

TWO PROBLEMS CONCERNING FREGE'S DISTINCTION BETWEEN CONCEPTS AND OBJECTS(*)

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Introduction

In this paper, I want to concentrate on two problems that are connected with Frege's distinction between objects and concepts.

First, I want to discuss a problem about the *motivation* of Frege's doctrine of incomplete referents. This motivation is a philosophical puzzle, which we can roughly sketch as follows. A sentence is more than a list of names. Therefore not every word of a sentence can stand for an object.

It is generally assumed that Frege's distinction between concepts and objects is an answer to this puzzle. In the first part of this paper, I want to investigate whether this puzzle really is a puzzle about reference. If this is not so, then it is more difficult to see why incomplete referents have to be invoked.

The second problem that will be discussed concerns Frege's criteria for deciding whether a given expression, occurring in some sentence, stands for an object or a concept. Frege uses two distinct criteria for this purpose. On one hand, he formulates a *logical criterion*. This criterion says that the logical subject of a sentence stands for a concept. The second criterion is based on *linguistic distinctions* between expressions standing for objects and expressions standing for concepts. In the second part of this paper, I will investigate whether these two criteria are compatible with each other, and whether they are adequate to their purpose.

In these difficult matters, we cannot expect Frege to hold his ground all on his own. At places where Frege's position seems hopeless, I will call upon Dummett's interpretation to help Frege out. I do not want to blur the issues by entering into discussions about fundamental problems in philoso-

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phy of language, such as the question about realism and anti-realism, for instance. Hence, for the sake of argument, I will at times assume much of Dummett's verificationism.

It is a well-known weakness of Frege's doctrine of incomplete referents that for fundamental reasons it can only be explained in *metaphorical terms*. It has been pointed out by several authors that as a consequence of this, Frege's doctrine ultimately remains unintelligible.⁽¹⁾ Although their arguments are convincing, it makes no sense to repeat them here again. Therefore throughout this paper I will *pretend* to understand Frege's explication of incomplete referents.

As a preliminary remark, I wish to say that *functional expressions* and their referents (if they have any) will not be discussed. Nevertheless, from what is said in this paper about predicative expressions, one can often in a straightforward manner draw parallel conclusions about functional expressions.

1. *A sentence is more than a list of names*

1.1. *A first characterization of the puzzle*

An important philosophical puzzle lies at the basis of Frege's distinction between concepts and objects. Dummett, who is well aware of this, formulates the problem in the following way.

Suppose that in a sentence every word stands for an object. This, Dummett says, would lead to something like the philosophical theories according to which predicative expressions stand for universals (Dummett 1980: 174). But the difficulty is, that if this were true, then we could only form *lists of names* of objects (Dummett 1980: 174). Such a list could never constitute a sentence. For in a sentence we are *saying* something (Dummett 1980: 214). A list merely *mentions* objects, Whereas in a sentence the objects that are mentioned are related (Dummett 1980: 214).

By means of his strict distinction between objects and concepts, Frege manages to escape this problem altogether (Dummett 1980: 175). It should

⁽¹⁾ For a detailed analysis of the role played by metaphors in Frege's explanation of the distinction between objects and concepts the reader is referred to Max Black's article "Frege on Functions". Even though my paper is not directly concerned with this problem, I could not refrain from making a few remarks about it at the end of the last section.

not be forgotten, however, that Frege's doctrine of complete and incomplete referents has problems of its own.

1.2. *A problem about meaning or about reference?*

Apart from the problems connected with Frege's doctrine of objects and concepts, we may say that Dummett's characterization of the puzzle that motivated Frege for advancing his theory is very vague. For one thing, it is not clear that the puzzle really is a puzzle about reference.

Someone might be inclined to paraphrase the puzzle in the following way. A sentence is not a list because a sentence expresses a thought, whereas a list does not.⁽²⁾ This accounts for the fact that a list cannot be used to make an assertion. For only thoughts can be asserted.

An important observation should be made here. The thought that a sentence expresses is its sense (Frege 1918: 36). Therefore from the fact that a list does not express a thought, we can at most draw conclusions about the *senses* of the parts out of which a sentence is composed. In other words, is not our puzzle a puzzle about meaning instead of reference?⁽³⁾

There seems to be some textual evidence that Frege himself believed that this doctrine of complete and incomplete entities relates in the first place to the meaning of expressions. Howard Jackson reports that in a paper from 1891-1892, Frege writes: "Die Wörter 'ungesättigt' und 'prädikativ' scheinen besser auf dem Sinn als die Bedeutung zu passen; aber es muss dem (sic) doch auch etwas bei der bedeutung entsprechen" (Jackson 1968: 377-378).⁽⁴⁾

But one might ask whether there is something for which predicative expressions stand. This is not obviously so. Intuitively it is not clear that the expressions 'eats', say, stands for anything at all.

⁽²⁾ This explanation of the difference between lists and sentences seems to be behind the following passage of "On Concept and Object": "For not all the parts of a thought can be complete; ... otherwise they would not hold together" (Frege 1892:54).

⁽³⁾ The idea that the motivation lies in a problem about reference, rather than in a problem about meaning was suggested to me by Anthony Anderson.

⁽⁴⁾ This passage can best be translated as follows: "The words 'predicative' and 'unsaturated' seem to apply better to the sense than to the denotation. But should not something correspond to this in the denotation [of expressions]?"

1.3. *Trying to make sense of the problem about reference*

Dummett realizes that it is counterintuitive to ascribe reference to predicative expressions. For this reason, he suggests that we should distinguish between two concepts of reference (Dummett 1980: 210).

On one hand, we can conceive of the reference of an expression as what bears that expression as its name (Dummett 1980: 210). On the other hand, there is the conception of the reference as the *semantic role* of that expression, i.e. the contribution that it makes to the meaning of the sentence in which it occurs (Dummett 1980: 191).

If we concentrate on the name/bearer-conception of reference, Frege's incomplete referents do not appear to have any reference whatsoever (Dummett 1980: 199), although we will later see that Dummett's position on this matter is more subtle than this. On the conception of reference as semantic role, however, it seems wholly unproblematic to ascribe reference to predicative expressions (Dummett 1980: 211).

Suppose for a moment that we agree with this distinction between two notions of reference. And let us concentrate on the notion of reference as semantic role. We must ask ourselves whether Frege's conjecture that an analogue of the puzzle about the meaning of sentences can be constructed here too is correct.

When he talks about conceiving of the reference of an expression as its semantic role, Dummett clearly has in mind what happens when we assign an interpretation to a logical language. More in particular, what is at stake here is how the truth-value of an atomic sentence of some predicate logic is determined by what an interpretation assigns to its parts. For the sake of convenience, let us restrict ourselves to ordinary first-order logic. An interpretation assigns an element of the domain to each individual constant of a sentence, and a *set* of *n*-tuples of elements of the domain to the (*n*-place) predicate letters of the sentence, or the *characteristic function* of such a set.

Let us first look at the case when an interpretation assigns as set of some sort to each predicate letter of the language. Well, if sets would either be objects or concepts, then one would be strongly inclined to call them objects, albeit of an abstract kind. But sets certainly do not have the incompleteness that Frege ascribes to the meanings (and referents) of incomplete expressions.

On the other hand, suppose that we assign characteristic functions of sets to predicate letters. They do seem to have the incompleteness that is characteristic for concepts. But in many textbooks of symbolic logic, one does not

distinguish between an n -place function and a set of $(n+1)$ -tuples of which the last element is the value that the function has for the first n elements. So suppose that a function really is such a set. Well, then the characteristic function that is assigned by an interpretation to a predicate letter coincides with what Frege calls the value-range of a concept. And since a value-range for Frege is an object (Frege 1891: 32), again every symbol of an atomic sentence stands for an object. And if this were true, then even on the conception of reference as semantic role, predicates still refer in any case to objects.

It is true that a characteristic function, or any other function, is not really a set of ordered tuples. Frege says that the value-range of a concept is not the concept itself, but the extension of the concept (Frege 1891: 31). Likewise, a set of ordered $(n+1)$ -tuples none of which have the same last element is not really an n -place function, but the extension of such a function.

Of course you can assign a function (in the intensional sense of the word) to every predicate letter of your first-order language. But you don't *have* to do so. All that you really need, is the extension of the function, i.e. a set of ordered tuples. The contribution of a predicate to the truth-value of the sentence in which it occurs is determined by its value-range, as Frege calls it. And this, we saw, is an object. Hence the reference of a predicate, in the sense of its semantic role, is an object. So the conclusion that we had reached earlier still holds.

Besides that, the semantic role of an expression can only be called its reference *by analogy* with reference an 'standing for'. Strictly speaking, what an interpretation assigns to the individual constants and predicate letters of a first-order language has nothing to do with reference. Let us therefore forget about reference as semantic role, and let us concentrate on reference as 'standing for'.

Suppose that Frege's thesis of the functional character of concepts is correct. In other words, let us assume that a concept is a function whose value is always a truth-value (Frege 1891: 30). A value-range cannot be a function; value-ranges are extensions of functions. Now the sort of things that *have* extensions are usually called 'intensions'. So it appears that functions have an intensional character. But from this we may infer that concepts must likewise be intensional entities.

Suppose further that the intensional character of functions resides in their being a rule, or a recipe if you like. The underlying idea here is that a function is some sort of prescription, which tells you for any given argument what you should do with it. The advantage of this suggestion is that

it becomes possible to make at least some sense of Frege's doctrine of the incompleteness of functions. Rules are incomplete, one might say, in the sense that we would not want to call them objects. And yet it is not possible to explain what a function is without appealing to the objects that serve as arguments for the function. This, by the way, is the essence of Dummett's explication of the incompleteness of functions (Dummett 1980: 249-251).

Well then, from the recipe-likeness of functions we can infer to the recipe-likeness of concepts. Consequently one might put forward something like the following characterization of concepts: the concept that is associated with a predicate is a criterion for deciding for any given object whether the predicate does or does not apply to it.

It is interesting to note that this characterization of concepts coincides with Dummett's provisional definition of the *sense* of predicates (Dummett 1980: 229). Indeed, if one conceives of concepts in the way that I have sketched just now, then they function as *meanings* instead of as referents. This is shown on one hand by their analogy with the senses of proper names, which, in Dummett's view, are rules or criteria too. But more importantly, if concepts would be referents, then we should be able to ask in which way a certain concept is given. But on our present conception of concepts, this question is completely senseless.

The point that I want to make can perhaps be made clearer by comparing predicative expressions with definite descriptions. Definite descriptions denote objects. Beside that, they also specify criteria for identifying their reference. Predicative expressions determine recipes or rules. But they do not over and above these recipes provide procedures for identifying these recipes.⁽⁵⁾

And this brings us back to our initial worry. The puzzle that motivated Frege's doctrine of complete and incomplete referents is a puzzle about meaning, not about reference!

⁽⁵⁾ This does not mean that a rule cannot be presented in different ways by different expressions. For consider the following identity statement:

"The rule denoted by the β -reduction of $(\lambda y.(\lambda x.(xy)))N$ is the rule denoted by $'\lambda x(xN)'$."

Since terms of the λ -calculus denote computational procedures, this sentence presents the same rule in two different ways.

1.4. *Do predicative expressions have any reference at all?*

Suppose that someone puts forward the hypothesis that predicates refer to Fregean values-ranges, or sets of ordered tuples, as we would say. Then both the subject and the predicate of each atomic sentence would stand for an object, and the reference of the sentence (its truth-value) would be determined by these referents. Yet it seems that atomic sentences would not thereby disintegrate into lists. Does this refute Frege's conjecture that incompleteness of the referents of predicates would correspond to the incompleteness of their senses?

The following would not be an adequate reply. The truth-value of a sentence is not determined unless it is specified *how* its truth-value can be obtained from the reference of its subject and its predicate. We need some procedure which tells us how to apply the function-in-extension which is the referent of the predicate to the referent of the subject. And this procedure must be the reference of some part of the sentence too, of the copula, say. But then the copula still has an incomplete referent, and this implies that Frege's distinction between complete and incomplete referents still holds. So this way of assigning a reference to predicates only moves the problem that motivated Frege's doctrine, but it does not escape it.

As I have said, this is not the right response. It is true that the truth-value of the sentence is not determined unless there is some rule that says how to obtain a truth-value from these referents. But this rule can be spelled out in some recursive clause for every sentence in the language, it does not have to be *named* in every sentence.

A better answer would be to say that strictly speaking, a value-range just is not the referent of a predicate. As we have seen before, value-ranges can only function as referents of predicates if reference is understood as semantic role, not as 'standing for'. It is precisely due to the fact that in the proposal that we are investigating reference is not used as 'standing for', that sentences do not disintegrate into lists. So we cannot conclude that Frege's conjecture is falsified by this proposal.

Maybe predicative expressions have no reference at all. I must confess that I am somewhat sympathetic to this view. And if I understand Dummett correctly, this is ultimately also his position.

The obvious difficulty for this hypothesis is to make sense of higher-order quantifications. "There is such a thing as being red", for instance, appears to be a true sentence. And this sentence seems to assert that 'being red' stands for something.

Now the sentence "there is such a thing as being red" would be true even if there would be no red objects in the world. Therefore I would be inclined to say that what we are quantifying over here, are senses and not referents. In other words, what this sentence asserts is that there are criteria for deciding for any given object whether it is red or not (even if these criteria would not actually be known by anyone). Or, if you are not that verificationist, you might want to say that the sentence asserts that there are criteria for recognizing what counts as conclusive evidence for being red. In any case, we have seen that these senses are not *named* by predicates, and therefore cannot be referents in the true sense of the word.

Of course much more needs to be done to show that predicates have no reference. But this may suffice to indicate an alternative that should be given serious consideration.

2. *Linguistic differences as indications of the distinction between concepts and objects.*

2.1. *The logical and the linguistic criterion*

Frege assumes in his theory of incomplete referents that there exists a strong parallellism between the distinction between complete and incomplete referents on one hand, and certain linguistic distinctions on the other hand. This has led some people to suspect that Frege has (fallaciously) concluded from linguistic differences between expressions to a fundamental difference in what is denoted by them. This position seems to be held by Kerry, against whom Frege's article "On Concept and Object" was directed (Frege 1892: 45). Similar considerations are expressed by W. Marshall: "Frege has taken a linguistic rift to be a rift in nature" (Marshall 1968: 267).

Frege is not guilty of a mistake of this caliber. His doctrine of incomplete referents purports to be a solution to the philosophical puzzle that we have discussed in the first part of this paper. But one might still wonder if not in his theory too much emphasis is put on certain linguistic distinctions.

Pushed by Kerry's objections, Frege gives the following explanation of his notions of object and concept: "We may say, in brief, taking 'subject' and 'predicate' in the linguistic sense: A concept is the reference of a predicate; an object is something that can never be the whole reference of a predicate, but can be the reference of a subject" (Frege 1892: 47-48). Speaking rather loosely, we will call this 'Frege's logical characterization

of concept and object'. Now it is not completely clear what Frege means by taking 'subject' and 'predicate' "in the linguistic sense". But I take it that if a sentence says something about something, the expression which stands for what is talked about is the subject, and the expression which stands for what is said about the referent of the subject is the predicate of the sentence.

Frege noticed that there seem to be linguistic differences between expressions that serve as subjects and expressions that serve as predicates of sentences. Indeed, Frege took these linguistic differences to be such a reliable sign of the ontological status of the reference of expressions, that he thought that you can read off from certain linguistic features of an expression whether it stands for a complete or for an incomplete referent.

Besides Frege's logical characterization of objects and concepts, then, we have a procedure for deciding of a given expression whether it stands for an object or a concept. This test can be sketched along the following lines: a noun phrase, beginning with an indefinite article, stands for a concept (Frege 1892: 45). So does a common noun or noun phrase not preceded by a definite or indefinite article. A noun phrase beginning with a definite article, or a demonstrative stands for an object (Frege 1884: 63). So does what we nowadays call a proper name... Let us call this 'Frege's *linguistic criterion* for deciding whether an expression refers to an object or a concept'.

One might ask oneself whether this procedure for deciding whether an expression stands for an object or a concept conflicts with Frege's logical characterization of concept and object. That this is not so is by no means a trivial truth. Whether an expression is the subject or the predicate of a sentence depends on the function of the expression in the sentence. In this sense, the notions 'subject' and 'predicate' are context-dependent. But the linguistic differences of expressions that serve as indications of the concept/object distinction are obviously context-independent. This makes the question about the equivalence of the two characterizations a non-trivial one.

In fact, the linguistic indications do conflict with Frege's logical criterion of object and concept. To show this, let us concentrate on the following passage: "In the sentence 'there is at least one square root of 4', we have an assertion, not about (say) the definite number 2, nor about -2 , but about a concept, 'square root of 4'; viz. that it is not empty. But if I express the same thought thus: 'The concept 'square root of 4' is realized', then the first six words form the name of an object and it is about this object that something is asserted" (Frege 1892: 49).

In the second sentence that Frege quotes in this passage, something is predicated of the *object* 'the concept 'square root of 4''. In the first sentence, something is predicated of the *concept* 'square root of 4', namely that it is not empty. In other words, the existential quantifier has to be regarded as a second-order predicate. This is in accordance with Frege's views: "in universal and particular affirmative and negative judgments, we are expressing relations between concepts" (Frege 1892: 48). But Frege thinks that the expression 'square root of 4' is not the subject of the sentence 'there is at least one square root of 4' (Frege 1892: 49-50). At this point I cannot agree with him. Since in the sentence under consideration something is predicated of the concept 'square root of 4', the expression which denotes this concept must be the logical subject of the sentence. And even if Frege here uses the word 'subject' in the purely grammatical sense, the expression 'square root of 4' must be the subject, for it determines the form of the main verb of the sentence.

Let us therefore agree that 'square root of 4' is the subject of the sentence 'there is at least one square root of 4'. Then we have a conflict with Frege's logical characterization of concepts, which says that a concept is the reference of a predicate.

One way to try to solve this problem would be to modify Frege's logical characterization of concepts. One could suggest that we replace Frege's logical characterization by the following clause: a concept is the referent of an expression that *can* play the role of a predicate (even if it does not have to do so in every sentence). This modified version of Frege's characterization holds good for expressions that begin with an indefinite article. The expression 'a square root of 4' is the subject of the sentence 'there is a square root of 4'. But since in '2 is a square root of 4' the expression 'a square root of 4' is used predicatively, it stands — even in the sentence 'there is a square root of 4' — for a concept.

Still, this modified characterization of concepts does not quite capture our intuitions concerning what expressions stand for. One would be strongly inclined to say that common nouns and noun phrases not beginning with an article also stand for concepts. But there is no sentence in which the expression 'square root of 4', say, is used predicatively.

Someone might remember the passage in "On Concept and Object" where Frege discusses the universal sentence 'All mammals have red blood' (Frege 1892: 47), and argue that in 'every square root of 4 is even' the expression 'square root of 4' is used predicatively. We can recognize the predicative nature of the expression 'square root of 4' when we notice that 'every

square root of 4 is even' can be paraphrased as 'whatever is a square root of 4 is even'. But this would not do. For our paraphrase of 'every square root of 4 is even' only shows that 'a square root of 4' can be used predicatively, not that 'square root of 4' can! Moreover, this cannot be concluded from the passage from Frege's "On Concept and Object". Frege would argue that the "predicative nature" of the *concept* 'square root of 4' is shown by the paraphrase. And this is true, since 'square root of 4' and 'a square root of 4' stand for the same concept.

We can conclude from this discussion that it is not possible to decide for an expression occurring in a sentence, solely on the basis of whether the expression plays a predicative role in that (or another) sentence, whether or not it stands for a concept. Purely linguistic considerations play an essential role in answering this question. Linguistic or formal differences are more significant for deciding whether an expression stands for a concept than its logical role in sentences.

Another attempt to avoid a conflict between Frege's logical characterization of concepts and the linguistic indications would be to state that the expression 'a square root of 4' sometimes stands for a concept, and sometimes for an object, depending on the logical role of the expression in that sentence. This amounts to abandoning the thesis of the reliability of the linguistic indications, for it would not be guaranteed that an expression beginning with an indefinite article, for instance, stands for a concept.

Unfortunately, this is not a good solution. Consider the sentence 'there is something which the number 2 is and which is not empty', where we agree to regard the second occurrence of the word 'is' as a copula and not as the identity-sign. Intuitively this sentence appears to be true, for the number 2 is a square root of 4 and the concept 'square root of 4' is not empty. But if the proposed solution were correct, then this sentence would always be senseless. For if that something would be a concept, then it could not be non-empty, since the argument of the predicate 'x is not empty' has to be an expression that stands for an object. And if that something would be an object, then it would always be meaningless to say that 2 is that something, for this only makes sense when that something is a concept.

Our second proposal to avoid the difficulty that we have sketched turns out to be wrong. And the first proposal has led us to a recognition of the importance of linguistic differences as a way of distinguishing expressions that refer to concepts from expressions that stand for objects. Therefore we may conclude that Frege was right to put much emphasis on the linguistic

differences between expressions standing for objects and expressions standing for concepts.

2.2. *First- and second-level predication*

Let us again consider the two sentences that are quoted by Frege: 'there is at least one square root of 4' and 'the concept 'square root of 4' is realized'. Frege claims that in these two sentences different things are predicated (Frege 1892: 49). That is, what is said in the first sentence about the concept to which 'square root of 4' refers is not identical with what is said in the second sentence about the object that is denoted by 'the concept 'square root of 4''. More in particular, Frege would say that the first sentence predicates of the concept 'square root of 4' that it falls *within* the higher-level concept 'being non-empty', whereas the second sentence predicates of the object 'the concept 'square root of 4'' that it falls *under* the first-level concept 'being realized'.⁽⁶⁾ Now this distinction between falling within and falling under a concept is not completely clear to me, due to the obscurity of the ontological status of Frege's concepts. But that is not the point here.

That what is predicated is different in the two sentences, is shown by the fact that "in the sentence 'there is at least one square root of 4' it is impossible to replace the words 'square root of 4' by 'the concept 'square root of 4'', i.e. the assertion that suits the concept does not suit the object" (Frege 1892: 49). The underlying thought here seems to be this: in order for two predicates to say the same thing, the same expressions must be able to fill their argument-places without the resulting sentence becoming nonsensical. It is worth noting that this principle does not go without saying, as Frege apparently assumes. For the correctness of this principle depends on whether predicates of distinct logical types can have the same reference. And it is precisely the analogue question for subjects of different logical types or categories, i.e. whether they can stand for the same referent, that Frege attempts to answer in "On Concept and Object". But let us grant Frege his principle.

So the predicates 'square root of 4' and 'the concept 'square root of 4'' do not meet Frege's necessary (but not sufficient!) condition for the same-

⁽⁶⁾ Frege explains his distinction between falling within and falling under in Frege (1892): 51.

ness of reference of predicates. This is not a coincidence, for it is "impossible, senseless" to assert of a concept what can be asserted of an object, or conversely (Frege 1892: 50).

But consider the following pair of sentences:

S1 "The concept 'square root of 4' *is a realized concept*."

S2 "Square root of 4 *is a realized concept*."

Both sentences have the same predicate, viz. the underlined part of the sentences. The subject of S1 denotes an object, on Frege's account. And if the linguistic criterion is correct, then the subject of S2 stands for a concept.

Insofar as S1 and S2 both are meaningful sentences, as they certainly *seem* to be, they show that it is not "impossible, senseless" to assert of an object what can be asserted of a concept, or conversely. For it would be hard to maintain that the same predicate 'x is a realized concept' does not say the same thing in the two sentences.

2.3. *The concept 'horse' is not a concept*

Until now, it appears that only the linguistic criteria adequately distinguish between expressions that stand for a concept and expressions that stand for an object. But there still is the famous sentence 'the concept 'horse' is not a concept'.

Frege believes that this sentence is true (Frege 1892: 46), and that is indeed what the linguistic criteria would predict.

But at the same time this sentence *appears* to be contradictory. This intuition is reflected in the logical form that we would be inclined to attribute to the sentence. Treating the definite description in 'Russellian' way, and taking 'x is a concept' as a second-order predicate, we would have the following translation:

$$(\exists X)[(C(X) \ \& \ X=H) \ \& \ (\forall Y)((C(Y) \ \& \ Y=H) \rightarrow Y=H) \ \& \ \sim C(X)]$$

Here the first-order predicate constant 'H' is the translation of the predicate 'horse', and the second-order predicate constant 'C' is the translation of the predicate 'x is a concept'. This formula seems somewhat redundant, for one

might as well write ' $C(H) \& \sim C(H)$ '. But then again, so does our sentence, for one might as well say: "'Horse' is and is not a concept'. But one thing seems clear: the sentence is an outright contradiction.

Frege did not think that there is a real inconsistency here, but only an "awkwardness of language" (Frege 1892: 46). He tries to justify this remark in a footnote: "A similar thing happens when we say as regards the sentence 'this rose is red': The grammatical predicate 'is red' belongs to the subject 'this rose'. Here the words 'The grammatical predicate "is red"' are not a grammatical predicate but a subject. By the very act of explicitly calling it a predicate, we deprive it of this property" (Frege 1892: 46). The question is, of course, whether the "awkwardness" of 'the concept 'horse' is not a concept' is of the same nature as the admittedly innocent awkwardness of this example.

Dummett rightly replies that this is not the case (Dummett 1980: 212). Frege says in the footnote that "The grammatical predicate "is red" is not a predicate' is a true sentence. Now this expression predicates of the *expression* 'The grammatical predicate "is red"' that it is not a predicate, whereas it at the same time asserts (or at least presupposes) that the expression 'is red' is a predicate. Hence this sentence is not contradictory in any sense. The difference with the sentence 'the concept 'horse' is not a concept' is that this sentence says of the *denotation* of the expression 'the concept 'horse'' that it is not a concept. Yet at the same time an instance of the disquotation principle says that 'the concept 'horse'' stands for the concept 'horse'.

Hence the analogy of the example in Frege's footnote with 'the concept 'horse' is not a concept' is not nearly as close as Frege suggests, and cannot do the work that it is expected to do. We would have a much more significant analogy if 'The grammatical predicate "is red" is not a grammatical predicate' were a true sentence. This sentence predicates of what 'The grammatical predicate "is red"' stands for that it is not a predicate. But the disquotation principle says that 'The grammatical predicate "is red"' stands for the grammatical predicate "is red". And therefore the sentence 'The grammatical predicate "is red" is not a grammatical predicate' is as contradictory as 'the concept 'horse' is not a concept'.

So Frege's footnote cannot take away our doubts about the consistency of 'the concept 'horse' is not a concept'. But even if 'the concept 'horse' is not a concept' is a true sentence, it brings us to trouble. Because then, one might say, we seem to have no means to say of a particular expression

for which particular concept it stands (Dummett 1980: 212). What Dummett means is probably this. If we want to assert of the predicate 'is a rose', say, that it stands for the concept 'rose', we cannot express this directly in the following way: 'The grammatical predicate 'is a rose' stands for 'rose''. For this sentence leaves it open whether the predicate 'is a rose' stands for the concept 'rose' or for the word 'rose', and thereby fails to express what it is supposed to say. Hence the sentence 'the grammatical predicate 'is a rose' stands for the *concept* 'rose'' seems to be the only remaining candidate for saying what we want to say. But since the expression 'the concept 'rose'' stands for an object, even this sentence does not succeed in saying what we want to say.

Dummett proposes a solution for this problem (Dummett 1980: 213-218). He thinks that the predicate 'x is a concept' cannot be used to talk about concepts, since it is a *first-level* predicate (Dummett 1980: 213). Therefore Dummett has to find a way to say of an expression that it stands for some particular concept without the aid of the predicate 'x is a concept'.

Dummett says that " 'concept' is, grammatically, a common noun, and can therefore be treated only as if it occurred as the content-word in a first-level predicate 'x is a concept' " (Dummett 1980: 213). Hence its argument-place may only be filled with an expression that stands for an object, which always yields a false sentence.

One could object that "'horse' is a concept' seems to be a meaningful sentence, even though 'horse' is a first-level predicate and not a singular term. Surely one can debate over whether this sentence is true, but this will depend on the correctness of Frege's thesis that a predicative expression refers to a concept. Perhaps Dummett would reply that in this sentence 'horse' functions as a *proper name*, and therefore it stands for an object. The fact that in sentences like "'horse' is a concept' we are inclined to put quotes around the expression 'horse', or to print it in italics, could be taken as a sign that the word 'horse' here stands for something different from what it normally refers to. But then again, you can also write 'Horse is a concept', without the sentence becoming nonsensical. If you insist that in 'Horse is a concept' the word 'horse' stands for an object, then you have to abandon Frege's linguistic criterion. So I am not convinced that Dummett has shown that a sentence of the form 'A is a concept' is false if A refers to an object, and *meaningless* otherwise.

But let us suppose for a moment that Dummett has proved this beyond any doubt. Then there are two things left for him to do. First, he has to explain why people are inclined to think that the predicate 'x is a concept' can be

used to make true statements about concepts. Second, he has to try to find another way of saying of an expression that it stands for a particular concept.

Dummett thinks that we regard 'x is a concept' as a "suitable" predicate only because we are mistaken about the logical form of expressions such as 'what the predicate "x is a horse" stands for'. We take it to be a definite description, which refers to an object, and which is of the appropriate logical type, so that it can serve as an argument for the "pseudo-predicate" 'x is a concept' (Dummett 1980: 213). Saying this, of course commits Dummett to showing that the expression 'what the predicate "is a horse" stands for' is of a different logical type. It will be Dummett's thesis that this is a predicative expression, so that it cannot be used as an argument for the first-order predicate 'x is a concept'.

So let us see how Dummett constructs the logical form of the expression 'what the concept "x is a horse" stands for'.

There is the general truth that for any expression A which stands for anything at all, the expression 'what A stands for' refers to what A denotes. So, in particular, the expression 'what "x is a horse" stands for' must refer to what 'x is a horse' denotes (Dummett 1980: 213-214). So if 'what "x is a horse" stands for' were a singular term, then the expression 'x is a horse' would denote an object. But obviously this is not so. Therefore 'what "x is a horse" stands for' must be a predicative expression (Dummett 1980: 214).

Next, he says, we want to know whether our expression 'what "x is a horse" stands for' involves first-order or second-order quantification. Dummett argues that this expression makes use of second-order quantification (Dummett 1980: 214).

Surely the expression 'Blue Peter is what "x is a horse" stands for', say, is a meaningful sentence. But this sentence can be paraphrased as 'for some y, y is what "x is a horse" stands for and Blue Peter is y', where on its first occurrence 'is' functions as an identity-sign and at its second occurrence it is a copula. 'x is what "x is a horse" stands for' can be paraphrased as 'for some y, y is what "x is a horse" stands for and x is y'. Hence although the predicate *involves* second-order predication, it is a first-order predicate.

But the expression 'what "x is a horse" stands for' can also be used to construct a second-order predicate (Dummett 1980: 215-216). We can take 'y is what "x is a horse" stands for' as a roundabout way of saying "'x is a horse" stands for y', where y indicates an argument-place that has to be filled with a first-level predicate. From this predicate we can form the

sentence 'Horse is what "x is a horse" stands for'. And this sentence does succeed in saying of the expression "x is a horse" for which particular concept it stands. Moreover, Dummett's discussion of sentences of this type shows that he thinks that in second-order sentences concepts can be *named*.

Furthermore, we can construct a predicate which is true of all concepts, in the same way as the predicate 'x is an object' is true of all objects (Dummett 1980: 216). We take for this purpose the predicate 'x is what everything either is or is not', where the argument-place is intended to be filled with a first-level predicate (Dummett 1980: 216-217).

It has to be granted that this predicate is true of something if and only if that something is a concept. But the predicate does not *say* that its argument stands for a concept. We wanted it to mean that what 'x is a concept' purports (but fails, on Dummett's account) to express. So even though the truth-conditions of this predicate are right, the *meaning* of the predicate is not what we had intended. In other words, on Dummett's account we are able to name concepts, but we are not able to say of an expression *that* it names a concept. If this is not an acceptable consequence, then we have to reject Dummett's attempt to escape the argument that the sentence 'the concept 'horse' is not a concept' is contradictory. And this in its turn would imply that the expression 'the concept 'horse'' *does* stand for a concept, so that ultimately the linguistic criterion also does not hold.

Let us now turn to what we can conclude from this discussion. First of all it is not clear that 'x is a concept' is a "pseudo-predicate", and cannot express what it purports to express. And if this nevertheless proved to be true, then we have no linguistic tools to express of a concept that it is a concept. Frege of course would reply that we can use a *metaphorical mode of speech* to express what we want to say (Frege 1892: 55). But it is an old saying that in scientific matters metaphors may only be used to express what could in principle also be expressed in a literal way. But according to Frege's (and implicitly also Dummett's!) theory there can be no sentence which *literally* says about a concept that it is a concept. And then the question arises how someone who does know what a concept is can ever come to know what it is. One thing is for sure, since it cannot be said, he (she) cannot learn it by verbal teaching. But I do not want to further enter into the problems concerning Frege's use of metaphors in his theory of concepts here. These problems are sufficiently known.

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