WHY FREGE DID NOT DESERVE HIS GRANUM SALIS
A Note on the Paradox of “The Concept Horse”
and the Ascription of Bedeutungen
to Predicates

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I.

What form, at the most general level, should be assumed by a semantics of predication? In particular, should a distinguished category of entity be associated with predication, as objects (or particulars) are associated with the use of singular terms?

The question generates just three possible responses:

- Yes, predicates stand for concepts (or universals, properties, attributes, qualities, or whatever) as singular terms stand for objects (or particulars).
- Yes, but the relation between a predicate and the associated entity is not that which obtains between a singular term and its referent but is sui generis.
- No.

Each of these proposals has apparent drawbacks. The third makes difficulties for the construal of higher order quantification\(^1\) and, worse, arguably implicitly surrenders the very notion of a property or concept (since once such things are countenanced, it could hardly be disputed that predication involves some relation to them.) How-

\(^1\) There are, of course, proposals to construe higher-order quantification without recourse to an ontology of properties: for instance, to construe the quantifiers substitutionally or, following George Boolos, as generalisations over plural terms. But there is cause to doubt that either approach can be successful in full generality.
ever the second seems ad hoc and mysterious – what might the special relation that holds between predicates and, say, concepts be, and how is its nature to be conveyed? Finally the first sets up what we may call Russell’s Problem: if “is a horse” is to stand for the property of being a horse, well, so surely does “the property of being a horse”. Co-referential expressions should be inter-substitutable salva veritate, at least in extensional contexts, and inter-substitutable salva congruitate in all. (Call that the Reference Principle.) So how come “Shergar is a horse” and “Shergar the property of being a horse” differ not merely in that the one is true while the other is not but in that the latter is not the expression of a truth-evaluable thought at all?

This is a tight and not very comfortable space of alternatives. Frege’s well-known response was to advance a version of the first proposal, but with the crucial insistence, driven by the Reference Principle, that no abstract singular term can after all co-refer with any predicate. Thus “is a horse” and “the property of being a horse” do not co-refer. Since predicates are to stand for concepts, it follows that no singular term can do so, including those, like “the concept horse”, which intuitively ought to. That’s a price Frege was prepared to pay for the requisite semantic difference between “is a horse” and “the concept horse” and its ilk, and the consequential solution to Russell’s Problem.

But is it solved? There is a misgiving one might have about Frege’s move even before coming to dwell on the famous attendant paradox. Wasn’t the problem to explain the difference between a well-formed subject predicate sentence – “Shergar is a horse” – and a certain kind of corresponding list – “Shergar the concept horse”. Yet Frege’s solution implies that the well-formed sentence is a kind of list, and that the words “Shergar the concept horse” do not even succeed as a list of the intended items. If you do succeed in listing the referent of “Shergar” alongside the item which you mistakenly intend “the concept horse” to refer to, you will have succeeded, willy nilly, in expressing a complete thought. However we might well feel that there should still be a difference between a listing of the items

2. That is, a problem which, as Bradley urged, Russell had (and never satisfactorily appreciated.)
respectively denoted by “Shergar” and “is a horse” – in formulating which one’s thought simply runs from one to the next – and a statement of the integrated thought that Shergar is a horse. Again: while, by restricting the kind of expression apt to refer to concepts to just those which may be combined with a singular term to express a complete thought, Frege does of course provide himself with the resources to find a semantic difference between “Shergar is a horse” and “Shergar the concept horse”, the charge may remain that he thereby abrogates the resources to explain why for former is not itself a kind of list.

It may be retorted that this is a misconceived concern: that any residual distinction between merely listing the items respectively referred to by the semantically relevant constituents of “Shergar is a horse” and having the thought expressed by that sentence, is a merely psychological one. Russell’s problem, by contrast, challenged us to draw a semantic distinction, and that Frege has done. But this is a dangerous retort from the Fregean point of view. For once granted a psychological distinction between listing the referents and having the thought, it is open to a defender of Russell to deny that there is any semantic distinction between “Shergar the concept horse” and “Shergar is a horse” – that the former no less than the latter is at the service of both psychological operations – and that it is merely not conventionally good English to use it in the second role.

However that may be, the famous, immediate cost of Frege’s proposal is that it is correct to say that whatever the concept horse is, it is not a concept. It has not been generally agreed whether this result betrays a fundamental incoherence in Frege’s semantics or whether it is rather, as Frege believed, the unavoidable but tolerable awkwardness for which he requested his granum salis. I shall argue that the real lesson of the situation is that there is no stable version of the first form of response to our leading question, and that Frege erred in supposing he could usefully – or even coherently – extend to predicates and other forms of incomplete expression the distinction between sense and reference which he drew for singular terms.
II.

It is important to take the full measure of the paradox. Consider this variant on it:

1. “The reference of ‘is a horse’” is a singular term.
Hence 2. Its reference, if any, is to an object.
3. The reference of “The reference of ‘is a horse’” is the
   reference of “is a horse”.
Hence 4. The reference of “is a horse” is an object.

It is tempting to think that 1 will be sustained by any refinement of Frege’s notion of a singular term (*Eigennname*) which allows that he was right so to classify e.g. the numerals; but if so, then 2 is merely Fregean orthodoxy; and 3 is just an application of disquotation for terms. Yet a version of this reasoning could be run for any predicate. So we seem to have broadly Fregean resources to show that all predicates – indeed all denotative expressions of whatever kind – stand for objects! Hence it may appear that Frege’s response to Russell’s Problem, incorporating as it does the claim that predicates stand for concepts, not objects, is already inconsistent with commitments he incurs via other things he held. To wit: if singular terms stand for objects, then the paradox seems to show that he has to hold that all referring expressions stand for objects.

*That* conclusion, if unavoidable, would be more than a tolerable awkwardness. How might it be avoided?

Clearly there is only one way. The response has to be that, once properly construed, claims of the form of 4 are actually nothing inconsistent with Frege’s proposals. Rather, appearances notwithstanding, terms like, “The reference of ‘is a horse’”, do not refer to entities within the range identified by Frege as apt to be referred to by predicates. To put the matter unhappily, you cannot refer to the reference of a predicate by the use of an expression of that form. Thus the objecthood of the things such expressions do refer to, whatever they are, is nothing at odds with the Fregean semantics for predicates.
Why should that upshot be thought more than a curiosity? Well, given that no singular term may be used in specifying what any predicate stands for – even including those of the form, “What F stands for”! – an issue arises about how exactly Frege is to communicate his semantic proposals about predicates. How is one to explain what, e.g., “is a horse” refers to without recourse to any singular term purporting to refer to the same thing?

The difficulty is real. It may slip past unnoticed when the Fregean theory is allowed to confine itself to generalities: to bland formulations such as that a singular term refers, if to anything, then to an object, whereas a (sharply defined) predicate will refer to a concept. But even here the indefinite phrases, “an object”, “a concept” merely mask the problem. For to claim of an expression that it refers to, respectively, an object or a concept is to make an existentially quantified claim which accordingly immediately demands the possibility of a specification of the object, or concept, concerned. What then is to be the canonical form of such specification in the case of a predicate and its associated concept?

Naturally, a decent semantic theory would have to offer such specifications in any case. We are very familiar with the idea of a recursive meaning-theory which proceeds, inter alia, by including for each primitive term of the language an axiom specifying the referent of that term:

“Cicero” refers to Cicero;
“Caesar” refers to Caesar; ... etc.

What would those of the axioms for a Fregean meaning-theory look like whose role it was to specify the referents of each of the primitive predicates? Here are some of the alternatives:

(i) “is a horse” refers to is a horse;
(ii) “is a horse” refers to the concept horse;
(iii) “is a horse” refers to being a horse;
(iv) “is a horse” refers to what anything is that is a horse;
(v) “is a horse” refers to is what anything is that is a horse.
But none of these is satisfactory. (i) is ill-formed; (ii) is inconsistent with the Reference Principle; and (iii) is likewise since “being a horse” is presumably a singular term standing for a *condition*. (iv) has at least the merit of an element of homophony – but only an element. For “what anything is that is a horse” likewise smacks of singular term-hood. In any case it does not seem to be an *incomplete* expression, being substitutable *salva congruitate* not with “is a horse”, but with “a horse” (compare “what anything is that is red” and “red”). Finally (v) is once again ill-formed.

Someone will doubtless want to rejoin that there is actually no difficulty about specifying the reference of predicates in a perfectly straightforward, homophonic way: the Fregean may merely avail himself of the notion of satisfaction or, more intuitively, of the notion of truthful predication. Thus it is open to us to give the reference of “is a horse” by no more complicated a formulation than:

(vi) “is a horse” may truly be applied to an object just in case that object is a horse.

This proposal, however, is open to the complaint that the form of semantic axiom it typifies would be available to theorists who took either the second or the third of the originally delineated options, dispensing with the idea of predicate reference altogether. If (vi) may indeed be interpreted as specifying the reference of “is a horse”, it does so in a way which involves no explicit recourse to the idea of *reference*. So the question persists: what is to be the form of axiom which makes it clear that predicates are being assigned a *Bedeutung*? How is the specific reference of specific predicates to be articulated? Or do we have instead to stomach the idea that the involvement of reference in the semantics of predication allows *only* of coy expression – of forms of expression which are equally available to theorists who would deny that predicates refer at all?

IV.

What constraints should be respected by a fully satisfactory dissolution of the paradox? The following seem attractive:
(i) The account should permit recognition of a range of entities suited to serve a non-substitutional interpretation of higher-order quantification, and should assist (or at least be consistent with) a satisfactory explanation of their nature and their contrast with objects in general.
(ii) The account should avoid Russell’s Problem.
(iii) The account should respect the Reference Principle: sameness of reference should ensure sameness of semantic role, so that co-referential expressions should be cross-substitutable *salva veritate* in extensional contexts, and *salva congruitate* in contexts in general.
(iv) The account should provide the means for a straightforward statement of the semantics of individual predicates and other basic incomplete expressions in a fashion that involves no coyness about the type of semantic relations involved.
(v) The account should avoid the need to treat any range of expressions as Frege’s proposal treats “the concept horse”, that is, as referring, if to anything, then to something other than what their sense intuitively dictates as their reference.

Frege’s semantics of predication satisfies the first three of these at the cost of failing the fourth and fifth. How might it be possible to do better? Are the constraints co-satisfiable at all?

V.

I turn now to Michael Dummett’s treatment of the issue in *Frege: Philosophy of Language*. Dummett reports that Frege himself resolved the problem in an article submitted to – but, astonishingly, rejected by – the same journal in which he had published “On Concept and Object”. Frege’s solution was, apparently, to dismiss the words, “concept”, “relation”, “function” as pseudo-predicates, un-

3. *Vierteljahresschrift für wissenschaftliche Philosophie*.
4. See *Frege: Philosophy of Language*, second edition, p. 212. Note the footnote on that page, however, where Dummett owns that he has not been able to corroborate this claim from the materials actually published in Frege’s Nachlass in 1969.
suited to express the categorial distinctions he had intended. The point is simply that all these expressions, as common nouns, are inescapably received as in effect first-level predicates – specifically, as admissible substituends for F in “... is an F” – and are thus heard as calling for completion by singular terms, which are naturally unsuited to stand for the incomplete entities which “concept” and its kin were supposed to pick out in the first place. “Concept”, “relation”, and “function” are thus quite unsuited for the task they are supposed to perform.

If we jettison the common noun, “concept”, then we cannot of course so much as formulate the paradox of “the concept horse” – we solve the classic form of the problem rather as amputation cures an infected toe. That this is hardly a sufficient response is evident, however. For no parallel incoherence has been disclosed in the use of the common noun, “object”, and – as we have seen – it is straightforward to formulate a version of the paradox, encapsulated in the result that the reference of “is a horse” is an object, without any use of “concept” or its kin.

That may seem decisive against Frege’s remedy. However I suspect Dummett would reply that we can live with such a violation of the fifth constraint provided it can be shown how, first, after eschewal of the misbegotten term “concept”, we may still better and correctly pick out the range of entities intended by it (for Frege cannot after all have meant to abandon altogether the distinction, absolutely basic to his philosophy of language, between complete and incomplete entities and expressions) and how, second, we may identify, without illicit use of such a common noun or associated singular terms, the specific referents of specific predicates. Those, in any case, are the matters which Dummett, in his brief discussion in Frege: Philosophy of Language, sets himself to explain.

His proposal on the first – I am not sure whether he here follows (his recollection of) Frege’s own explicit remarks in the unpublished paper or enlarges upon what he takes to be their general direction – begins with the key suggestion that expressions of the form, “What ‘is a horse’ stands for” are not the singular terms which we naturally take them to be. We naturally construe them on the model of “What I have hidden in my desk” or “What nobody here seems to realise” – respectively tantamount to “The thing which I have hid-
den in my desk” and “The fact that nobody here seems to realise”. But according to Dummett the reference of any phrase of the form “What E stands for” ought just to be the reference of E. This principle, he says, should hold whether E is a singular term or predicate. So just as e.g. “What ‘Nixon’ stands for” should coincide in reference with “Nixon”, so “What ‘is a horse’ stands for” should coincide in reference with “is a horse”. In particular, we may thus construe “Shergar is what ‘is a horse’ stands for” in such a way that the first occurrence of “is” is the copula and the whole is equivalent to “Shergar is a horse”.

That provides a new class of expressions by which to refer within the domain of incomplete entities. How is having them to help? What we now need, Dummett continues, is a second level predicate which we can significantly append to expressions of this kind to make claims which are somehow distinctive of items in that domain – and that will then provide the correct and canonical way of saying what we infelicitously tried to say by the use of “concept”. It is not difficult, he claims, to devise such a predicate in natural language:

A particularly suitable expression would be, “... is something which everything either is or is not”: the gap is intended to be filled by a predicative expression, and the resulting sentence will then say that the generalised law of excluded middle holds for the corresponding concept [sic.] 5

Dummett himself does not remark that someone not party to the Fregean insistence that concepts need sharp boundaries might well demur at making the law of excluded middle part of their essence in this way. But that can easily be got around. Reflect that the proposed second level predicate only gets the intended results if its “is or is not” component is construed as involving the copula rather than the “is” of identity – otherwise what we have is a predicate which is distinctive of objects. But once that required understanding is stipulated, a less exceptional way of getting what is wanted comes into view. Concepts are essentially things which, save when necessarily empty, objects are liable to be (the infinitive of the copula.) Thus an attractive alternative choice might be: “... is something which nothing is or something could be”.

5. Frege: Philosophy of Language, p. 216.
Recall that what was wanted was, in effect, a predicate which could be truly appended to all and only expressions referring within the domain of concepts (if I may so speak), just as “is an object” may be appended, for Frege, to all and only referring singular terms. We now have two candidates, and two corresponding ways of saying what we tried to say by means of the misbegotten sentence, “The reference of ‘is a horse’ is a concept”, viz. that what “is a horse” stands for is something which everything either is or is not; or, if you prefer, that what “is a horse” stands for is something which nothing is or something could be.

It may occur to the reader that, having introduced these locutions, nothing should bar us from reintroducing “concept” as a convenient shorthand for either of them. So we can perfectly properly stipulate “is a concept” as a second level predicate abbreviating e.g. “is something which nothing is or something could be”. And now we can truly say that what “is a horse” refers to is a concept. What happens, accordingly, if, with “concept” so rehabilitated, we try to coin the term, “the concept horse”, or “the concept referred to by ‘is a horse’” – might the paradox be reinstated?

Again, Dummett does not explicitly consider the matter. But the necessary reassurance is easily obtained. The crucial question is what level of variable is bound by the description operator in the coined term. If it is an objectual – individual – variable, then the results are ill-formed since “concept”, as just re-introduced, is second level. But if instead we essay to treat the description operator as binding a conceptual – predicate – variable, then “the concept horse” should be on a syntactic footing with Dummett’s reading of “what ‘is a horse’ refers to”, so that it turns out not to be a singular term, and “The concept horse is a concept” is, as it ought to be, true!

So far so good, it may seem. It remains to determine what is to be the legitimate form of specification of what a particular predicate refers to. Dummett sees no difficulty:

We can for example say, “A philosopher is what ‘ξ is a philosopher’ stands for” or, more informatively, “What ‘ξ is a philosopher’ stands for is what Socrates and Plato both were” ... (The form “‘ξ is a philosopher’ stands for being a philosopher” is perhaps acceptable.)

In general, Dummett’s suggestion is that the expressions we may legitimately use to specify predicate reference will be what he terms “predicative expressions” (cf. quotation above) – that is, expressions formed from a grammatical predicate (i.e., an open sentence with a single argument place) by dropping the copula, or converting the main verb into the participial form of the same tense. Examples include “a horse”, so derived from “is a horse”; “running” from “runs”, “having eaten” from “have eaten”, “bald” from “is bald”, and so on. Evidently, he writes,

to almost every predicate in Frege’s sense which is formed from a sentence of natural language, there corresponds a predicative expression, constructible with greater or less awkwardness.\footnote{Ibid. p. 215.}

Accordingly, we will almost always have the resources to specify what such predicates refer to in the fashion Dummett envisages. In general, where E is a predicate and E* a corresponding predicative expression, our specification will take the form: E* is what E refers to.

But now a line of objection surfaces. How can a predicate’s reference be specified by a participial conversion of it, or a proper part of it, still less by a noun phrase like “being a philosopher”? Our whole problem was set by the Reference Principle, requiring that a necessary condition of co-reference is substitutability \textit{salva congruitate}. If any expression is to co-refer with an incomplete expression, it must accordingly be likewise incomplete, so apt to stand where an incomplete expression can stand. Yet neither “a philosopher” nor “being a philosopher” can play the syntactic role of “is a philosopher”. Indeed, expressions corresponding as E and E* are always of different syntactic categories – at least as measured by cross-substitutivity. Just that is ensured by the very distinction between predicates proper and the derived category of predicative expressions. In the presence of the Reference Principle, the expressions which Dummett is proposing we use to specify predicate reference would thus seem to be one and all disqualified for the task.

Note, however, that examples of the proposed form of specification, for instance:
A philosopher is what "ξ is a philosopher" stands for, do not appear ill-formed. In general E* and "what E refers to", corresponding as indicated, need not be of different syntactic categories. So there must have been something wrong with Dummett's principle, that "what 'is a horse' refers to" should be so construed that it is not a singular term but co-refers with "is a horse". Dummett's thought was that the relevant principle should hold good for referential expressions in general. But now it emerges that it cannot. It fails for Fregean predicates precisely because, in the most basic case, they are characterised as, in effect, open sentences - the results of deletion of a single occurrence of a singular term from a significant sentence - whereas expressions of the form, "what E refers to", never so result, even when used in predications in the way Dummett envisages. What results, rather, from deleting the subject term when such an expression is so used will be something of the form, "is what 'E' refers to".

So runs the objection. Dummett's response would presumably be that his proposal was indeed conceived as regarding the copula as a syntactic irrelevance and is entirely dependent upon the legitimacy of that view. I think the view is ad hoc and hard to maintain. What stands in the way of the thesis of the syntactic irrelevance of the copula is the fact that for Frege it is essential that incomplete expressions are characterised in the first place as those which result from deletion of one or more occurrences of singular terms from a sentence. If we take that characterisation seriously, then there is simply a patent difference in syntactic category between predicates and the predicative expressions which may be derived from them by further modifications; and it is only the former that can properly be said to be incomplete (to have gaps for singular terms). Indeed, it is precisely the copula and the other devices which we are to delete or modify in transforming predicates into the corresponding predicative expressions that are the vehicles of the incompleteness of the former. Their incompleteness consists in their capacity to generate a complete sentence when appropriately filled in with singular terms.

8. "For Frege, the copula is a mere grammatical device, with no content." Frege: Philosophy of Language p. 214.
or quantifiers and only expressions appropriately featuring the copula and the other devices have that capacity.

A corollary is that, since Dummett’s principle, that E and “what E refers to” should co-refer in general, is untenable, it never provided any reason to suppose that “what ‘is a horse’ refers to” is not a singular term but should co-refer with “is a horse”. It would, certainly, be a further step to conclude that “what ‘is a horse’ refers to” is a singular term after all. But what is true in any event is that no case has been made for regarding that form of expression as any better suited than “the reference of ‘is a horse’” to serve in the characterisations – of predicate reference in general, and of its specifics – which we seek.

VI.

These reservations about Dummett’s account are close to those of another philosopher who is in no doubt about the seriousness of the situation for Frege and has attempted a remedy of broadly Fregean spirit, viz. David Wiggins.9 Wiggins’ proposal is prima facie of the third type initially distinguished – we are to drop the idea that incomplete expressions refer to incomplete entities, indeed that they refer to anything at all. But the objection I canvassed – that this type of view makes problems for the construal of higher-order quantification, or indeed of contexts generally which seem to call for an ontology of properties, or the like – is to be offset by the contention that there is reference to concepts within incomplete expressions. Wiggins writes:

... let us hold on to the thought that second-level quantification is over what it seems to be over, viz. entities like man, horse, admirer of Hegel, wise, run, walk, sit, work, sleep. Such entities – let us call them concepts – are not objects, and they are neither saturated nor unsaturated. They are simply the references of grammatical predicates. But let us also take the copula and the finite endings of verbs seriously. What the copula does on this alternative view is to combine with a concept-word or predicate to produce an unsaturated expression that will in its turn

combine in the fashion Frege himself describes with a saturated expression to produce a complete sentence.\textsuperscript{10}

Thus the entities required by higher-level quantification are now supplied as the referents of the kind of expression which Dummett called “predicative expressions”; expressions which result by deletion of the copula from (or transformation of verb endings in) an open sentence, as “(a) horse” results from “is a horse”, “red” from “is red”, “fly” from “flies” and so on. In “Shergar is a horse”, accordingly, there is reference to a concept, effected by the occurrence of “(a) horse”, but the element of unsaturatedness, essential to the expression of a unified thought, is only introduced by the concatenation of that expression with the copula.

What should be the semantic role of the copula itself, on this view? Wiggins is clear that it would be a bad blunder to allow it to refer to a relation – call it the relation of subsumption – in its turn; for the effect would be immediately to re-introduce a version of Russell’s Problem – we should have no resources to explain the difference between “Shergar is a horse” and, say, “Shergar the relation of subsumption a horse”. But in Wiggins’ view, there is no need to assign a reference to the copula in order for it to contribute to the sense of sentences containing it. Rather we may fix that contribution by laying down a general stipulation (a “simple schematic rule of truth”) to the effect that any sentence resulting from linking a term and a concept-denoting expression by the copula is true just if the designation of the term falls under the concept in question, and then adding appropriate specific stipulations, for each concept-denoting expression, to fix the conditions under which an object falls under the concept it denotes.

Wiggins’ repair thus essentially consists just in treating concepts and relations as the referents of proper parts of incomplete expressions, rather than of incomplete expressions themselves. It remains Fregean, first, in that incomplete expressions, although not now a primitive semantic category\textsuperscript{11} but derived from adjoining expressions for concepts, etc., to the copula, continue to play an essential role in the resultant semantic theory, and to provide the key resource

\textsuperscript{10} Wiggins \textit{op. cit.} p. 133.

\textsuperscript{11} By a primitive semantic category, I mean a type of expression associated with its own specific sort of \textit{Bedeutung} by the axioms of a semantic theory.
in avoiding Russell's Problem; and, second, in its ontology of concepts and higher-order functions and relations generally.

These are significant advantages. But is the result significantly better than Frege's? One key question concerns what we are now supposed to say about the reference of "the concept horse". Are concepts now available to be the referents of singular terms or are they not? If not, there is no progress on the fifth constraint – it will still be true to say that the concept horse is not a concept. But if concepts are available to serve as the referents of appropriate singular terms, then Wiggins seems committed to allowing that syntactically disparate expressions – for instance "the concept horse", or "the referent of '(a) horse'", and "(a) horse" – may co-refer, notwithstanding the fact that they are not cross-substitutable salva congruitate. So once again we have a violation of the Reference Principle. (Reflect that "Shergar is the concept horse" is ill-formed when "is" is the copula, since the copula cannot link singular terms.) Wiggins' view of the expression "(a) horse" in the illustrated type of occurrence is apparently that it is neither complete nor incomplete. 12 If that is right, the Reference Principle must drive the conclusion that no such expression can co-refer with any singular term. And if concepts are the exclusive reference of such incomplete expressions, it follows that the concept horse is still not a concept. On the other hand, if Wiggins were to backtrack and allow that "(a) horse" and its ilk are after all a kind of singular term, the point remains that the copula cannot grammatically link a pair of singular terms, so "Shergar is a horse", so construed, ought to be nonsense.

That all seems unprogressive. In addition, once we are in the market for other-than-complete expressions having reference within a domain of concepts and relations at all, the idea that the copula lacks reference is apt to seem under-motivated and problematical. To be sure, there is the threat of the Bradleyan regress in any opposing view, as noted. But that doesn't off-set the point that there does seem to be a perfectly good second-level relation – that noted, of an ob-

12. "'Man' – as it occurs in 'Jesus is a man' – seems neither saturated nor unsaturated. It neither goes into a gap to make a complete sentence nor is it such that the insertion of a name into its gap gives a complete sentence. It has no gap. And all we get from the attempt to treat it as if it had one is 'Jesus man ...'" Wiggins, op. cit. p. 132.
ject’s *subsumption under* a concept – which we might ordinarily be
forgiven for associating with the copula. If such a relation is ac-

cnowledged to be in play in any unified subject-predicate thought,

and if it is the presence of the copula that is responsible for the unity,

then what is to be the connection between the copula and this rela-
tion? The effect of the copula in “Shergar is a horse” is precisely to

subsume the mysterious disappearing stallion under *horse*. If the
copula doesn’t refer to the relation, what is its connection with it?

To be sure, a defender of Wiggins might simply deny that there is

any such relation (there is some suggestion that would be Wiggins’

own preference\(^\text{13}\)). But on what ground? As remarked, the relation

seems intuitive enough. The alternative is to recognise some other

relation for the copula to stand in to that relation: to find some other

relation than reference for at least one prima facie relational expres-
sion – the copula – to bear to that relation – subsumption – whose ob-
taining it serves to express. The use of the copula between “Shergar”

and “(a) horse” would then serve to express a claim of subsumption

without making reference to the relation of subsumption. But now,

once such a possibility is countenanced at all, why not let it do more

general work in the semantics of predication? Why not allow in gen-
eral that predicates stand in some such relation – one distinct from

reference – to the properties, or concepts, whose instantiation they

serve to express? That would be to move in the direction of the sec-

ond broad proposal indicated at the start, and away from the idea,

still conserved by Wiggins’ repair, that reference continue to play a

key role in the semantics of predication.

VII.

Dummett’s and Wiggins’ contributions are representative of a re-

markable oversight in the literature. Nowhere\(^\text{14}\) does it seem cleanly
to have been noticed that Frege was simply never at liberty to intro-
duce *Bedeutung* into the semantics of predication, at least not if that

is to involve having the very same relation link predicates and con-

\(^{13}\) Wiggins *op. cit.*, pp. 142-3.

\(^{14}\) I suppose this claim is almost certainly false. What is true is that *almost* all

of more than 100 years of sophisticated secondary literature on this topic has pro-
cepts as ties a singular term to its bearer. A fully explicit statement of the reference of a predicate would have to consist of a name for that predicate and an expression – in the homophonic case, the predicate itself – standing for its referent, the two linked by an expression standing for the relation of reference. It should have been obvious from the start that *there can be no such statement within the Fregean framework*, however indirect, however clever we box. The reason is simple: while the name of the relevant predicate will be a complete expression, standing for an object,\(^{15}\) Fregean theory requires that the expression which serves to indicate the intended referent, since that is a concept, must be *incomplete*. It follows that no relational expression which standardly links singular terms can result in a well-formed sentence if used to concatenate these expressions. Or to put the point at the semantic level: any relation between the respective referents of “is a horse” and “is a horse” must bridge distinct orders, since it has to be apt to relate objects and concepts. *That*, then, cannot be the relation that links a singular term to its referent; for that is an object-object relation. Accordingly, if we have already harnessed the notion of reference to the connection between a name and its bearer, mere syntax demands that it cannot be *reference* which links a predicate to its semantic value.

This conclusion, note, is secured purely by the appeal to the Reference Principle: it never should have seemed possible for a minute that we might make the idea that predicates stand in the very same relation to concepts that singular terms stand in to objects consist with the contention, integral to Frege’s theory, that that relation is controlled by cross-substitutability *salva veritate* (*congruitate*). For, again, precisely because singular terms and predicates are not so cross-substitutable, nor can any pair of relational expressions be one of which calls for completion by *Eigennamen* and the other by an *Eigennname* and a *Begriffswort*. It follows that if reference is singled out as the relation between a singular term and its bearer, then

\(^{15}\) This not to presuppose that predicates and incomplete expressions generally may properly be viewed as isolable *parts* of sentences in which they occur. The idea that a predicate is a (Fregean) object would be perfectly consistent with construing its occurrence in a sentence as a *pattern* therein displayed rather than a lexical component of it.
no expression for the relation between a predicate and its associated concept can stand for the relation of reference, and no well-formed thought of the form, "is a horse’ refers to ...", can correctly depict the putative reference of "is a horse". If we continue to assume that such a thought has to be possible provided "is a horse" has a reference in the first place, then the conclusion is inescapable: it doesn’t, and the first of the initial three proposals is unplayable both in its Russellian and in its Fregean versions.

This simple reflection in effect resolves the immediate paradox: once we are forced to recognise that the relation between a predicate and the associated concept cannot be regular singular reference, the Reference Principle puts no barrier before the idea that singular terms can after all refer to concepts. The traditional form of the paradox, which only arises on the assumption of the Reference Principle, can only persist as long as the requirements of that principle are merely confusedly apprehended. Frege had no need for his granum salis and only thought otherwise because he misconceived – and led generations of his commentators to misconceive – his dialectical situation. Again: there can be no Paradox of "the concept Horse" without the Reference Principle; but that Principle itself provides the materials for a reductio of the assumption that one relation links singular terms to objects and predicates to concepts respectively. So whatever the relation between a predicate and a concept, it should be consistent, for all that has so far been said, with the possibility of ordinary singular reference to the latter.

That is not to say that we could not stipulate that "refers to" should have a use linking the name of a predicate to an expression par excellence, the predicate itself – for its semantic value. In that case, "is a horse’ refers to is a horse” – proposal (i) above – would be well-formed, but – just for that reason – "refers to”, so used, would not speak of the relation that holds between a singular term and the object for which it stands.

VIII.

Let’s take stock of the situation in the light of the five constraints of section IV. We just saw that the third, the Reference Principle, dic-
tates that no account of the semantics of predicates, a fortiori none respecting all five constraints, can construe both predicates and singular terms as standing in the same relation to concepts and objects respectively. Since respect of that principle is absolutely integral to Frege’s approach, we have to conclude that he had no business generalising the sense-reference distinction in the way he did. That moral, to be sure, was in effect respected by Wiggins’ repaired framework, wherein predicates refer to nothing. But Wiggins’ proposal, as we noted, must still violate either the fifth or third constraints: either “the concept horse” still does not refer to what intuitively it ought to refer, or it co-refers with “a horse”. Dummett’s proposal, for its part, also clashes with the Reference Principle – it has “is a horse” and “a horse” co-referring – as well as violating the fifth constraint by dint of failing satisfactorily to treat “the reference of ‘is a horse’”. Since three out of five was Frege’s original score, this too is not an advance. We have yet to see how to do better in detail but we know that a first step must be to drop the idea that the entities recognised by a satisfactory account of higher order quantification bear the same relation to predicates and other incomplete expressions as objects bear to the singular terms which refer to them.

It is tempting to summarise that lesson by saying that predication is not a species of reference. That, however, would not strictly be warranted by any considerations reviewed so far. After all, it might be proposed, the relation between a predicate and a concept could still be a species of reference – just not the same species as holds between a singular term and an object. That would be enough for the observation of the previous section since it would remain that no obstacle had been disclosed to the idea that expressions of distinct syntactic types might bear different species of reference to the same things. I think it doubtful, however, whether the proposal can be made clear. Someone who advanced it would have to face the question, what made the two relations species of the same genus – why was each a matter of reference? And it would be no answer, of course, to advert to the fact that each relation was such that for distinct expressions to bear it to the same entity would show in their

cross-substitutivity *salva veritate* in extensional contexts (however those contexts might be characterised without circularity.) For cross-substitutivity *salva veritate* is a property of pairs of expressions – “but” and “and”, maybe, or perhaps better “lest” and “in order that it not be the case that” – which intuitively do not refer to anything. Thus the idea that it is a species of *reference* which it controls in the case of predicates would need to be motivated independently.

Absent any reason to think that can be done, I suggest that the way forward should be to respond to a difference which ordinary thought already recognises in the contrasting ideas of *naming*, which one does by means of a singular term, and *describing*, which one does by means of a predicate. The suggestion is accordingly that we go for the second of the three original forms of proposal and deploy a special term for the relation between a predicate and the associated concept or property. “Ascription” would be a natural choice. Thus we may naturally say that whereas “Shergar” stands for Shergar, “is a horse” *ascribes* being a horse, or the property of being a horse, or – less naturally – the concept of being a horse. The role played in Fregean semantics by reference would now, in the case of predicates, be assigned to the relation of ascription, “referent” would become “*ascriptum*”; and what one does by an appropriate intra-sentential use of a predicate would be, not to refer to a concept, or property, but to ascribe it.

Of course, that is all just labelling. Before consideration of the immediately foreseeable complaint it will provoke, let’s review how it might enable us to respond to the five constraints.

(i) First, on the ontology of higher-order quantification: the proposal would indeed recognise a range of entities suited to serve a non-substitutional interpretation of such quantification. These are precisely the entities which predicates ascribe, and they contrast with objects in general precisely by being apt for such ascription.

(ii) Russell’s Problem – to account for the difference between “Shergar is a horse” and “Shergar the concept horse” – is solved by the reflection that “is a horse” and “the concept horse” differ precisely in that the former *ascribes*, the latter *refers to* the concept horse. It is because the sense of “is a horse” fits it to ascribe
rather than refer to that concept that it is at the service of expression of the relevant thought, rather than the compilation of a list. Moreover – with respect to the misgiving about Frege’s response to the problem which I canvassed in section I – “Shergar the concept horse” may now once again be viewed as listing the relevant items in a perfectly straightforward way; and the dangerous suggestion that the contrast between a sentence and a list is to be sought at the level of psychology rather than semantics – which, as remarked, would have been perfectly congenial to Russell – is avoided.

(iii) The proposal is quite consistent with the Reference Principle that sameness of reference ensures sameness of semantic role, so that co-referential expressions should be cross-substitutable salva veritate in extensional contexts, and salva congruitate in contexts in general; it is likewise consistent with the corresponding principle that sameness of ascription makes for sameness of semantic role, so that co-ascriptive expressions will be cross-substitutable salva veritate in extensional contexts, and salva congruitate in contexts in general.

(iv) The proposal does leave available the means for straightforward statement of the semantics of individual predicates and other basic incomplete expressions, merely by putting no obstacle in the way of reference to the relevant ascripta by the use of appropriate singular terms. Thus we may say that “is a horse” ascribes the concept horse, “is red” ascribes the concept red, and so on.

(v) More generally, the proposal puts no obstacle in the way of singular reference to the ascripta of predicates and thus contains nothing to put strain on our intuitive preconceptions about the sense of any singular terms purportedly standing for properties and concepts.

It is worth consolidating the last point by reviewing in this setting the paradox, outlined in section II, which imposed just such strain on our intuitive preconception about the sense and reference of “the reference of ‘is a horse’”. Thus

1* “The ascriptum of ‘is a horse’” is a singular term;
2* Its reference, if any, is to an object.
3* The reference of "The ascription of 'is a horse'" is the ascription of "is a horse".
hence 4* The ascription of "is a horse" is an object.

The reasoning is still sound. But 4*, unlike the original conclusion, is not a paradox. We can acknowledge its truth without the cost that "The ascription of 'is a horse'" does not refer to what intuitively it ought to refer. For that entity is an object, qua referent of a singular term, and a concept too, qua ascription of a predicate.

IX.

The "immediately foreseeable complaint" anticipated a moment ago is just that all this is mere terminological leger-de-main: that we have as yet no clear idea what this new relation is supposed to be or how an explanation might run which appropriately contrasted it with reference – in effect, just the objection anticipated at the start when the second proposal was stigmatised as "ad hoc and mysterious". But by now there should be some sympathy for the thought that that complaint is misguided, at least if what is at issue is merely sufficient clarity to motivate our recourse to a notion which, by all means, may then go on to profit from further clarification and theoretical setting. For a predicate to stand in the relation of ascription to a property or concept is just this: for its sense so to relate it to that property/concept that it may be used in concatenation with an appropriate singular term to say of the bearer of that term that it has the property, or falls under the concept in question. That relation is, pre-theoretically, every bit as clear as the ordinary notion of reference as applied to singular terms. Indeed, it is its dual: for the ordinary notion of reference, as applied to singular terms, is just that relation such that an expression's bearing it to an item enables it in concatenation with an appropriate predicate to be used to say of that item that it has the property, or falls under the concept ascribed by the predicate in question. It is also pre-theoretically utterly intuitive that ascription, so conceived, is not the relation that singular terms like "the concept horse", which intuitively refer to concepts, or properties, bear to the items they stand for. So much would seem mere
common-sense to one innocent of Frege’s thought about the matter. This may be a case where common-sense incorporates insight.

X.

That, then, is the shape of the solution to Frege’s paradox which, it seems to me, one is inevitably driven to if one respects the Reference Principle. And without the Reference Principle, there is no paradox.

Must that principle be respected? No doubt part of it must be: expressions of the same syntactic category which have the same reference had better be cross-substitutable salva veritate in extensional contexts. (That’s the merest tautology, since extensional contexts are exactly those in which truth-value is determined by components’ reference.) But why exactly cannot sameness of reference cross syntactic categories? What disaster attends if we allow that while any pair of syntactically like expressions which co-refer must be appropriately cross-substitutive, expressions of distinct syntactic categories may also co-refer?

I think the truth is not that disaster attends this proposal, but that it is unlikely in the end to be able to point to any purpose in its distinction from the alternative I have been sketching. Even if we allow that “is a horse” and “the concept horse” are alike in co-referring to the concept horse, we still have to provide for one crucial difference in the relations they bear to that item since – to stress – the first, but not the second is fitted to be used, in concatenation with an appropriate singular term, to say of the bearer of that term that it falls under the concept horse. That relation, – ξ is fitted to be used, in concatenation with an appropriate singular term, to say of the bearer of that term that it falls under the concept F – *is* in effect the relation of ascription as characterised above. So the thesis that predicates and suitable singular terms are alike in co-referring to concepts has to be taken as the contention that ascription is not a primitive relation but is somehow composite, with reference – understood as the very same relation in both cases – as one ingredient in it. The proposal therefore owes an argument that that is so – that it is a definite mistake to treat ascription as a *sui generis* form of relation between an expression and a concept – and such an argument would have to take the form that the
distinctive semantic differences between predicates and singular terms are best explained in a way which points up an underlying analogy on the way they relate to their associated concepts and objects respectively. What that analogy might be, however, and how it might subserve an account of the differences, is still to be explained.

XI.

How un-Fregean, really, is the general orientation on predicate semantics I have been sketching – and does it provide the beginnings of a stable account? The issues would require much fuller discussion than I can attempt here but four brief markers will not be inappropriate by way of conclusion.

First, we do – naturally – surrender one central Fregean contention, viz. that aspect of the incompleteness of concepts which, for Frege, sustains their ineligibility to serve as objects of singular reference and singular thought and their suitability to serve as items of predication. However we still retain the means to acknowledge the point that predicates’ reference to such incomplete entities was meant to complement and underwrite – their incompleteness at the level of sense, consisting in their essential fitness to generate a complete thought when yoked to an appropriate singular term. That point is straightforwardly secured by the thesis that the senses of predicates are such as to fit them to ascribe rather than refer to concepts/properties.

Second, we remain free to acknowledge the fundamental character of the distinction between object and concept/property. To be sure, it is no longer a distinction between two kinds of referent, mirroring the distinction between the syntactic roles of the two kinds of expression respectively standing for them. But it is still a distinction which derives from that between reference and predication: only concepts/properties are apt to be ascribed and referred to; individuals – objects that are not concepts/properties – by contrast, are available only for reference.\textsuperscript{17}

\textsuperscript{17}. If it is asked why some objects are unfitted for ascription, the strategic direction of an answer should be to build on the systematic connections of canonical
Third, once we again have free recourse to singular terms standing for concepts/properties, we have to confront anew the property-abstractive form of Russell’s Paradox: the paradox of the property possessed just by those properties that do not possess themselves. This, like the recent resurgence of tuberculosis in the Western world, is a disappointment. But I do not think it is really an objection – too many of the family of paradoxes that exercised Russell survive the imposition of Frege’s hierarchy to allow us to think that it gets to the root of that particular one.

Finally, we remain free, so far as I can see, to treat the syntactic categories, singular term and predicate, as primary in the order of explanation and the ontological categories, object and concept/property, as derivative. The detail of the predicate/concept half of the explanation changes. But so far as I can see, the other half may remain unaltered – the general notion of an object remains: referent of a (possible) singular term, and nothing occurs to compromise the grounds or content of the Platonism of Grundlagen, understood in the way that I myself would favour.\(^{18,19}\)

terms standing for concepts/properties with appropriately corresponding predicates: what fits an object for ascription – what makes it a concept/property – will be that it is the referent of an expression formed by a certain kind of abstraction on a corresponding predicate. That will not be the situation of the ordinary run of singular terms, though of course the details remain to be worked through.

18. For elaboration, see my Frege’s Conception of Numbers as Objects, Aberdeen: Aberdeen University Press 1983.

19. This paper has benefited both from the discussion at the Stirling Dummett conference and from detailed comments from Michael Beaney, Bob Hale, Gary Kemp, Fraser MacBride, Ian Rumfitt and Peter Sullivan. Thanks also to participants at a special seminar at Leeds at which a version of the material was presented in December 1997.