is astonishing what language can do. With a few syllables it can express an incalculable number of thoughts, so that even a thought grasped by a human being for the very first time can be put into a form of words which will be understood by someone to whom the thought is entirely new. This would be impossible, were we not able to distinguish parts in the thought corresponding to the parts of a sentence, so that the structure of the sentence serves as an image of the structure of the thought.

(Frege 1923: 36/1963: 1)¹

This passage evokes, in order to account for the creative aspect of language use, what is now known as the principle of compositionality (Heim and Kratzer 1998: 2-3), according to which “[t]he meaning of the whole is a function of the meaning of its parts and the way they are put together” (de Swart 1998: 39).

While Frege’s impact on modern semantics (and pragmatics) is uncontroversial, it is generally assumed that the scope of the Fregean framework is confined to formal semantics (and pragmatics) as opposed to cognitive semantics, or more broadly, cognitive linguistics. This comes with no surprise, since Frege’s first and foremost interest was logic rather than natural language, as seen clearly from all his works. As a consequence, the Fregean framework is rarely evoked in papers or textbooks on cognitive linguistics. Nevertheless, we must not underestimate his interest in cognitive aspects of natural language, as suggested by his claim that “we cannot understand one another without language, and so in the end we must always rely on other people’s understanding words, inflexions, and sentence-construction in essentially the same way as ourselves” (Frege 1892b: 195/1997: 184)². As a matter of fact, a striking similarity can be found between Frege’s and Langacker’s conceptions of meaning.

It is natural, now, to think of there being connected with a sign (name, combination of words, letter), besides that to which the sign refers, which may be called the reference of the sign, also what I should like to call the sense of the sign, wherein the mode of presentation is contained.

(Frege 1892a: 26/1960: 37)³

Most broadly, a meaning consists of both conceptual **content** and a particular way of **construing** that content. The term **construal** refers to our manifest ability to conceive and portray the same situation in alternate ways. (Langacker 2008: 43, emphases in the original)

¹ „Erstaunlich ist es, was die Sprache leistet, indem sie mit wenigen Silben unübersehbar viele Gedanken ausdrückt, dass sie sogar für einen Gedanken, den nun zum ersten Male ein Erdbürger gefasst hat, eine Einkleidung findet, in der ihn ein Anderer erkennen kann, dem er ganz neu ist. Dies wäre nicht möglich, wenn wir in dem Gedanken nicht Teile unterscheiden könnten, denen Satzteile entsprächen, so dass der Aufbau des Satzes als Bild gelten könnte des Aufbaues des Gedankens.“ (Frege 1923: 36)

² „[...]weil] wir uns ohne die Sprache nicht verständigen können und daher zuletzt doch immer auf das Vertrauen angewiesen sind, der andere verstehe die Worte, die Formen und die Satzbildung im wesentlichen so wie wir selbst.“ (Frege 1892b: 195)

³ „Es liegt nun nahe, mit einem Zeichen (Namen, Wortverbindung, Schriftzeichen) außer dem Bezeichneten, was die Bedeutung des Zeichens heißen möge, noch das verbunden zu denken, was ich den Sinn des Zeichens nennen möchte, worin die Art des Gegebenseins enthalten ist.“ (Frege 1892a: 26)

The similarity emerges from the well-known distinction between sense (*Sinn*) and reference (*Bedeutung*), which Frege is said to have discovered around 1890.

We can think of the theory of Meaning [= reference], very generally, as concerned with relations between expressions of the language and entities in the world. Now, Frege came to see the need for another level of description and theory which is concerned, we might with equal generality say, with relations between expressions of the language and the understanding that competent speakers have of them. (Evans 1982: 13)

As Dummett (1973: 84) says, reference does not belong to what competent speakers of the language understand, and it is the introduction of “sense” that enabled us to talk about the knowledge of language in the Fregean framework. Frege (1892a, 1892b, 1918-1919a) calls the senses of sentences “thoughts”, and assigns thoughts to “the third realm”, a realm of entities which differ both from physical objects in not being material or concrete, and from ideas in not being private or subjective (Blanchette 2015). Although the characterization is by no means obvious, it is generally agreed that “thoughts are psychologically real: they are the objects of the propositional attitudes and it is by reference to an agent's propositional attitude that his rational actions are to be explained” (Noonan 1984: 205). There is then no *a priori* reason to oppose the Fregean framework with cognitive linguistics.

As a preliminary survey on the relation between the Fregean system and cognitive linguistics, this paper will explore to what extent Frege's sense/thought is compatible with Langacker's construal.

2. Singular Terms and Sentences

Probably Frege's best known example is the difference between “the morning star” (*Morgenstern*) and “the evening star” (*Abendstern*). Frege (1892a: 27/1960: 37) introduces this example by saying that the reference, but not the sense, of “the morning star” and “the evening star” would be the same⁴. This might give the impression that Frege (1892a) treats mainly, or even only, the semantics of singular terms (i.e. proper names, definite descriptions, demonstratives, personal pronouns, etc.). As Ducrot (1972: 27) stresses, however, one of the goals of the paper is to establish the parallelism between singular terms and sentences⁵. The fundamental idea underlying all of Frege's works is that the semantic power of a linguistic expression consists in an association with an extralinguistic entity (Evans 1982: 8-9). Just as a singular term is meaningful insofar as it is associated with an object, a sentence is meaningful insofar as it possesses one of the truth values, the True and the False. These extralinguistic entities constitute references (*Bedeutung*) of singular terms and sentences⁶. One might perhaps wonder whether the True

⁴ “Es würde die Bedeutung von “Abendstern” und “Morgenstern” dieselbe sein, aber nicht der Sinn.” (Frege 1892a: 27)

⁵ The term Frege uses for “sentence” is “Satz”, a German word which can be translated in English as “sentence”, “proposition”, “theorem” or “clause” (Beaney ed. 1997: xiv). Ducrot (1972) translates “Satz” as “proposition”, a French word corresponding to “proposition” or “clause” in English. In this paper, we will translate it as “sentence”, following Evans (1982).

⁶ Frege's “Bedeutung” is sometimes translated as “Meaning” with an upper case, rather than as “reference” (Evans 1982: 7-8, n.2, Iida 1987: 141-142, n.26). In this paper, we will use the term “reference”, following Dummett (1973). This term is much more common in linguistics (cf. Langacker 1987: 165, n.13).

and the False can be regarded, like objects, as entities in the world. A reasonable answer would be that they can, given the three kinds of conceptions of Truth that Austin (1950/1979: 117) alludes to. Truth can be a substance, a quality or a relation. Corresponding to these conceptions are, respectively, the substantive “truth”, the adjective “true”, and the prepositional “true of”. We can say that the Fregean system draws upon the first of these conceptions of Truth. Especially characteristic of the system is the fact that what Frege calls “Eigennamen (proper name)” includes not only singular terms but also sentences. This is precisely because both kinds of expressions refer to objects as opposed to concepts or relations, referred to rather by predicates. Concepts and relations are predicative or unsaturated, while objects are complete or saturated (e.g. Frege 1891-1892: 174, 1892b: 193, 205/1997: 182, 193). The sharp boundary between concepts/relations and objects, which Frege repeatedly emphasizes in a number of places, allows us to treat singular terms and sentences in a unified way. Frege (1892a: 34/1960: 42) says: “Every declarative sentence concerned with the reference of its words is therefore to be regarded as a proper name, and its reference, if it has one, is either the True or the False.”⁷

The parallel between singular terms and sentences goes further. Just as a singular term designates an object only through expressing a certain sense (Sinn), a sentence designates a truth value only through a certain sense. Frege (1892a: 32/1960: 41, 1918-1919a: 61/1956: 292) calls the sense of a sentence “thought” (Gedanke)⁸. Thus, both categories are associated with certain modes of presentation of extralinguistic entities⁹. Here emerges a parallelism between the Fregean framework and the cognitive linguistic framework (Langacker 1987, 2008). According to the latter, every linguistic expression, be it a word or a clause, is associated with a construal, a particular way of viewing the content it evokes. Before discussing what the two frameworks have in common, we will try to partially elucidate the Fregean “sense” by showing especially what it is not.

3. What is not sense

The discovery of the distinction between sense and reference allowed Frege to develop a five-layered model, where the so-called meaning of a linguistic expression consists of idea (Vorstellung), tone (Beleuchtung, Färbung), presupposition (Voraussetzung), sense (Sinn) and reference (Bedeutung). In this section, we will take a look at the first three categories.

3.1 Idea (Vorstellung)

⁷ „Jeder Behauptungssatz, in dem es auf die Bedeutung der Wörter ankommt, ist also als Eigennamen aufzufassen, und zwar ist seine Bedeutung, falls sie vorhanden ist, entweder das Wahre oder das Falsche.“ (Frege 1892a: 34)

⁸ It is not the case that the sense of every sentence is a thought. Frege (1918-1919a: 61-62/1956: 292-294) restricts the notion of sense to sentences for which the question of truth could arise, i.e. declarative (indicative) sentences and sentence-questions. Equally important is the fact that Frege separates the sense/thought of a sentence from its assertive force. Frege (1918-1919a: 62/1956: 294) says: “An interrogative sentence and an indicative one contain the same thought; but the indicative contains something else as well, namely, the assertion. The interrogative sentence contains something more, too, namely a request.” („Fragensatz und Behauptungssatz enthalten denselben Gedanken; aber der Behauptungssatz enthält noch etwas mehr, nämlich eben die Behauptung. Auch der Fragensatz enthält etwas mehr, nämlich eine Aufforderung.“) This is made possible by the separation between the act of grasping a sense and of judging (Frege 1918-1919b: 145/1997: 348). Although this is an issue highly relevant to modern pragmatics, we will not go into it in this paper.

⁹ A question that naturally arises here is whether we can talk about the sense of predicates, expressions which refer to concepts or relations as opposed to objects. Only when this question is answered affirmatively is it possible to establish a full parallelism between the Fregean framework and the cognitive linguistic framework. We will address the issue in 5.2 below.

Frege (1892a) introduces the notion of idea by defining it negatively in relation to both reference and sense.

The reference and sense of a sign are to be distinguished from the associated idea. If the reference of a sign is an object perceivable by the senses¹⁰, my idea of it is an internal image, arising from memories of sense impressions which I have had and acts, both internal and external, which I have performed. Such an idea is often saturated with feeling; the clarity of its separate parts varies and oscillates. The same sense is not always connected, even in the same man, with the same idea. The idea is subjective: one man's idea is not that of another. There result, as a matter of course, a variety of differences in the ideas associated with the same sense. A painter, a horseman, and a zoologist will probably connect different ideas with the name 'Bucephalus'. This constitutes an essential distinction between the idea and the sign's sense, which may be the common property of many and therefore is not a part or a mode of the individual mind. For one can hardly deny that mankind has a common store of thoughts which is transmitted from one generation to another.

(Frege 1892a: 29, 1960: 38-39)¹¹

Unlike the sense and the reference of an expression, the idea is always subjective and cannot be shared by more than one person. The use of the singular article 'a' in "A painter, a horseman, and a zoologist" is essential in the quotation above, since the use of the plural as in "Painters, horsemen, and zoologists" might imply that the same idea is shared among painters, for example, and contradict the very characterization of the idea. To the extent that linguistics is concerned with what linguistic expressions convey from one person to another, it makes sense to say that the idea does not constitute the subject matter of the discipline (cf. Dummett 1973: 85).

3.2 Tone (Beleuchtung, Färbung)

An aspect of meaning apparently similar to the idea is the tone¹². Frege (1892a) applies this notion to the meaning of "obgleich" (although), "aber" (but) and "doch" (yet).

Subsidiary clauses beginning with 'although' also express complete thoughts. This conjunction

¹⁰ The term 'sense' here means 'sensory organ'. It must not be read as the Fregean 'sense' mentioned in the first sentence cited here.

¹¹ „Von der Bedeutung und dem Sinne eines Zeichens ist die mit ihm verknüpfte Vorstellung zu unterscheiden. Wenn die Bedeutung eines Zeichens ein sinnlich wahrnehmbarer Gegenstand ist, so ist meine Vorstellung davon ein aus Erinnerungen von Sinneseindrücken, die ich gehabt habe, und von Tätigkeiten, inneren sowohl wie äußeren, die ich ausgeübt habe, entstandenes inneres Bild. Dieses ist oft mit Gefühlen getränkt; die Deutlichkeit seiner einzelnen Teile ist verschieden und schwankend. Nicht immer ist, auch bei demselben Menschen, dieselbe Vorstellung mit demselben Sinne verbunden. Die Vorstellung ist subjektiv: die Vorstellung des einen ist nicht die des anderen. Damit sind von selbst mannigfache Unterschiede der mit demselben Sinne verknüpften Vorstellungen gegeben. Ein Maler, ein Reiter, ein Zoologe werden wahrscheinlich sehr verschiedene Vorstellungen mit dem Namen "Bucephalus" verbinden. Die Vorstellung unterscheidet sich dadurch wesentlich von dem Sinne eines Zeichens, welcher gemeinsames Eigentum von vielen sein kann und also nicht Teil oder Modus der Einzelseele ist; denn man wird wohl nicht leugnen können, dass die Menschheit einen gemeinsamen Schatz von Gedanken hat, den sie von einem Geschlechte auf das andere überträgt.“ (Frege 1892a: 29)

¹² We follow Dummett (1973) here: "What I have here called 'tone' Frege refers to as 'lightning' [Beleuchtung] or 'colouring' [Färbung], but these are less natural metaphors in English, and we may stick to the term 'tone'" (Dummett 1973: 84).

actually has no sense and does not change the sense of the clause but only illuminates it "in a peculiar fashion. We could indeed replace the concessive clause without harm to the truth of the whole by another of the same truth value; but the light in which the clause is placed by the conjunction might then easily appear unsuitable, as if a song with a sad subject were to be sung in a lively fashion". *Note: Similarly in the case of 'but,' 'yet.'

(Frege 1892a: 45/1960: 52)¹³

What distinguishes the tone from the idea is that the former is, or at least can be, objective. As Dummett (1973) says, all competent speakers of English must know the meaning of "but". This is the reason why the tone, but not the idea, can be the object of linguistic inquiry. It is not hard to see that the Fregean tone corresponds to conventional implicature (Grice 1989) or procedural meaning (Carston 2002), a topic much discussed in modern pragmatics. Indeed, Carston (2002: 217-218) notes that the distinction between truth-conditional meaning and non-truth-conditional meaning is due to Frege (1892a)¹⁴. In a later work, Frege explicitly defines the meaning of "but", claiming that the difference in meaning between "and" and "but" is external to the thought expressed by the sentence in question.

The word "but" differs from "and" in that with it one intimates that what follows is in contrast with what would be expected from what preceded it. Such suggestions in speech make no difference to the thought. (Frege 1918-1919a: 64, 1956: 295-296)¹⁵

The same holds for the meaning of "still (noch)" and "already (schon)". According to Frege (1918-1919a: 295), the sentence "Alfred has still not come ("Alfred ist noch nicht gekommen)" says that Alfred has not come and hints that his arrival is expected. Even when the latter turns out to be false, the whole sentence remains true. Frege's description of "but" and "still" is consistent with the dominant view in modern pragmatics, represented by Carston's (2002: 53) remark: "The crucial element here [= e.g. Luke likes Sam {a. and / b. but} Hank loves Bob.] is the much discussed 'but', whose truth-conditional contribution seems to be identical to that of 'and', although its inherent meaning clearly incorporates another feature (of 'contrast', roughly speaking)." This description of "but" is now so common in pragmatics that Carston does not cite any source, but it should be attributed to Frege (1918-1919a).

Note that Frege talks about thought, while Carston (2002) talks about truth-condition. As discussed below, a difference in truth-condition entails a difference in thought, but not vice versa. Thus, if any aspect of meaning is external to the thought expressed by the sentence, then it is also external to its

¹³ „Auch in Nebensätzen mit „obgleich“ werden vollständige Gedanken ausgedrückt. Dieses Fügewort hat eigentlich keinen Sinn und verändert auch den Sinn des Satzes nicht, sondern beleuchtet ihn nur in eigentümlicher Weise*. Wir könnten zwar unbeschadet der Wahrheit des Ganzen den Concessivsatz durch einen andern desselben Wahrheitswertes ersetzen; aber die Beleuchtung würde dann leicht unpassend erscheinen, wie wenn man ein Lied traurigen Inhalts nach einer luftigen Weise singen wollte. *Ähnliches haben wir bei „aber“, „doch“.“

¹⁴ "It is worth noting that Frege (1892a: [45, 1960: 52]) made a clear distinction between what he called tonal elements, such as 'but', 'although', 'yet', and 'fortunately', on the one hand, which cannot affect the truth value of the sentence/utterance, and subordinating conjunctions such as 'because', 'since', 'after' and 'before', which have what he calls 'sense', and so do have a truth-conditional effect." (Carston 2002: 217-218, n.46)

¹⁵ „Das Wort „aber“ unterscheidet sich von „und“ dadurch, dass man mit ihm andeutet, das Folgende stehe zu dem, was nach dem Vorhergehenden zu erwarten war, in einem Gegensatz. Solche Winke in der Rede machen keinen Unterschied im Gedanken.“ (Frege 1918-1919a: 64)

truth-conditional meaning, but not vice versa. This suggests, on the one hand, that, as Carston (2002) says, the difference between truth-conditional and non-truth-conditional meaning is due to Frege (1892a, 1918-1919a), and, on the other hand, that thought is a more fine-grained notion than truth-condition. The second point enables us to reflect upon the similarity between the Frege's thought and Langacker's construal, an issue raised in Section I above.

A bit problematic about the notion of tone is that Frege himself sometimes advances the view that the tone is subjective, contrary to what he should claim about the contrast between "and" and "but", obviously public in nature.

Such colouring and shading are not objective, and must be evoked by each hearer or reader according to the hints of the poet or the speaker. Without some affinity in human ideas art would certainly be impossible; but it can never be exactly determined how far the intentions of the poet are realized. (Frege 1892a: 31/1960: 40)¹⁶

On this account, the tone would be nothing but the idea sketched in the preceding section. As Dummett (1973: 85) contends, however, this account reduces to a simple contradiction, because meaning cannot be subjective under any theory, to the extent that, unlike the idea, it can be conveyed to another by the use of the word in question. Consequently, within the Fregean system, the tone is to be sharply distinguished from the idea, as against Frege's own remark.

3.3 Presupposition (*Voraussetzung*)

There is yet another notion which is similar but external to thought, i.e. presupposition. Frege (1892a: 39-41/1960: 47-48) introduces the notion of presupposition in connection with sentences such as (1).

- (1) Der die elliptische Gestalt der Planetenbahnen entdeckte, starb im Elend.
(Whoever discovered the elliptic form of the planetary orbits died in misery.)

At first sight, sentence (1) might appear to contain two thoughts (or propositions), namely the thought that there is someone who discovered the elliptic form of the planetary orbits, and the thought that the person died in misery. This might seem to be confirmed by the fact that both thoughts must be true for the whole sentence to be true. Frege objects to this view, however, for two reasons. First, the alleged thoughts are not independent, to the extent that (1) cannot be paraphrased by two separate sentences. To be sure, (1) can be paraphrased as "Someone discovered the elliptic form of the planetary orbits, and he/she died in misery," but "he/she" in the second clause can only be understood with respect to the first clause (Ducrot 1972: 29). Second, if (1) contained two thoughts, the sentence in (2), the negation of (1), would

¹⁶ „Diese Färbungen und Beleuchtungen sind nicht objektiv, sondern jeder Hörer und Leser muss sie sich selbst nach den Winken des Dichters oder Redners hinzuschaffen. Ohne eine Verwandtschaft des menschlichen Vorstellens wäre freilich die Kunst nicht möglich; wieweit aber den Absichten des Dichters entsprochen wird, kann nie genau ermittelt werden.“ (Frege 1892a: 31)

mean (3)¹⁷.

- (2) Der die elliptische Gestalt der Planetenbahnen entdeckte, starb nicht im Elend.
(Whoever discovered the elliptic form of the planetary orbits did not die in misery.)
- (3) Either whoever discovered the elliptic form of the planetary orbits did not die in misery or there was nobody who discovered the elliptic form of the planetary orbits.

This is by no means the case, however. The negation in (2) only affects the thought that whoever discovered the elliptic form of the planetary orbits died in misery, leaving intact the fact that there is someone who discovered the elliptic form of the planetary orbits. This can be accounted for, Frege argues, by assuming that the latter proposition is not contained in the thought expressed by (1). As Ducrot (1972: 30) remarks, the proposition in question, not being negated when the sentence is negated, is not affirmed when the sentence is affirmed. The truth of the proposition is rather presupposed by (1), just as “Kepler died in misery” presupposes the existence of Kepler. It is because the existence of Kepler is not part of the thought expressed by “Kepler died in misery” that its negation “Kepler did not die in misery” never means “Either Kepler died in misery, or the name ‘Kepler’ has no reference”¹⁸. More generally, the use of a sentence presupposes that every expression occurring in it has a reference. Frege concludes that the presupposition is always external to the thought expressed by the sentence.

3.4 Summary

As shown in (4), the three categories of meaning discussed in this section are all external to the thought expressed by the sentence.

¹⁷ This is because, in general, the negation of “p & q” is equivalent to “¬p ∨ ¬q”.

¹⁸ Ducrot (1972: 30-31) points out that Frege (1892a) employs the negation test as the last resort. If all the information contained in a sentence that resists the negation were judged to be a presupposition, then the information (ii) contained in (i) should also be regarded as a presupposition of (i), since the negation of (i), namely (iii), also contains the information in (ii).

(i) Napoleon, who recognized the danger to his right flank, himself led his guards against the enemy position.

[Napoleon, der die Gefahr für seine rechte Flanke erkannte, führte selbst seine Garden gegen die feindliche Stellung.]
(Frege 1892a: 44/1960: 51)

(ii) Napoleon recognized the danger to his right back.

(iii) It is not the case that Napoleon, who recognized the danger to his right flank, himself led his guards against the enemy position.

Frege does not say, however, that (ii) is presupposed by (i). This is because, according to Ducrot, it is harmless to include (ii) in the thought expressed by (i). (ii) can be replaced by another clause of the same truth-value like (iv), without affecting the reference, namely the truth-value, of the whole sentence, as in (v).

(iv) Napoleon was born in Corsica.

(v) Napoleon, who was born in Corsica, himself led his guards against the enemy position.

If both (i) and (iv) are true, then it follows that (v) is true. By contrast, a replacement of this kind may alter the reference of (1) in the text.

(vi) Whoever discovered the elliptic form of the planetary orbits died in misery. [= (1)]

Even when both (vi) and (vii) are true, it does not follow that (viii) is true.

(vii) There is someone who discovered penicillin.

(viii) Whoever discovered penicillin died in misery.

In the Fregean system, this fact would remain a mystery, if the information in (ix) were contained in (vi).

(ix) There is someone who discovered the elliptic form of the planetary orbits.

This is, Ducrot argues, the true reason why, with the help of the notion of presupposition, Frege had to eliminate (ix) from the thought expressed by (vi).

- (4) a. idea (Vorstellung): private, external to the thought
- b. tone (Beleuchtung, Färbung): public, external to the thought
- c. presupposition (Voraussetzung): public, held to be true, external to the thought

Insofar as they are defined as in (4), these categories find themselves outside of the thoughts that competent speakers convey to each other by using language. Accordingly, they can hardly be integrated into the cognitive linguistic framework, according to which “meanings are in the minds of the speakers who produce and understand the expressions” (Langacker 2008: 27). Only at the level of thought, discussed in the next section, can the Fregean framework be compatible with the cognitive linguistic framework. This does not mean, however, that the categories in (4c) cannot be integrated into the latter framework, by changing either the definition of idea / tone / presupposition or that of thought. We will return to this issue in 5.2.

4. Sense and Construal of Singular Terms

The above discussion suggests that there is nothing but the sense (*Sinn*) that can potentially be assimilated with Langacker's (2008) construal, insofar as the definitions in (4) are assumed. As is well known, Frege (1892a) introduces the notion of sense to account for the difference in cognitive value (*Erkenntniswert*), or information content (Dummett 1973: 94), between (5a-6a) and (5b-6b).

- (5) (Let a, b, c be the lines connecting the vertices of a triangle with the midpoints of the opposite sides.)
 - a. the point of intersection of a and b = the point of intersection of a and b
 - b. the point of intersection of a and b = the point of intersection of b and c
- (6) a. the morning star = the morning star
- b. the morning star = the evening star

The reference of “the point of intersection of a and b” and that of the point of the intersection of b and c” are the same. If the meaning of these expressions were exhausted by their reference, both (5a) and (5b) would mean “A = A”. This is by no means the case, however. While (5a) holds *a priori*, (5b) contributes an extension of our knowledge. This difference in cognitive value, says Frege, comes from the difference in sense between “the point of the intersection of a and b” and “the point of the intersection of b and c”. By the principle of compositionality, the differing senses of these expressions give rise to those of the sentences in (5a) and (5b). A similar remark applies to (6)¹⁹. Frege here assumes (7), where *S* and *S'*

¹⁹ Some people might say that the reference of “the morning star” is not identical with that of “the evening star”, on the ground that, unlike (i), (ii) sounds odd (cf. Sakahara 1982: 152).

(i) I saw the morning star this morning.

(ii) I saw the evening star this morning.

Two remarks are in order. First, this objection overlooks the fact that Frege (1892a: 27/1960: 37) cautions that the term “reference” should be taken in the widest range (“dies Wort [= Gegenstand] im weitesten Umfange genommen”). The objection in question thus amounts to a matter of terminology. We must construe the term “reference” so that the reference of “the morning star” may be identical with that of “the evening star”. Second, if one sticks to the claim that the references of the two expressions are substantially (rather than terminologically) different, one will be forced to account for the intuitive difference between (iii) and (iv-v).

represent sentences.

(7) If S and S' have differing cognitive value²⁰, then S and S' have different senses.

(Perry 1977: 475/1993: 4)

In general, S and S' have differing cognitive value if and only if “it is possible for someone to understand both sentences at a given time while coherently taking different attitudes toward them, i.e. accepting (rejecting) one while rejecting (accepting), or being agnostic about, the other” (Evans 1982: 18-19)²¹. Evans (1982: 18) calls (7) “the Intuitive Criterion of Difference for thoughts”. As Dummett (1973: 293) says, “‘sense’ is first introduced as a correlative of ‘understand’: the sense of an expression is what we know when we understand it.” This corresponds to Frege’s (1892a) well-known remark: “The sense of a proper name is grasped by everybody who is sufficiently familiar with the language or totality of designations to which it belongs.”²² Less known but more eloquent is Frege’s (1918-1919b: 146/1997: 349) following remark:

The being of a thought may also be taken to lie in the possibility of different thinkers’ grasping the thought as one and the same thought. In that case the fact that a thought had no being would consist in several thinkers’ each associating with the sentence a sense of his own; this sense would in that case be a content of his particular consciousness, so that there would be no common sense that could be grasped by several people. (Frege 1918-1919b: 146/1997: 349)²³

To the extent that we can understand each other by using an expression, it must be the case that we share the sense of that expression.

The notion of sense has yet another aspect. Frege characterizes the sense as containing a mode of

(iii) the morning star \neq Mars

(iv) the morning star \neq Venus

(v) the evening star \neq Venus

If, as assumed here, you accept (vi), you must also accept (iv-v) above.

(vi) the morning star \neq the evening star

This is because, if you rejected (iv-v) and accepted (vii-viii) instead, (ix) would follow from (vii-viii).

(vii) the morning star = Venus

(viii) the evening star = Venus

(ix) the morning star = the evening star

But (ix) is exactly what we are assuming here that you reject. This shows that the acceptance of (vi) entails the acceptance of (iv-v) as well as (iii). There is an intuitive difference between (iii) and (iv-v), however. Whereas (iii) is obviously true, (iv-v) are felt to be false, or require an explanation, to say the least. This is, in our opinion, part of the reason why Frege took the reference of “the morning star” to be identical with that of “the evening star”.

²⁰ “Cognitive value” is a translation of “Erkenntniswert”. This term is also translated as “cognitive significance” (cf. Recanati 1993: 34, 63).

²¹ More simply, S and S' have differing cognitive value if and only if “it is possible for someone who understands S and S' to accept one as true, while not accepting the other” (Recanati 1993: 63).

²² „Der Sinn eines Eigennamens wird von jenem erfasst, der die Sprache oder das Ganze von Bezeichnungen hinreichend kennt, der er angehört.“ (Frege 1892a: 27)

²³ „Man kann unter dem Sein eines Gedankens auch verstehen, dass der Gedanke als derselbe von verschiedenen Denkenden gefasst werden könne. Dann würde das Nichtsein eines Gedankens darin bestehen, dass von mehreren Denkenden jeder seinen eigenen Sinn mit dem Satze verbände, der dann Inhalt seines besonderen Bewusstseins wäre, so dass es einen gemeinsamen Sinn des Satzes, der von mehreren gefasst werden könnte, nicht gäbe.“ (Frege 1918-1919b: 146)

presentation of the reference. On this view, “the morning star” and “the evening star” correspond to different modes of presentation of the same object. Now, how is the characterization of the sense as a correlative of ‘understand’ related to the characterization of the sense as a container of the mode of presentation of the reference? The answer lies in the fact that understanding a singular term involves thinking of its reference in a particular way, as Evans puts it:

Frege’s idea was that it may be a property of a singular term as an element of a public language that, in order to understand utterances containing it, one must not only think of that object, its Meaning [= reference], but one must think of that object *in a particular way* [...].

(Evans 1982: 16, emphasis in the original)

Every singular term is associated with a particular way of thinking of its reference, and a competent speaker of the language must understand it²⁴. This “particular way of thinking of the reference” may correspond to what Langacker (2008: 43) calls construal, namely “our manifest ability to conceive and portray the same situation in alternate ways”. Just as Frege stresses the public nature of the sense as opposed to the idea (*Vorstellung*), Langacker (2008: 55) talks about the conventionality of construal: “As part of its conventional semantic value, every symbolic structure construes its content in a certain fashion”. As a matter of fact, no substantial difference can be found between Frege’s and Langacker’s accounts of the morning star / evening star problem.

Classic examples illustrating the Fregean sense / reference distinction are treated similarly: *the morning star* designates an entity construed in relation to the stellar configuration of the morning sky, and *the evening star*, to that of the evening sky. For a person who knows that the morning star and the evening star are the same, both expressions include these abstract domains in their encyclopedic characterizations; they differ in their choice of primary domain, through which access to the overall knowledge system is achieved. *Venus* is yet another expression with the same designatum but a different primary domain. (Langacker 1987: 165, n13)

²⁴ This characterization raises problems for indexical expressions such as “I”, “this”, “yesterday” on the one hand, and empty singular terms such as “Pegasus”, “the president of Japan” on the other (Dummett 1973: 169, 366-367, Iida 1987: 119-124, Evans 1982: Ch. 1, Perry 1977/1993). As Evans (1982: 21) remarks, in cases where there is more than one object that is thought about, there is necessarily more than one mode of presentation. Accordingly, (i) and (ii) are associated with two different modes of presentation, to the extent that more than one object is thought about in (i) and (ii).

(i) (Uttered by Hans) I’m hungry.

(ii) (Uttered by Peter) I’m hungry.

What a competent speaker takes to be the meaning of *I*, however, seems to be constant; “I” means the utterer of (the token) of “I” (cf. Reichenbach 1947). Here, the modes of presentation depart from what a competent speaker understands about the linguistic expression in question. Iida (1987: 133-138) proposes to divide the sense into sense₁ and sense₂. Sense₁ is a correlative of ‘understand’ while sense₂ is a mode of presentation of the reference. Sense₁ would correspond to what Kaplan (1989) calls character and sense₂, content. A similar problem arises for empty singular names. We can fully understand what “Pegasus”, “the president of Japan”, etc. mean. They do not have reference, however. Consequently, they do not present their reference in any way. In Iida’s terminology, these names have sense₁, but not sense₂. This second problem is more serious for Frege’s theory than the first one. The reason why Frege did not nevertheless take the problem seriously lies in the fact that he swept it under a convenient mat: Fiction (Evans 1982: 28). Iida (1987: 146, n55) refers to this alleged solution as “Frege’s irritating dichotomy between science and poetry”.

As far as singular terms are concerned, the cognitive linguistic approach to the phenomenon is no different from the Fregean approach. Both sense and construal are more fine-grained than truth-conditional meaning. As said in Section 2, Frege calls the sense of a declarative sentence “thought”. If sense is a more fine-grained notion than truth-conditional meaning, then the thought expressed by a sentence should be more fine-grained than its truth-condition. It follows that there are pairs of truth-conditionally equivalent sentences whose thoughts are nevertheless different. This is indeed the case. Frege (1892a) claims that the thought in (8a) differs from that in (8b), even though (8a) is true if and only if (8b) is true.

- (8) a. The morning star is a body illuminated by the sun.
- b. The evening star is a body illuminated by the sun.

Langacker would be sympathetic with this view, to the extent that (8a) and (8b) conceive and portray the same situation in alternate ways. What remains to be seen is whether the parallel between sense and construal holds for expressions other than singular terms.

5. Is Sense Less Fine-grained Than Construal?

5.1 Predicates

As seen in the preceding section, Frege holds the thought expressed by a sentence to be distinct from its truth-condition, if the sentence contains a singular term. This can be attested in several places of Frege’s texts. Following the line of argument that Frege (1892a) invokes for (8) above, Frege (1918-1919a: 297-298) claims that (9a) and (9b) express distinct thoughts, even when (9c) holds.

- (9) a. Dr. Lauben has been wounded.
- b. Gustave Lauben has been wounded.
- c. Dr. Lauben = Gustave Lauben

Noteworthy is the fact that, despite the truth-conditional equivalence between (9a) and (9b), Frege takes (9a) and (9b) to correspond to different modes of presentation.

Accordingly, with a proper name, it depends on how whatever it refers to is presented. This can happen in different ways and every such way corresponds with a particular sense of a sentence containing a proper name. The different thoughts which thus result from the same sentence correspond in their truth-value, of course; that is to say, if one is true then all are true, and if one is false then all are false. Nevertheless their distinctness must be recognized. So it must really be demanded that a single way in which whatever is referred to is presented be associated with every proper name. (Frege 1918-1919a: 65-66 /1956: 298)²⁵

²⁵ „Demnach kommt es bei einem Eigennamen darauf an, wie der, die oder das durch ihn Bezeichnete gegeben ist. Das kann in verschiedener Weise geschehen, und jeder solchen Weise entspricht ein besonderer Sinn eines Satzes, der den Eigennamen enthält. Die verschiedenen Gedanken, die sich so aus demselben Satze ergeben, stimmen freilich in ihrem

On this account, the thought expressed by a sentence comprises, but is not exhausted by, its truth-condition²⁶. As Recanati (2008: 69) claims, the Fregean thought is not the truth-condition; it corresponds to the truth-condition under a certain mode of presentation²⁷.

Sentences containing a proper name apart, however, Frege seems to equate thoughts with truth-conditions²⁸. Without wishing to give a definition, Frege (1918-1919a: 60/1956: 295) calls a thought something for which the question of truth arises. Then he eliminates from the thought everything external to the question of truth. Quite naturally, Frege (1918-1919a: 63-64/1956: 295) throws away the idea and the tone, which, as discussed in Section 3, he takes to be external to the thought. Things get complicated when Frege (1918-1919a: 63/1956: 295) regards the difference between “horse”, “steed”, “cart-horse” and “mare” as external to the thought, just like the difference between “and” and “but”. Frege thereby distinguishes predicates from singular terms. Whereas the difference between “Dr. Lauben” and “Gustave Lauben” belongs to the sense, that between “horse” and “steed” belongs to the tone, and thus makes no difference to the thought containing these predicates. This line of division has no counterpart in cognitive linguistics. Langacker (1987: 164-165) advances the view that “roe” and “caviar” are distinguished with respect to the relative prominence of certain domains evoked by these expressions, even though they designate the same mass of eggs. A similar remark applies to “snail” and “escargot” (Langacker 2008: 49). Seen from this cognitive linguistic perspective, the meaning of a predicate is not exhausted by its extension, comprising a construal of its extension.

Then, what makes Frege refuse to include the contrast between “horse” and “steed” in the thought expressed by a sentence containing these expressions? Frege here appears to endorse (11), the inverse of (7) above.

(10) [= (7)] If *S* and *S'* have differing cognitive value, then *S* and *S'* have different senses.

(11) If *S* and *S'* do not have differing cognitive value, then *S* and *S'* do not have different senses.

This is the interpretation Evans (1982: 18) defends by saying that (10), namely what he calls the Intuitive Criterion of Difference for thoughts, is “the single constraint Frege imposed upon his notion of thought”. If there is no other criterion of difference for thoughts, then (11) is no less valid than (10). The fact that there is no difference in cognitive value between (12a) and (12b) entails, according to Evans (1982: 20), that the thought expressed by (12a) is the same as that expressed by (12b), in conformity with Frege’s (1918-1919a: 63/1956: 295) view.

Wahrheitswerte überein, d. h. wenn einer von ihnen wahr ist, sind sie alle wahr, und wenn einer von ihnen falsch ist, sind sie alle falsch. Dennoch ist ihre Verschiedenheit anzuerkennen. Es muss also eigentlich gefordert werden, dass mit jedem Eigennamen eine einzige Weise verknüpft sei, wie der, die oder das durch ihn Bezeichnete gegeben sei.“ (Frege 1918-1919a: 65-66)

²⁶ Presumably, this is why Bell (1984: 371, my emphasis) states that “the sense of a sentence *comprises* the condition = the True, i.e. its truth-condition”, rather than that the sense of a sentence *is* its truth-condition.

²⁷ “La « pensée » frégéenne n’est donc pas identique à ce que j’ai appelé la condition de vérité : la pensée frégéenne correspond à la condition de vérité *sous un certain mode de présentation*.” (Recanati 2008: 69, emphasis in the original)

²⁸ The identification of thoughts with truth-conditions is generally considered to be most clearly advanced in Frege (1893: § 32) (cf. Iida 1987: 112-114).

- (12) a. This is a horse ridden by the Queen.
 b. This is a steed ridden by the Queen.

It remains unclear, however, whether the claim that (12a) and (12b) express the same thought is entailed by, or even consistent with, what Frege says elsewhere. Two points can be raised here. First, even if we accept (11) as well as (10), it does not follow that (12a) and (12b) express the same thought. Recall that, in general, S and S' have differing cognitive value if and only if “it is possible for someone to understand both sentences at a given time while coherently taking different attitudes toward them, i.e. accepting (rejecting) one while rejecting (accepting), or being agnostic about, the other” (Evans 1982: 18-19). Evans (1982: 19, n.19) notes that the word “somebody” is crucial in this definition, because it is *not* true that *anyone* who understands the sentences in (8a-b) above can take different attitudes to them. Indeed, those who know that the morning star is identical with the evening star would accept both as true. This interpretation of (10) is supported by textual evidence. When discussing (8a-b) above, Frege (1892a: 32/1960: 41) says that anybody who did not know that the evening star is the morning star might hold the one thought to be true, the other false²⁹. The restriction “who did not know that the evening star is the morning star” is crucial here. The difference between the thought expressed by (8a) and that expressed by (8b) is justified by the attitude of those who do not know that the evening star is the morning star. If, then, there is at least one person who does not know that “steed” is synonymous with “horse”, and takes different attitudes toward (12a) and (12b), we can say that the two sentences express different thoughts.

Some might object to this argument by saying that those who do not know the extensional equivalence between “horse” and “steed”, hence the truth-conditional equivalence between (12a) and (12b), cannot be qualified as competent speakers of English, and accordingly do not satisfy the description “understand both sentences at a given time” contained in the definition of differing cognitive value. Presumably, Evans (1982: 20) upholds this objection when he says that “[i]f we found different senses here [= in (12)], then Frege’s explanation of the difference in cognitive value of two sentences, in terms of their possessing different senses, would not be generally acceptable”. However, it turns out that this is too strict a condition for differing cognitive value. To be sure, it might be plausible to say that those who do not see the truth-conditional equivalence between (12a) and (12b) do not count among competent speakers of the language. Yet, it is hardly the case that we are required to know every synonym in order to be competent speakers of the language. The public nature of senses which Frege (1892a) stressed as seen in Section 4 above does not entail that every competent speaker of the language understands all synonyms of the language, including technical terms. In principle, for any pair of sentences each containing predicates P_m and P_n , “it is possible for someone to understand both sentences at a given time while coherently taking different attitudes toward them”. We can then say that Evans (1982) underestimates his own use of the term “someone” in the definition of differing cognitive value. This word should be taken literally. Our loose interpretation of differing cognitive value is supported by Recanati’s (2008: 193) argument to the effect that the French sentences in (13a-b) express different thoughts for someone (say, Marcel) who believes (13a) while doubting (13b).

²⁹ „Jemand, der nicht wüsste, dass der Abendstern der Morgenstern ist, könnte den einen Gedanken für wahr, den anderen für falsch halten.“ (Frege 1892a: 32)

- (13) a. Paul est oculiste. (Paul is oculist.)
 b. Paul est ophtalmologiste. (Paul is ophthalmologist.)

According to Recanati, Marcel, as a rational subject, assigns different senses to the predicates “oculiste” and “ophtalmologiste”. The following passage from a letter to Russell seems to suggest that Frege acknowledges the possibility that, as in (13), two extensionally equivalent predicates M and N may express different senses.

The thoughts that *all thoughts belonging to Class M* are true is different from the thought that *all thoughts belonging to N* are true, for someone who did not know that *M* coincided with *N* would hold one of these thoughts to be true and the other to be false. (A letter to Russell 1902, cited in Evans 1982: 19)

This enables us to conclude that, as against Frege's (1918-1919a: 63/1956: 295) own remark, (12a) and (12b) can still be considered to express different thoughts. The thought expressed by a sentence is distinct from its truth-condition, whether the sentence may contain a singular term or not.

There is another argument against the view that (12a) and (12b) express the same thought. Unlike the first argument we have just seen, the second one attacks the very criterion given in (11), the inverse of the sound criterion in (10). As seen in Section 2, on the Fregean model, the reference of a singular term is an object, while the reference of a sentence is a truth-value. In conformity with the principle of compositionality, the combination of the reference of a singular term with the reference of a predicate yields the reference of a sentence. It follows that the reference of a predicate is a concept (Begriff), i.e. a (one-place) function from objects to truth-values³⁰. In general, “what two concept words [= predicates] stand for [*bedeuten*]³¹ is the same if and only if the extensions of the corresponding concepts coincide” (Frege 1891-1892: 177), or equivalently, if and only if every object that falls under one concept also falls under the other concept, and conversely (Frege 1891-1892: 175-176). On this view, the relation in (14a) entails that the reference of F is the same as the reference of G, which in turn entails, by the principle of

³⁰ Dummett (1973: 173) proposes to employ the term ‘property’ in place of the term ‘concept’, in order to avoid misleading suggestions of the English word ‘concept’. Although we use the term ‘concept’ here, it should be kept in mind that the concept is the reference rather than the sense of a predicate. In this respect, the Fregean sense is distinct from connotation as well as from intension as used in modern semantics (Wiggins 1984: 312). Frege (1892b: 198/1997: 187) emphasizes that “a concept is the reference of a predicate; an object is something that can never be the whole reference of a predicate” („Begriff ist Bedeutung eines Prädikates, Gegenstand ist, was nie die ganze Bedeutung eines Prädikates“). The sense of the contrast between singular terms and predicates lies in the fact that singular terms must not be empty for the sentence containing them to have a truth-value, whereas predicates can be empty (Frege 1891-1892: 178, 180). To take examples from Recanati (2008: 38-40), in Frege's framework, (i) is neither true nor false, while (ii) is false.

(i) The king of France is bald. (Le roi de France est chauve.)

(ii) The animal that walks in my garden is a unicorn. (L'animal qui se promène dans mon jardin est une licorne.)

By the principle of compositionality, a sentence does not have any truth-value if one of its parts lacks reference. Since (ii) has a truth-value, however, we must assume that its parts have references, despite the fact that the predicate “unicorn” is empty. This provides evidence that the reference of a predicate is not an object or a set of objects. Consequently, Frege holds the reference of a predicate to be a concept, namely a (one-place) function from objects to truth-values.

³¹ Frege (1892a: 31/1960: 40) reserves the term “stand for [*bedeuten*]” specifically for reference. In general, an expression expresses [*ausdrücken*] its sense, and stands for [*bedeuten*] or designates [*bezeichnen*] its reference.

compositionality, that the reference of (14b), where ‘a’ refers to an object, is the same as the reference of (14c).

- (14) a. $\forall x (F(x) \Leftrightarrow G(x))$
 b. $F(a)$
 c. $G(a)$

A question arises here as to whether the sense of (14b) is the same as the sense of (14c). Does a predicate have a sense over and above its reference? There was controversy in the past over whether Frege intended to extend the sense/reference distinction to predicates (Beaney ed. 1997: 172). The publication of Frege (1891-1892/1997), originally as a chapter of Frege (1969), settled the issue: “To every concept word [= predicate] or proper name, there corresponds as a rule a sense and a reference” (Frege 1891-1892/1997: 173). In general, the sameness of reference does not entail the sameness of sense, as clearly suggested by the distinction between “the morning star” and “the evening star” discussed in Section 4 above. Then, (14a) does not entail that the sense of (14b) is the same as the sense of (14c). Dummett (1973: 173) says that “it is plain that this statement [= (14a)] can hold even though the predicates ‘ $F(\xi)$ ’ and ‘ $G(\xi)$ ’ have quite different senses”. This is exactly what Frege claims in the following passage.

[...] just as proper names can replace one another *salva veritate*, so too can concepts words [= predicates], if their extension is the same. Of course the thought will alter when such replacements are made, but this is the sense of the sentence, not its reference. (Frege 1891-1892/1997: 173)

The distinction between “trilateral” and “triangular” is a case in point (Recanati 2008: 37-38). Even though the equivalence in (15a) holds, the sense of (15b) is different from the sense of (15c).

- (15) a. $\forall x (\text{trilateral}(x) \Leftrightarrow \text{triangular}(x))$
 b. This figure is trilateral.
 c. This figure is triangular.

This suggests that the sense of a predicate is more fine-grained than its intension as well as its extension. Since (15a) is valid in all possible worlds including the real world, not only the extension but also the intension is the same for “trilateral” and “triangular”. Nevertheless, the sense is different, hence the thought expressed by (15b) is distinct from the thought expressed by (15c). Especially significant is the fact that the difference in thought between (15b) and (15c) may not be detected by the Intuitive Criterion for thoughts given in (10) above, because every competent speaker of English is likely to take (15b) and (15c) to be truth-conditionally equivalent. Still, we would be able to say that the thoughts they express are distinct, to the extent that “trilateral” and “triangular” present one and the same concept under different modes of presentation. As against Evans (1982: 18), (10) is not “the single constraint Frege imposed upon his notion of thought”. While there is every reason to accept (10), nothing forces us to accept (11). It is thus by no means mandatory to conclude, following Frege (1918-1919a), that the sense of a predicate like

“horse” or “steed” should be equated with its truth-conditional meaning, be it its extension or intension.

The rejection of (11) enables us, concerning the meaning of predicates as well, to claim that Frege's sense is as fine-grained as Langacker's construal. Langacker would say that the difference between (15b) and (15c) lies in their profile, i.e. the specific focus of attention within their immediate scope (cf. Langacker 2008: 66-67). Since differing mode of profiling can be considered to correspond to Frege's differing mode of presentation, there is no substantial difference in the way the two frameworks handle pairs like (15b-15c). Even within Frege's model, the distinction between “roe” and “caviar”, or that between “snail” and “escargot” could be accommodated in a way compatible with Langacker's (1987, 2008) model.

5.2 Constructions

The hallmark of the cognitive linguistic approach is the way it handles the meaning of various grammatical constructions which are truth-conditionally equivalent. “Expressions can have the same content, and profile the same relationship, but differ in meaning because they make different choices of trajector and landmark (Langacker 2008: 70)”, where the trajector is the primary focus of the profiled relationship, while the landmark is the secondary focus. For instance, the passive combines with a verb to derive a higher-level verb representing a different type, says Langacker (2008: 361), by adjusting the focal prominence of processual participants, conferring trajectory status on what would otherwise be the landmark. In the active in (16a), the stimulus X and the experiencer Y appear as the subject and the object respectively. The passive in (16b) focuses on the experiencer Y instead of the stimulus X (Langacker 2008: 126).

- (16) a. X frightened Y.
b. Y was frightened by X.

A similar contrast can be found in (17) (Langacker 2008: 75-76).

- (17) a. The rock is in front of the tree.
b. The tree is behind the rock.

Even though (17a) and (17b) describe the same situation, they differ in the choice of the trajector and the landmark. In (17a), the trajector is the rock and the landmark is the tree. The alignment is reversed in (17b), resulting in a different construal.

Remarkably, Frege was fully aware of the alternations observed in such pairs as (16) and (17). He says in one place that “[l]anguage has means of presenting now one, now another, part of the thought as the subject; one of the most familiar is the distinction of active and passive forms” (Frege 1892b: 200/1997: 188)³², and in another that “[a] sentence can be transformed by changing the verb from active to passive and making the object the subject at the same time. In the same way the dative may be changed

³² „Die Sprache hat Mittel, bald diesen, bald jenen Teil des Gedankens als Subjekt erscheinen zu lassen. Eins der bekanntesten ist die Unterscheidung der Formen des Aktivs und des Passivs.“ (Frege 1892b: 200)

into the nominative while ‘give’ is replaced by ‘receive’” (Frege 1918-1919a: 64/1956: 296)³³. Largely incompatible with the cognitive linguistic framework, however, is his view that the alternations have no bearing upon the thoughts expressed by the sentences.

[W]e must not fail to recognize that the same sense, the same thought, may be variously expressed; thus the difference does not here concern the sense, but only the apprehension, shading, or colouring of the thought, and is irrelevant to logic.” (Frege 1892b: 196, n7/1997: 184, nG)³⁴

We know that even in speech the same thought can be expressed in different ways, by making now this proper name, now that one, the grammatical subject. No doubt we shall say that these different phrasings are not equivalent. This is true. But we must not forget that language does not simply express thoughts; it also imparts a certain tone [Beleuchtung] or colouring [Färbung] to them. And this can be different even where the thought is the same.” (Frege 1906: 295)

A sentence can be transformed by changing the verb from active to passive and making the object the subject at the same time. In the same way the dative may be changed into the nominative while “give” is replaced by “receive”. Naturally such transformations are not indifferent in every respect; but they do not touch the thought, they do not touch what is true or false. If the inadmissibility of such transformations were generally admitted then all deeper logical investigation would be hindered. It is just as important to neglect distinctions that do not touch the heart of the matter as to make distinctions which concern what is essential.

(Frege 1918-1919a: 64/1956: 296)³⁵

Nowhere does Frege include distinctions in meaning as observed in (16-17) in the thoughts expressed by the sentences; the distinctions bear only on the tone, an aspect of meaning we have seen in Section 3. His view on grammatical constructions is consistent throughout all his works, in contrast with his view on the sense of predicates discussed in 5.1. The parallel between sense and construal finally collapses here.

Is it possible here to offer a remedy in such a way as to make Frege’s view compatible with Langacker’s? The simplest solution that comes to mind would be to integrate (part of) the tone into the thought, following the line we have suggested at the end of 3.4. An obstacle to this solution lies in Frege’s peculiar view that the tone belongs to “what is beautiful in language (das Schöne in der Sprache)” (Frege

³³ „Man kann einen Satz umformen, indem man das Verb aus dem Aktiv ins Passiv umsetzt und zugleich das Akkusativ-Objekt zum Subjekte macht. Ebenso kann man den Dativ in den Nominativ umwandeln und zugleich „geben“ durch „empfangen“ ersetzen.“ (Frege 1918-1919a: 64)

³⁴ „[E]s darf nicht verkannt werden, dass man denselben Sinn, denselben Gedanken verschieden ausdrücken kann, wobei denn also die Verschiedenheit nicht eine solche des Sinnes, sondern nur eine der Auffassung, Beleuchtung, Färbung des Sinnes ist und für die Logik nicht in Betracht kommt.“ (Frege 1892b: 196, n.7)

³⁵ „Man kann einen Satz umformen, indem man das Verb aus dem Aktiv ins Passiv umsetzt und zugleich das Akkusativ-Objekt zum Subjekte macht. Ebenso kann man den Dativ in den Nominativ umwandeln und zugleich „geben“ durch „empfangen“ ersetzen. Gewiss sind solche Umformungen nicht in jeder Hinsicht gleichgültig; aber sie berühren den Gedanken nicht, sie berühren das nicht, was wahr oder falsch ist. Wenn allgemein die Unzulässigkeit solcher Umformungen anerkannt würde, so wäre damit jede tiefere logische Untersuchung verhindert. Es ist ebenso wichtig, Unterscheidungen zu unterlassen, welche den Kern der Sache nicht berühren, wie Unterscheidungen zu machen, welche das Wesentliche betreffen.“ (Frege 1918-1919a: 64)

1918-1919a: 64/1956: 296) or “poetic eloquence (Dichtkunst Beredsamkeit)” (Frege 1892a: 34/1960: 40), as opposed to logic and science. The dichotomy between science/logic and fiction/poetry occurs in various places of Frege’s works. As Evans (1982: 28) rightly points out, fiction is a convenient mat for Frege under which he sweeps cumbersome problems for his theory, such as empty singular terms. For Frege, the tone is just another thing that must be put under the mat. The tone is relevant neither to the reference of a sentence (Dummett 1973: 84), nor to the propositional attitudes toward a sentence, as discussed in Sections 4 and 5.1. This would motivate Frege to sweep the tone under the mat of fiction, as seen from his remark: “Words like ‘alas [leider]’ and ‘thank God [gottlob]’ belong here. Such constituents of sentences are more noticeably prominent in poetry, but are seldom wholly absent from prose.” (Frege 1918-1919a: 63/1956: 295)³⁶ The dichotomy between science/logic and fiction/poetry might be viewed as Frege’s major mistake, because the difference in meaning between “leider” and “gottlob” belongs indisputably to the public aspect of meaning that every competent speaker of German is expected to master. Likewise, every competent speaker of English is expected to recognize the difference in meaning between (17a) and (17b), for instance. Given that it is by no means a matter of poetic eloquence, the difference between (17a) and (17b) should rather be accounted for within the realm of science, namely what Frege calls the third realm, to which thoughts belong³⁷.

Although, as has just been seen, the notion of sense as conceived by Frege is useless for the account of (16-17), it should still be noted that Langacker’s analysis of grammatical constructions is not always more fine-grained than Frege’s. Langacker (1987: 110) observes that the sentences in (18) “embody substantially different images (and hence are semantically distinct) even though they could all be used to describe the same objective situation”³⁸.

- (18) a. The clock is on the table.
 b. The clock is sitting on the table.
 c. The clock is standing on the table.
 d. The clock is lying on the table.
 e. The clock is resting on the table.
 f. The table is supporting the clock.

For Langacker, this is made possible by our ability to construe a conceived situation in alternate ways. (18d), for example, calls attention to the alignment of the clock along the horizontal axis of the table. By contrast, (18e) emphasizes the static character of the locative relationship. Yoshiki Nishimura (University of Tokyo) expresses his sympathy for this line of argument in the interview with Shigeki Noya (University of Tokyo) recorded in Nishimura and Noya (2013: 47-50). Noya is reluctant, however, to acknowledge the advantage of the notion of construal in the account of the distinction between (18a-f),

³⁶ „Wörter wie ‚leider‘, ‚gottlob‘ gehören hierher. Solche Bestandteile des Satzes treten in der Dichtung stärker hervor, fehlen aber auch in der Prosa selten ganz.“ (Frege 1918-1919a: 63)

³⁷ Thoughts are neither material objects nor (subjective) ideas. Accordingly, on Frege’s view, a third realm must be recognized (Frege 1918-1919a: 69/1956: 302).

³⁸ We add (18b) and (18c) to Langacker’s (1987) original list of sentences. (18b) and (18c) are discussed later by Langacker (2008: 87). We find it justified to put the six sentences together to evaluate Langacker’s argument.

adducing evidence that these sentences have different truth-conditions. We can do justice to Noya's position by showing that the reference of "be standing on" is not the same as that of "be lying on", for example. As said in 5.1, the reference of the predicate F is the same as the reference of the predicate G if and only if the extensions of the corresponding concepts or relations coincide. Now, it is obvious that (19) does not hold.

$$(19) \quad \forall x \forall y (\text{be_standing_on}(x, y) \Leftrightarrow \text{be_lying_on}(x, y))$$

Then, the substitution of one for the other may or may not alter the truth-value, namely the reference, of the sentence. This is confirmed by Langacker's (2008: 87) observation given in (20).

(20) The {vase / ?pen / ?football / ?*watermelon / *mat / *peach} is standing on the table.

Langacker observes, for example, that a watermelon can only lie on the table, because it has rounded ends. Put differently, (21a) and (21b) have different references, i.e. truth-values.

- (21) a. The watermelon is standing on the table.
b. The watermelon is lying on the table.

A similar line of argument would establish that the predicates in (18) have different references, which in turn would entail that the sentences in (18) are distinct at the truth-conditional level. Accordingly, the distinction between them could be accommodated even by Frege's pre-sense-and-reference model, which lacks the notion of sense. This may offer an explanation for Noya's refusal to acknowledge the advantage of the notion of construal in the account of the distinction between (18a-f). An analysis based on the sole notion of reference, namely what Noya calls the objectivist framework, can capture the difference in meaning between (18a-f) no less well than Langacker's cognitivist framework.

6. Concluding Remarks

We have shown that, appearances notwithstanding, Frege's and Langacker's frameworks are largely compatible. As regards singular terms like "the morning star" / "the evening star", the compatibility of the two models is indisputable; the sense/construal of a singular term corresponds to a particular way of thinking or viewing its reference.

Frege's position on predicates like "horse" / "steed" is not so straightforward as his own remark might suggest. In several places he explicitly puts the difference between predicates in the realm of the tone, to which the difference in meaning between "and" and "but" belongs. This treatment raises two issues. On the one hand, it leaves differences in meaning like that between "oculist" and "ophthalmologist" unaccounted for, since, as Recanati (2008) notes, these two predicates may be judged to have different senses by what Evans (1982) calls the Intuitive Criterion of Difference for thoughts, a criterion Frege exploits everywhere in his texts. On the other hand, even when this criterion does not yield any definitive result, a case can still be made for the difference in sense between "trilateral" and

“triangular”, for instance. For Frege, senses/thoughts constitute the foundations of logic and science. It is doubtful that the distinction between “trilateral” and “triangular” has no bearing upon these disciplines. Langacker’s framework, by contrast, accommodates the difference with no difficulty, by virtue of the notion of profile, i.e. the specific focus of attention within the immediate scope evoked by these predicates. Our tentative conclusion is that, with regard to predicates as well, Frege’s framework can be so construed as to be no less fine-grained than Langacker’s.

The parallel between sense and construal finally collapses when grammatical constructions appear on the scene. The gist of the cognitive linguistic thesis is that various grammatical constructions embody our manifest ability to conceive and portray the same situation in alternate ways. There is no place in the Fregean system where this thesis can be stated, because differences in meaning between constructions are all relegated to the realm of the tone. The integration of (part of) the tone of an expression into its sense is not easily feasible, in light of Frege’s peculiar view that the tone belongs to “what is beautiful in language” or “poetic eloquence”. On this view, the study on constructional meaning would belong to aesthetics or poetry. But, for cognitive linguistics, it should mostly belong to science.

Perhaps we could offer a remedy for the discord between the two camps by advising the Fregean to give up “Frege’s irritating dichotomy between science and poetry” (Iida 1987: 146, n55). This advice is compelling for linguists all the more because what Frege calls the tone, together with the sense, is generally considered to constitute what linguistics should explore. If the integration of the tone into the sense is feasible, then Frege may count as one of the founders, albeit a marginal one, of cognitive linguistics, in that he explicitly provided, more than one century ago, detailed descriptions of those aspects of meaning that cognitivists are pursuing today.

The subtitle of this paper must be taken literally, however. Frege addresses various other issues on cognitive aspects of language. Particularly relevant is Frege’s (1918-1919a) insight into the meaning of indexical expressions such as “I”, “today”, “yesterday”, etc. (Evans 1982, Perry 1977/1993, Recanati 1993, 2008, among others), which this paper fails to address. Frege (1918-1919a: 64/1956: 296) claims for example that “[i]f someone wants to say the same today as he expressed yesterday using the word “today”, he must replace this word with “yesterday”³⁹. This phenomenon is obviously related to what Langacker (2008: 43) qualifies as “our manifest ability to conceive and portray the same situation in alternate ways”. Frege’s precise impact on cognitive linguistics is yet to be seen.

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³⁹ „Wenn jemand heute dasselbe sagen will, was er gestern das Wort „heute“ gebrauchend ausgedrückt hat, so wird er dieses Wort durch „gestern“ ersetzen.“ (Frege 1918-1919a: 64)

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フレーゲの「意義」概念とラネカーの「捉え方」概念の 両立可能性に関する予備的考察

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キーワード: 意義 意味 思想 真理条件 捉え方 認知言語学

要旨

ゴットロープ・フレーゲが現代意味論・語用論に与えた影響は疑いを容れないが、一般にその影響は形式意味論・語用論に限られると考えられている。この論文の目的は、フレーゲにおける「意義/思想」概念がラネカーの認知文法論における「捉え方」概念とどこまで両立可能であるかを検討することである。見かけの違いにもかかわらず、二つのアプローチはかなりの程度まで両立可能であることが判明する。「明けの明星」「宵の明星」のような単称名辞に関しては、二つのモデルの両立可能性は明らかであり、「意義」と「捉え方」はいずれも指示対象に対する特定の見方に対応している。Horse/steedのような述語に関するフレーゲの立場を確定するのは容易ではないが、述語の「意義」を認知言語学における「捉え方」と同程度にきめの細かい概念として解釈することは可能であるように思われる。両者の決裂が決定的となるのは構文的意味の扱いにおいてである。フレーゲは真理条件の等しい複数の構文の間に意味の違いを認めつつ、そうした意味の違いは「意義」ではなく「陰影」の問題であり、言語の美的側面ないし詩的雄弁に属するものとみなした。このフレーゲの特異な見解を乗り越え、陰影を意義に統合することができれば、フレーゲを認知言語学の(周辺的とはいえ)創始者の一人とみなす道が開ける。根底にある問題意識が異なるとはいえ、一世紀以上も前に、フレーゲは今日の認知言語学者が探求の対象としている言語表現の意味の認知的側面に関して、明示的かつ詳細な記述を提出していたのである。

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