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Notions of Existence in Frege Dolf Rami

In this paper, I aim to present the main components of my non-standard interpretation of Frege's views on existence to the English-speaking public (Rami 2017a, 2018, 2019a,b). First, I will outline the standard interpretation and show how to a great but not full extent the standard interpretation can be justified on the basis of Frege's writings. Second, I show that the main error of the standard interpretation consists in the assimilation of the contents of the ordinary language expressions "exist" ("existiert") and "there is" ("es gibt") according to Frege. Third, I evaluate possible sources for this unfounded assimilation. After that, I outline my alternative interpretation that distinguishes in opposition to other non-standard interpretations between a substantive and a deflationary part of Frege's complete conception of existence in analogy to Frege's analysis of truth and negation. Fifthly, I justify my interpretation by the reconstruction of a so far overlooked *master argument* of Frege against the abovementioned assimilation. In the last section, I introduce and discuss five objections against my interpretation that came to my attention.

Notions of Existence in Frege

Dolf Rami

1. The Standard Interpretation of Frege's Conception of Existence

In most texts about Frege and his view on existence or important views on existence more generally, we find the *standard interpretation* of his view on existence that can be represented in its full explicitness by the following main theses:¹

- (F1) Existence is exclusively a property or concept of concepts of objects, i.e., a second-order concept.
- (F2) The concept of second-order existence applies exclusively to first-order concepts with a non-empty extension; these are concepts such that no object falls under them.
- (F3) The notion of second-order existence is paradigmatically denoted in German by the expression "es gibt" (and "there is" in English).
- (F4) Existential sentences are paradigmatically represented in the *Begriffsschrift* by particular quantifications of the logical form: $|_{T^{\mathfrak{a}}} \Lambda(\mathfrak{a})$
- (F5) Sentences of the form "There are Fs" are only meaningful if a concept-word is used for "F".
- (F6) "existiert" in German ("exist" in English) expresses the same notion of existence as "es gibt" in German ("there is" in English).

In this section, I show how the theses (F1)–(F5) can directly be justified on the basis of quotations from Frege's works. However, (F6) is unfounded, and I will show that there is evidence in the works of Frege that he explicitly rejected (F6).

In my opinion, there are three sources for the incorrect attribution of (F6) to Frege: (a) a common assimilation between the views of Frege and Russell in the anglophone branch of analytic philosophy, (b) Frege's condensed and slightly misleading presentation of his view in 1884a, (c) a lack of knowledge about the content of "Dialogue with Pünjer on Existence", and (d) translations of the works of Frege into English that do not carefully distinguish between "there is", "there exists" and "exists", although Frege carefully distinguished "Es gibt" ("there is") and "existiert" ("exist"). I aim to provide some evidence for these four hypotheses in this paper.

2. The Standard Interpretation of Frege's View of Existence and its Justification

Let's start with the justification of (F1)–(F5) in Frege's works. Probably the most famous statement of the theses (F1) and (F2) in his works can be found in Frege (1884a), paragraphs §53 and §55:

... aber der Satz, daß es kein rechtwinkeliges, geradliniges, gleichseitiges Dreieck gebe, spricht eine Eigenschaft des Begriffes »rechtwinkeliges, geradliniges, gleichseitiges Dreieck« aus; diesem wird die Nullzahl beigelegt. In dieser Beziehung hat die Existenz Ähnlichkeit mit der Zahl. Es ist ja Bejahung der Existenz nichts Anderes als Verneinung der Nullzahl. Weil Existenz Eigenschaft des Begriffes ist, erreicht der ontologische Beweis von der Existenz Gottes sein Ziel nicht. (Frege 1884a, §53)

[...but the proposition that there is no rectangular, rectilinear, equilateral triangle does state a property of the concept "rectangular, rectilinear, equilateral triangle"; it assigns to it the number zero. In this respect existence is analogous to number.

¹Compare Sluga (1980); Williams (1981); Wiggins (1995); Mendelsohn (2005); Priest (2009).

Affirmation of existence is in fact nothing but denial of the number zero. Because existence is a property of concepts the ontological argument for the existence of God does not reach its goal.]²

[E]inem Begriff kommt die Zahl o zu, wenn allgemein, was auch a sei, der Satz gilt, daß a nicht unter diesen Begriff falle. (Frege 1884a, §55).

[The number o is assigned to a concept if, whatever *a* may be, the proposition that *a* does not fall under this term holds universally.]

From the quoted very dense passage of §53, we can *first* extract that sentences of the following two forms have the same truth-evaluable contents according to Frege:

- (1) There are no Fs.
- (2) The number zero is assigned to the concept F.

Furthermore, claim (2) is a more transparent representation of the logical structure of this content for Frege because it reveals that from a logical point of view (1) and (2) are attributions of a property to a concept.

In Frege (1884a), we already find the clear and metaphysically fundamental distinction between *objects* and *concepts*. In this work, we also find the corresponding distinction between first-order (level) and second-order (level) properties; although not as explicitly as in Frege (1891/92, 27), for example. Concepts can only have second-order properties. Given these two distinctions, we can conclude from §53 that "the number zero is assigned to ..." expresses a possible second-order property of a concept.

Surely, (2) sounds rather cryptic taken by itself and in isolation. The expression "the number zero is assigned to ..." is a technical notion that is explained in the second quote from §55. This explanation can be formulated by means of the following equivalent formulations, which are more contemporary:

- (3a) If the number zero is assigned to the concept F, $\forall x \text{ (x does$ *not* $fall under the concept F).}$
- (3b) If the number zero is assigned to the concept F, $\neg \exists x$ (x falls under the concept F).

This allows us to reformulate Frege's initial claim in a more understandable fashion, namely, that sentences of the following two forms have the same content and (2') is the apparently more transparent formulation of this content³:

- (1) There are no Fs.
- (2') Nothing falls under the concept F.

These two claims imply that this characterization is equally true for the following positive counterparts of (1) und (2'):

- (4) There are Fs.
- (5) Something falls under the concept F.

Based on the outlined relations between sentences of the form (4) and (5) and Frege's identification of claims like (4) and (5) with *affirmations of existence* in §53, we can establish the truth of (F1), and implicitly also the truth of (F3). Thesis (F2) is established by this justification and the following bridging principle implicitly endorsed in Frege (1884a, §29, §68):

(6) Something falls under the concept F iff the extension of the concept F is not empty.

Thesis (F₃) is justified by the following explicit quote:

²All English translations are my translations if not otherwise indicated.

 $^{^{3}(2&#}x27;)$ is apparently more transparent because it seems to explicitly *represents* its logical structure and seems to *attribute* a higher-order concept to first-order concepts.

In dem "es gibt" haben wir einen Begriff zweiter Stufe[.] (Frege 1976, 73).⁴

[In "there is" we have a second level concept[.]]

In a similarly straightforward way, we can justify (F4), too, by a quotation like the following:

 $\mid \mathfrak{a} < 0$

[e]s giebt mindestens eine negative Zahl;... Hieraus ist zu sehen, wie die wichtigsten Existenzialsätze auszudrücken sind. (Frege 1891/92, 26)⁵

[There is at least one negative number;...

From this we see how to express the most important existential sentences.]

In this quote, Frege first states a specific mathematical proposition in the *Begriffsschrift*. Second, he gives an ordinary-language paraphrase of the formal representation. Third, he claims that sentences of the mentioned logical form and with the corresponding paraphrase are the most important kinds of existential sentences.

Dialectically one can interpret the status of (F4) as follows: Frege's natural language investigations have detected in sentences of the form "There is an F/are Fs" ("Es gibt ein F/Fs") the philosophically most important attributions of existence. (F4) provides the bridge from natural languages to the *Begriffsschrift*, and it identifies a way to express this notion also in the latter formal language.

The quoted formulation of (F4) raises the question of which other kinds of existential sentences Frege had in mind that have

a different logical form and are less important. I focus on this important question in more detail in due course.

The thesis (F5) is not contained in any of the works of Frege mentioned so far. There are direct and more indirect formulations of this thesis in other writings. The most explicit statement can be found in the following quote:

Es ist nicht nur sprachlich unstatthaft zu sagen "es gibt Afrika" oder "es gibt Karl den Großen"; sondern es ist unsinnig. Wohl können wir sagen "es gibt etwas, was Afrika genannt wird", und die Worte "wird Afrika genannt" bezeichnen einen Begriff. (Frege 1903, 373)⁶

[It is not just linguistically impermissible to say "there is Africa" or "There is Charlemagne"; but it is nonsensical. However, we can say "there is something that is called Africa", and the words "is called Africa" denote a concept.]

From an intuitive point of view, it is more difficult to make this thesis plausible and to understand it correctly. There are important semantic and syntactic differences between "es gibt" in German and "there is" in English. "there is" is ambiguous: it has (a) a locative, and (b) an existential reading, while "es gibt" in German has only an existential reading. But Frege clearly distinguishes in the quote *linguistic* from *logical* aspects of his thesis.

As I have already mentioned, there is no explicit evidence in Frege's works for thesis (F6). Nevertheless, several authors who published on Frege or existence ascribed (F6) explicitly or implicitly to him.⁷ Here is a notable and prominent quote by Kripke:

Frege and Russell gave a fairly uniform and common solution to this problem, which I suppose you all know. They in good part

⁴Similar justifications can be found in Frege (1893, 12) and Frege (1914, 269). There are also relevant passages on this issue in Frege (1880/81, 22–23), (1891/92, 111), and (1895, 453).

⁵See also Frege (1880/81, 22–23), (1891/92, 111), and (1893, 12).

⁶See also: Frege (1892a, 200), (1891/92, 119).

⁷Compare Williams (1981, 53); Currie (1982, 73); Hintikka (1986, 249); Kenny (1995, 76); Wiggins (1995, 94); Beaney (1996, 93-94); Mendelsohn (2005, 100–24); van Inwagen (2008, 37); Priest (2009, 238–39); Künne (2010, 372) and Crane (2013, 33).

arrived at it independently... they held that existence is not a firstlevel but a second-level concept (this is to use Frege's terminology as opposed to Russell's). By this they meant that although we meaningfully use the word "exists" to say of a property or predicate that it is or is not instantiated, as when we say that there are tigers, and that there are no round squares—that tigers exist, but round squares do not—the word "exists" here expresses, so to speak, a property of properties, whether they are instantiated or not: it holds of a property if it is instantiated. This is what Frege calls a "second-level" concept. (Kripke 2013, 6)

This quote does not only provide a clear attribution of (F1) and (F2) to Frege, it also clearly implicitly presupposes (F6). Furthermore, it also confirms one of my hypotheses concerning one of the sources of confusion about (F6). Kripke often identifies the superficially similar views of Frege and Russell in his works. In this quote he does it with respect to views of Frege and Russell on existence. In the next section, I demonstrate that Russell in opposition to Frege endorsed (F6) and I say more about the other sources of confusion with respect to (F6), too.

2.1. Possible sources of the confusion about "es gibt" ["there is"] and "existiert" ["exist"]

First let me show that Russell indeed endorsed (F6). The following two quotes provide an excellent summary of his view on existence from 1905 on:

Take "x is a man", there is at least one value of x for which this is true. That is what one means by saying that "There are men", or that "Men exist". Existence is essentially a property of a propositional function. If you say "There are unicorns", that will mean that "There is an x, such that x is a unicorn". (Russell 1918/1985, 66–67)

We shall denote " ϕx sometimes" by the notation $(\exists x).\phi x$. Here " \exists " stands for "there exists," and the whole symbol may be read "there exists an x such that ϕx ." (Russell and Whitehead 1910, 9, 132).

From these quotes we can distill the following two assumptions of Russell: (i) The ordinary language sentences "There are men", "There exist men", "At least one thing is a man" and "Men exist" are logically equivalent and express a content with the same logical form; (ii) The common logical form of these sentence is " $(\exists x).\phi x$ ", which is a stylistic variation of the more contemporary " $\exists x \phi x$ ". These two assumptions seem to justify that Russell did not only hold (F6), but the slightly stronger thesis that "there are", "there exist", "exist" and "at least one thing" express the very same higher-order notion of existence.

These two quotes also show certain important similarities between Frege and Russell. Firstly, Russell uses the logical form " $\exists x \phi x$ " to analyze general existential sentences. Frege uses the corresponding logical form of his Begriffsschrift for the same purpose. Frege and Russell think that "There are men" in English and its translation to German "Es gibt Menschen/Männer" have structurally the same logical form. However, the significant difference between Frege and Russell is that Frege does not think that "exist" expresses a higher-order property in the same way as "there is". This significant difference between the two authors is justified in detail in the next section. In the light of the simplicity of Russell's view on existence, Russell had bigger direct impact on the history of analytic philosophy, and given there is a significant overlap between the views of Frege and Russell, it is unsurprising that the views of Frege and Russell on existence were conflated by different philosophers, and even by some Frege experts.

The tendency to assimilate the views of Russell and Frege on existence based on the significant similarity of their views may explain why *non*-experts on the philosophy of Frege and Russell have identified their view. However, it does not fully explain why Frege *experts* make this error. There are two other sources that that may better explain this confusion of Frege experts. Firstly, as I have mentioned, some brief and dense passages in different paragraphs of Frege (1884a) contain the most famous and wellknown presentations of Frege's view on existence. Frege himself uses the noun "Existenz" ["existence"] three times in §53 to characterize the second-order notion that is expressed according to him by means of the German expression "Es gibt" ["There is" in English]:

... aber der Satz, daß *es* kein rechtwinkeliges, geradliniges, gleichseitiges Dreieck *gebe*,... In dieser Beziehung hat die *Existenz* Ähnlichkeit mit der Zahl. Es ist ja Bejahung der *Existenz* nichts Anderes als Verneinung der Nullzahl. Weil *Existenz* Eigenschaft des Begriffes ist... (Frege 1884a, §53; my emphasis)

[... but the proposition that *there are* no rectangular equilateral rectilinear triangles... In this respect *existence* is analogous to number. Affirmation of *existence* is in fact nothing but denial of the number zero. Because *existence* is a property of concepts...]

This is a rather misleading presentation of his view because it rapidly shifts the focus from "es gibt ["there is"] and its content to the notion that is expressed by "Existenz" ["existiert"]. We have already seen that is possible to justify (F1) and (F2) mainly by §53. It seems to be straight-forward to derive (F6) from these two assumptions and the following innocent looking assumption, that seems to be implicitly justified by Frege's constant use of the noun "Existenz" ["existenz"]:

(IA1) "exist" expresses the concept of existence.

However, (IA1) is not as innocent as it might look. Frege would have been well advised if he had distinguished "existence*" from "existence" in §53 to indicate that the outlined argument rests on an equivocation. Or even better, he should have used the noun "Esgi(e)btexistenz" ["There-is-existence"] instead of "Existenz" ["existence"] as he clearly did in the following letter to Liebmann from 1900:

Ganz ähnlich wie sich Jena verhält zu [dem Begriff] Universitätsstadt, verhält sich [der Begriff] Quadratwurzel aus 4 zur Esgiebtexistenz. Wir haben hier [im zweiten Fall] eine Beziehung zwischen Begriffen... zwischen einem Begriff erster Stufe zu einem Begriff zweiter Stufe[.] (Frege 1976, 151)

[Quite similarly as Jena relates to [the concept] *university town*, [the concept] *square root of 4* relates to there-is-existence. We here have [in the second case] a relation between concepts... between a first-level concept to a second-level concept[.]]

Hence, if we distinguish *there-is-existence* from *existence* and reformulate (F1) and (F2) on this basis to make it more precise by replacing "existence" with "there-is-existence" and thereby get as result (F1*)-(F3*), we cannot derive (F6) from (F1*), (F2*) and (IA1). This subtle difference is an important mark of Frege's view on existence; as I show in more detail in the next section.

A second related source of confusion are translations of the paragraph §53 that confuse "there is" with "there exist", for example in the translations by Austin and Jacquette:

... but the proposition that *there exists* no rectangular equilateral rectilinear triangle does state a property of the concept "rectangular equilateral rectilinear triangle"; it assigns to it the number nought. (Frege 1953, §53, 64).

... but the proposition that *there exist* no rectangular, rectilinear, equilateral, [sic] triangle predicates a property of the concept "rectangular, rectilinear, equilateral triangle"; it attributes to it the number nought. (Frege 2007, §53, 60).

Unfortunately, "there exists" is not the best translation of "es gibt", especially not in the context of Frege's philosophy. It certainly is a literal translation of the rather unusual German "es existiert". However, Frege does not use "es existiert" in any of his writings.

Based on this only slightly wrong translation, it seems easy to establish the theses (F1)-(F3) relative to our original formulation. And from these theses and the following innocent and trivial looking additional principle

(IA2) If "there exists" expresses the concept of existence, then "exist" also expresses this notion,

we have another independent argument that justifies (F6). However, this argument rests on false or misleading assumptions as we have already seen. In any case, this new possible route to (F6) provides an alternative interpretation, why even Frege experts, especially English-speaking Frege experts, attribute (F6) to Frege.

In the next section, I show that Frege clearly distinguishes between "es gibt" ["there is"] and "existiert" ["exist"] and argue for an interpretation according to which only the former expresses a second-level concept, while the latter expresses a first-level concept. This is based on a careful interpretation of the second part of "Dialogue with Pünjer", which is often overlooked, and if not, incorrectly interpreted.

3. My Alternative Interpretation of Frege's view of Existence

My interpretation of Frege's conception of existence does not only reject (F6), but it replaces (F6) with a bunch of theses that, in my view, contain an original analysis of the expressive function of a first-order concept of existence that applies to every object. Before I (a) formulate the main theses of this view and (b) justify this view in detail, let me present the main idea of this new interpretation of Frege's conception of existence.

According to my interpretation, Frege distinguishes two related but different notions of existence, and thereby combines two classic views on existence into a pluralist view on existence.

The first notion is the notion of there-is-existence that is expressed by the expression "there is" in English and "es gibt" in German. The second notion is the notion of being-existence that is expressed by "exist" ["existiert"] and the (dated) referential use of "is" ["ist"] in English [German].

The first concept is an *explanatory* notion that (a) has a distinctive discriminating purpose and an explanatory function. The second concept is (b) a purely *expressive* notion, without an explanatory or discriminating view. Hence, because of (a) Frege holds a *substantial* view with respect to the first notion and because of (b) a *deflationary* view with respect to the second notion.

The main theses with respect to this substantial notion are (F_1^*) - (F_3^*) , (F_5) , which I now call (F_5^*) and the following modified version of (F_4) :

(F4*) The most important existential sentences are paradigmatically represented in the *Begriffsschrift* by particular quantifications of the logical form: $\lim_{t \to a_{T}} \Lambda(\mathfrak{a})$

The notion of there-is-existence has the important metaphysical and conceptual function to distinguish between properties and concepts that are exemplified by objects.⁸

Instead of (F6) this alternative interpretation of Frege's view consists of the following new additional theses:⁹

- (F6*) Being-existence is a concept of objects, i.e., a first-level concept.
- (F₇*) The (quasi-)concept of being-existence applies to all objects.
- (F8*) This concept of being-existence paradigmatically is expressed by the predicate "exist" ["existiert"] and the full verb or existential use of "is" ["ist"] in English [German].

⁸Frege is one of those philosophers who identify the notion of a property with the notion of a concept. Both notions are objective and mind-independent notions. Compare Frege (1892a, 201–2), (1891/92, 120–22).

⁹I use "E!" as a formal representation of all linguistic variations of "exist" that Frege and Pünjer consider, and "S!" as a formal representation for all linguistic variations of "is" relative to its existential reading.

- (F9*) Singular sentences of the form "a exists" are redundant and self-evident¹⁰ if "a" refers to some object; and meaningless and out of the scope of logic if "a" does not refer.
- (F10*) The usefulness of the expression "exist" ["is" relative to its existential use] consists in the following expressive purpose: it allows us to identify the contents of paradigmatic existential sentences of the form "There are Fs" that express the notion of there-is-existence with the contents of the corresponding sub-class of sentences that have the particular form of judgment like "Some Fs are E!" and "Some E!s are F" ["Some Fs are S!" and "Some S!s are F"]; that contain one of the two mentioned first-level existence predicates.
- (F11*) Ordinary general existential sentences of the form "Fs exist" have slightly different logical forms as philosophically paradigmatic existential sentences of the form "Es gibt Fs", but they express the same logically relevant¹¹ contents (thoughts).

In the remaining part of this section, I aim to justify and clarify these theses in sufficient detail.

The posthumously published work "Dialogue with Pünjer on Existence" consists of two independent but related manuscripts by Frege that were found in the very same envelope by the editors of Frege's written legacy: first, Frege's incomplete transcription of a dialogue between himself and a philosophically interested theologian named "Bernhard Pünjer" who was deeply influenced by Kant, and second, a short written critique of Pünjer's views on existence by Frege, in which Frege also presents his own view on this topic correcting what Frege considered to be misunderstandings by Pünjer. The second text is the longest written existing work by Frege on existence that we know. This work contains all the mentioned additional theses and also relates them to some of the better known theses of Frege on existence expressed by $(F1^*)-(F5^*)$.

Frege starts the review of his debate with Pünjer by laying out of what he thinks is the main matter of dispute between the two of them:

Wir betrachteten die Sätze "Dieser Tisch existiert" und "Es gibt Tische". Es fragte sich, ob in dem Worte "existiert" des ersteren Satzes im Wesentlichen derselbe Inhalt liege wie in dem "es gibt" des zweiten. (Frege 1884b, 68)

[We considered the sentences "This table exists" and "There are tables". The question arose whether the word "exists" in the first sentence has essentially the same content as the word "there are" in the second.]

Pünjer concedes that "There is" ["Es gibt"] and "exist" ["existiert"] are different in some linguistic respects but express the same content. Frege, on the other hand, defends in this review the thesis that these two expressions express two different contents [concepts].

Their dispute with respect to the aforementioned main question centers around the analyses of the following types of sentences that either contain "There is" ["Es gibt"], "exist" ["existiert"] or "is" ["ist"] in its different possible forms and variations:

(7) Leo Sachse exists. ["Leo Sachse existiert."]

(8) A is. ["A ist."]

¹⁰I have translated Frege's expression "überflüssig" as "redundant" and "selbstverständlich" as "self-evident". See Frege (1969, 63).

¹¹Frege is aware that not all aspects of the meaning of expressions or sentences are relevant for the inferential potential of a sentence. In Frege (1879), he distinguished between conceptual, judgeable, and unjudgeable contents of expressions of the *Begriffsschrift*. Two sentences have the same *conceptual content* if the very same inferences can be draw from either of these two sentences together with any other additional assumptions. In the later works, Frege reserved the notion of *sense* and *thought* (on the sentential level) to capture aspects of content that are logically relevant in the specified sense.

- (9) Humans exist. ["Menschen existieren."]
- (10) There are humans. ["Es gibt Menschen."]
- (11) Some humans exist. ["Einige Menschen existieren."]
- (12) Some humans have being. ["Einige Menschen sind."]
- (13) Some things that have being are humans. ["Einiges Seiende ist ein Mensch."]
- (14) Some humans exist. ["Einige Menschen existieren."]
- (15) Some things that exist are humans. ["Einiges Existierende ist ein Mensch."]

Frege's main goal is to show (i) that all corresponding sentences of the form (9)–(15) express the *same* contents [judgeable contents/thoughts] although there are structural and pragmatic differences between these sentences and (ii) that if one accepts this identification with respect to the content of such kinds of sentences, one is committed to the claim that sentences of the form (7) and (8) are either trivially true like "A=A" or are meaningless.

3.1. Frege's master argument against (F6)

Based on these two main theses an argument for the negation of (F6) is unfolded in Frege (1884b). I want to call this argument *Frege's master-argument with respect to existence* and it can be formulated in its explicit form as follows:¹²

- (P1) Meaningful sentences of the form "There are Fs" are classificatory statements, that classify concepts with respect to the empty-ness or non-empty-ness of their extensions.
- (P2) If (P1), then meaningful sentences of the form "There are Fs" are not self-evident.

- (P3) Sentences of the form "There are Fs" have the same logically relevant content as structurally different sentences of the following five forms: (a) "Some Fs are E!", (b) "Some E! are Fs", (c) "Some Fs are S!", (d) "Some S! are Fs", (e) "Fs exist".
- (P4) If (P3), then all meaningful sentences of the form "E!a" or "S!a" are self-evident.
- (P5) If all meaningful sentences of the form "E!a" or "S!a" are self-evident and all meaningful sentences of the form "There are Fs" aren't, then "There is" has a different content (meaning) than "E!" or "S!".
- (C) "There is" has a different content (meaning) than "E!" or "S!".

This master-argument can be extracted from different passages of both parts of "Dialogue with Pünjer on Existence". I now show how it can be extracted and how some of the main theses (F1*)– (F11*) of my interpretation of Frege's conception of existence are used to justify the premises of the master argument or follow from this master argument as consequences.

Let us start with the extraction of the main premises of the argument from the mentioned text.

3.1.1. The justification of the categorical premises

In a first step, I justify the categorical or non-conditional premises of the argument and in a second step, the remaining conditional premises.

The following passage does not only contain a clear statement of (P1), but also probably the first formulation of (F1*) and (F2*) in a Frege text that we know:¹³

¹²I again use "E!" as a formal representation of all linguistic variations of "exist" that Frege and Pünjer consider, and "S!" as formal representation for all linguistic variations of "is" relative to its existential reading.

¹³It is not clear when the two parts of "Dialogue with Pünjer on Existence" were written by Frege and when the dialogue took place. It is certain that it was in or before 1885, because of Pünjer's death in 1885. Its second part is

In den Sätzen "Es gibt Menschen" und "Es gibt keine Centauren" findet auch eine Klassifikation statt. Sie klassifizieren aber nicht das Ding, das in dem einen Falle gar nicht da ist, in dem anderen nicht in eine von zwei Klassen eingereiht wird, sondern Sie klassifizieren die Begriffe "Mensch" und "Centaur", indem Sie den einen in die Klasse von Begriffen bringen, unter die etwas fällt, den anderen von dieser Klasse ausschliessen. (Frege 1969, 61).

[In the sentences "There are men" and "There are no centaurs", a classification also takes place. But you do not classify the thing that in the one case is not there at all, in the other is not placed in one of two classes, but you classify the concepts "man" and "centaur" by placing the one in the class of concepts under which something falls, and excluding the other from this class.]

A large part of the second part of "Dialogue with Pünjer" is concerned with the justification and discussion of (P₃), and Frege takes several steps to justify (P₃) in its full generality.

The first step consists in a reminder of a well-known principle of conversion¹⁴ in traditional logic that says:

(CP) Sentences of the form "Some F are G" are convertible to sentences of the form "Some G are F" and vice versa; and, hence, they have the same logically relevant content.¹⁵

Frege subscribes to this principle and makes his acceptance clear by means of an example, which is certainly inappropriate from a contemporary moral point of view:¹⁶

Wenn hierüber Einverständnis herrscht, so kann man ein partikulär bejahendes Urteil, wie "Einige Menschen sind Neger" umkehren in "Einige Neger sind Menschen". (Frege 1884b, 68)

[If there is agreement on this, then one can reverse a particular affirmative judgement, such as "Some men are Negroes" to "Some Negroes are men".]

This principle is not only valid in traditional logic—defended also by Neo-Kantian logicians in the 19th century –but also in Frege's more contemporary logic. With respect to (P₃) it secures that some of the mentioned claims concerning content-identity come as free lunch.

The next step of Frege's justification of (P₃) already makes use of the conversion principle and aims to establish the following assimilation principle:

written in the style of a direct reply to Pünjer mainly addressed to him, hence, it is very likely that it was written after the real dialogue took place. The Begriffsschrift as a formal language is also mentioned in the text. However, Frege (1884a) is not mentioned in either part of the text, although there are relevant passages in this book. Frege also does not explicitly assimilate sentences of the form "There are Fs" with statements of number like in 1884a. It was recognized in Gabriel and Schlotter (2017, 62-63) that Frege (1884a) conceives of numbers as *independent* entities, but as *dependent* entities in the dialogue. Another important observation is that while Frege (1879) uses the expression "Nebenbedeutung" ["complementary meaning"] to characterize implicatures, he uses the expression "Nebengedanke" ["complementary thought"] and in later writings for this purpose in the second part of "Dialogue with Pünjer on Existence". The first known systematic use of the expression "Gedanke" ["thought"] can be found in "17 Kernsätze zur Logik", which was clearly written before 1890 if one takes into account all views that are expressed in this short work. In addition, there is a letter from 29 August 1882 (to Stumpf or Marty, there are unclarities about the real addressee) in which Frege reports some of the conclusions he also drew in the second part of the text. As Wolfgang Kienzler pointed out to me, it is also demonstrated in Frege (1880/81) that particular and existential judgments (in the sense of there-isexistence) can be formally represented in the same way in Frege's Begriffsschrift. Hence, maybe the dialogue took place before the letter was sent to one of the colleagues in Prague and before Frege (1880/81) was written. Hence, a dating between 1879 and 1881 or even in 1880 is not implausible, but that is only speculation.

¹⁴To name only a few important examples: Aristotle (1984, *Analytica Priora*, I.2; I.5); Kant (1800/1920, §55); Lotze (1874/1989, vol. 1, §81).

¹⁵As we will see in due course, Frege is aware of the pragmatic differences between both forms of sentences.

¹⁶In my opinion, the prefix "If there is agreement on this" is used by Frege only as a rhetorical device to secure Pünjer's consent on this generally accepted logical principle.

(AP) Sentences of the form "Fs exist" have the same logically relevant content as sentences of the form "Some Fs exist" *if* the latter sentence is understood as "Some, possibly all, but at least one man exists".

The endorsement of this principle is expressed by Frege in the following passage:

Sie wollten nun den Ausdruck "Menschen existieren" aufgefasst wissen als gleichbedeutend mit "Einiges Existierende ist Mensch"...Wir können dies nun auch sprachlich zum Ausdruck bringen, indem wir umkehren: "Einige Menschen existieren" in dem Sinne "Einige, vielleicht auch alle, mindestens aber ein Mensch existiert". Dies ist dann also gleichbedeutend mit "Menschen existieren"...

Ich glaube, dass man nur deshalb das "einige" weglässt in dem Satze "Menschen existieren", um dem Einwande zu entgehen: "nicht alle?" (Frege 1884a, 69)

[You now wanted to conceive of the expression "Men exist" as synonymous with "Some existing thing is a man"¹⁷... We can now also express this in purely linguistic terms by converting the latter to: "Some human beings exist" in the sense of "Some, possibly all, but at least one man exists". This is then equivalent to "Men exist"...

I believe that the "some" is only left out of the sentence "human beings exist" to avoid the objection: "not all?"]

Apart from the endorsement of (AP) this passage contains a very interesting observation by Frege. He is clearly aware of a specific pragmatic feature of sentences of the form "Some Fs are G" that were rediscovered by Grice (1975) and systematized in Levinson (1983) and Horn (1984, 1989). Frege observed that sentences of the form "Some Fs are G" express a so-called complementary thought additionally to a logically relevant content. The former

has the content of the explicit sentence "Not all Fs are G". Interestingly, Frege already uses the expression "Nebengedanke" ["complementary thought"] in the second part of the dialogue, as the following morally even more problematic continuation of the previous quote with the morally problematic content shows:

Das Widerstrebende, das hierin zunächst liegt, hat darin seinen Grund, dass man unwillkürlich hinzudenkt: "aber einige Neger sind nicht Menschen". Dieser Nebengedanke wird durch unseren Zusatz "vielleicht auch alle" ausgeschlossen. (Frege 1884a, 68)

[The reluctance that one might at first sight have, has its reason in the fact that one involuntarily thinks: "but some negroes are not men". This complementary thought is excluded by our addition of "possibly all".]

His awareness of this complementary thought and the possibility that such additional pragmatic thoughts can be *canceled* explains why Frege added the mentioned restriction to (AP). Furthermore, he combines this observation with an interesting claim explaining the intuitive expressive difference between "Men exist" and "Some men exist". Contemporary linguistics tells us that so-called bare-plural sentences like "Men exist" can have a so-called existential reading. Truth-conditionally there is no difference between an existential reading of "Fs are G" and "Some Fs are G"; we can assign the contemporary logic form " $\exists x$ (Fx & Gx)" to both, which clearly has a counterpart in Frege's Begriffsschrift. But as contemporary linguistic observations also tell us, "Fs are G" does not create the same scalar implicatures--just as Frege observes. It probably creates the scalar implicature "More than one F is G". In any case, Frege's analysis of sentences of the form "Men exist" along the lines of (AP) does not only seem original and interesting. It has a fair chance to be the linguistically correct analysis, too.¹⁸

Let me now focus on the last and most important step that Frege takes to justify (P₃). This step concerns the question of

¹⁷"Something existing is a man" would have been a more direct translation of this sentence, but the intendent classical particular form of judgment "Some F is G" thereby gets lost.

¹⁸For more on this issue see Rami (2017b, 2018).

whether we should and can assume that "Some Fs are E!" or "Some Fs are S!" have the same logically relevant content as sentences of the form "There are Fs". Here is the last missing part with respect to (P₃):

(PF) Sentences of the form "There are Fs" have the same logically relevant content as the following sentences that have the form of a particular judgement: "Some Fs are E!" and "Some Fs are S!".

Frege is very clear that a positive answer to this question requires a specific interpretation of "E!" and "S!":

Nun kann ich wohl zugeben, dass der Ausdruck "es gibt Menschen" dasselbe bedeute wie "Einiges Existierende ist Mensch", jedoch nur unter der Bedingung, dass das Wort "existieren" eine selbstverständliche Aussage enthalte, also eigentlich keinen Inhalt habe. Dasselbe gilt von den anderen Ausdrücken, die Sie statt "existieren" gebrauchen. (Frege 1884a, 69)

[Now I can well admit that the expression "there are men" means the same as "some existing thing is a man", but only under the condition that the word "exist" contains a self-evident statement, that is, it actually has no content. The same applies to the other expressions you use instead of "exist".]

The question is now which specific conditions must "E!" and "S!" satisfy? One must be cautious in this respect because (a) Frege expresses his position in a very misleading way and (b) indicates two options, but only explicitly uses one of these in his masterargument. Frege explicitly says that "only under the condition that the word 'exist' contains a self-evident statement, that is, it actually has no content", the content-identity holds. The first part is sloppy, a word cannot contain literally a self-evident statement. The second part is misleading because one might think that Frege claims that "E!" and "S!" must be meaning- or contentless for the required purpose. However, before we resolve this puzzle and interpretation problem, let us see in which special sense Frege attributes "self-evident" to sentences or judgments: Selbstverständlich nenne ich eine Aussage, welche dasjenige, von dem sie ausgesagt wird, nicht näher bestimmt. (Frege 1884a, 66)

[I call a statement self-evident, which does not specify the thing of which it is said in a more specific sense.]

This clarification is also rather vague, but Frege used sentences of the form "A=A" as paradigmatic examples of self-evident sentences.¹⁹ Some people might now think that something is selfevident when it has no cognitive value in the sense of Frege's later philosophy. That is, to some extent, true. There is some relation but the lack of cognitive value of sentences like "A=A" is not the main issue for Frege with respect to his use of "selfevident" ("selbstverständlich"). His main point is semantical, not epistemological. Meaningful sentences of the form "A=A" are self-evident for Frege because they are true of every *thing*: everything is identical with itself. Hence, these sentences do not classify things into two groups as opposed to sentences of the form "There are Fs", which, according to Frege, do classify concepts into two groups but not things. Hence, when Frege says that a self-evident statement "does not specify the thing of which it is said in a more specific sense", he thereby means that a selfevident statement does not distinguish the subject of predication from any other subject that falls under the predicated concept. Self-evident predications contain concepts that apply to everything in the domain of the respective concept. That is, in these cases the predicate applies to every object (thing) with respect to first-order concepts, and to every first-order function with respect to every second-order concept etc. For Frege the concept of self-identity is a paradigmatic example of this kind with respect to the domain of objects.

With this clarification in mind, one can now understand how and why Frege aims to conceive "S!" as concept of the mentioned kind like self-identity, too. The reasons are as follows:

¹⁹Compare (Frege 1884b, 69).

So bildet man einen Quasibegriff "Seiendes" ohne Inhalt, da von unendlichem Umfang. Man kann nun so sagen: Menschen = seiende Menschen; "Es gibt Menschen" ist dasselbe wie "Einige Menschen sind" oder "Einiges Seiende ist Mensch". Es liegt also hier der eigentliche Inhalt der Aussage nicht in dem Worte "Seiend", sondern in der Form des partikulären Urteils. Das Wort "Seiend" ist nur eine Verlegenheitsschöpfung der Sprache, um die Form des partikulären Urteils zur Anwendung bringen zu können. (Frege 1884a, 71)

[Hence, a quasi-concept of "being" is formed, which is without content since it has an infinite extension. This makes it now possible to say: men = men that have being; "There are men" is the same as "Some men are" or "Some thing that has being is a man"²⁰. Here, then, the real content of the statement does not lie in the word "being", but in the form of the particular judgment. The word "being" is only a stopgap of language in order to be able to make use of the form of the particular judgement.]

In this passage, Frege calls a concept that applies to everything relative to its domain a *quasi-concept* because, for him, an interesting kind of concept makes some sort of classification and distinguishes two sub-domains with respect to the domain of application; that is, a class of entities to which it applies and a class of entities to which it does not apply. For Frege, noncharacterizing or quasi-concepts are a limiting case. Certainly, concepts that apply to nothing with respect to its domain are a limiting case too. However, they are not relevant for Frege's main problem of finding a justification for (PF).

We can now express Frege's correct observation in more formal terms to make it more precise. At first, this is done in a contemporary logical setting and then in the setting of Frege's *Begriffsschrift*. Before, note that sentences (not only in the quoted passage) of the form "Some Fs are G" are called "sentences of the form of the particular judgement" by Frege as reminiscent of a traditional logical classification of these sentences/judgments. Frege correctly claims that " $\exists xFx$ " (the formalizations for "There are Fs") and " $\exists x(Fx \& S!x)$ " (a common formalization of sentences of the form of the particular judgment) are logically equivalent and, hence, express the same logically relevant content if "S!x" is defined as having the same extension as the domain of discourse. Since conjunction is a commutative logical notion (a symmetric truth-function), this is also true of corresponding sentences of the form " $\exists x(S!x \& Fx)$ ". Similarly, we can express and confirm this equivalence in Frege's logical system as follows: Frege formalizes sentences of the form "There are Fs" in all relevant writings form all periods in the following way:

$\vdash \mathfrak{a}_{\top} \Lambda(\mathfrak{a})$

He also formalizes sentences of the form of the particular judgment from Frege (1879) onwards as follows:

$$\begin{bmatrix} \mathfrak{a} \\ M(\mathfrak{a}) \end{bmatrix}$$

If we now substitute in the first formula " Λ " with "M", interpret "P" and "M" in the second formula as expression with a *judgable content* or *sense* and *reference*, and additionally assume that "P" is a quasi-concept in the specified sentence or substitute " Λ " with "P" and interpret everything the other way round, then it also true in the logical setting of the *Begriffsschrift* that the two formulas are logically equivalent relative to the specified conditions because they have the very same set of possible derivations.

In the following passage, Frege explains this strategy in more detail using his paradigmatic quasi-concept *self-identity* as an example:

Wenn man die Sache [die dargelegte Äquivalenz] ganz allgemein machen will, muss man einen Begriff aufsuchen, der allen Begriffen übergeordnet ist. Ein solcher Begriff, wenn man es so nennen will, kann gar keinen Inhalt mehr haben, indem sein Umfang

²⁰Again, the more literal translation would be "Something that has being is a man", but this sentence does not have the intended form "Some F is G".

grenzenlos wird; denn jeder Inhalt kann nur in einer gewissen Beschränkung des Umfangs bestehen. Als solchen Begriff könnte man den des "Sich selbst gleichen" wählen, indem man sagte "Es gibt Menschen" ist dasselbe wie "Es gibt sich selbst gleiche Menschen" ist dasselbe wie "Einige Menschen sind sich selbst gleich" oder "Einiges sich selbst gleiche ist Mensch". (Frege 1884b, 73)

[If one wants to secure this result [the outlined equivalence] in a quite general way, one must search for a concept that is superordinate to all other concepts. Such a concept, if one wants to call it that, can no longer have any content at all because its extension has no limitation; every content of a proper concept can only consist in a certain delimitation of its extension. As such a concept one might select that of "self-identity", such that one could now say: "There are men" is the same as "There are men that are identical with themselves", and the same as "Some men are identical with themselves" or "Some things that are identical with themselves are men".]

So far, we only have seen that Frege explains his strategy to account for the truth of (PF) literally with respect to "S!", and for the purpose of illustration with respect to "is identical with itself". Does he also extend it to "E!"? He does. In the quote presented immediately after forumlating (PF) he additionally indicates the necessity of this strategy with respect to (PF). Furthermore, he describes this strategy directly with respect to "E!" as follows:

Aber der Satz "Einige Menschen existieren" oder "Einiges Existierende ist Mensch" ist nur dann gleichbedeutend mit "Es gibt Menschen", wenn der Begriff "Existierendes" dem Begriffe "Mensch" übergeordnet ist. Wenn also jene Ausdrucksweisen allgemein gleichbedeutend sein sollen, so muss der Begriff "Existierendes" jedem Begriffe übergeordnet sein. (Frege 1884b, 74)

[But the sentence "Some men exist" or "Some thing that exists is human" is only synonymous with "There are men"/"There are humans" if the concept "exist" is superordinate to the concept "man"/"human". Therefore, if these forms of expression should have the same meaning in general, the concept "exist" must be superordinate to every concept.]

This completes our stepwise reconstruction of Frege's justification of the central premise (P3). Let us now show which central theses of Frege's complete conception of existence are involved in or follow from Frege's justification of (P3). Firstly, as we have seen, Frege explicitly uses (F6*)–(F8*) to justify (PF). He also claims that (PF) can be achieved only if we endorse (F6*)–(F8*). Furthermore, the *central claim* of the deflationary part of Frege's conception (F10*) about the usefulness of "exist" and the existential "is" in natural languages²¹ follows directly from his justification of (PF) and the following claim by Frege, which was already quoted above:

The word "being" ["existence"] is only a stopgap of language in order to be able to make use of the form of the particular judgement. (Frege 1884b, 71)

The justification of (F11*) follows directly from the outlined justification of (PF) and (AP). Hence, apart from (F9*) all main theses of the deflationary part of Frege's pluralist conception of existence are connected to Frege's justification of (P3). We will see in due course with which other premises (F9*) is connected.

3.1.2. The justification of the hypothetical premises

As the final task of this section, let me now demonstrate how (P2), (P4) and (P5) either directly follow from what we have already said or how Frege justifies them directly.

This task is relatively easy and straightforward with respect to (P2). This premise is a direct consequence of (P1) and the

²¹This thesis might be called *Nützlichkeitsthese* ["utility thesis"] (see also Rami 2019a,b, 2018, 70). There are other authors, who also attribute a pluralist conception of existence to Frege. In Rami (2018, Ch. 1) I have compared my reconstruction in detail with more narrowly or more distantly related views defended in Stuhlmann-Laeisz (1975); Haaparanta (1985, 1986a,b, 2012, 2020); Haefliger (1994).

outlined definition of Frege's notion of self-evident statements. That is, if "there is" expresses a second level concept that is not a quasi-concept, then statements of the form "There are Fs" are not self-evident. Since Frege holds (P1), we can conclude (P2).

The situation is similar with respect to (P5). We have already seen that Frege has shown that (P3) can only be true if "exist" and the existential "is" express a quasi-concept. Since Frege accepts (P3) on this basis, it again follows from this observation and the definition of self-evident statements that sentences of the form "A exists" and "A is" are self-evident. This shows that our last remaining thesis of the deflationary part of Frege's conception of existence is a consequence of (P3) and (P4) too. It is also important to notice that (F10*) is not a thesis that Frege conceives of as being attractive by itself, but he seems to be happy to accept it in the light of (P3). For Frege, the truth of (P3) shows that he is right in claiming that the concept of there-is-existence is the most important and substantial conception of existence and the concept of being-existence has only a very limited expressive value.

Our final step is now to clarify the status of (P5). This premise seems to be a conceptual truth, that is justified by the definition of self-evident statements and its intimate relation to the existence of quasi-concepts. Nevertheless, we can provide a clear textual evidence that Frege explicitly endorses (P5):

Wenn aber der Satz "Leo Sachse ist" selbstverständlich ist, so kann in dem "ist" nicht derselbe Inhalt liegen wie in dem "es gibt" des Satzes "Es gibt Menschen", denn dieser sagt nicht etwas Selbstverständliches. (Frege 1884b, 69)

[But if the sentence "Leo Sachse is" is self-evident, then it is impossible that "is" has the same content as "there are" use in the sentence "There are people", for the latter does not say something self-evident.]

Now we have Frege's *master-argument* fully in place and can deduce the negation of (F6). In addition, it is thereby shown that the standard-interpretation of Frege's conception of existence is incorrect. Furthermore, I have also shown that my alternative interpretation of Frege's conception of existence is, to a large extent, intimately connected with Frege's master argument in "Dialogue with Pünjer on Existence".

3.2. The dialectical status of the master argument

The reconstructed master-argument of Frege and its outlined justification is mainly concerned with the logical analysis of ordinary language expressions. It shows, in any case, that Frege was more interested in natural language semantics than Russell who defended his view on existence without considering any expressive differences of ordinary existential forms. People who know Frege as the inventor of the Begriffsschrift-a precise, unambiguous and transparent formal language with the purpose of providing a more suitable tool for the expression of thought than natural languages—might be puzzled about (a) Frege's interest in natural language semantics and (b) his careful distinctions between different ordinary notions of existence in "Dialogue with Pünjer on existence". However, these two things go together very well. In opposition to Russell, Frege was, like Wittgenstein, aware of the fact that we cannot escape natural language completely. That is, even the construction of a precise formal language must make use of the expressive resources of natural language. Furthermore, he also acknowledged that natural language is our natural medium for expressing our thoughts. Hence, if one aims to construct a better suited formal language for this purpose, they must be aware of the pitfalls and ambiguities of natural languages to be able to avoid them. And one must especially be clear which natural language expressions are more reliable expressions of philosophically interesting notions than others. Frege (1884b) carries out such a foundational exercise.

4. Objections and Replies

The reconstruction of the master-argument in "Dialogue with Pünjer on Existence" is a quite recent and a completely new achievement of this paper. Nevertheless, there are objections that are more directly related to the main theses (F1*)–(F11*) of my non-standard reconstruction of Frege's view of existence that came to my attention in the last years. I now discuss some objections that I consider to be important; some of which were brought to my attention by other people and some of which I could think of by playing devil's advocate.

Objection 1: The objection from negative free logic

Negative free logic (NFL) is a modest modification of classical predicate logic. It is based on a single-domain semantics.²² It purports that is possible to combine two apparently incompatible views:

- (V1) Everything exists.
- (V2) Some singular existential sentences of the form "a exists" are true, some false.

This is achieved by a rather peculiar semantics of the existence predicate "E!" that behaves differently in connection with individual variables than with individual constants. A sentence like "E!x" can only receive a truth value relative to an assignment of an object of the domain of discourse to "x". This sentence is true relative to every possible assignment of objects. On the other hand, "E!a" is true relative to an interpretation if an object is assigned to "a" by the interpretation function, and it is false if no object is assigned by this function. However, if this position is a stable und meaningful option, it can be used to undermine (P₃). This modification of classical logic is happy to accept Frege's

logical analysis of sentences of the form "Some E!s are F" or "Fs are E!s" and "There are Fs" and, hence, (P2). It would, however, reject the consequence that such analysis commits one to (F9*). What is Frege's take on this issue?

From a logical point of view, such a conception might seem problematic because it falsifies *the substitution theorem*:²³ The substitution into a quantification, where the quantifier is deleted and all corresponding and remaining free variables are substituted with an individual constant is not truth-preserving. In his main work in logic, Frege (1893; 1903) himself makes use of such a substitution rule to get rid of quantifiers in logical proofs.²⁴ Hence, on Frege's own view, his logical system would be unnecessarily complicated by adopting a free logic.

From a philosophical point of view, Frege famously holds the view that sentences containing proper names that do not refer are only acceptable in domains of language use like fiction or makebelieve to which the rules and laws of logic are not applicable.²⁵ He expresses this view clearly in the dialogue:

Die Regeln der Logik setzen immer voraus, dass die gebrauchten Worte nicht leer sind, dass die Sätze Ausdrücke von Urteilen sind, dass man nicht mit blossen Worten spiele. Sobald "Sachse ist ein Mensch" ein wirkliches Urteil ist, muss das Wort "Sachse" etwas bezeichnen[.] (Frege 1884b, 67)

[The rules of logic always presuppose that the words used are not empty, that the sentences express judgements, that one is not playing a game with mere words. Once "Sachse is a man" is a real judgement, the word "Sachse" must denote something[.]]

Hence, the proposed alternative for which Pünjer has clear sympathies is unacceptable for Frege.²⁶

²⁶Compare: "Sie dürfen aus dem Satze 'Sachse ist ein Mensch' allein nicht schliessen 'Es gibt Menschen', sondern Sie bedürfen dazu noch des Satzes:

²²For more details on *free logics* see Bencivenga (1986); Lehmann (2002); Rami (2014, 2020).

²³See Rautenberg (2010, 71).

²⁴See Frege (1893, §48, rule 9).

²⁵See Frege (1897, 141–42).

However, the more I think about this topic, the more I think that Frege saw that something is deeply wrong with a view on existence that aims to combine (V1) and (V2). Standard versions of NFL implicitly or explicitly endorse the following four theses:²⁷

- (L1) "a exists" has the logical form of an atomic sentence "E!a".
- (L2) "E!a" makes a statement about *a* and, hence, "E!" does not express a metalinguistic property.
- (L₃) The property of existence applies to everything/every thing.
- (L4) Some sentences of the form "E!a" are false.

I guess that Frege's systematic thought behind the quoted claim is the following: (L1) and (L4) are incompatible, because (L1)–(L3) entail that (L4) is false. Hence, at least one of these free assumptions must go in order to make (L4) palatable. But it is unclear which of these theses NFL can sacrifice without losing its *prima facie* plausibility and the simplicity it is praised for. Frege thought that his view is more consistent in this respect; he evidently accepts (L1)–(L3) and endorses (F9*) instead of (L4).²⁸

Objection 2: *The objection from an alternative interpretation of the master argument*

If one carefully reads Frege (1884b), one notices that Frege also gave hints to an alternative explanation of the truth of (P2) that was ultimately defended in Moore (1936, 184–85). In this paper Moore discusses the question of how Russell could apply

his formal analysis of existence to sentences like "Some tigers exist". Moore suggested to Russell that he should treat "exist" in such a sentence as a pure-grammatical expression, a pure form-word without a contribution to the truth-conditions of a sentence. With respect to "Some tigers exist" this would have the consequence that we could assign to "Some tigers exist" the same logical form as to "Tigers exist" namely: " $\exists xTx$ ".

A closely related idea also seems to be suggested in the following quote from Frege (1884b):

"Existieren" ist in diesem Satze als ein blosses Formwort aufzufassen in ähnlicher Weise wie in "es regnet" das "es". Wie die Sprache da in der Verlegenheit um ein grammatisches *Subjekt* das "es" erfand, so hat sie hier in der Verlegenheit um ein grammatisches *Prädikat* das "existieren" erfunden. (Frege 1884b, 69)

["exist" in the sentence "Men exist" is to be understood as a mere form-word in a similar way as the "it" in "it is raining". Just as language invented "it" in the absence of a grammatical *subject*, so here, it invented "exist" in the absence of a grammatical *predicate*.]

If Frege had taken this idea seriously, he would have formulated his master-argument differently. Some people think that according to Frege "E!" and "S!" are predicates without a *content* because they make no semantic contribution to any sentence that contains them. Such people²⁹, who in my eyes misinterpreted Frege's view, may think that Frege held the following two premises instead of (P4) and (P5):

- (P4*) If (P3), then all sentences of the form "E!a" or "S!a" are meaningless because the main predicates "E!" and "S!" do not make a semantic contribution to the semantic contents of these sentences.
- (P5*) If all sentences of the form "E!a" or "S!a" are meaningless because the main predicates "E!" and "S!" do not make

^{&#}x27;Sachse existiert'." [You cannot conclude from the sentence "Sachse is a human being" alone that "there are human beings", but you also have to use the sentence: "Sachse exists" for this purpose.] (Frege 1884b, 67)

²⁷Compare Bencivenga (1986); Lehmann (2002); Rami (2014, 2020).

²⁸There are, in my opinion, two viable options that a defender of negative free logic can choose: reject (L1) or (L3). A metalinguistic approach would lead to a lot of delicate problems. See Rami (2018, 35–36) and Rami (2020).

²⁹Compare: Sluga (1980, 89).

a semantic contribution to the semantic contents of these sentences and a large class of sentences of the form "There are Fs" are not meaningless, then "There is" has a different content (meaning) than "E!" or "S!".

A defender of such an alternative interpretation would consequently reject that Frege held the deflationary part of his view on existence and, hence, all theses from (F6*) to (F11*). I aim to reject this interpretation by showing that the reconstructed claims only briefly appear in the text as an apparent different option and that Frege mainly follows the alternative option that I have reconstructed in detail. Before doing so, I would like to say something about an interesting consequence of this alternative interpretation. If this interpretation is assumed in addition to (F1)–(F5), then Frege would hold that sentences of the form "There is a" ["Es gibt a"], and sentences of the form "a exists" ["a existiert"] are both meaningless, although for completely different reasons. In the first case, a semantic type-mismatch is the reason for the meaninglessness of sentences of this form; in the second case, it is the fact that "exist" ["existiert"] is a pure syntactic form-word, which is only useful in sentences of the form "Some Fs are G".

However, this kind of interpretation rests on the *single* quote just mentioned and finds no textual support from other passages of Frege (1884b). As I have shown in detail, it seems that one can find additional evidence for the form-word-interpretation only based on a misinterpretation of what Frege meant by the claim that "exist" is a predicate without content ["ohne Inhalt"] and by incorrectly equating "x is a predicate without content" with "x does not contribute anything to the semantic content of a sentence that contains x". But on the contrary, the rest of the second part of Frege (1884b) is clearly only concerned with a different strategy that aims to distinguish important differences between "There is" ["Es gibt"]. In the previous section, I have shown in detail, how an alternative version of the master argument can be reconstructed from various *main* passages of the second part of Frege (1884b).

If one is aware of the fact that "x is a predicate without a content" means "x is a predicate with an unrestricted extension", then another important indication against the alternative interpretation of the master argument is provided by the following final passage of the second part of Frege (1884b):

Die durch "es gibt" ausgedrückte Existenz kann nicht Merkmal des Begriffes sein, dessen Eigenschaft sie ist, eben weil sie seine Eigenschaft ist...

Der Inhalt des Wortes "existieren" kann nicht gut zum Merkmal eines Begriffes genommen werden, weil "existieren" keinen Inhalt hat, so wie es in dem Satze "Menschen existieren" gebraucht wird. Man sieht hieraus, wie leicht man durch die Sprache zu falschen Auffassungen verleitet wird, und welchen Wert es daher für die Philosophie haben muss, sich der Herrschaft der Sprache zu entziehen. (Frege 1884b, 74)

[The existence expressed by "there is" cannot be a characteristic mark of a concept whose property it is, just because it is a property of it... The content of the word "exist" cannot well be taken as the characteristic mark of a concept, because "exist" has no content, as it is used in the sentence "Men exist".

One can see from all this how easily one is misled by language into false conceptions, and what value it must therefore have for philosophy to free ourselves from the dominion of language.]

In this quote, Frege discusses the question whether the concepts that are expressed by "There is" and "exist" can be characteristic marks of certain other concepts. With respect to the concept expressed by "There is" Frege answers this question in a negative way in so far as concepts of objects are our concern: A second-level concept can only be the property but not the mark of a first-level concept. With respect to "exist" he denies this question because, relative to its use in sentences like "Men exist", Frege thinks that this expression expresses a concept with a completely unrestricted first-level extension. Concepts with such an extension cannot not well be taken as characteristic marks of *certain* concepts. If "exist" expressed no concept at all according to Frege, it would be futile to discuss this question with respect to "exist" at all.

Nevertheless, one might reasonably raise the question why the quoted passage that contains the form-word interpretation is part of Frege (1884b) at all. In my opinion, there are two possible interpretations of the mentioned quote and two different conceptions of the notion of a form-word.³⁰ Frege in the quoted passage only claims that there is a *similarity* between "it" and "exist" as it is used in sentences like "Men exist". He does not claim that "it" and "exist" are in the same sense *expletive* expressions that have only a syntactic, but no semantic function. I think his claim is weaker. For him, a form-word is an expression that does not contribute in a substantial way to the content of a sentence. In this sense, there could be different kinds of form-words: form-words like "it" in "it rains" that have no semantic content at all and thus only have a syntactic function; and form-words like "exist" that have a redundant semantic content and hence only have a trivial semantic contribution and allow that the form of particular judgment is used in special cases like "Some existing things are humans". With this looser notion of a form-word that is clearly intended with respect to the use of "exist" in connection with the form of the particular judgement "Some Fs are G", the mentioned quote does not pose a puzzle at all and the following main thesis gets the reconstructed content:

The word "being" is only a stopgap of language in order to be able to make use of the form of the particular judgement. (Frege 1884b, 71)

The apparently challenging quote is only formulated in a slightly misleading way, but fits perfectly into the argumentation strategy against Pünjer that is captured by Frege's master argument to a large extent.

Objection 3: *The objection from limited validity*

It is difficult to determine the exact date of the creation of Frege (1884b). However, it was certainly before 1890, and, hence, before Frege's important reconceptualization of the *Begriffsschrift* based on the distinction between sense and reference, especially the distinction between thoughts and truth-values. On this basis, one might raise the following two doubts about my claim that (F1*)–(F11*) represent Frege's conception of existence in an unrestricted and non-relative sense:³¹

- (D1) It might be the case that Frege held the outlined view for a certain period of time before 1890, there is, however, no indication that Frege held this view after 1890.
- (D2) It is likely the case that Frege defended this view only in a private dispute with Pünjer because there is no evidence that Frege intended to publish the second part of Frege (1884b) and that he intended it to be conceived as his view by a greater audience.

In my opinion, these doubts are important and should be taken seriously. However, I aim to show what one can do to take away their apparent strength.

First, it has to be noticed that the theses $(F6^*)-(F11^*)$ are not incompatible with any conceptual changes that Frege made after 1890. It is evident that Frege explicitly held the theses $(F1^*)-(F5^*)$ some time before and all the time after 1890. Frege did not explicitly make (a) the distinction between objects, concepts and functions and (b) the distinction between concepts and functions of different levels (orders) as fully and explicitly as he does after 1890. However, both distinctions are already implicitly present in Frege (1879). Frege's views on the semantics of quantified sentences changed between 1879 and 1891 with respect to certain details, but he claimed from Frege (1879) on that at least certain

³⁰This response was brought to my attention by Fabian Heimann.

³¹See (Rosefeldt 2019, 423-25).

particular quantifications are existential sentences of the there-isvariety.³² The idea of a quasi-concept that applies to everything can also be reconceptualized on the basis of Frege's later conception of concepts as functions into truth-values. Such a concept is a function that maps all objects to the True. Hence, there are no good reasons to assume that Frege might have changed the view that he expressed in Frege (1884b).

Second, I think, there is an explanation why Frege didn't repeat the master-argument or any of the theses (F6*)–(F11*) in any other later work. On the one hand, he was not particularly interested in philosophical debates on the notion of existence and since it was clear for him that "exist" does not express a philosophically interesting concept of existence, he only made use of the substantial notion of there-is-existence in writings after Frege (1884b). On the other hand, he was not involved in any debates about the notion of existence. There were other philosophers like J. F. Herbart, B. Bolzano, E. Reinhold, F. Brentano, J. Bergmann, C. Sigwart and E. Schröder that critically discussed, transformed or rejected Kant's view on existence.

It seems that Frege had only two quite minor goals with respect to existence: (i) He aimed to establish the view that all particular quantifications³³ are existential sentences of the thereis-variety and (b) he aimed to vindicate the true core of (the later) Kant's view on existence and the ontological argument on the basis of the conceptual resources of his new language of thought (*Begriffsschrift*.) A first step towards this goal was the linguistic clarification and distinction of two different notions: the notion of being-existence and there-is-existence. A second step was the implementation and location of the second more important notion in his language of thought. The first step is taken in Frege (1884b), the second step in other writings, especially and quite explicitly from 1881 on. Third, it is not true that there is no evidence that Frege wished to make his views expressed in (1884b) public. Frege explicitly added the manuscripts of the first and second part of (1884b) to those unpublished works that he handed over to his adopted son Alfred in his testament with the clear desire to preserve them for a future public:

Do not despise the pieces I have written. Even if all is not gold, there is gold in them. I believe there are things here which will one day be prized much more highly than they are now. Take care that nothing gets lost. (Frege 1979, XI)

Fourth, it is important to notice that the investigations in the second part of Frege (1884b) are another paradigmatic *aspect* and *example* of Frege's *philosophical methodology* that aims to break the dominion of language over the human mind in philosophy. There are interesting parallels between Frege's conception of existence (according to my interpretation) and other Fregean views on two logico-philosophical notions. A detailed comparison between these three conceptions of Frege would certainly be a suitable topic for another research paper. However, let me briefly outline the main similarities between the mentioned three views to provide at least a first sketch of an additional indirect argument for my distinction between a substantive and a deflationary part of Frege's view on existence.

Apart from his conception of existence there are two other important Fregean philosophical conceptions that have a deflationary and a related substantial part: his conceptions of *truth* and *identity*. Frege defends a deflationary conception of truth with respect to the notion expressed by the ordinary predicate "is true", and a substantial conception with respect to *the True*, which is represented by a truth-value that is the value of specific functions and a referent of the content-expressing constituents of a Begriffsschrift sentence.³⁴ For Frege, "is true" only has expressive functions, namely (a) the function to denominalize expres-

³²Compare: Frege (1879, §11, 23) and Frege (1880/81, 15–16).

³³Compare: Frege's exchange on this issue with Stumpf: Frege (1976, 163–65; 256–57).

³⁴See Frege (1892a, 1897, 1906b, 1915, 1918).

sions of the form "the thought that p" and restore the assertoric potential of plain "p"³⁵ and (b) the function to establish the possibility that sentences that are formulated in the dependent form "that p" can be used in combination with "is true" to formulate assertions with the same content as plain "p".³⁶ However, such a deflationary conception of "is true" is only possible for Frege because every assertion relates the expressed thought to the True, the substantial representation of truth. Here we have a striking analogy with (F10^{*}), *the utility thesis*. A deflationary conception of "exist" is possible for Frege only because he already has the more substantial notion of existence at hand expressed by "there is".

The situation is also interestingly similar with respect to Frege's conception of *negation*. According to Frege, the substantial notion of negation is expressed in the *Begriffsschrift* by the negation-sign ["Verneinungsstrich"]. Relative to the first version of the *Begriffsschrift* it designates a function that maps a *circumstance* ["Umstand"] to a higher-order contradicting *circumstance*;³⁷ relative to the second version it designates a truth-function that maps the True to the False and vice versa. For Frege, a similar notion is also expressed in natural language by the negation particle "not". Frege also distinguishes a deflationary notion of negation from the substantial notion. The deflationary notion is represented by the notion of negation as

an act of denial. He holds the view that one can easily define an act of denial by the affirmation of a negated content. That is, he conceives of an act of affirming p as the act of asserting the thought that p, and he conceives of the corresponding act of denial as the act of asserting the *negation* of the thought that p. Such a deflationary conception of denial reduces the act of denial to the assertation of a negated content. Hence, this conception again presupposes a second substantial and more fundamental conception of sentential or thought-negation. Exactly as in the case of existence and truth, Frege's deflationary conception of negation is piggybacking on the primary substantial conception of negation.³⁸

Hence, in a nutshell, my argument by analogy for the continuous acceptance of (F1*)–(F11*) goes as follows: Frege has an emblematic philosophical methodology that he uses throughout his whole career and which he applies to central philosophical notions. He uses this methodology explicitly in connection with his analysis of the notions of *truth* and *negation* in different writings and different creative periods. He clearly uses it in application to the notion of existence in Frege (1884b), too. Hence, it is plausible to assume that (1884b) contains an important part of Frege's complete conception of existence that exemplifies his emblematic methodology that he used throughout his whole career as a philosopher with respect to central philosophical notions. Since there is no evidence that Frege revised his view on "exist", it seems plausible to treat his analysis of existence methodological on a par with his analysis of other fundamental notions like truth or negation.

Finally, there too are certain subtle indications that the wellknown theses (F1)—(F5) do not exhaustively characterize his complete view of existence after 1890. Let us start our review of these indications by analyzing the following sentence, which was already quoted above:

³⁵For the later Frege "The thought that p" is a nominalization of "that p" that refers to the thought expressed by "that p". For him, the addition of "is true" to such a term has (a) a denominalizing function and (b) restores the initial content *and* force-potential of "p".

³⁶In Frege (1915) it is claimed that "that p" and plain "p" express the very same thought for Frege, but *only* "p" has assertoric potential and can be used with assertoric force. Hence, the syntactic transformation from "p" to "that p" blocks or cancels for Frege the assertive potential of "p". For him that is the main expressive use of "that" in this context. The addition of "is true" restores this assertoric potential again and, hence, this new sentence can be asserted in a similar way as proper "p".

³⁷Hence, for example, "f(a)" is mapped to "The circumstance that f(a) is not a fact".

³⁸See Frege (1879, 1880/81, 1882, 1891/92, 1893, 1906a,b, 1919).

From this we may see how to express *the most important* existential sentences. (Frege 1891/92, 26, my emphasis)

As I discussed above, by using this sentence, Frege claims that sentences of the grammatical form "There are Fs" and sentences of the logical form $|_{|_{\top} \overset{a}{\to} \uparrow} \Lambda(\mathfrak{a})$ are the *most important* expressions of existential sentences or judgments. This claim raises the question: What are the other less important expressions of existential sentences or judgments? In light of Frege's thesis that all particular judgments are existential judgements, one might think that sentences of the form "Some Fs are G" are the other missing expressions of existential judgments. But these expressions have the mentioned logical form, too. Expressions of the form "Some Fs are G" are expressions that have as logical form a specific subclass of sentences of the more general form $|_{\top} \overset{a}{\to} \Lambda(\mathfrak{a})$.

Hence, either Frege meant that particular judgments are the opposite less important versions of existential sentences or he meant that *other* existential sentences that have completely different logical forms than existential sentences of the there-is-variety exist as well.

This interpretation-problem can be resolved by taking another important quote from 1919 into account:

Die Allgemeinheit kann verneint werden. So erhält man, was die Logiker Existential-Urteile und partikuläre Urteile nennen. Die hier gemeinten Existential-Gedanken sind solche, welche im Deutschen mit "es gibt" ausgedrückt werden. Nach dieser Wendung folgt nie unmittelbar ein Eigenname im Singular, auch nie ein Wort mit dem bestimmten Artikel, sondern immer ein Begriffswort (*nomen appellativum*) ohne bestimmten Artikel. In solchen Existential-Sätzen wird etwas von einem Begriffe ausgesagt. Das ist ein Beispiel dafür, dass ein Begriff sich zu einem Begriffe zweiter Stufe ähnlich verhalten kann, wie ein Gegenstand zu einem Begriffe, unter den er fällt. Nahe verwandt mit diesen Existential-Gedanken sind die partikulären Gedanken, ja diese können zu jenen gerechnet werden. (Frege 1919, 274–75) [A general statement can be negated. In this way we arrive at what logicians call existential judgements and particular judgements. The existential thoughts I have in mind here are such that they are expressed by "there is/are" ["es gibt"]. This phrase is never immediately followed by a proper name in the singular, or by a word accompanied by the definite article, but always by a conceptword (*nomen appellativum*) without a definite article. In existential sentences of this kind, we are making a statement about a concept. Here we have an instance of how a concept can be related to a second level concept in a way analogous to that in which an object is related to a concept under which it falls. Closely akin to these existential thoughts are thoughts that are particular: indeed, they may be included among them.]

In this quote, Frege does not only subsume particular judgments and thoughts under the rubric of existential judgements and thoughts of the there-is-variety,³⁹ but he also clearly distinguishes existential judgements and thoughts of the there-isvariety from other possible existential judgements or thoughts. Hence, he implicitly assumes that there are other kinds of existential sentences than those of the there-is-variety. In my opinion, these other possible kinds of existential judgments include judgments like "Leo Sachse exists", which are only discussed and analyzed in Frege (1884b). This shows, in any case, that even in 1919 Frege does not think that the class of existential judgments is exhausted by existential judgments of the there-is-variety and their corresponding logical forms.

Another kind of implicit evidence for my interpretation of Frege's view on existence is contained in a passage, already quoted above:

Ganz ähnlich wie sich Jena verhält zu [dem Begriff] *Universitätsstadt*, verhält sich [der Begriff] *Quadratwurzel aus 4* zur Esgiebtexistenz. Wir haben hier [im zweiten Fall] eine Beziehung zwischen Begriffen... zwischen einem Begriff erster Stufe zu einem Begriff zweiter Stufe[.] (Frege 1976, 151)

³⁹Compare Frege (1976, 165).

[Quite similarly as Jena relates to [the concept] *university town*, [the concept] *square root of 4* relates to there-is-existence. We here have [in the second case] a relation between concepts... between a first-level concept to a second-level concept[.]]

In my opinion, in this letter to Liebmann Frege purposely marks the concept of existence that is expressed in existential judgments of the there-is-variety as the concept of there-is-existence ["Esgiebtexistenz"]. He does this to show that he is aware of the fact that there are other notions of existence, expressed by other expression than "there is" ["es gibt"]. Among those is the most obvious candidate of a concept of existence that is expressed by the predicate "exist" ["existiert"], which Frege only discusses explicitly in Frege (1884b). Hence, this quote provides another indirect evidence that Frege after 1884 thinks that not all existential judgments express the notion of there-is-existence.

If one takes all the mentioned evidence in favor of a conception of existence that distinguishes being-existence from there-is-existence together they make a plausible case for an interpretation of Frege's complete conception of existence that is based on $(F1^*)$ – $(F11^*)$. This conception is only expressed in full detail in certain writings of Frege in 1880s, but these writings seem to contain a view that Frege never rejected nor replaced by a more simple and uniform conception.

Objection 4: The objection from conditional endorsement

There is a quite natural objection that I have heard from several people in personal or written correspondence who believe in the standard interpretation and have no intention to give up a view which already became common wisdom. They hold that Frege does not *really* or *universally* endorse the outlined master-argument or parts of it⁴⁰ but *only* uses it or parts of it for dialectical purposes to argue against Pünjer. Hence, not even

Frege (1884b) contains a Fregean conception of existence that consists of the central theses (F1*)-(F11*). In my opinion, this objection is without any foundation. If one reads the second part of Frege (1884b) carefully and without bias, it becomes clear that Frege not only formulates the master-argument to use it against Pünjer, but to give his own well-justified answer to the systematic main question ["Streifrage"] that Frege formulated at the beginning of the second part of Frege (1884b). If one only takes into account the transcribed part of Frege's real dialogue with Pünjer, one *might* come to the conclusion that the dispute between Frege and Pünjer is mainly concerned with the meaningfulness and coherence of Pünjer's view on existence. But if one also takes Frege's written reply to Pünjer into account that constitutes the second part of Frege (1884b), then it is clear that the dispute between Frege and Pünjer was also a systematic dispute about the correct conception of existence. Hence, the transcribed part of the literal dispute only captures one aspect of the whole dispute.

Objection 5: *The objection from incompleteness*

There is a very interesting quote in Frege (1895). At first sight, it might seem that in this quote Frege himself distinguishes between two different *cases of existence* or *types of existential sentences*, namely singular and general, and only points out some minor differences between the two kinds of sentences:

Zwei gänzlich verschiedene Fälle sind hier wohl auseinanderzuhalten, die leicht vermischt werden, weil man in beiden von *Existenz* spricht. In dem einen handelt es sich darum, ob ein Eigenname etwas bezeichnet, Name für etwas ist, in dem anderen darum, ob ein Begriff Gegenstände unter sich befaßt. Wenn man die Worte >es gibt< gebraucht, hat man nur diesen letzten Fall. Nun hat ein Eigenname, der nichts bezeichnet, keine logische Berechtigung, weil es sich in der Logik um Wahrheit im strengsten Sinn des Wortes handelt, während er in Dichtung und Sage immerhin

⁴⁰Compare Stuhlmann-Laeisz (1975, 126); Green (2015, 297–98).

gebraucht werden mag. Ganz anders bei Begriffen, die keinen Gegenstand unter sich befassen: solche sind ganz berechtigt. (Frege 1895, 454)

[Two completely different cases need to be distinguished here, which are easily mixed up, because there is a certain tendency to speak of *existence* in both cases. In one case the question is whether a proper name designates something or is the name of something; in the other, whether a concept takes objects under itself. If we use the words "there is" we have the latter case. Now a proper name that designates nothing has no logical justification, since in logic we are concerned with truth in the strictest sense of the word; it may on the other hand still be used in fiction and fable. For concepts that do not comprehend anything under them it is quite different; they are entirely legitimate.]

Some authors are tempted to use this passage as a justification for the claim that Frege accepts the thesis that "Leo Sachse exists" (a singular existential sentence) means the same as "The name 'Leo Sachse' designates something".⁴¹ If correct, this observation would imply that even our non-standard interpretation of Frege's view of existence is incomplete.

In my opinion, these authors misunderstand the dialectic purpose of this passage. In it, Frege does not distinguishes two cases that *he* would conceive of as two cases of existence. Rather, he presents two cases that he considers to be completely different, but which *certain people tend* to interpret as two cases of existence. That is, his main aim is to distinguish between two different cases that are often not separated and that are interpreted by certain people as two similar cases or uses of *existence* ["existence", respectively]. In the first sentence of this quote, Frege either leaves it completely open or implicitly excludes himself from the class of people that treat the two kinds of statements that he aims to distinguish in the rest of the quote. One cannot interpret the German constituent clause "weil man in beiden von *Existenz* spricht" as a commitment of Frege to treat the two distinguished sentences as two kinds of *existential* sentences that express a certain notion of *existence*. The use of "man" in the first sentence of this quote clearly does not entail *he*, Frege, endorses the claim expressed by using "weil man..."

The quoted passage is from an essay by Frege about the logic and philosophy of logic of Ernst Schröder. As Frege (1895, 435) correctly observed, Schröder says (apparently) inconsistent things about the semantics of proper names. In the introduction to "*Vorlesungen zur Algebra der Logik*" Schröder claims the following about the semantics of proper names:

Die Namen waren entweder

c) Eigennamen oder Gemeinnamen

—jener ein Individuum unter den Objekten des Denkens, dieser (distributiv) eine Klasse von Individuen bezeichnend—... (Schröder 1890, 78).

[The names were either

c) proper names or common names

—the former denoting an individual among the objects of thought, the latter (distributive) denoting a class of individuals—...]

In the latter part, about the semantics of simple sentences of the form "a is F", where "a" is a proper name and "F" is a common name for Schröder, he makes the following (apparently) incompatible claim:

Und auch ein Individuum mögen wir bezeichnen als eine Klasse, welche eben nur dies Individuum selbst enthält. (Schröder 1890, 148)

[And we may also represent an individual by a class which contains only this individual itself.]

This shows that Frege and Schröder agree on one important thing: proper names designate individual objects. However, they interpret the semantics of proper names in their formal languages differently. Schröder formally represents proper names

⁴¹Compare Miller (2000, 7); Stuhlmann-Laeisz (1975, 127n5). See also on this issue: Green (2015, 300).

by means of singleton classes that contain the referent as element. In Schröder's (1890) system, name-constants designate classes that either contain a single or no element. Frege analyzes proper names as name-constants that designate things. In his system, Frege rejects proper names that lack a semantic referent, while Schröder accepts them. A simple sentence of the form "a is F" is true for Schröder if the union of the (singleton-)class that is designated by "a" and the class denoted by "F" is not empty. For Frege around 1884, on the other hand, a sentence of the form "a is F" is true if the object that is designated by "a" falls under the concept that is designated by "F";⁴² while after 1890 Frege holds the view that a sentence of the form "a is F" is true if the concept that is designated by "F" maps the object that is designated by "a" to the truth-value the True.

Schröder's view allowed him to treat singular and general existential sentences on a par. As we have seen, Frege's view does not have these resources. Schröder proposes two different very interesting formal analyses of existential sentences.⁴³ Here I only present the first one because it is the view that is relevant for understanding the related quote by Frege in full detail. According to this view, *positive singular* existential sentences like "Leo Sachse exists" can be formally represented in Schröder's system as follows, where "a" denotes that singleton that contains Leo Sachse, "o" is the sign for the empty class, " \neq " the relation of non-identity, and "=" the relation of identity between classes:

 $(S_{1+}) a = 0$

In a structurally similar fashion Schröder can represent *positive general* existential sentences like "Horses exist" or "There are horses":

 $(S_{2+}) A = 0$

Given this, it is straightforward how Schröder can account for the negations of these claims in the following way:

(S1-) a ≠ o

(S2-) A ≠ 0

However, Schröder also accepts term-negation that maps a class to its absolute complement, for example, by using the expressions " \overline{A} " and " \overline{a} " for this purpose (Schröder 1890, §16). He faces the same problems as his successor Quine,⁴⁴ by predicating or allowing too many negations for singular existential sentences like:

(SP) $\overline{a} = 0$

Intuitively a sentence like "Leo Sachse exists" does not have such a kind of term-negation and Frege's treatment of simple sentences that can be applied to such cases is able to account for the fact that singular existential sentences only can have a *single* negation represented by the negation-sign in the *Begriffsschrift*.

There is no evidence that Frege was aware of this problem. Frege has principal reservations against Schröder's analysis of existential sentences. Firstly, from a Fregean point of view, Schröder's semantics is non-compositional because it avoids the use of functions in truth-values to account for the semantics of the central predicative expression. Secondly, for Frege the semantic assimilation of proper names and predicates that Schröder proposes undermines the important strict metaphysical distinction between concepts and objects that should also be reflected on the level of logical form of a language of thought, according to Frege.

We need to understand our quote from Frege (1895) against this background. Frege aims to distinguish the following two types of sentences as different in kind:

⁴²Compare Frege (1969, 7, 189–90); Frege (1884a, §70–71).

⁴³Compare Schröder (1890, 240–42) and Schröder (1891, 93, 169). He additionally proposes a third significantly different informal one in Schröder (1890, 151–52).

⁴⁴Compare Quine (1948).

- (K1) There are Fs. ["Es gibt Fs"]
- (K2) The name "n" designates something. ["Der Name 'n' bezeichnet etwas"]

For Frege, only sentences of type (K1) can be considered existential sentences, because, from a logical point of view, the falling of an object under an ordinary first-order concept can only be meaningfully expressed by a "There is"-sentence. These sentences are the paradigmatic examples of existential sentences. Frege explicitly denies that sentences like (K2) are of this kind. And he adds another reason why it is important to distinguish (K2) from (K1): According to him, a proper formal language of thought can only include proper names that designate an object. However, Schröder obviously includes proper names that lack a referent in his formal language. Frege's main reasons for the exclusion, which have been outlined before, are his commitment (a) to a metaphysically fundamental object/concept distinction and (b) the view that a correct formal language of thought has to mirror important metaphysical structures in its syntax. According to Frege, Schröder's analysis violates all these assumptions that are important for Frege. Therefore, Frege rejects Schröder's assimilation of (S1+) to (S2+). For Frege, only (S2+) is acceptable as a type of existential judgments. But Frege rejects (1) as a proper formal semantic analysis of sentences of the form "a exists" because this analysis is (a) not compositional in Frege's eyes and (b) does not reflect in syntax the metaphysical distinction between concepts of different order either.

The strategic thrust of the mentioned quote is to undermine and reject the assimilation of singular and general existential sentences proposed by Schröder. Hence, if one extracts from this passage a Fregean analysis of singular existential sentences along the line of (S1+), this is certainly a misunderstanding of this passage.

Nevertheless, Frege seems to have made an error in the quoted passage. Surprisingly, Frege does not regard "There is" and

"something" on a par as expressions of a second-level concepts that map first-level concepts to the True if at least one object falls under the latter concept. So, maybe he has overlooked that (K2) is only a syntactic variation of the following claim:⁴⁵

(K2*) There are things/is a thing that "n" designates.

Hence, people who are aware of this equivalence might wonder why Frege considers (K1) and (K2) as different *kinds* of statements from a logical point of view. But if one takes into account the discursive context of our last Frege-quote, it becomes clear, that Frege tried to point out a *less superficial logical* difference between claims of the form (K1) and (K2). Relative to a proper formal language of thought, sentences of the form (K1) are contingently true or false, while sentences of the form (K2) are self-evidently true.

One only understands what accounts for this difference if one takes Frege's metaphysics and conception of a correct formal language fully into account.

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⁴⁵Compare Dummett (1973, 219–20).

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