Sense without reference

1   Introduction

Many people think that Frege allowed that expressions could have sense yet lack reference. The question I wish to raise is how one could justify the claim that a systematic description of natural language will make essential use of such a view.

The project might be thought doubly unsuitable for a conference on Frege. First, Frege himself would have had no interest in systematic accounts of the semantics of natural languages. However, I take it to be acceptable to see whether a thinker's ideas can be applied even in an area in which he had no interest. Second, there is some interpretative doubt about whether Frege held that expressions genuinely having sense, expressions capable of contributing to the expression of genuine thoughts, could lack reference, or at any rate, whether he held it for long. I am inclined to the view that he did hold it when he wrote "On Sense and Reference", where he says of the definite description, "the least rapidly convergent series", that it "has a sense but demonstrably lacks a reference". However, by the time of the piece called "Logic", dated 1897 and published only posthumously, he says that a sentence containing an expression lacking reference expresses at best a mock thought, a "Scheingedanke", and this would seem to be something which is not a thought. [1] So I think that there is a case to be made for saying that at least by that time he had abandoned the view that sense without reference was possible. I will not engage in this exegetical issue, relying on the clear statement in "On Sense and Reference" to justify regarding the doctrine that sense is possible without reference as deserving the label "Fregean".

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[1] Despite Bell's contrary opinion (Bell, 1989), the soundings I have taken among native speakers suggest that a Schein-F is something intended to seem an F even though it isn't an F. Thanks to Max Kölbel for discussion.

This paper argues for an affirmative answer to its question as applied to proper names, as this expression is commonly used nowadays, of semantically simple singular terms.[2] I argue that one can justify using a description of natural language which is "Fregean" in just the following respect: it makes essential use of the possibility of empty proper names. In deference to Russell's view that "what does not name anything is not a name", I shall label any denial of this "Russellian". A full account would have at least three parts: (1) an attack on arguments for the Russellian view;[3] (2) a semantic theory which gives a recursive specification of meanings or truth conditions in a way that does not discriminate between empty and non-empty names; and (3) an account of the notion of a name-using practice which, likewise, is neutral between the case in which the practice involves an empty name and the case in which it involves a non-empty one.

The second task has in my opinion been successfully accomplished by Tyler Burge in his 1974 paper "Truth and Singular Terms". In the semantics he develops, names are treated by axioms like

$\forall x$ ("Hesperus" refers to x iff x = Hesperus).

The setting is negative free logic: atoms with empty names are false, and universal and existential quantifier rules are modified. An axiom of the above form for an empty name like "Vulcan" is true, because the right hand side is false for each value of x, leading to the appropriate verdict that there is nothing to which "Vulcan" refers. One interesting feature of the theory, which I will carry

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[2]As Jonathan Barnes pointed out to me, this is a rather inadequate characterization of the relevant class of expressions. Most westerners have forename and family name, and it is hard to see how this complexity (if that is what it is) is to be characterized. Are book titles names of books? These issues deserves closer scrutiny. A related issue is that I exclude demonstratives. While I certainly think that it is important to consider how the considerations of this paper relate to the use of demonstratives, I am unsure that the issues are logically connected. Both the view that the class of singular terms fractures into names and demonstratives, and the view that both are subsumed under a single category of singular terms, appears consistent with the main claim of this paper, viz. that there is a unified category of (empty and non-empty) proper names. Thanks to François Recanati and Ian Rumfitt for discussion.

[3]For which see Sainsbury (1999).

through to my own discussion, is that the semantics associates names neither with an object nor with a description (in the usual qualitative sense of "description").[4]

However, supplying a Fregean semantics of this kind leaves some questions unaddressed, questions like how one should apply the notion of rigid designation to empty names, and how one should explain the distinction between mastery and incompetence. The question to be discussed here is related to how one would supply empirical support for the semantics: what features of the linguistic behaviour of speakers would make it right to describe their language by a Burge-style semantics.

2   Some general considerations

I will very briefly mention a number of general considerations in favour of a "Fregean" semantics, one which allows for empty names. Although I find them to have some suasive force, they are probably well-known to Russellians, who remain unmoved by them. So I suspect that the more persuasive part of this paper is likely to be the discussion of name-using practices (§3).

A semantic theorist, as radical interpreter, must immerse himself in the language-using practices of his subjects. Vague as the notion of immersion may be, it is natural to suppose that some degree of it is sufficient for understanding. In that case, nothing else is necessary. So unless immersion in a practice covertly requires the existence of a referent if the practice involves a name, the Fregean view is imposed by the data of interpretation.

We can give examples of how easily empty names can be introduced, whether as fiction, jest or through error, and claim that various actual empty names have *distinct* understanding conditions (e.g. "Vulcan" and "Santa Claus"), and so have understanding conditions, and so have sense. We can insist that there is parity at the level of explaining behaviour. We can explain why many adults are excited by the thought of a trip to *Paris* in terms of their expectations that Paris is beautiful and

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[4]Such a semantics also undermines any ultimate difference between reference and satisfaction. What we call reference is just satisfaction under a condition (like *being Hesperus*) capable of being satisfied by at most one thing.

has excellent restaurants, where the evidence for the relevant beliefs derives in part from the subjects' "Paris"-utterances. In just the same way, there is a prima facie case for saying that we can explain why children are excited at Christmas in terms of their expectations that *Santa* will bring them presents, where the evidence for the relevant beliefs derives in part from the children's "Santa"-utterances.

Cases in which the population under study is agnostic about, for example, whether there ever was such a person as Homer, or which is divided on the question, are particularly striking. The Russellian theorist would need to resolve the issue. From his perspective, if "Homer" is empty, semantic theory has nothing to say about it; the activities relating to this vocable do not constitute a name-using practice, and ordinary sentences containing it lack truth conditions. Yet it seems clear that semantic theory should be able to describe the relevant behaviour without risking falsification by the eventual discovery that the sceptics were right and there really is no such person as Homer.

We could not expect a semantic theorist to explore the historical origin of every name on the University's register to see if it is genuine or is, rather, like "Paul R. Zwier" (Larson and Segal 1995, p.161); nor need he be an astronomer, which he would have to be to distinguish "Neptune" and "Vulcan"; nor a theologian, which he would have to be to determine which, if any, of his subjects' names for gods are empty; nor a chemist, which he would have to be to distinguish "phlogiston" and "ether" from "heat" and "air"; nor a literary theorist with sound views on the authorship of *Odyssey* and *Iliad*. To suppose otherwise is not merely implausible but potentially incoherent, for the relevant investigations would take for granted that the names are intelligible, and would be guided by what that meaning is. This would underwrite the possibility of intelligible questions *whether* there is such a person as Paul R. Zwier, *where* Vulcan is supposed to be, if it exists, *what* phlogiston is meant to be like, and *who* Homer was, if anyone. The questions to be investigated make essential use of, and thus presuppose the intelligibility of, the names in question. Semantic theory is one thing, specialist knowledge of non-semantic fact another.

A preference for a Fregean over a Russellian theory can be motivated for non-empty names. It would seem possible that the users of such a name, say "*a*", which in fact refers to *a*, should fail to know that *a* exists, even if they have true beliefs to this effect. The failure of knowledge might derive from a deviant link in some causal chain, or from a serious lack of confidence (one can select an explanation to fit one's theory of knowledge). A Russellian semantic theorist, however, is required to make an explicit affirmation of the existence of *a*. Since the theorist should affirm only what he knows, he is required to have knowledge that outstrips that of the speakers whose knowledge he is trying to describe. Moreover, in attributing to the speakers implicit knowledge of the semantic theory, he is attributing to them knowledge which, by hypothesis, they lack. No such contradiction besets Fregean theories.

One can view a semantic axiom as if it were a stipulation governing the use of an expression. One cannot stipulate things into existence, so a Russellian axiom affirming the existence of an entity to which a name refers could count as an axiom of semantic theory. By contrast, one can stipulate an "at most one" condition, as a Fregean theory does (for example, as developed by Burge). For one can stipulate that a tie for victory is defeat: if there is a group containing more than one candidate for meeting an "at most" condition, like that of being Hesperus, and each candidate in this group is as good as any other in the group but is a better candidate than any of the candidates outside the group, then no candidate counts as meeting the condition.

The familiarity of these arguments has not made them persuasive[5], especially to Russellians. I think that a more persuasive place to look is at the nature of name-using practices.

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[5]These considerations all have a prima facie character, for if there is a direct and decisive argument for the claim that a name must name, then this conclusion must somehow be accommodated in the methodology of semantic theorizing. Hence the arguments against arguments for the view that every intelligible name must have a bearer (see Sainsbury 1999) are complementary to those offered here.

3   Name-using practices

The obvious first thought is that speakers of a Fregean language would exemplify the same pattern of use for empty as for non-empty names. But this is not easy to get a grip on. Exemplifying the same pattern is consistent with exemplifying a different pattern, since two patterns can be alike in one respect and different in another; so we need some fix on the appropriate level of description. In their most ordinary employment, names are certainly intended to have reference, so in the case of empty names this intention either fails or is absent, and in either case we have the basis for "a different pattern of use". What we must ask, however, is whether the demands of semantic theory for a language require that such a distinction be exploited, and this in turn raises the question of whether we need the distinction in order to give a proper account of the semantic aspects of the behaviour of users of the language. My hope is that an answer will emerge from a discussion of the criteria whereby name-using practices are individuated.

On one ordinary way of individuating proper names, many people and places are called by the same one. This shows that we cannot individuate the practice of using a name simply by the name itself, thus individuated. We need a finer discrimination, which will answer such questions as "When he used the word 'Aristotle', did he mean Aristotle the tycoon or Aristotle the philosopher?". We also need to allow that different sounds or marks can be uses of the same name. This is not only in order to allow for differences of pronunciation, but also to distinguish, for example, a pair like "London", "Londres" (arguably the latter is simply the French way of saying or writing the former) from a pair like "Leningrad", "St Petersburg".

In the idiom I shall use in this paper, the question is: to which name-using practice did a speaker's use of the name on this occasion belong? There are two familiar kinds of answers, one in terms of the information associated with the practice's name, another in terms of the object which is the reference of the name. The first of these is indeed Fregean, since information may be of nothing, and may as well be associated with an empty as a non-empty name. The second is the Russellian view. I think one source of a Russellian position is dissatisfaction with the informational view,

together with the supposition that these are the only two options. My own preference is for a position distinct from both these: name-using practices are to be individuated by their sources, the initial event in a practice. This is a properly Fregean position since a source does not need a reference.

In the first instance, we can think of a source as a baptism, except that we exclude the baptised object. Every practice is initiated by a baptism, a single point from which the practice propagates outwards, and to which every other use within that practice traces back. Propagation is causal, but not every pairing in which a bona fide practitioner does something which results in someone else using the name (syntactically individuated) counts as propagation. For example, if you, a full master of the name "Sally", shout it so loudly in my ear that I don't even identify the word, yet, thanks to some quirk of neural wiring, thereby come to use a name "Sally" in rather the way you used it, I do not thereby become a party to your use of "Sally". Propagation routes probably need to be like those causal routes capable of propagating knowledge. Moreover, the result of the impact must include some re-organization of the new user's intentions. In a typical case, they will come to include intentions which are deferential relative to the event from which he learned the name: initially, he will intend to conform his usage to that usage. Getting the details right would no doubt be very difficult. However, for my purpose I need to say little more about how this should be done. My strategy, rather, will be to show that alternative ways of individuating name-using practices are no better placed, and in many cases are worse placed, to deliver the intuitively correct results. So Fregean individuation in terms of source emerges as at least as good as any other proposal for individuating name-using practices.

From this perspective, including the reference of the name in the individuating conditions seems otiose. We have the network of uses, held together by a certain causal relation and involving deferential intentions. Attaching the object to the source may well also involve causality, but it will be operating under different constraints. So the object will be an excrescence in the picture, attached by means not involved elsewhere, and doing no work that is not independently done by the uses themselves.

1.   Information involved in distinguishing competence?

Must we not appeal to associated information in distinguishing one who has authentically joined a practice from one who has tried but failed? Does not one who sincerely affirms "London is the capital of France" give one reason to believe he does not understand "London"? Likewise, does not one who sincerely affirms "Santa Claus is a planet which affects the orbit of Mercury" give one reason to believe he does not understand "Santa Claus"?

In both cases, this is merely defeasible evidence of lack of mastery. In the one case it would be defeated by, for example, the discovery that while in other respects a normal user of "London", the speaker had been carried away by a dream about a new phase of British colonization. In the other case, it would be defeated by, for example, the discovery that while in other respects a normal user of "Santa Claus" he had come to believe an Ovidian fantasy in which the sledge driver had offended the gods by excessive jingling, and in punishment had been transformed into a silent planet.

2.   Empty names a special case?

It may seem that although in the case of a non-empty name there is no information whose possession is required for understanding, this is not so for empty names. Precisely because there is no bearer, contact with which could be involved in what makes for understanding, surely information must play a crucial role. This idea may be encouraged by the accidental fact that some are associated with very little information ("Vulcan"), and others, though suffering no dearth of information, generally permit access to the full richness only to those who have passed through a narrow gateway of information ("Shylock"). These are not essential features of empty names. We could well imagine that the speculation about Vulcan was not rapidly quashed, but continued over several generations, the information being enriched by various myths, so that some later users are quite ignorant of the basis of the original postulation; so some competent users might rationally doubt that Vulcan was a planet. Likewise, it may well be in fact the case, and certainly could be the case, that a competent user of "Shylock" should be unaware of the Shakespearean origin, and

suppose the name to refer to some nineteenth century miser. His competence might be revealed by his having some line on such matters as who Shylock's daughter was and the kinds of contract into which he entered. One such line would be simple belief, but another would be recognition that others hold such beliefs, together with an account of their falsehood. ("That pound of flesh stuff was obviously just an anti-semitic exaggeration of a normal, if exigent, business arrangement.")

Here is a story about how a name-introducing rumour might begin, which reveals the way in which information may diverge. An over-imaginative, or self-deceiving, or evil tongue, T_0, may start a rumour which is embellished by others. The rumour is that there's a dragon, Fiamma, who lives in the mountain just south of the village and whose preferred diet is human babies. You hear the rumour from T_1 and I hear it from T_2, each of whom heard it, on separate occasions, from T_0. You say that Fiamma is green, trusting to T_1's embellishment, and I say she is red, trusting to T_2's. By some standard, our Fiamma-related information has different origins; but there is a standard which rules that these different bodies of information have the same source, in T_0. This is the standard we need: it correctly represents us as disagreeing about Fiamma's colour. It rules as it does because, although the information that Fiamma is green is new to T_1, and the information that Fiamma is red is new to T_2, both these pieces of information were intended by their producers to link to Fiamma, so the "ultimate" origin lies further back, with T_0. This is the source that is invoked by my proposal.

The view that no piece of information need be shared by all users in a practice has its analogue for empty names. Those who think that one can understand "Russell" without even knowing that its bearer is human will think that one can understand "Fiamma" without even knowing that its bearer is a dragon: perhaps the rumour will develop, so that some say Fiamma is a gorgon, some say she prefers adults to babies, some that "she" is really a he, and some elders, wishing to reduce panic, claim she is vegetarian. These people disagree among themselves, provided that their use of the name "Fiamma" has a common origin, and that each intends to speak of what the others speak of.

3.   Duplicated sources: information is insufficient

Even when name-using practices co-incide in what information is invoked, they constitute different practices if they originate in different objects. Suppose there are two speakers, S_1 and S_2, each of whom knows just one of the twins, Jim and Tim, and each calls the one he knows Harry. S_1's "Harry"-related information derives exclusively from Jim, S_2's from Tim. Qualitatively, their information may be identical (both affirm "Harry is tall", "Harry is happy" etc.). But if they encounter one another, their apparently harmonious use of "Harry"-sentences provides merely an illusion of understanding: because their information derives from different sources, they are using the name in different ways (or, semantically, there are two different names with the same spelling). This illustrates how, for non-empty names, difference of source seems enough for difference of practice.

The same goes for empty names. T_0 lives on the north side of the mountain. North siders have no contacts with south siders. Quite co-incidentally, a south sider spreads a rumour about a dragon, Fiamma, who lives in the mountain just north of the village and whose preferred diet is human babies. Were a south sider to meet a north sider and begin a "Fiamma"-related conversation, there would be an illusion of understanding; but no more than an illusion since their information has no common origin.[6] To put it in a tendentious way, though one whose naturalness is of interest, they would be talking about different dragons, whether or not they could ever know this. This kind of case mirrors for empty names things that Evans has taught us about non-empty names, and suggests that, for empty names too, difference of source is enough for difference of practice.

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[6]Suppose you do not share this intuition, but that it seems obvious to you that there is a single rumour. Some modification of the source-based conception of a practice is then required, but it might be that the modification allows the unification of empty and non-empty names. For example, the account might be based on the idea that practices are individuated by bodies of information which overlap in the kind of way which is normally explained in terms of a common source (in the broad sense of source which includes bearers and rumours). Thanks to Eric Loomis for pushing me on this point.

4. More than one source?

A given utterance may be beholden, in ways normally suitable for making it part of a name-using practice, to two sources. In some of these multiple source cases, one may be at a loss (or in dispute) about how to individuate name-using practices. I learn the name "Harry" in the presence of Jim, but, without my realizing the shift, it's Tim I mostly meet thereafter. My original "Harry"-related information comes from Jim; but the majority of my "Harry"-related information comes from Tim. To whom do I refer when I use "Harry"? The options are: Jim, Tim, both, neither, there's no fact of the matter. To rephrase: should one count my possibly idiosyncratic name-using practice whose name refers to Jim, to Tim, to a Jim-Tim fusion, or to nothing? Or should one say there is no fact of the matter?

Suppose one of the north siders learns the name "Fiamma" through contact with the north side rumour, but then spends most of his life on the south side. His original "Fiamma"-related information was north side, but the majority of it is south side. Is he inappropriately engaged in north-side practice while on the south side, just south-side practice, both practices, no practice, or is there no fact of the matter? For empty-names, as for non-empty ones, there may be no clear answers to such questions; for my purpose, the only thing that matters is the parallelism.

Evans (1973) gives what he calls a simplified version of the "Madagascar" example, which belongs in this category:

> two babies are born, and their mothers bestow names upon them. A nurse inadvertently switches them and the error is never discovered. It will henceforth undeniably be the case that the man universally known as "Jack" is so called because a woman dubbed some other baby with the name. (p. 11)

A natural response is that "Jack" does indeed refer to the man universally known as "Jack", in which case there is an apparent problem for a source-based account of the individuation of name-using practices: baptisms do not individuate name-using practices, for the baptismal use of "Jack" does not belong to the same practice as its subsequent use.

We have to distinguish two "baptismal" uses of "Jack". The notion of a baptism is only an idealization, a way of marking a first use, upon which the subsequent uses depend, by an intrinsic feature, that of the deliberate conferring of a name. What the example shows is that a first use need not be known to be or intended to be such. After the switch, the mother started calling someone else's baby Jack, taking it to be her own. This use came to prevail. Unbeknownst to her, it inaugurated a new name-using practice, a distinct one from the short-lived practice inaugurated by a possibly more official baptismal ceremony. There are two names "Jack" in the story, just as there are (more than) two names "Aristotle".

This shows that we need to count the first use of "Jack" of the new baby as a baptism, as inaugurating a new practice. But what feature of the event could make this so? The mother was using the name intending to conform with her previous intentions; and she was in causal contact with the source, the original baptism of her real child. The answer seems to be that in this case her deferential intentions were radically unsuccessful. Although she was trying to using the name "Jack" as she had before, in this she failed. In this case the failure consists of referring to some other child; but so long as failure is enough, we can explain the case in a way that does not discriminate between empty and non-empty names.

This approach is supported by a comparison with empty names. T_0 started the rumour about the dragon, Fiamma by saying "In the mountains to the south of the village, there lives a dragon, Fiamma". Someone mishears this as "In the fountains near the mouth of the river, there lives a demon, Fiamma". Under the misapprehension, she continues what she takes to be the same tale, elaborating on how the water-demon likes to startle the villages who come to bathe. Inadvertently, she has started a new rumour, and a new name-using practice. The name "Fiamma" has, as it were, switched bearers. The explanation seems to be that although the second user is trying to conform her use to that of the first, in this she radically fails; and this unifies the explanation of why we count her as starting a new rumour (about a new beast) with the explanation of why we count Jack's mother as having started a new name-using practice.

We need to look more closely at the kind of causation that can propagate a practice. At a minimum, it needs to be an interaction in which informational channels remain open. Suppose that I shout the name "Sally" at you very loudly and startle you. You do not really digest the noise as a name, but because of some neural quirk you start using a name "Sally" which was previously absent from your vocabulary. Your use was caused by interaction with my use; but plainly not in such a way as to be a case in which I have introduced you to my name-using practice. One way of identifying the defect is to say that as I used "Sally" there was no possibility of associated information reaching you. An explanation along these lines might show that in the "Fiamma" case (or some elaboration of it) the mishearing was so extreme that information could not be propagated, and only causal interactions in which this can happen count for getting an act into an existing name-using practice. This answers the question of what the failure of deferential intentions consists in.

5.   *Entangled sources*

In the previous case, we envisaged one initial source and one steady subsequent source, but one can also envisage cases in which the sources merge. I learn "Harry" from contact with Jim, but after that I assimilate to my "Harry" file all the information I get from both Jim and Tim, never appreciating that two people are involved. Compare: the travelling north-sider moves back and forward between the two communities, never appreciating that he is making contact with different "Fiamma"-rumours. Once more, the cases of empty and non-empty names are parallel.

6.   *Counting hypotheses*

Suppose two people postulate the existence of a planet which they quite independently dub "Neptune". Would it not be right to say that they had independently discovered Neptune? The criterion for a single name-using practice seems to rule that here we have two practices: the one which originated in the one investigator's speculations, and the one which originated in the other's. They seem to understand one another: but this must be ruled an illusion by the criterion. Here, it may be said, only individuation in terms of the object gives the right result; but in that case we

cannot use the criterion in terms of source which allows for the individuation of empty name-using practices.[7]

The case divides into two. First, suppose that both investigators were responding to Neptune-induced phenomena, postulating Neptune to explain them. Then it seems right to say that Neptune is, after all, the ultimate origin of both their uses, so we can account them parties to a single practice.

Second, suppose that at least one of them introduced the hypothesis not in response to Neptune-induced phenomena. (It came to him out of thin air, or he was responding to phenomena causally discrete from Neptune.) Then it no longer seems at all compelling to say that we should count their uses of "Neptune" as part of a single practice.

4   Source a disjunctive property?

Since everyone agrees that, if a name is individuated purely syntactically, there are practices of using empty names and practices of using non-empty ones, the relevant notion of a source needs to mark out a non-disjunctive property of name-using practices. Yet I can imagine someone inspecting the concept of a source I have tried to develop and claiming that it is disjunctive.

I myself find it hard to engage with the objection, for I do not know what it is for a property (as opposed to a predicate) to be non-disjunctive in some absolute sense. What seems to me to matter is whether a property is treated disjunctively or not in some context. Thus the property of becoming a parent is treated disjunctively in English employment law: becoming a parent by becoming a mother is one thing, entitling the possessor to a decent period of paid leave; becoming a parent by becoming a father is another, entitling the possessor to a much shorter period of leave. On the other hand, in another context, effectively the same property is treated non-disjunctively by the English welfare benefits system. Being a single parent entitles you to the same benefits whether you are a

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[7]Thanks to Maite Ezcurdia for pressing this objection.

single parent by being a single mother or whether you are a single parent by being a single father. So the question I can understand is whether semantic theory treats the notion of source as disjunctive or not.

What I have recommended in this paper is that it be treated as non-disjunctive. Practices using empty and non-empty names are individuated in the same way, in terms of their source. Semantic axioms will take the same form for both cases. They will not be discriminated within the theory. While I recognize that my reasons for making this suggestion may fall short of being conclusive, I do not think that a reasonable response is merely to claim, as if reporting on the upshot of a metaphysical inspection, that the relevant notion of source is disjunctive. What would need to be done would be to give theoretical reasons for treating it as such.

REFERENCES

Bell, David (1990). "How 'Russellian' was Frege?" *Mind* 99, 267–277.

Burge, Tyler (1974). "Truth and singular terms." *Noûs* 8, 309–325.

Evans, Gareth (1973). "The causal theory of names." *Proceedings of the Aristotelian Society: Supplementary Volume* 47, 187–208.

Evans, Gareth (1982). *The Varieties of Reference*. Oxford: Clarendon Press.

Frege, Gottlob (1979). *Posthumous Writings*. Oxford: Basil Blackwell.

Larson, Richard and Gabriel Segal (1995). *Knowledge of Meaning: an Introduction to Semantic Theory*. Cambridge, MA: MIT Press.

McDowell, John (1977). "On the sense and reference of a proper name." *Mind* 86, 159-185. Reprinted in Moore, A.W. (ed.) *Meaning and Reference*, 111-136, Oxford: Oxford University Press (1993).

Russell, Bertrand (1919). *Introduction to Mathematical Philosophy*. London: George Allen and Unwin.

Sainsbury, R.M. (1999) "Fictional Names and 'Really'". *Proceedings of the Aristotelian Society, Supplementary Volume*.