HINTIKKA VS. FREGE ON THE "LOGIC OF BEING"

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0. INTRODUCTION

Hintikka blames Frege and Russell for having established in the tradition of modern logic the "dogma" of the ambiguity of "is" between existence, predication, identity, and class-inclusion. The affirmation of this multiple ambiguity is called by Hintikka the "Frege-Russell thesis".

Hintikka's criticism of the Frege-Russell thesis is (as emphasized by Hintikka himself in Self-Profile 1987a) twofold: theoretical (English does not have and does not need the distinction of meanings of "is") and historiographical (pre-Fregean texts, to be properly understood, do not need the retrospective projection of that distinction).

Frege is the real culprit, rather than Russell. Hintikka views his dispute with Frege as pertaining to "the logic of being" (a phrase apparently coined by him; cf 1979, end of section 10: "Game-theoretical semantics is thus much closer to Aristotle's views on the logic of being than is the received view [Frege's]", emphasis mine, but the theoretical and historiographical opposition to Frege concerning the meaning of "is", is only a part of a more general "revolt against Frege" (Hintikka 1981b) undertaken by Hintikka.

The aim of this paper is to evaluate the success of Hintikka's "revolt" against Frege in the particular issue of the ambiguity of "is". In section (1) I describe the thesis of the ambiguity of "is" attributed to Frege by Hintikka and Haaparanta. In (2) I examine Hintikka's reasons for rejecting the thesis of the ambiguity of "is". Section (3) is devoted to an analysis of the historiographical campaign as presented in the volume The Logic of Being.

From the criticisms I present in each one of the three sections it follows that my final, global evaluation is negative in all of the three aspects under consideration: my conclusion is that Hintikka's "revolt against Frege", in the issue of the "logic of being", has not succeeded.

1. FREGE ON "IS"

* A first discussion of Hintikka's criticism of Frege was presented in, and published in the proceedings of the "Congreso Internacional de Filosofía", Córdoba, Argentina, September 1987. Cf. my En torno a la "lógica del ser" de Hintikka.
1.1. FREGE ON "IS" ACCORDING TO HINTIKKA AND HAAPARANTA

What Hintikka and Haaparanta claim Frege said about 'is' may be summarized as follows: a) 'is' ('are', etc) has four meanings: i) predication (p. 81 TLOB ) or copulative meaning (p. ix of TLOB), ii) identity, iii) existence, iv) class-inclusion or generic (p.ix of TLOB ); b) these meanings are "mutually exclusive"; c) the distinction is of meanings (or senses), not merely of uses (or forces)

There is vast textual support for my formulation of the conjuncts (a) and (c); less for (b).

For Haaparanta's (a) the three publications listed in the bibliography may be consulted: 1985, p. 14; 1986b , p. 269 ; 1986a p. 157; for Haaparanta's (b): 1986b, p. 269 : "several altogether different meanings"; for (c) ibid.

With regard to Hintikka's (a): he has apparently moved from an initial hesitation between a threefold and a fourfold distinction (depending on whether "class-inclusion" is counted or not as one Fregean sense of "is", cf. Hintikka l979, 1984, which is a paper read in 1979) to a full endorsement of (a) : Hintikka 1981, 1983, 1986a,1986b, 1987a, 1987b.

Concerning Hintikka's (b) there is a difficulty: Hintikka in his 1979, p. 442, asserts that "the Fregean readings are mutually exclusive"; the revised reprint, however, does not include this phrase any more. The editors explain (p. xi) that the paper was "reprinted with a number of minor changes". The elimination of the mentioned assertion is certainly not minor.

With regard to Hintikka's (c): cf. 1979b, p. 448 ("undeniable discrepancies between different uses"), 1983, section 3, p. 207 ("this [the existence of different uses of "is", which "no one doubts"] does not imply that we are dealing with a real ambiguity"); 1984 p. 37 ("I am not denying that there are different uses of "is"}). Hintikka uses the term "force" as a variant of "use" and the term "sense" as a variant of "meaning"; for example, in his Aristotle paper in TLOB (p. 82, 96).

1.2 FREGE ON "IS" ACCORDING TO FREGE

1.2.1 SUBORDINATION

Contrary to Hintikka's and Haaparanta's claims, Frege never distinguishes an "is" of subordination as opposed to an "is" taken in another sense. In fact, relative to the type of sentences considered by Frege there was no reason why he should have singled out a subordination sense of "is". I believe that there is in this connection a misunderstanding that needs a careful clarification.

i) The principal feature of traditional, Aristotelian, predication theory as opposed to modern, Fregean predication theory was that the components, marks, of a universal ( its notae) were predicated not only of the individuals falling under the universal but also of the universal itself; for instance, animal was predicated of man. Equivalently, the
universal was subject (of predication) of its own components (man subject of animal)

ii) For our present discussion it is important to observe that the just mentioned predications, in which a universal is subject of one of its own marks, occurred in two forms: i) indefinite categoricals (i.e. categoricals without quantifiers) with the subject in the singular: "homo est animal"; quantified categoricals: "omnis homo est animal". The former were quite frequent in Latin logics, but tended to disappear from logics written in modern European languages, such as German or English, a quantifier or a definite article being prefixed to the universal term (a rare exception is "man" in English).

iii) Frege rejected the principal feature of traditional predication theory; in his terminology, marks of a concept are not predicated of the concepts of which they are marks (opening lines of GRL § 53). Subordination between two concepts should be distinguished from the subsumption of an object under a concept. Thus, for example, according to Frege, homo is not subject (of animal) and animal is not predicate (of homo) either in the indefinite form "homo est animal", or in the quantified form "omnis homo est animal". Homo and animal stand in the subordination relation, whereas Socrates stands to animal, or to homo, in the subsumption relation.

iv) How does this Fregean revolution affect the verb "est"? Here, I believe, it is crucial to distinguish between the indefinite and the quantified categoricals. With regard to the latter, there is no reason, from a Fregean point of view, to say anything about "est"; in "omnis homo est animal" the word "est" expresses the subsumption of whatever x happens to be homo under animal. All we need is to add a second "est" of subsumption, as for instance Raue did in the 17th century: "omne id quod est homo, est animal". With regard to the indefinite form of categoricals the situation is different; the "est" of "homo est animal" cannot be claimed as a subsumption "est"; from a Fregean standpoint one is forced to distinguish the "est" in "homo est animal" from the "est" in "Socrates est animal", and to say that the former means subordination, the latter subsumption or genuine predication.

v) As Frege does not seem to have considered indefinite categoricals from the scholastic literature, but rather the quantified ones in German writings, he did not have to single out a subordination use of "is". Had Frege considered indefinite categoricals he would have probably made the distinction between a subordination "est" and a subsumption "est", just as he observed that Schröder's symbol of Einordnung was ambiguous between membership of an object in a class and inclusion of a class in another class (KSCH p.). Again, had Frege read that, according to Abelard, in the sentence "homo est animal" "animal praedicatur, homo vero subicitur" ("animal is predicate, man is subject", quoted by Jacobi, in Hintikka's TLOB, fn. 100), he would have certainly objected that "homo" is not subject of the predicate "animal" and he would have probably observed that the "est" does not express predication but Unterordnung, subordination.

1.2.2 EXISTENCE

In only one occasion Frege refers to the existential "is". This happens in his Dialog mit
Pünjer. The issue is whether in the sentences "this table exists" and "there are tables" (but note that German does not bring in the verb "to be" at all, as it has "es gibt" rather than "there are") the phrases "exists" and "es gibt" have or not the same content (p. 68). The dialogue could have been carried out without even mentioning "is" or "to be", but at a certain point Frege uses "is" [ist] instead of "exists" [existiert]; instead of saying "Leo Sachse existiert" Frege writes "Leo Sachse ist".

Not only is this the only reference to the existential "is" in Frege's corpus; the reference is, moreover, quite negative. Frege regards such a use of "is" as uninformative, empty and in the end a "deification" of the copula (Vergötterung, wrongly translated into "apotheosis" in the Posthumous Writings, p. 64).

To talk of a "Frege thesis", as Hintikka does, with respect to the existential "is" is clearly disproportioned but it appears to be even more so when one learns that for centuries the existential "is" had been, contrary to Frege's view of it, firmly established and respected in the philosophical literature. The following passage from St. Thomas is particularly attractive:

"considerandum est quod hoc verbum est quandoque in enunciatione praedicatur secundum se; ut cum dicitur, Socrates est: per quod nihil aliud intendimus significare, quam quod Socrates sit in rerum natura. " (In Perihermeneias. 212).

1.2.3 IDENTITY

The only distinction, among those listed by Hintikka, seriously made by Frege is that between the "is" of identity and the "is" of predication. There are many texts on this issue: 1) GRL § 57, 2) BGGE, in KS p. 168-9, 3) letter to Linke, in Briefwechsel, 4) KSCH, in KS p. 200, 5) LUM, Nachlass p 258-9, 6) LUM , Nachlass p. 255-6, 7) UGG, in KS p. 297, 8) WIF, in KS p. 280. Perhaps the most comprehensive account is given by (2):

nichts anderes als” ist nun “ist” wirklich nur noch die Kopula. Was hier ausgesagt wird, ist also nicht die Venus sondern nichts anderes als die Venus.

The following English version is from Translations:

The concept (as I understand the word) is predicative [fn: It is in fact the reference of a grammatical predicate]. On the other hand, a name of an object, a proper name, is quite incapable of being used as a grammatical predicate. [...] Can’t one just as well assert of a thing that it is Alexander the Great, or is the number four, or is the planet Venus, as that it is green or is a mammal? If anybody thinks this, he is not distinguishing the usages of the word "is". In the last two examples it serves as a copula, as a mere verbal sign of predication. (In this sense the German word ist can be replaced by the mere personal suffix: cf. dies Blatt ist grün and dies Blatt gränt.) We are saying that something falls under a concept, and the grammatical predicate stands for this concept. In the first three examples, on the other hand, "is" is used like the "equals" sign in arithmetic, to express an equation. In the sentence "The morning star is Venus" we have two proper names, "morning star" and "Venus", for the same object. In the sentence "the morning star is a planet" we have a proper name, "the morning star" and a concept-word, "planet". So far as language goes, no more has happened than that "Venus" has been replaced by "a planet"; but really the relation has become wholly different. An equation is reversible; an object's falling under a concept is an irreversible relation. In the sentence "the morning star is Venus", "is" is obviously not the mere copula; its content is an essential part of the predicate, so that the word "Venus" does not constitute the whole of the predicate. One might say instead: "the morning star is no other than Venus"; what was previously implicit in the single word "is" is here set forth in four separate words, and in "is no other than" the word "is" now really is the mere copula. What is predicated here is thus not Venus but no other than Venus.

From the just quoted texts, in conjunction with the others, it appears that Frege thought of "is" as having (at least?) two uses [Gebrauchsweisen]. In one of these uses the word "is" is a mere copula, a "mere formal word of the enunciation" (freely rendered by Geach and Black as "mere verbal sign of predication"), has no proper meaning (keinen eigenen Sinn hat, text 3), lacks any particular content (ohne irgendeinen besonderen Inhalt, text 4). In its other use, the word "is" does have a meaning, a Sinn, as text (1) says, which is the meaning of the phrase "the same as" or "identical to".

This is a real (sachlich, text 2, quoted above) distinction, revealed by the fact that in one use (identity) "A is B" converts into "B is A" but not in the other use (text 2, quoted above). The distinction of the two uses is concealed (verhüllt) by ordinary language (text 3). There is of course in Frege the normative approach to logic and language at work: the mere observation that there are two uses in ordinary German is not the end; it is necessary to adjust our notation; thus, for instance, it is an error to read an identity sentence "A = B" as "A is B" (text 8, also 6).

From Frege's texts one might think that it is correct to infer that in the copula use "is" does have a meaning after all, which would appear to be nothing less that Frege's "fundamental logical relation", i.e. the falling of an object under a concept, subsumption, or its converse, predication (text 7 says that the output of one use of "is" is an Identitätssatz, the output of the other use is a Subsumtionssatz.) However, it is obvious this is not what Frege wants. For one thing, it is wrong to think of Subsumtion as it was a third item in addition to the object and the concept (cf. Über Schönflies, p. 193). At any rate, in the copula use "is" performs the rather syntactical function of "making the predicate known", introducing or announcing the predicate (text 3: als Kopula [...] nur das Prädikat als solches kenntlich macht).
In spite of all the differences, the copula "is" is not related to the identity "is" in a way that might be called "mutually exclusive"; rather, the identity use includes the copula use, although not vice versa: in "the morning star is no other than Venus", the copula "is" is part of the predicate "is no other than Venus" (cf. end of quoted text 2).

After establishing that the "is" of subsumption and the "is" of identity are seriously distinguished by Frege, the question arises of Frege's originality in this respect. Strictly speaking, the answer must be negative, in view of the fact that the same distinction was already made by Aquinas (Weidemann, in Hintikka's TLOB p. 183)

1.2.4 ASSERTION

Finally, there is one use, or perhaps better "force" (Kraft) of "is" that Frege singles out quite carefully but is missing in Hintikka's list as well as in Haaparanta's list (1985 p. 14) although she knows quite well of it (ibid., ch. 5.2). This is the assertive "is". The texts are brief and may be quoted in full:


Posthumous Writings (p. 177): We count the copula "is" as belonging to this part of the sentence. But there is usually something combined with it which here must be disregarded: assertoric force.


Posthumous Writings (p. 185): We can express a thought without asserting it. But there is no word or sign in language whose function is simply to assert something. This is why, apparently even in logical works, predicating is confused with judging.

3) Einleitung in die Logik, p. 207: Das "ist" muss hier aber immer ohne behauptende Kraft genommen werden.

Posthumous Writings (p. 191): But the "is" here must be taken throughout as being devoid of assertoric force.

4) Einleitung in die Logik, p. 211: Im Grunde besagt ja auch der Satz "Es ist wahr, dass 2 eine Primzahl ist" nicht mehr als der Satz "2 ist eine Primzahl". Wenn wir im ersten Falle ein Urteil aussprechen, so liegt das nicht in dem Worte "wahr" sondern in der behauptende Kraft, die wir dem Worte "ist" beilegen. Das können wir aber ebenso gut im zweiten Satze tun, und der Schauspieler auf der Bühne z.B. würde den ersten ebenso gut wie den zweiten ohne behauptende Kraft aussprechen können.

Posthumous Writings (p. 194): In fact at bottom the sentence "it is true that 2 is prime" says no more than the sentence "2 is prime". If in the first case we express a judgement, this is not because of the word "true", but because of the assertoric force we give to the word "is". But we can do that equally well in the second sentence, and an actor on the stage, for example, would be able to utter the first sentence without assertoric force just as easily as the second.

Posthumous Writings (p. 198): Dissociating assertoric force from the predicate. We can grasp a thought without recognizing it as true[...]. We need to be able to express a thought without putting it forward as true. In the ideography I use a special sign to convey assertoric force: the judgement stroke. The languages known to me lack such a sign, and assertoric force is closely bound up with the indicative mood of the sentence that forms the main clause.

1) Frege does not talk of a special meaning of "is" but of a special "force" (Kraft).

2) He is not satisfied with the mere observation that in ordinary German there are these diverse forces of "is"; he wants a notation that reflects that difference (texts 2 and 5). The famous vertical stroke in his ideography is precisely intended to express assertion.

3) From a historical point of view, Frege's distinction between assertion (Urteil, Behauptung) and predication is, like other distinctions of his (Begriff, concept in an objective sense vs. concept in a subjective sense; concepts of first and of second level, etc.) novel only relative to the so-called "modern philosophers" (from Descartes onwards), who tended to forget the good old scholastic teachings. In the scholastic tradition the distinction is quite vulgaris. It has survived even through neoscholastics texts (for example, Maritain: the copula "is" has a "double function": "merely copulative" and "properly judicative").

1.3 CONCLUSIONS

Our examination of the Fregean texts concerning the meaning of "is" shows that the Hintikka-Haaparanta report on Frege's "is" is far from accurate.

As for part (a), one of the items attributed to Frege (subordination) is not in Frege, one of the items actually in Frege (assertion) is not in Hintikka's or Haaparanta's list (but if it were it could hardly be counted as Frege's invention). It is quite inadequate to attribute to Frege the existential "is": neither he invented it nor he liked it!. Even the distinction between identity and predication, so emphatically defended by Frege, cannot, strictly speaking, be presented, according to today's scholarship, as a contribution on the same level of originality still enjoyed, for instance, by Frege's new predication theory.

With regard to part (b), I already observed that it is inappropriate to say that the identity "is" and the predication "is" are for Frege "mutually exclusive". To say that they are "altogether different" is acceptable, but only because the phrase is vague.

As for part (c), Hintikka and Haaparanta should have discussed Frege's speaking of uses and forces of "is" rather than of the meanings of "is", in order to determine if it is just an external coincidence with their favored terminology.
2 HINTIKKA'S REJECTION OF THE THESIS ON THE AMBIGUITY OF "IS"

2.1 THE PROBLEM

From a reading of the Hintikka's papers cited in the bibliography, the following seems to be an adequate description of his approach to the semantics of "to be".

Hintikka starts from a recognition of the fact that there are what might be called *semantical discrepancies* among the occurrences of "is". He observes that the "is" of "Jack is a boy" is clearly *predicative*, while the "is" of "Jack is John Jr." is clearly *one of identity* (1987a, p. 36).

The question is next whether these semantical discrepancies can be construed as mere differences of *use*, as just representing different uses (or forces), or have to be seen as differences in *meaning* (sense).

The criterion for distinguishing between use and meaning is the following: a semantic discrepancy is just of use if the context suffices to resolve it, so that a special notation (such as, in the case of "is": ∈, =, etc) is not required. On the contrary, if the context fails to resolve the discrepancy, then a special notation is required and we have a genuine ambiguity, or a difference of meanings.

2.2 HINTIKKA'S THESIS

Hintikka's thesis is that the variety of directions in which "is" seems to perform does not involve an ambiguity of meanings; the meaning, he claims, is only one: "the allegedly different senses of 'is' [such as predicative, identity] simply cannot be distinguished from each other" (1987a, p. 37).

Thus, for example, Hintikka affirms that the "is" of "Jack is a boy" and the "is" of "Jack is John Jr." are "identical in meaning" (1979, p. 440), "synonyms" (1979, p. 442), "synonymous" (1984, p. 36).

The synonymity or uniqueness of meaning of "is" is presented by Hintikka as a consequence of a feature of his game-theoretical semantics or dialogues ("it follows", 1979, p. 440; "therefore" ibid., end of section 8 in the original version, beginning of section 9 in the revised reprint; "in virtue of", 1984, p. 36; "hence", 1987a, p. 36-7). The feature in question is that in Hintikka's dialogues all the occurrences of "is" are left untouched by the (presumably truth-preserving) rules which gradually lead from compounds to components. Thus, for instance, "Jack is John Jr." is obtained from "Jack is a boy" by a substitution -of "John Jr." for "a boy"- that leaves *untouched the word "is"*. This is found i) in 1979 (end of section 8, beginning of section 9 in the revised reprint), where the "is" of "Jack is John Jr." is viewed as a "descendant" of the "is" in "Jack is a boy"; ii) 1987a, where Hintikka points out that the two "is" are "one and the same word, in fact part of the [expression] which remains constant [emphasis mine] in the transition" from "Jack is a boy" to "Jack is John Jr.".
Of course this "proof" makes the thesis of the uniqueness of meaning of "is" valid only for the dialogical games. In fact, Hintikka emphasizes that his claims on "is" are relative to his chosen game-theoretical semantics: "In a Fregean semantics, "is" is manifoldly ambiguous; in game-theoretical semantics no such ambiguity exists" (1984, p. 38). Still, he also entertains the notion that his thesis on the uniqueness of meaning of "is" holds absolutely for English überhaupt:

First and foremost, there does not seem to be a single English sentence which in fact has several readings because of the alleged ambiguity of "is"[...]. Hence on any theory, however many senses of "is" it may postulate, the differences between different uses of "is" can always be explained by reference to the context. After all, it is the context that always suffices (if my claim is right) to resolve the alleged ambiguity. (1979, section 16)

There is in Hintikka's theory not only the meaning of "is" but even the basic meaning of "is":

Even though in the basic meaning of esti we cannot tell the allegedly different Fregean senses apart, contextual factors may on occasion have the effect of almost separating from each other the different Frege-Russell forces and nearly eliminating all but one of them (1986a, end of section 3, p. 98, emphasis mine)

Similar phrases occur in the same paper: "the basic semantical force of esti" (p. 86), "the basic semantical meaning of esti" (p. 87).

2.3 CRITICISM

a) Let us begin with the basic meaning of "is". Two inter-related questions arise here.

First, what is the denotation of such sophisticated descriptions as "the basic meaning of is", "the basic semantical force of esti"?. The reader expects from Hintikka the logician a clear account of that x such that x is a meaning of "is", x is basic, and x is the only entity fulfilling such conditions. But there seems to be not even a hint at an answer. We are told that "the basic semantical meaning of esti is neutral with respect to the different Fregean senses" (p. 87), which is a merely negative explanation.

Secondly, there is the question of what is the relationship of the basic meaning to the various uses or Fregean senses: is it like from indeterminate to determinate (horse to this or that horse), in which case we would not expect the basic meaning to occur as such ever, or is the basic meaning of the sort that there are occurrences of 'is' which convey the basic meaning and nothing but the basic meaning? No answer to these questions is found in the pertinent Hintikka's writings I have consulted.

For the consideration of these questions it might be relevant to point out that in the volume TLOB we find several phrases that remind us of the old analogia entis: "focal meaning" (1986a, p. 108), "analogous term" (1986b, p. xiii), and even "analogue focal meaning theory of 'is'" (1986b, p. xiv). Elsewhere Hintikka writes: "Aristotle distinguishes between outright ambiguity (homonymy) of a word and its being used in
many ways (pollakhos legetai)” (1987b, comments on the paper listed as 1973b). But I fail to see any specific way of understanding Hintikka's views on "is" in terms of the Aristotelian-scholastic analogy of being.

b) Let us remove "basic" from the phrase "the basic meaning of is," and just consider the description "the meaning of is". What is that unique entity performing the role of denotatum of the description "the meaning of is"? This question remains unresolved. It is not predication, it is not identity, what is then? Hintikka does not answer.

c) As we saw, Hintikka bases his claim that relative to his dialogues "is" has just one meaning on the fact that the dialogical development leaves "is" untouched. This is however only part of the truth. The "is" may remain untouched "inside" the dialogue, but it must be carefully watched at a metadialogical level in order to secure both a correct construction and the appropriate final determination of the truth-value of the atomic sentences.

First, one of the dialogical rules, called (G.an), takes from sentences of the form "...is a...", where "a" is understood as an existential quantifier, to a set of sentences one of which is again of the same form "...is a...". Hintikka stops the regress by stipulating that the rule (G.an) does not apply to sentences of the form "...is a..." when the latter express predication (1977, section 4; 1979, section 6).

Secondly, once the dialogues reach atomic sentences the issue of the truth-value of the latter naturally arises. In this connection Hintikka points out that an atomic sentence "b is Y" that expresses predication is to be evaluated according to whether it attributes or not to b the property or complex of properties expressed by Y (1979, section 6). Presumably, if Y was a singular term, the evaluation would have to follow different instructions, such as: is the object designated by "Y" the same as the object designated by "b"?

d) Hintikka's answer to the just stated objection would probably be that neither inside the dialogues nor in the metadialogical reflection a special notation for the various uses of "is" has to be ever introduced: the context always will tell. As noted earlier, Hintikka thinks of this claim as holding for ordinary language in general, not just for a fragment of it. Here the obvious objection is that such a claim has not been established by Hintikka. Relative to the ordinary, un-regimented, language, the claim may even fail to be proof-definite (i.e. one does not even know what a proof of it would be like). Relative to an already regimented language a la Frege, with sharp delimitation of singular terms and predicates, the claim may fare better but then a new objection emerges: the acceptance of regimentation in some areas and the refusal to clarify the use of "is" by means of a special notation do not constitute a coherent behavior.

2.4 CONCLUSIONS. TWO APPROACHES TO LANGUAGE

My conclusion is that Hintikka does not really oppose to the ambiguity of "is" but only to its recognition through some special notation in written or oral language. It is quite irrelevant whether we use the term "ambiguity" or any other phrase that Hintikka might
prefer: semantic varieties, variety of uses, forces, etc. The fact is that there is a plurality of ways of understanding "is" and that this plurality is fully recognized by Hintikka except when it comes to expressing it in writing (or orally). Here he says "no", and he trusts that he can say "no" by proving eventually that it is not necessary to reflect the semantic plurality in the form of a differentiated notation. Frege, on the contrary, is always anxious to express relevant semantical discrepancies by special symbols.

Imagine Hintikka and Frege reading the first thesis of Wittgenstein's *Tractatus*: "Die Welt ist alles, was der Fall ist". Frege points out that the first "ist" is of identity, while the second is predicative (copula, cf. his last letter to Wittgenstein, p. 26). We may suppose that Hintikka agrees with this distinction, but he would certainly disagree at the moment Frege demanded a re-writing of the thesis, as "Die Welt = alles, was der Fall ist" or as "Die Welt ist dasselbe wie alles, was der Fall ist" (the latter formulation is based on Frege's own recommendation).

It is certainly awkward, or even inconsistent, to acknowledge mental differences but to prohibit their symbolic, written representation. What can be the reason why Hintikka refuses to express in language the differences that he acknowledges in "is"? I can only imagine, as explanation, that language is viewed as a piece of nature that should not be disturbed; English has "is" and it is wrong to tamper with it. This linguistic naturalism (or "environmentalism") is of course preposterous, since language is not a piece of nature, but a piece of culture (the phrase "natural language" is as preposterous as, say, "natural aircraft carrier"). While pieces of nature should be respected, tools of culture should be improved, as Frege insisted throughout his life with regard to language.

If one adopts a normative approach to language, and one is interested in enhancing the clarity and precision of the linguistic tools, one will recommend, with Frege, the use of a special symbol, say "=", instead of "is" in sentences such as "Venus is the morning star" and one will find that the "confusion of the copula with existence and with equality" is "grotesque" (Weyl, §8). If, on the contrary, one follows the trend of linguistic naturalism, one will disapprove the introduction of that special notation, or of any special notation for that matter, without realizing, however, that the given ordinary language is itself a product of many special notations (normatively or carelessly) introduced in past centuries.

It is interesting to observe that in such a comprehensive volume as TLOB there seems to be just one single hint at the normative approach to language. This occurs in Jacobi's essay on Abelard. According to Jacobi, Abelard points out that "there is always an existential import" in esse, even when it is used as a copula, but Abelard says this with regret: "it would be ideal if the copula had absolutely no semantic content". Here we have the normative insight. In fact, as Jacobi further explains, Abelard thought that the role of the science of argumentative discourse was "to reflect on and explain language and yet not to shy away from correcting it and bringing to it a greater precision" (p. 156).

3 THE HISTORIOGRAPHICAL ATTACK
This section is devoted to the analysis of the volume "The Logic of Being" (TLOB), edited by Hintikka and Knuuttila. (The list of essays included in TLOB is given in the bibliography). I will consider first the two papers written by Hintikka himself. Secondly, I will discuss the other authors.

3.1 HINTIKKA'S PLAN

Hintikka's intention in editing TLOB may be described as follows. The lack of a distinction of meanings of "is" in English or in the pre-Fregean tradition is not to be regarded as a defect (as a "logical howler", TLOB p.x) but as a feature to be praised since it reflects a better semantics of natural language (TLOB p. 82). Scholars interested in revealing the good things of ancient philosophers should no longer feel obligated to show that classical authors paved the way for the "Frege-Russell thesis" - such a precursorship would be, in Hintikka's judgement, a "non-honor" (TLOB p. 257).

3.1.1 HINTIKKA ON ARISTOTLE

Of course, by holding to linguistic descriptivism one may have the illusion of vindicating fragments of the history of philosophy that normative thinkers like Frege had led us to view as wrong or at any rate to seriously question. In fact, this actually happens as a by-product of Hintikka's "revolt against Frege". I will give two examples found in Hintikka's paper on Aristotle (1986a). i) Hintikka distinguishes, for the interpretation of Aristotle (p. 83), a "transitive" from an "intransitive predication", restarting the pre-Fregean theory of predication (cf. in my Studies, 5.42, the fascinating Cajetan's phrase praedicari de praedicato contingit dupliciter, in one way with transitivity, in another way without it). ii) In Metaphysica Z, 6, Aristotle affirms the identity of each thing with its essence. This is typically irritating for anyone demanding, à la Frege, a sharp distinction between individuals and universals, between singular terms and concept-words. Hintikka's attitude, on the contrary, towards the famous Aristotelian chapter is sympathetic; after all, "is" can express a bit of identity as well as a bit of predication; we can read "Socrates is man", like any other essential predication, as being "in a sense" an identity (p. 95).

In reading Hintikka's comments on Aristotle's "is" a dreadful suspicion arises in the mind of a Fregean reader: perhaps the question of what is the meaning of Hintikka's definite descriptions "the meaning of is" or "the basic meaning of is" has a simple answer: it is a bit of everything. But this would be unacceptable; while one might accept Hintikka's notion that each context brings out one use of "is", it cannot be accepted, from a minimally normative point of view, that each context brings out a bit of more than one use of "is".

From Hintikka's paper 1986a: The varieties of being in Aristotle, we learn that (unsurprisingly) "Aristotle does not recognize the Frege-Russell ambiguity of 'is' "(such is the title of section 1), that however "the nonambiguity of esti does not preclude purely existential uses" (title of section 2), or "purely identificatory" uses (section 3, last
paragraph). I have not seen Hintikka's references to a "purely predicative use", but a predicative use (pure or not) is certainly available in Aristotle.

Thus, we have in Aristotle three of the meanings of "is". That they are uses rather than meanings merely indicates, in Hintikka's approach, that there is no need of introducing special notations for each one of them. The context will always tell.

The situation is however complicated by Hintikka's claim that sometimes more than one use (or meaning) is at work:

In general, it is not possible to understand the questions Aristotle is asking in such works as Met Z 6 without appreciating the simultaneous presence of several Frege meanings in esti in his discussion (end of section 1, emphasis mine).

It is of course conceivable to have such a "simultaneous presence of several Frege meanings" to the extent that they are not inconsistent. For instance, Frege would agree that in "Socrates is man" the "is" may express simultaneously subsumption of an object under a concept (predication) and our assertion, judgement that recognizes the sentence as true. As to whether "is" can express predications and identity at once, this is also possible, for instance when we have an identity: "Austin is the capital of Texas": there is always a predication associated with it. Thus, there is a number of legitimate senses for a "simultaneous presence of several Frege meanings". It is not clear to me, however, that this applies to the sort of simultaneous presence required to make sense of Met Z,6, especially in Hintikka's interpretation.

I believe that the major shortcoming in Hintikka's study of Aristotle in connection with "is" lies in his overlooking the problem that is in my view the central issue when Aristotle and Frege must be compared: the theory of predication, in the particular sense that Aristotle does not distinguish, as demanded by Frege, subsumption and subordination. The clash between the two giants occurs, for instance, when *Analytica Priora* B 27 and *Grundlagen der Arithmetik* § 53 are brought together.

Hintikka does not address the real problem, namely that for Aristotle a mark of a concept is predicated of the concept (animal of man) whereas this is forbidden for Frege. Hintikka does not highlight the contrast between Frege and Aristotle as I just did, but in terms of the English translations "Socrates is a man", "a man is an animal"; here the fact that disturbs Frege (animal, which is a mark of man, predicated of man) is not shown. When Hintikka writes:

it is clear that there is no Frege-Russell type difference in meaning for Aristotle between the different occurrences of is in "Socrates is a man" and "a man is an animal" (p. 84, towards end of section 1),

Frege could very well disagree; as pointed out above, he might well say that the "is" of "a man is an animal" is a predicative "is", just like the "is" of "Socrates is a man" and all we need to add is a second predicative "is" associated with "man": for every x, if x is man, then x is animal.
One of the fallacies discussed by Aristotle in *Soph El* is: "you know Coriscus, Coriscus is the man who is approaching, hence you know the man who is approaching [whereas in fact you do not know the man who is approaching]". Aristotle's reply is "It does not necessarily follow that all the same attributes belong to all the predicates of a thing and to that of which they are predicated" (*Soph El 00*). For those who have been corrupted by Frege, the analysis consists in translating the second premiss into "Coriscus = the man who is approaching" and then reading the just quoted text as a restriction on Leibniz's law. But for Hintikka:

drawing the predication vs. identity distinction is not what Aristotle is doing here. What he actually does is draw a distinction between transitive and nontransitive predication. (p 83, section 1)

and in fact Hintikka easily reads the Aristotelian above quoted statement as a restriction on the transitivity of predication. This is an amazing example of repetition of history. Cajetan: *praedicari de praedicato contingit dupliciter* (one is transitive, the other is not).

### 3.1.2 HINTIKKA ON KANT

With regard to Hintikka's essay on Kant, it is convenient to quote in full the following portion of Hintikka's paper on Kant (p. 257-8):

But doesn't Kant deserve at least the honor of anticipating the Frege distinction? I am not sure that such precursorship necessarily qualifies as an honor. I have shown that the Frege-Russell distinction is not indispensable. There are correct alternative ways of dealing with the semantics of "is", ways which may even be preferable to the Frege method for the purpose of understanding natural language and arguments conducted in natural language, including the arguments conducted by virtually all pre-Fregean philosophers. But even apart from this devaluation of Frege, Kant does not rate the non-honor of paving the way for Frege. It is amply evident from Kant's own words that he does not think of our words for being as exhibiting the Frege-Russell ambiguity. Seeing this is nevertheless made somewhat more difficult by the fact that Kant does not speak of just existence (Dasein, Existenz), being (Sein), and "is" (ist), but also of "position" (setzen). What is this "positing", anyway? Kant's pre-critical essay on proofs of God's existence shows unmistakably that it is merely another expression for being (Sein), and that it is unambiguous (einfach):


In the Critique of Pure Reason (A 598 = B 626), Kant says that "'being' is obviously [sic] not a real predicate... . It is merely the positing of a thing, or of certain determinations, as existing in themselves".

The reason why Kant introduces the term "setzen" is probably a desire [sic?] to have a term which sits more happily with the cases in which "is" apparently has a merely predicative function. "God is omnipotent" c according to Kant be true even if there were no God. It merely expresses a necessary relation between the subject and the predicate. "God is omnipotent" does not logically imply for Kant that "God is", even though the step might seem tempting. In order to avoid this temptation, it see Kant uses his terminus quasi technicus "setzen" for positing something as being - in any sense of being.

The explanation Kant gives of the difference between "God is omnipotent" and "God is" nevertheless shows that we are dealing with the same "is" in both cases. In both cases, we are "positing" something. The only difference is that in the former case the positing is relative but in the latter case absolute. Otherwise, it is the same old positing.
[In] the proposition, 'God is omnipotent', ... the small word 'is' adds no new predicate but only serves to posit the predicate in its relation [Kant's italics] to the subject.

Here positing clearly means predication. But Kant continues:

If now, we take the subject (God) with all its predicates...and say 'God is', or 'There is a God', we attach no new predicate to the concept of God, but only posit the subject in itself with all its predicates...

Here positing clearly means to assume existence. The relation of existence to predication is thus merely that of an absolute positing to a relative one. This observation is confirmed by further passages [...] Thus Kant clearly thinks of the "is" of predication (the copula) and the "is" of existence as two uses of the same notion. Occasionally he even seems to consider the copulative "is" [...] as a variant of the "is" of identity. He thinks of a necessary judgment like "God is omnipotent" as expressing the identity of a God and an omnipotent God. "The omnipotence cannot be rejected if we posit a deity ..., for the two concepts are identical" (A 595 = B 623). Hence meaning differences between the first three elements of the Frege ambiguity are rejected by Kant.

As for the fourth alleged sense of "is" apud Frege and Russell, Kant's assimilation of it to other senses (especially to the "is" of predication) is seen from his failure (or refusal) to distinguish the subsumption of one concept to another from the application of a concept to a particular (in other words, this particular's falling under the concept).

Remarks.

1) Hintikka's treatment of the "fourth alleged sense" is quite unnecessary; it would be a great discovery to find, before Frege, that anyone clearly stated the distinction between subsumption and subordination.

2) Hintikka's treatment of the identity meaning of "is" is just too hasty insofar as all the quoted text may mean is that the two concepts are equiextensional, but also unnecessary, since the view of affirmative statements (predications) being based upon an underlying identity is a commonplace in the philosophical tradition. The latter however does not entail that identity and predication are not distinguished; the role of identity is one of truthmaker.

3) The gravest objection to Hintikka's analysis has to do with the existence-predication distinction. The distinction offered by Kant and accepted by Hintikka is between 1) the positing of a relation between a mark of a thing (Ding, Sache) and the thing, and 2) the positing of the whole set of marks, i.e. of the thing. The "posing" common to the two cases amounts to very little; in the first case it simply means that there is some relation (normally subordination) between two concepts; in the second case the positing means nothing less than existence. An atheist may accept the first positing but not the second.

3.2 THE OTHER CONTRIBUTORS TO "THE LOGIC OF BEING".

In TLOB Hintikka has organized a powerful team of scholars in order to carry out this historiographical revolt; as one can read in the cover of the volume, the purpose of TLOB is to mount a "frontal attack at the hegemony of the Frege-Russell thesis on the historical level". (The same historiographical revisionism is expressed in Hintikka's Self-profile,
section vii.) Let us examine how each of Hintikka's soldiers actually performs his duties in the battle for the logic of being in the history of philosophy. The papers included in TLOB will not be discussed in all their aspects, but only qua relevant to the Hintikkian enterprise (Alalan's paper is not relevant, pace the editors' remarks in the introduction). Of course Hintikka's own two papers in TLOB are not part of this group: they were already discussed. Haaparanta?

3.2.1 KAHN

From the just defined, restricted point of view I wish to make two main observations concerning Kahn's essay, followed by some concluding remarks.

1) Kahn distinguishes seven ways of understanding the Greek esti: copula, veridical, existential (of which there are three types), possessive, potential (the two latter: esti + dative, esti + infinitive are not discussed in TLOB). My phrase "ways of understanding" is not Kahn's; I chose it on purpose in order to avoid the words "use", "sense" or "meaning" for, as we know, Hintikka accepts a distinction of uses but rejects a distinction of senses or meanings. Kahn's view on this matter is revealed by the following passages of his paper:

1) "Whether this diversity ["the union of the predicative, locative, existential and veridical functions in a single verb"] is properly regarded as a case of ambiguity of meaning is a question on which I do not propose to take a stand" (p. 4).

2) "There has recently been a noticeable trend away from the Mill-Russell view that "is" has different senses, which the Greek philosophers should have distinguished. See e.g., Benson Mates' suggestion that Plato's different uses of "is" can all be understood on the basis of a single, univocal use of the copula [Kahn refers to Mates' paper in TLOB]. And compare Jaakko Hintikka's paper in this volume. In my opinion, the question whether "is" has different meanings or only different uses cannot be answered without confronting certain very deep problems in the theory of meaning, which is ultimately part of the theory of knowledge... epistemology and metaphysics must be called in..." (footnote 10, appended to the above quoted text 1).

3) "Despite my general reluctance to decide when a different use becomes a different sense, I am inclined to speak here of a veridical meaning or connotation of einai, in cases where the Greek verb cannot adequately translated by the copula or by an idiomatic use of is alone... and there are cases of the veridical connotation..." (p. 9).

While texts (1) and (2) are evasive, (3) is straightforward: Kahn is inclined to speak of a distinction of meanings, or senses, rather than of mere uses. It is crucial to observe that this is written by Kahn in full awareness of Hintikka's terminology and views, as shown by Kahn's footnote 10 (our text (2)). The term "connotation" in text (3) is clearly introduced by Kahn as an equivalent of "meaning"; towards the end of (3) the phrase "veridical connotation" may be replaced by "veridical meaning": using "connotation" instead of "meaning" may have appeared to Kahn as less antagonizing with respect to the editor's views.

2) Kahn distinguishes two aspects in the copula function of "to be": 1) a merely syntactical, sentence-forming purpose, 2) a semantical side, which consists in the fact that "is" expresses an assertion. Thus, on the face of it, the semantics of Kahn's copula is just
assertion, hence we must conclude that for Kahn the unasserted copulas (a very frequent situation, as emphasized by scholastic manuals and by Frege) have no meaning, they just have syntax (here Kahn joins the stubborn tradition according to which the copula 'is' has "no content", is "mere form", or as Abelard misleadingly put it: "copulat tantum"). The purpose of such a meaning-less syntax remains obscure. Kahn's account of the copula use of "is" lacks a semantics of the unasserted sentence. A hint at the missing semantics of the copula is contained in Kahn's reference to the "truth-conditions" of a sentence (p. 6 just before fn 14) and especially in footnote 14, where Quine's description of predication is quoted. The copula, or predicative "is" expresses subsumption, the falling of an object under a property, etc. regardless of our asserting it or not.

To sum up, Kahn i) distinguishes seven ways of understanding the Greek "to be", carefully avoids taking a stand in the issue of "uses" vs. "meanings" but definitely speaks of the "veridical meaning". ii) Curiously, Kahn's veridical meaning is the same as the assertive meaning emphatically distinguished by Frege but overlooked by Hintikka and Haaparanta in their inventory of Fregean meanings of "is". iii) The subsumption meaning of the esti copula, if recognized by Kahn, as it should be, would create an additional, number eight way of understanding (use?, meaning?) the ancient Greek esti.

Briefly, Kahn's paper, if anything, helps Frege, not Hintikka's historiographical program. The editors of TLOB, nevertheless, believe just the opposite, as shown by their astonishing claim in the Introduction (p. ix): "Kahn has argued that Frege and Russell's thesis that verbs for being, such as 'esti', are multiply ambiguous is ill suited for the purpose of appreciating the actual conceptual assumptions of Greek thinkers."

3.2.2 MATES

In opposition to some Plato scholars, Mates asserts that there is no "conclusive evidence" (conclusion of his section 3) that there are any such senses of "is" as identity, predication, pauline predication (class-inclusion), either in Greek (esti) or in English (Mates refers both to Greek and English; cf. for example the first page or so of his section 3). Moreover, Mates claims that it is "possible to maintain that Plato uses the verb "to be" in a single sense throughout - a single sense in terms of which some of the other senses that have been proposed can be defined." (p. 42).

In Mates theory, there is a primitive "is" (note "primitive" four times: p. 36, second paragraph, 5; p. 43, line 5; footnote 36). Indeed, there is only one primitive "is", so that we may talk of the primitive is (p. 43 fn 36 second occurrence). There seems to be just one axiom for the primitive "is": "A is A" is true for all A. The various senses of "is": (1) identity, 2) class-inclusion, subordination, or Pauline predication, and 3) ordinary predication), are defined as follows: A = B iff A is B and B is A; A is (Pauline) B iff anything that is A is also B (plus a restrictive clause that we may ignore here); A is (a) B ("ordinary predication") iff A is B but not- B is A and not A is (Pauline) B (p. 42).

I cannot help seeing in Mates' theory of the primitive "is" one more example of the perverse influence of the modern misconception of the axiomatic method. There is
nothing, semantically, to Mates' primitive "is". If the latter seems to have a content it is just because of the familiar connotations of the word: as soon as the primitive "is" is replaced by a really unknown symbol, say *, the real situation emerges, and one realizes that there are no truth-conditions at all for the primitive "is". How does Mates know that, for instance, "Socrates is a man", with the primitive "is", is true (p. 43 top)? He should replace "is" by "*": "Socrates * man", and then the impossibility of answering the question would be clear.

Still, Mates might argue - as friends of the axiomatic method frequently do - that it is not the logician's task to discuss the content but to outline a form; it is Plato who should provide the content for "*". My reply would be that, once ordinary predication, identity, and Pauline predication are ruled out, there is hardly anything left for Plato to fill the empty primitive "*" with.

Mates relies heavily on the context and the background information; it seems to me that the context may help to determine some partially given information but if there is nothing at all at the beginning, as in the case of "*", the contextual help will not be able to get the procedure even started, unless there is the tacit assumption that "*" must mean one of a set of possible things. In fact, at a certain point Mates writes: "If Plato's usage is more or less along these lines, then we can expect that for him, whenever 'A is B' [A*B] is asserted, then 'A is the same as B' or 'A is (Pauline) B' or 'A is (a) B' could also be asserted."(p. 42). This however turns "*" into a mere abbreviation, time-space saving procedure, as in a history of Greek philosophy we used just "Aristpla" instead of the two singular terms "Aristotle" and "Plato", leaving to the context the determination of which of the two must be filled in. Actually, the abbreviation view would amount to fully restoring the multiplicity of meanings (senses, uses) of "is".

To sum up, Mates' contribution, contrary to Kahn's, coincides with the intentions of the editors of TLOB, but fails to help. The editors' comments on the significance of Mates' essay (p.x) miss the issue.

3.2.3 DANCY

Let us consider the following passage from Dancy's essay:

To get at this, first consider another distinction that some have alleged to be pertinent to English and Greek being: that between identity and predication. There is certainly a distinction here: it is between claims like (16) Dr. Jekyll is Mr. Hyde, on the one hand, and claims like (17) Dr. Jekyll is schizoid or (18) Dr. Jekyll is an addict on the other. (16) states an identity; (17) and (18), I think, do not, and I shall characterize both as predications.

Philosophers are, notoriously, myopic, and when they apply their magnifying glasses to sentences that do different things, they usually can only manage to bring into focus a single word. Here the word is 'is'. They profess to spot the 'is' of identity in (16) and the 'is' of predication in (17), and then fall to arguing over the character of the 'is' in (18).
I shall call this habit of supposing that every difference in character from one sentence to the next must be locatable in single ambiguous words the "fallacy of the magnifying glass'. We do not need to pull the word 'is' out of those sentences and go into Angst over the meaning of being. The situation is completely described that 'is' is followed in (16) by a singular definite noun phrase, in (17) by an adjective, and in (18) by an indefinite noun phrase. Sentences that show the structure of (16) state identities; the others are predications. But this has nothing to do with the occurrence of 'is' in different colors: it is what comes next what counts.

Aristotle does not commit the fallacy of the magnifying glass in connection with 'einai', identity and predication. But [...] he thinks that the fact that 'man' and 'pale' relate differently to Socrates makes for a different 'is' in (3) Socrates is a man from the one in (2) Socrates is pale [the former an 'is' per se, the second an 'is' per accidens]. (P. 63-4).

Dancy 1) rejects the distinction between the predication and identity meanings of "is" in general, 2) denies its acceptance on the part of Aristotle, 3) regrets however that Aristotle introduces the distinction between accidental "is" and essential "is".

With regard to the existential meaning of "is" Dancy's view is that "S is" is just elliptical for "S is P" (p.59); "S is" is not a sentence but only half a sentence, a "truncated" predication. It is false to refer to it as an "existential sentence", to talk of its "truth conditions" (p. 57), to describe it as an "existential claim", or to replace its "is" by "exists" (p. 66). Dancy discusses, relative to Plato and Aristotle, the two rules "S is P ⇒ S is " and "S is not P ⇒ S is not", and affirms that,

"at the very least, the 'is' in the antecedent must be the same 'is' as in [the] consequent. In particular, there can be no shift from an alleged predicative sense of 'is' to an alleged existential sense of 'is'. Since...there are no such senses of 'is', this is not a problem" (p. 53).

If now we ask Dancy what is the meaning, if any, of "is", the answer appears to be the following:

So we are left with 'simple sentences': subject-predicate sentences. These frequently employ 'is'. But this word is, after all, quite meaningless: it is merely a syntactic device for connecting subjects and predicates where the predicates are not already verb phrases (p.63).

After outlining Dancy's relevant claims, we have to evaluate now his contribution to the historiographical campaign. 1) The reader learns from a Greek philosophy scholar that there is no reason - either in the ancient philosophical Greek sources or in current English - to search for a special meaning of "is" when the latter appears to express existence, for the simple reason that such cases do not really exist: "S is" is just a "truncated" full sentence "S is P". That is, Dancy tells us that there is not a special existential meaning to be distinguished from the others because the phrase "S is" does not really occur. 2) But then there is a further, even more lethal reason that should discourage the friends of the "Frege-Russell thesis" both from projecting it on the old Greek texts and from applying it to English: the little word "is" has no meaning at all. No stronger argument can be imagined against the claims that "is" is ambiguous: "is" is meaningless. Meaningless sounds cannot be ambiguous.
To sum up, Dancy's contribution is too helpful to be really helpful to the editors' program.

3.2.4 EBBESEN, JACOBI, WEIDEMANN, KNUUTTILA

Ebbesen writes: "The distinction between the predicative and the existential 'is' has met with general disapproval, at least from the time of Robert Kilwardby (c. 1240). He flatly denies 'is' is equivocal" (p. 124). Also: "With others, senses of 'is' and modes of being tend to proliferate" (p. 131); "they claim that 'is' is an analogical term" p. 131.

We confirm from Ebbesen's paper that the highlighting of the existential meaning or use of 'is' was not Frege's achievement - who, as said, hardly referred to this issue once, and quite negatively; rather it had been for centuries a disputed question, with people in favor and people against. In other words, Ebbesen's essay really undermines the editors' program rather than helping to carry it out.

According to Jacobi in Abelard and among his contemporaries we find an intense concern with the distinction between the copulative and the existential functions of the verb 'to be'. Interestingly, Jacobi observes that for Abelard the two functions in fact do not occur purely, but they should (this may be the only hint at a normative approach to logic and language in the whole TLoB volume):

In speaking of 'esse' Abelard points out that "there is always an existential import in its linkage" and "it allows us to determine that another thing exists", even when it is used as a copula. But he says this with regret. It would be ideal if the copula had absolutely no semantic content.(p. 156).

We see that the awareness of the existential function of "is" is not a Fregean matter but a traditional issue, related to the de secundo adiacente propositions. I wrote "function" of "is" to avoid the words meaning, sense or use. Jacobi does not take a stand in the issue of meaning vs. use. He uses mostly "use" rather than "meaning" but it is not clear that he means the technical opposition; for example on p. 164 that terminology becomes important because he is describing multiple uses, equivocation etc.

The essays in this book [TLoB] investigate whether the word 'to be' is indeed ambiguous, as is assumed in most modern discussions of logic. The first discussion sketched from Abelard's writings teaches that caution is required at the outset, in the formulation of the question itself. If asked whether the word 'to be' always conveys the same thing or whether it conveys different things according to context and use, Abelard would surely have been unable to favor either alternative. For this formulation of the question assumes that 'est' has a significative function wherever it is employed, an assumption which Abelard does not share" (p. 148)

Jacobi wants to be cautious in his joining the historiographical campaign of the editors. Moreover, he brilliantly observes what I believe applies to Dancy insofar as the latter insists on the purely "syntactic", "meaningless" nature of the copula.

Weidemann, after showing more than anyone else that Aquinas has all the Fregean distinctions (except class inclusion) and more, asks: "Does Aquinas, when distinguishing
between different uses of the verb "be", ever imply that this verb is genuinely ambiguous?" (p. 186). The answer is predictably negative for anyone who is acquainted with the basics of Thomism: being is analogous.

Unfortunately, Weidemann brings into consideration the famous passage from S. Th. I 13 12 (p. 187-8) to show that predication and identity are assimilated. The second text has to do with the foundations, the truthmaker of a predication, which is something that Frege does not focus on. The first text is the Fregean one: clarity of language.

The famous analogy of being (in the Thomist-Scotist debate) is Knuuttila's topic. As far as I can see, the relevance of Knuuttila's paper to the TLoB main purpose is the observation that Aquinas being is analogous.

It seems that it is part of the project to believe that the analogy of being is a weapon against the Frege- Russell thesis; obviously it has to do with part (b) of it. I believe this does not affect in the least Frege.

3.3 GENERAL EVALUATION OF THE HISTORIOGRAPHICAL CAMPAIGN

1) The papers included in TLOB, aside from Hintikka's and Happaranta's, do not serve in general the purpose of the editors; on the contrary, they rather undermine or oppose to Hintikka's historiographical program.

2) The central comparative issue for anyone attempting to do history of logic and Frege is the subordination-subsumption distinction. This distinction would have probably led Frege to the formulation of a distinction between a subordination "is" and a subsumption (predication, copula) "is", had he been confronted with indefinite categoricals (homo est animal).

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St. Thomas Aquinas: **In Perihermeneias**, ed Marietti